

# Revisiting a Total Market Approach to Contraceptive Security in Honduras

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## **Abstract**

**Background:** Although several Total Market Approach (TMA) initiatives to family planning products have been implemented, little research has been conducted to evaluate the outcomes of these interventions. The current article aims to help fill this gap in the literature by examining the effects of a TMA activity implemented in Honduras from 2009 to 2010 called "TMI Honduras" which was led by Abt Associates with assistance from John Snow, Inc.

**Methods:** Outcomes of the TMA activity were measured quantitatively by comparing family planning data from the 2005-2006 and 2011-2012 Demographic and Health Survey (DHS). Qualitative data on market segmentation strategy and implementation of project recommendations was gathered through stakeholder interviews in August 2013 and April 2014 from members of the Honduran Contraceptive Security Committee.

Results: DHS data suggested a decline in unmet need from 16.8 percent to 10.7 percent and an increase in contraceptive prevalence from 65.2 percent to 73.2 percent between 2005-2006 and 2011-2012; improvements were most notable among the poorest wealth quintiles and in rural areas. Stakeholder interviews suggested moderate initial success in engaging new stakeholders, segmenting the market, and implementing recommendations from the TMA activity. While the Contraceptive Security Committee had a strong and active presence for the first two years following the TMA, political turbulence and organizational changes disrupted progress and thereafter, the group stopped meeting.

Conclusions: The Honduran case demonstrates that a small TMA activity can be successful in bringing together the public, private nonprofit, and private commercial sectors to address unmet need and improve contraceptive prevalence rate. Unfortunately, political realities can derail TMA efforts. The results suggest that even in low-resource settings, the market for contraceptives can be enlarged with government buy-in and initiative. However, the extent to which TMI Honduras influenced improvements in the Honduran contraceptives market is difficult to determine.

**Keywords:** Family planning, Honduras, Private sector, Public sector, Social marketing

## Introduction

A total market approach (TMA) refers to a coordinated effort of the public, private nonprofit, and private commercial sectors to analyze the market for a health product and consider an appropriate role of subsidies for vulnerable consumers while preserving sustainable commercial provision. A balanced or "appropriate" public-private mix is achieved when consumer needs by market segment are served by the corresponding sector (public, nonprofit, or commercial) in a manner that maximizes overall efficiency and is sustainable for all three sectors. While a handful of TMAs have focused on insecticide-treated bed nets and products such as oral rehydration salts and zinc, most documented TMAs focus on family planning products.<sup>2,3</sup>

Although several public and private donor agencies have instigated TMAs around family planning products in Latin America, the Caribbean, and Southeast Asia in the past decade, little research has been conducted to evaluate the outcomes of these interventions. This article aims to help fill this gap in the literature by examining the effects of a TMA activity implemented in Honduras from 2009 to 2010 quantitatively through recently released (2011-2012) Demographic and Health Survey (DHS) data and qualitatively through stakeholder interviews conducted in August 2013 and April 2014. By understanding the successes, failures, and lessons learned from the TMA experience in Honduras, new TMA initiatives can better focus their efforts and quantify their outcomes.

# **Background**

## **Total Market Approaches**

Through evaluating social marketing efforts over the years, donors and governments have come to recognize that many who are able to pay market prices for contraceptives and other health products receive free or subsidized health goods through the public or nonprofit sectors. <sup>4,5</sup> Studies have also shown that the poor often pay for health products in low-resource countries. <sup>6,7</sup> In many countries, the private commercial, private nonprofit, and public sectors work in isolation from one another, resulting in over-serving or duplicating services to some populations, while neglecting others.

A TMA is a process to facilitate engagement of different suppliers in a health market.<sup>8</sup>

Ultimately, the goal of a TMA is better targeting of health products so that each sector optimizes its objectives, its strengths, and its core constituencies. By working across public, private commercial, and private nonprofit sectors, TMAs seek to increase the effective delivery of family planning services and supplies by responding to the varying needs for family planning in a given country and allowing individuals to obtain their method of choice where and when they choose. 9

The United States Agency for International Development (USAID), Department for International Development (DFID) in the United Kingdom, Gates Foundation, Bixby Foundation, and other donors have supported total market approach activities in Nicaragua, <sup>10</sup> Honduras, <sup>11</sup>

Vietnam, <sup>12</sup> Cambodia, <sup>13</sup> the Caribbean, <sup>14</sup> and several other countries. <sup>9</sup> Some donors have supported elements of a total market approach, but because they did not include the participation of all sectors, public, private nonprofit and private commercial, they were not considered TMAs. To bring uniformity to the TMA space, the Market Development Approaches (MDA) Working Group of the Reproductive Health Supplies Coalition (RHSC) sponsored two Total Market Initiatives (TMIs) in Honduras and Madagascar for proof of concept. The terms TMI and TMA will be used interchangeably hereafter.

#### Conceptual Model and Proof of Concept. In a

TMA activity, market segmentation informs a comprehensive analysis of the overall market for a product or service. A TMA activity also assesses the comparative advantages of different actors on the supply side. A TMA model helps inform the design of market segmentation strategies to ensure better targeting and the development of demand across all sectors. The TMA conceptual model defines public and private sector roles, ensures government ownership of the overall strategy, and encourages the development of sustainable donor and government sub-sector financing strategies. 15 A TMA should result in increased market segmentation, improved communication among the public and private sector actors, and increased access and sustainability. The elements of a TMA activity are illustrated in Figure 1; TMA typically includes stewardship and a policy development process, stakeholder engagement, market segmentation analysis, targeted marketing strategies, service delivery, and health financing strategies.

The TMA concept is informed by over 40 years of donor experience in social marketing, itself inspired by commercial marketing methods, which combines the 4P's (product, price, place, and promotion) to maximize use of specific products (eg, condoms) by specific population groups. <sup>16</sup> Social marketing models are typically

Figure 1. Elements of a Total Market Approach



defined by the organization that manages them, either a nongovernmental organization (NGO) or a manufacturer, although we increasingly see hybrid models that combine aspects of both. NGO models focus on serving the poor and achieving health impacts; financial returns and program sustainability in the short run are less of a concern. The manufacturer's model is typically a partnership between product manufacturers or suppliers and donors, governmental, or social marketing organizations that support demand-creation efforts to grow the overall market. The successes and failures of these three models have helped inform the thinking behind the total market approach.

The total market approach framework represents a shift from a fully-subsidized market solely focused on increasing access to products amongst the poorest segments to one where different actors address the needs of a growing number of consumers of all backgrounds and income levels. This approach has been utilized as more of a lens through which to view the health market, and less as a step-by-step iterative process. Most

efforts that have used a TMA approach have not been systematic, and implementation of the resulting strategy has varied from case to case. Involvement of the government as stewards has varied as well. While the Reproductive Health Supplies Coalition has indicated that it will attempt to document TMAs undertaken through USAID funding through an innovation grant, currently there is no body of knowledge regarding the results of a TMA. In light of this, the authors felt a re-examination of TMI Honduras could begin to document how TMAs affect a country's contraceptive market and shed light on lessons learned to inform future TMAs.

### TMI Honduras

Context and Rationale for TMI Honduras. The largest provider of family planning services in Honduras in 2001 was the Ministry of Health (MOH). MOH delivered 40 percent of all services, followed by the International Planned Parenthood Federation (IPPF) local affiliate, the Asociación Hondureña de Planificación de Familia (ASHONPLAFA), which, at that time, delivered 29 percent of services. 18 Another important provider of family planning services was Pan American Social Marketing Organization (PASMO), a USAID social marketing program. The commercial sector, comprised of pharmacies and private providers, met the needs of 12 percent and 10 percent of the population respectively. 18 Additionally, the Honduras Social Security Institute (IHSS) served approximately five percent of the population who were employed in the formal sector. 18 These distributions remained approximately the same through 2006. 19(p84, Table 5)

In 2009, the Honduran family planning (FP) market had several characteristics that made it ideal for a TMA intervention. First, according to DHS figures, unmet need, defined as the percentage of women who do not want to become pregnant, but are not using contraception, rose from 11 percent in 2001 to 16 percent in 2006.<sup>20,21</sup> During the same time period,

contraceptive prevalence, defined by the DHS as the percentage of women of reproductive age who are using (or whose partner is using) a contraceptive method at a particular point in time, had slowed, increasing from 62 percent to 65 percent. 20,21 Honduras was facing USAID graduation in 2012 (ie, a reduction in family planning assistance funding), pressuring the public sector to be more judicious with their resources. 19 A post-conflict situation left the government with little funding to divide between numerous competing priorities. 19 Because of USAID's Regional Contraceptive Security Initiative in eight Latin American countries, the government had a functioning national contraceptive security committee (Comité Interinstitucional para la Disponibilidad Asegurada de Insumos Anticonceptivos or CIDAIA) with a focus on supply chain management, and the government was also developing a Contraceptive Security Strategy. 19 Contraceptive security exists "when every person is able to choose, obtain, and use quality contraceptives and condoms for family planning and for the prevention of HIV and AIDS and other sexually transmitted infections."22(pix) CIDAIA had a small committed core members from the public and private sectors who could lead the TMA process, from the MOH, USAID, ASHONPLAFA, PASMO, IHSS, and the United Nations Population Fund, but the committee stopped meeting in 2009 due to political unrest. 11 Another important criterion for a successful TMA that Honduras met was having an active private sector (commercial and NGO). TMA is not a mechanism to create a market, but rather to reorganize one to better meet the needs of all population subgroups, but particularly the poor and most vulnerable. Finally, the Honduran DHS was very comprehensive, including questions about FP method preference and most recent contraceptive access source (eg, public or private sector) to inform a market segmentation activity.

With the above criteria having been met, Abt Associates and John Snow, Inc. partnered in

2009 to combine their knowledge, technical skills, and expertise to develop a TMI to improve contraceptive security in Honduras. Key objectives of the TMI were to consolidate information on the contraceptives market to guide the strategy process, expand participation in the family planning market, and facilitate greater stakeholder collaboration in alignment with the existing contraceptive security strategy.

Abt Associates considered TMI Honduras for a follow-up review after a new DHS study on Honduras was published in 2013, which provided an opportunity to view recent changes in the family planning landscape. <sup>23</sup> The presence of a functioning contraceptive security committee also provided an opportunity to directly interview key stakeholders from the TMI Honduras activity to better understand how the TMA activity influenced behaviors of the public, private nonprofit, and public for-profit sectors. The goal of the follow-up assessment was to determine whether the characteristics favoring a TMA in 2009 resulted in a successful TMA activity a few years later.

Formative Research: TMI Honduras. To understand the possible impact of the TMA activity, it is important to first understand the project design of TMI Honduras and the data that were collected during this formative research. TMI Honduras began in 2009 as a small project funded by the RHSC's Innovation Fund and implemented by Abt Associates and John Snow, Inc. The Strengthening Health Outcomes through the Private Sector (SHOPS) project subsequently contributed to the activity, working through the convening authority of the CIDAIA and in collaboration with stakeholders from the public, private nonprofit, and private commercial sectors of the Honduran contraceptive market.

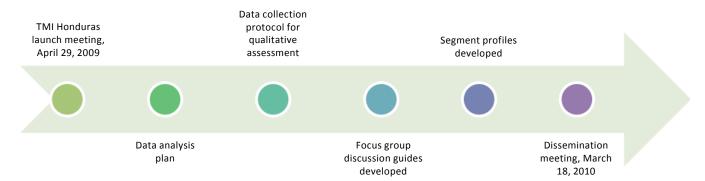
*Stakeholder engagement.* As a first step, the TMI Honduras team, led by Abt Associates,

conducted interviews with public, private commercial, and private nonprofit stakeholders on the following: the current state and challenges of family planning, roles of various actors, coordination of family planning activities and introduction of new players, level of market segmentation, and the future of family planning in the country. The TMA team reached out to stakeholders who historically had not participated in the contraceptive security debate, but who nevertheless play an important role in this area. These included the Global Fund, commercial contraceptive distributors, manufacturers, academics, physicians, and health associations.

During TMI Honduras, the TMA activity was reviewed with core stakeholders through the convening authority of the CIDAIA. DHS data from 2005-2006 was presented to key stakeholders in order to describe the main characteristics of target populations and to provide them with information that was not readily available in the published DHS and market segmentation reports. Additionally, several small-scale qualitative assessments with target populations were conducted, and stakeholder meetings were held, during which key representatives from all sectors helped to develop a contraceptive market segmentation strategy for Honduras. Engaging stakeholders required Abt to build on existing relationships, act as a neutral facilitator, leverage the government's convoking authority, and use data to support the idea that family planning stakeholders collectively stood to benefit from a TMA effort. Figure 2 shows the timeline for TMI Honduras, which began in April 2009 and ended in March 2010.

*Market segmentation.* Market segmentation analysis for TMI Honduras was conducted in stages, beginning with quantitative analysis using data from the 2005-2006 Honduras DHS followed by qualitative analysis using focus groups to uncover motivations and attitudes.

Figure 2. Timeline for TMI Honduras project, April 2009–March 2010



The quantitative analysis provided a descriptive analysis (univariate and bivariate) of data from the DHS on current, previous, and future contraceptive use and reproductive history, socioeconomic, and demographic characteristics. The population was then segmented into groups with similar demographic characteristics.<sup>21</sup> This DHS analysis served as the basis for designing the qualitative phase of the market segmentation research, which was designed to better understand the psychographic characteristics of different population segments and to determine how those segments affected contraceptive use and sourcing (ie, where contraceptives were obtained or purchased). Focus groups included contraceptive users and those with unmet need, to better understand their respective attitudes, barriers to use (including affordability, misconceptions, and cultural barriers), intentions to use, and preferred/ probable sources.<sup>24</sup> Qualitative assessments also included small-scale, market segmentation research with men who used or did not use condoms at the time to understand their perceptions regarding condoms.

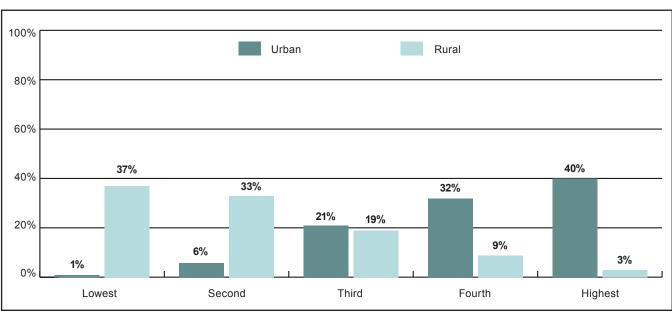
In addition, quantitative data analysis was performed on the sources of supply for hormonal contraceptives using Honduras-specific sales data purchased from IMS Health, a global company that sells pharmaceutical data gathered either at the point of sale to pharmacies or the point of sale to consumers.<sup>25</sup> Analysis of source of supply,

defined as the percent distribution of the types of service-delivery points cited by users as the source of their current contraceptive method,<sup>26</sup> included source by type of facility and type of sector (public or private). TMI Honduras was also able to obtain NGO and public sector data for a variety of contraceptive methods.

Findings that informed the TMI Honduras strategy. Analysis of 2005-2006 DHS data revealed that the vast majority of citizens in the two poorest wealth quintiles in Honduras lived in rural areas, with very few living in urban areas (Figure 3).<sup>26</sup> This data made clear to the public sector the fact that the vast majority of their contraceptive customers, who were living in urban or peri-urban areas, were in the higher wealth quintiles. Therefore, if the public sector wished to serve the poorest quintiles, they needed to focus on and improve rural distribution efforts.

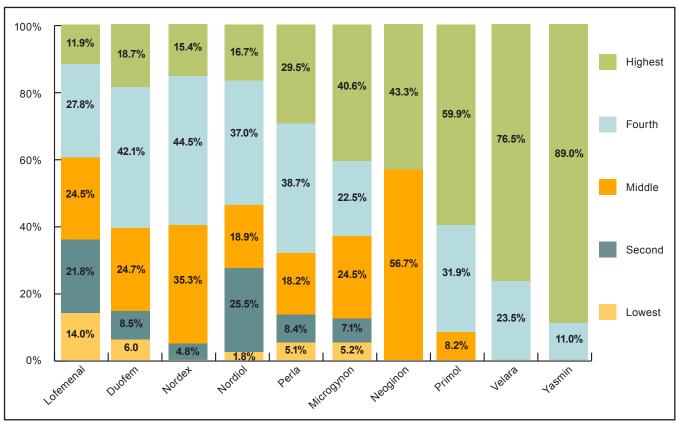
Data from the 2005-2006 DHS also allowed for a detailed analysis of oral contraceptive use by wealth quintile. Private sector brands included Yasmin, Velara, and Microgynon, while socially-marketed brands included Perla and Duofem. Over 60 percent of users of Lofemenal (the public sector brand) came from the middle, wealthy, and wealthiest quintiles (Figure 4).<sup>26,27</sup> This implied opportunities for both Perla (the socially marketed brand) and commercial brands to capture new users. The TMI Honduras team calculated that this opportunity represented over

Figure 3. Population distribution by wealth quintiles and urbanicity, 2005-2006 a,b



<sup>&</sup>lt;sup>a</sup> Data from the Honduras Demographic and Health Surveys in 2005-2006.<sup>26</sup>

Figure 4. Percent distribution of oral contraceptive brand use by wealth quintile, 2005-2006 a,b,c



Data from the Honduras Demographic and Health Surveys in 2005-2006.<sup>26,27</sup>

<sup>&</sup>lt;sup>b</sup> Wealth quintiles are ordered from lowest to highest with "Lowest" representing the poorest 20 percent and "Highest" representing the wealthiest 20 percent.

Wealth quintiles are ordered from lowest to highest with "Lowest" representing the poorest 20 percent and "Highest" representing the wealthiest 20 percent.

<sup>&</sup>lt;sup>C</sup> The public sector brand was Lofemenal, the socially marketed brands included Duofem, Nordex, Nordiol, and Perla, and the private sector brands were Microgynon, Neogynon, Primol, Yasmin, and Velara.

10,000 consumers from the top three wealth quintiles that obtained oral contraceptives from public sector sources. Additionally, in the injectables market, approximately 21,000 users from the top two wealth quintiles sourced from the public sector.

The qualitative portion of the 2009 TMI formative research activity was designed to explore attitudinal and cultural elements of contraceptive behavior. Findings highlighted latent demand for certain methods and services, which proved to be valuable information for suppliers. Results pointed to four distinct audience segments, based on age, sex, preferred method, and use of modern methods segmented by desire to space or limit children. Two female segments, "thirty-somethings" and "I think my family is complete" were identified as "priority segments." Both segments were more receptive to the idea of using family planning in the future and could be a potential focus for service providers and product suppliers. For men, two market segments were identified as priorities. The first segment was composed of men from different regions and socioeconomic levels that did not use condoms because they were in a faithful union and felt condoms were not needed. These men were not considered strong candidates for the use of condoms because their partners already used other methods or wanted to become pregnant. The second segment consisted of urban males from all socioeconomic levels seeking condoms in pharmacies, markets, and clinics. These men indicated a man should always be "ready to go," yet had little recoginition of the role men play in family planning decision making.

#### TMA workshop and strategy development.

Findings from the market segmentation exercise were presented in March 2010 at a workshop in Tegucigalpa, Honduras with participation from 30 organizations, including seven participants from the private commercial sector, six from the public

sector, six from the private nonprofit sector, five from academic/professional associations, and six from international donors/implementers. The workshop content included the following: an overview of the market segmentation research; a critical analysis of unmet need, barriers to use, and possible strategies to decrease them; a review of each stakeholder's core strengths and challenges in the delivery of contraceptives; a consensus on what an ideally segmented contraceptive market would look like; and identification of the segments that should be targeted by each stakeholder and sector. A video documenting the TMA activity in Honduras can be found on the Reproductive Health Supplies Coalition website

Recommended strategies were developed at the workshop for market segmentation and/or market expansion for each of the three sectors; the public, private nonprofit, and private commercial sectors. For the public sector, workshop participants suggested reactivating and expanding the membership of the CIDAIA to include more actors from all three sectors. Other strategies suggested for the public sector at the workshop were to explore introducing new products, such as female condoms, implants, and impregnated IUDs, and to pursue joint communication strategies with other actors. Stakeholders at the workshop suggested four activities for the private nonprofit sector: to 1) develop a complete mapping of all the institutions in the family planning space to get a better sense of where alliances could be built geographically, 2) create an umbrella NGO or alliance of NGOs working in the family planning space, 3) coordinate and combine advocacy efforts with other NGOs to increase political impact, and 4) explore the possibility of introducing a progesteroneonly oral contraceptive in the social marketing space. Private commercial sector actors were encouraged to 1) pursue public-private alliances for distribution and education/information

campaigns, and joint campaigns with NGOs and the public sector on side effects, 2) increase geographical penetration (through an increased sales force, medical visits, and mass media), and 3) create "institutional" pricing structures to sell to the public sector.

**Proposed Next Steps.** The one-and-a-half day workshop resulted in the development of fifteen possible sector-specific strategies for market segmentation and/or market expansion. The Vice

Minister of Health, Ms. Miriam Paz, closed the workshop by officially reconvening the CIDAIA and invited all workshop participants to continue the momentum of the Total Market Initiative through monthly meetings of the CIDAIA to implement the sector-specific strategies. At that point, the direct involvement of Abt Associates and John Snow, Inc. through the Reproductive Health Supplies Coalition innovation grant for TMI Honduras ended.

## **Methods**

### **Study Design**

Using the data gleaned from the formative research as a foundation, we designed a followup study with quantitative and qualitative components to determine how the TMA intervention affected the contraceptive market in Honduras thereafter. A 2011-2012 DHS dataset allowed us to conduct statistical analysis of changes in contraceptive prevalence and source of family planning methods by wealth quintile and sector since the 2005-2006 DHS.<sup>23</sup> Then, interviews were conducted with key stakeholders from July to August 2013 and in April 2014 to validate initial findings from our quantitative analysis and to answer questions related to the effect of TMI Honduras in three broad areas: 1) the extent to which the TMI Honduras recommendations for implementation and contraceptive market segmentation strategies have been carried out, 2) the extent to which the contraceptive market has expanded to include new family planning products, and 3) the progress and current status of the Honduran Contraceptive Security Committee and TMA-related activities. We measured the qualitative responses against a scoring rubric to understand the successes and

failures of the TMA activity three to four years after its original implementation.

### **Data Collection**

In 2009, TMI Honduras sought and received IRB approval from the Ministry of Health's Health Promotion Division, and from the Abt Associates IRB, for focus group participants who were asked questions about their attitudes, barriers to use, intentions to use, and preferred/probable sources. Key stakeholder interviews in 2009 with CIDAIA members were exempted from IRB review. The 2013-2014 key stakeholder follow-up interviews were also deemed exempt from IRB review by the Abt Associates IRB when the study team went through the IRB review process. Quantitative data were not collected, but consisted of secondary analysis of existing DHS data.

Qualitative Data Collection. The authors attempted to interview the key members of the CIDAIA from the public and private sectors to better understand changes brought about by the TMI Honduras activity. These included representatives from the Ministry of Health, Bayer, PASMO, Honduras Local Technical

Assistance Unit for Health (ULAT in Spanish), ASHONPLAFA, Compañía de Productos Látex Hondu Alemana (CPL), Sociedad de Obstetricia y Ginecología de Honduras (SGOH), Global Communities Honduras (formerly CHF International), Asociación Mujer y Familia, and the Secretaría de la Mujer. Due to time and budget constraints, the authors were not able to travel to Honduras to conduct stakeholder interviews face-to-face. Therefore, it was often difficult to obtain key informant input. Interviews were conducted in Spanish by email and telephone. An initial email request for an interview was followed by a one-hour interview. A total of eleven stakeholders were eligible to be interviewed and were sent an email request; of those, five (45 percent) completed the interview. Of the stakeholders contacted, a total of one (33 percent) out of three public sector agencies, three out of six (50 percent) non-governmental organizations, and two out of two (100 percent) for-profit companies completed the interviews.

Quantitative data. The Honduras Instituto Nacional de Estadistica (INE) is responsible for collecting the DHS. According to the USAID DHS Survey Summary Reports, fieldwork for the 2005-2006 and 2011-2012 surveys occurred from October 2005 to May 2006 and September 2011 to July 2012 respectively. <sup>28,29</sup> Interviews for the 2005-2006 survey were conducted in 18,683 households; the sample size for women age 15-49 was 19,948. No interviews were conducted with men. Interviews for the 2011-2012 survey were conducted in 21,362 households; the sample size for women age 15-49 was 22,757, and for men age 15-59 it was 7,120. The Honduras DHS datasets for both years were obtained from the Measure DHS website. 28,29

#### Measures

**Qualitative measures.** Key stakeholder interviews were conducted in 2013 and 2014 to measure changes following the TMI activity

in 2010 related to: 1) how segmentation of the family planning market had changed, 2) the number of new private sector family planning products (oral contraceptives, injectables, and long-acting methods) introduced, and 3) whether or not a mid-priced contraceptive, injectable, or long-acting product had been introduced into the market. Additionally, respondents were asked to comment on 1) which strategies proposed at the TMI meeting had been implemented, 2) which strategies were crucial for increasing the contraceptive prevalence rate and reducing unmet need, and 3) the progress and current status and composition of the Honduran Contraceptive Security Committee.

Quantitative measures. Standardized family planning indicators exist across all of the DHS surveys and are, for the most part, similarly calculated across countries. <sup>26</sup> Measures used in this analysis include the following: unmet need, contraceptive prevalence rate, and source of contraceptive supply. Demographic data of interest included age, urbanicity (urban vs rural), and wealth index quintiles. Each of these measures is defined further below.

**Demographics.** Age was broken down into the following seven categories; women aged 15-19, 20-24, 25-29, 30-34, 35-39, 40-44, and 45-49. The DHS urban-rural definition is country specific and based upon how the Honduras national statistics office defines it. To determine the Wealth Index quintiles for each country, DHS uses data collected in the Household Questionnaire to ascertain ownership of a number of consumer items (eg., television or car), dwelling characteristics (eg., flooring material, water source, toilet facilities), and other wealth status related characteristics. 30,31 Weights or factor scores generated through principal components analysis are assigned to each asset and summed, and are then standardized to a normal distribution. Country level asset scores

are then divided into five equal wealth quintiles with approximately 20% of the population in each (defined as Lowest, Second, Middle, Fourth, and Highest). Households are then assigned individual quintile scores based on their asset scores and the established population cutoffs.

Family Planning Indicators. Unmet need for family planning (FP) refers to the percent of reproductive age women (age 15-49) who are currently married or in union, who do not want to become pregnant (either because they do not want any more children or would like to postpone childbirth), but who are not currently using a contraceptive method.<sup>26</sup> The contraceptive prevalence rate (CPR) refers to the percent of women of reproductive age who are using (or whose partner is using) a contraceptive method at a particular point in time. 26 This indicator is almost always reported for women married or in sexual union and the standard indicators include use of all contraceptive methods (modern and traditional), as well as use of modern methods only. Source of supply by type of contraceptive method is obtained from respondents who are currently using contraception.<sup>26</sup> It basically determines the types of service-delivery points or locations where respondents obtained their current contraceptive method. If more than one source is mentioned, then the source of the most recent method is obtained. The DHS data includes both type of facility (eg, hospital, health center, FP clinic, mobile clinic, pharmacy, field worker, private doctor, etc.) and type of sector (eg, public, private, and other). The source of supply market share for the percentage of contraceptive use obtained from the public, private sector (pharmacies, private doctors), and other relevant sources can be calculated.<sup>26</sup>

## **Data Analysis**

Qualitative Data Analysis. Responses from stakeholder interviews were recorded as notes and measured against a rubric to determine the level of success (either "unsuccessful," "limited

to moderate level of success," or "high level of success") for each indicator (see Table 1). The first two indicators measured the extent to which stakeholders felt that the TMI Honduras activity helped segment the market and the level of success of the CIDAIA in moving forward with the recommendations developed at the final TMI Honduras meeting in 2010. Indicators three and four evaluated whether or not new midpriced oral contraceptives, injectables, or other long-acting methods were introduced into the Honduran market, and if so, whether they were launched by private sector companies involved with the CIDAIA as a result of the TMI activity or for other reasons. Information related to implementation of TMI Honduras strategies and the current status of the CIDAIA was collected as interview notes and synthesized into key themes following the qualitative interviews.

Quantitative Data Analysis. To understand differences in the use and provision of family planning products between the DHS from 2005-2006 and 2011-2012, we analyzed unmet need, contraceptive prevalence, and source of family planning methods. With Honduras datasets obtained from the Measure DHS website, 32 we used Stata to conduct survey analysis that calculated the weighted total proportion of women aged 15-49 who fit into specific categories. These totals were then disaggregated by age, location, and wealth quintile to examine variations across market segments and the results from the two datasets were compared to see if there were noteworthy differences. Additionally, for the two surveys, we developed client profiles of modern method users who obtained contraceptives at public facilities, NGOs, private clinics, private pharmacies, and other sources. These profiles helped demonstrate what clientele each type of facility served. Based on the results from the two datasets, we identified whether there were any noteworthy differences across years, but did not conduct analyses to test whether those differences were statistically significant.

**Table 1.** TMI Honduras: Level of success rubric <sup>a</sup>

	Unsuccessful	Limited to Moderate Level of Success	High Level of Success
Did stakeholders feel the TMI Honduras activity helped segment the market?	No, not at all.	Yes, TMI Honduras helped segment the market and improve access, but only slightly to moderately, or only for a short amount of time.	Yes, TMI Honduras successfully segmented the market and has noticeably improved access.
Did the CIDAIA move forward with any recommendations?	No, none.	Yes, the CIDAIA moved forward with several recommendations, but these actions were not long-lasting or they have had a limited to moderate effect on the contraceptive market.	Yes, the CIDAIA moved forward with many recommendations, and these actions have positively affected the contraceptive market.
Did any private sector companies involved with the CIDAIA introduce new products after the 2010 activity?	No, none.	Yes, at least one private company introduced new products after TMI Honduras.	Yes, two or more private sector companies introduced new products after TMI Honduras.
Was a mid-priced oral contraceptive product, injectable, or other long-acting method introduced?	No, it was not.	Yes, a mid-priced oral contraceptive product, injectable or other longacting method was introduced, but it is no longer on the market.	Yes, a mid-priced contraceptive product, injectable or other longacting method was introduced and continues to be on the market today.

<sup>&</sup>lt;sup>a</sup> The level of success rubric was used to classify results from stakeholder interviews and estimate the success of the Honduras national Contraceptive Security Committee (CIDAIA) in achieving market segmentation, moving forward with recommendations, and introducing new contraceptive products after the TMI Honduras activity.

## **Results**

## **Qualitative Results**

Measured against the level of success rubric, some indicators were achieved with a moderate level of success, while others were less successful. As previously stated, the qualitative data were assessed in relation to three broad areas: 1) whether the TMI Honduras recommendations for implementation and contraceptive market segmentation strategies were met, 2) whether new family planning products were introduced in the market, and 3) the status of the Honduran

Contraceptive Security Committee and TMA related activities.

#### Changes in the contraceptive landscape.

Interviews with PASMO in 2013 and Bayer in 2014 revealed limited to moderate success of the TMI Honduras activity in segmenting the contraceptive market. A market segmentation strategy was approved by the MOH in 2012, and a strategy to institutionalize family planning services was developed with the *Instituto* 

Hondureño de Seguridad Social. Additionally, a representative of Bayer participated through the CIDAIA market segmentation commission in mapping distribution points of contraceptives, which differentiated between public and private providers.

When asked in 2014 which strategies were crucial for what appeared to be an increase in the use of modern contraceptive methods between the DHS in 2005-2006 and 2011-2012, the Ministry of Health and Bayer cited the MOH's distribution of contraceptives through all public services in the country. Donors worked with the MOH to better target distribution of family planning products and services in rural areas where the poor live. Bayer also noted an increase in family planning counseling done by public and private sector doctors and the private sector's distribution of contraceptives through pharmacies. According to the MOH, reduction in unmet need for contraceptives can also be attributed to better stock control in the public sector as a result of a new computerized logistical control system and the distribution of family planning products by community health volunteers. Several recommendations were not implemented, however, such as the creation of a multisectoral, behavior change communication campaign or a website to institutionalize information. While PASMO, Bayer, and ASHONPLAFA noted that CIDAIA moved forward with several of the TMI Honduras recommendations, only some had a lasting impact because the CIDAIA is currently defunct as will be discussed further below.

New contraceptive products. In addition to the level of market segmentation and implementation of TMI Honduras' recommendations, the second focus of the level of success rubric was whether or not private sector companies introduced new mid-price oral contraceptives, injectables, or long-acting methods into the Honduran market. Stakeholder interviews revealed limited to

moderate successes in the contraceptive market specifically attributable to the TMI Honduras activity. In 2011, Bayer launched a new oral contraceptive, Qlaira, in the Honduran market at a medium-high price point. However, Bayer indicated that this decision was not due to TMI Honduras, but rather to a corporate strategy for the entire region. PASMO, which intended to introduce a new oral contraceptive product, decided not to proceed with the planned launch because an internal market study indicated that they would not be able to recover their costs. In 2013, the MOH introduced Implanon, a sub-dermal implant as a free product at public sector facilities through donations by UNFPA. The MOH indicated that as a CIDAIA member, UNFPA funded these implants as part of a market segmentation strategy. Injectables, which showed the highest increase from the 2005-2006 to 2011-2012 DHS, were marketed by ASHONPLAFA over the prior six years with sales of about 113,000 injectables per year through a social marketing program, according to interviews with ASHONPLAFA staff in July 2013. Thus, while several new products were introduced, a midpriced oral contraceptive was not introduced into the market by the private sector as a direct result of the TMA activity.

Continued CIDAIA activities. Regarding the activity level of CIDAIA, interviews with key stakeholders revealed that CIDAIA activities resumed in 2010 following the TMI Honduras workshop with the strong commitment of the vice-minister of health and continued through much of 2012. The CIDAIA's composition became more multisectoral, with additional representatives from the commercial sector including Arsal, Pfizer, Bayer, CPL, Durex, and the occasional participation of Merck and IMBOSA Laboratories. Other new additions to the CIDAIA following the TMI Honduras workshop included *Sociedad de Obstetricia y Ginecología de Honduras* (SGOH), CHF

International, Asociación Mujer y Familia, and the Secretaría de la Mujer.

USAID projects DELIVER and ULAT continued to support the CIDAIA, particularly in the development of the market segmentation plan and dual use of condoms for family planning and HIV prevention. The CIDAIA created a series of technical subcommittees to focus on expansion of the commercial sector, widening of procurement options, and policy coordination. Subcommittee milestones included: 1) MOH approval of a market segmentation strategy for condoms (although a proposal to field test the strategy has been stalled since 2013), 2) facilitation of a workshop conducted to estimate the dual use of condoms for family planning and HIV prevention, 3) implementation of a centralized condom distribution and logistics unit at the MOH, and 4) the 2012 signature of an agreement between the UNFPA and MOH to purchase four family planning methods at international market prices for free distribution.

After two years of strong performance, the CIDAIA started to meet more infrequently, beginning in September 2012, due to a change in the minister of health. In July 2013, a second change of the minister of health halted CIDAIA meetings completely. A proposal to validate the market segmentation strategy submitted to the MOH in April 2013 has not yet been approved. CIDAIA activities, anticipated to resume after the presidential elections in November 2013, have remained dormant.

## **Quantitative Results**

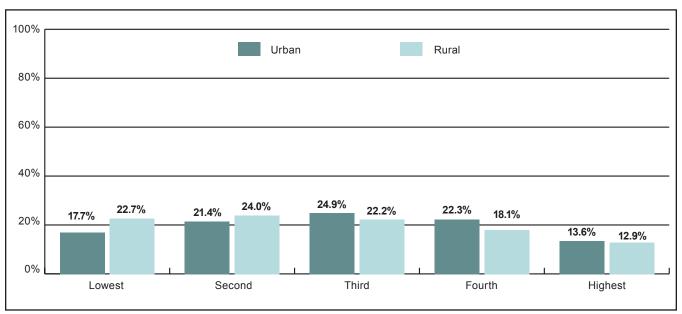
A comparison of the 2005-2006 and 2011-2012 Honduras DHS results revealed what appeared to be a decline in unmet need from 16.8 percent to 10.7 percent and a potential increase in contraceptive prevalence from 65.2 percent to 73.2 percent over the same time period. The largest decrease in unmet need was found in rural areas, from 19.2 percent to 11.6 percent

and in the lowest wealth quintile, from 24.4 percent to 13.7 percent. The largest increase in contraceptive prevalence (for use of any contraceptive method among women 15-49) was observed in rural areas; an increase of 10 percentage points from 60.8 percent in 2005-2006 to 70.7 percent in 2011-2012. While current use of modern contraceptive methods appeared to increase slightly (from 56.4 to 63.8 percent), and in both rural and urban settings, the increases were higher in rural areas, increasing from 50.7 percent to 60.6 percent in rural areas versus 62.3 to 67.3 percent in urban settings. The lowest wealth quintile increased the most, shifting from 41.1 to 55.1 percent. Use of modern methods increased in all age groups, with the youngest women (aged 15-24) showing the highest increase at nearly 10 percentage points between 2005-2006 and 2011-2012.

Figure 5 shows the client base for obtaining modern contraceptives from public sector facilities by wealth quintiles in 2005-2006 and 2011-2012. For those who sourced from the public sector in 2011-2012, there was a slightly higher proportion who did so from the lower two wealth quintiles than in 2005-2006 and a slightly lower proportion from the two highest wealth quintiles than in 2005-2006, suggesting the possibility of a more rational segmentation in 2011-2012 than in 2005-2006.

In terms of the most recent source of modern family planning products, the public sector share shifted only slightly from 48.8 percent in 2005-2006 to 51.9 percent in 2011-2012. In contrast, the private clinic relative share appeared to decline from 34.8 percent to 22.8 percent and the private pharmacies saw a five percentage point increase from 13 percent in 2005-2006 to 18 percent in 2011-2012. The increase in sourcing of family planning products from private pharmacies crossed all wealth quintiles for both rural and urban populations (data not shown).

**Figure 5.** Source of modern method of family planning for all women 15-49 by wealth quintiles, 2005-2006 and 2011-2012 a,b,c



- Data from the Honduras Demographic and Health Surveys in 2005-2006 and 2001-2012.28,29
- <sup>b</sup> Public sector sources refers to access through government agencies, clinics, or pharmacies.
- <sup>C</sup> Wealth quintiles are ordered from lowest to highest with "Lowest" representing the poorest 20 percent and "Highest" representing the wealthiest 20 percent.

## **Discussion**

Since very few TMA initiatives have been revisited, this case study offers unique insights to inform other TMA activities. The findings from this study reinforce the importance of revisiting a short-term TMA activity to determine whether changes in the family planning landscape occurred while factoring in the political and economic context.

## **Key Findings**

There was evidence from the stakeholder interviews that changes continued to occur for several years following the TMI Honduras initial activities. New members were added to the CIDAIA, a condom market segmentation strategy was approved by the MOH, a workshop focused on estimating dual condom use for family

planning and HIV prevention use was held, and a centralized condom distribution and logistics unit was put in place at MOH. Several CIDAIA partners (UNFPA, MOH, and ASHONPLAFA) introduced new contraceptive products (ie, subdermal implants and injectables). However, while the private sector introduced a new mid-price oral contraceptive in the market, it was not directly attributable to TMI Honduras.

Stakeholders attributed what appeared to be improvements in contraceptive prevalence and a reduction of unmet need in rural areas to various factors. They suggested that MOH's distribution of contraceptives through all public services in the country, improved targeting, better stock and logistical controls, expanded family planning

counseling by public and private sector doctors, as well as the private sector distribution of family planning products and services through pharmacies all may have contributed. Thus, any changes in the contraceptive landscape between the 2005-2006 and 2011-2012 DHS were likely to be the sum of actions of several providers of family planning including the MOH, donors, the private NGO sector, and the private commercial sector. And, while TMI Honduras may have helped to improve family planning access and use, the observed differences in DHS data across years could also have been attributable to factors other than the TMI Honduras initiative.

Country-led and country-owned is a TMA goal, and in Honduras the ongoing commitment and leadership of the CIDAIA, and in particular the MOH, was an important element in the activity's initial success. The early commitment of the MOH was key to bringing stakeholders together and increasing the coverage of contraceptives in rural areas in particular. This focus has been supported by USAID through ULAT and within the framework of health sector reform. By adding new partners from the private commercial and nonprofit sectors and civil society, the CIDAIA became a platform for the exchange of family planning information and joint efforts in reproductive health. Progress has been limited more recently, however, by the personnel changes at MOH and the recent cessation of the CIDAIA meetings.

### **Lessons Learned**

Political and economic realities can derail a functioning TMA activity. The CIDAIA's activities were halted in 2009 for political reasons and again after the TMI activity; ministry of health personnel changes occurred twice in the years following the initial TMI Honduras activity. While it is crucial that the government lead a TMA effort, disruptions may be inevitable, requiring course corrections later on. Political

fluidity, conflict, and infrastructure constraints have certainly undermined prior social marketing and TMA approaches, and can interfere with program sustainability. Without population-based data, it can be difficult to determine market dynamics. And, while it appears that the public sector share as a source of family planning products increased at the expense of the private sector, without additional data it is hard to tell. IMS and NGO data would be needed to determine current market conditions.

### Limitations

The current study had several limitations including the lack of face-to-face interviews, lack of resources to acquire additional IMS data to review changes in the contraceptives market, and the cessation of the CIDAIA meetings. The study team was able to compensate for the lack of face-to-face interviews through email and telephone interviews, and the team relied only on new DHS information to update the market segmentation exercise from 2009. There was no way to overcome the fact that the CIDAIA has essentially disbanded over the past year, but by interviewing as many of the original participants as possible, we were able to better understand how TMI Honduras may have affected market dynamics for contraceptives during the interval. One additional noteworthy limitation was not having conducted statistical analyses to determine whether the changes identified across the 2005-2006 to 2011-2012 interval were statistically significant overall and for various subgroups. This further limits anything that can be said with assuredness about whether significant changes in the contraceptive market occurred.

# **Implications for Practice and Research**

Implications of the current research are that TMA projects should include not only a market segmentation component, but also implementation steps to ensure that a total market mentality is adopted by all stakeholders. TMA activities need to build in a clear monitoring and evaluation component into the project design. Developing commonly agreed-upon indicators to evaluate TMAs is also essential. Analysis of DHS data on key indicators helped identify possible improvements in contraceptive prevalence and unmet need, particularly among the poorest population segments and in rural areas. As noted elsewhere, the use of wealth quintile data and urban-rural distinctions offered a means by which to assess equity and access, which can improve the potential usability of the findings for decision-making. 33

### **Conclusions**

Stakeholder interviews are quite important to conduct when initiating a TMA; they offered a means by which to assess perceptions of the barriers and benefits to multisectoral collaboration, both in this project and elsewhere. 9,34 While several TMA activities have been implemented, there are few examples in the literature of follow-up research to determine whether market segmentation and stakeholder coordination continues beyond the initial

intervention. This case study from Honduras shows that a TMA activity can reinvigorate and refocus a contraceptive security committee and bring a new cadre of actors to the table to broaden multisectoral participation. Although political and personnel changes have shut down the CIDAIA over the past year, there is still hope that the TMA efforts begun several years ago will resume soon.

Revisiting the Honduras contraceptive market through quantitative and qualitative analysis revealed that a small TMA activity can be potentially successful in bringing together the different sectors to address unmet need. And, while changes in DHS between 2005-2006 and 2011-2012 cannot be directly attributed to the TMI intervention, the data suggests that even in low-resource settings, the market for contraceptives can be enlarged with government buy-in and initiative. The Honduras TMI would suggest that through better targeting of government and donor resources to the poor and rural residents, the private sector (commercial and nonprofit) can better target those able and willing to pay.

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