Innovating mobile service delivery to increase FP choice and access for the peri-urban poor

Marie Stopes Tanzania’s bajaji model
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Marie Stopes International (MSI) is a global non-profit organization working across 37 countries to deliver a broad range of high quality sexual and reproductive health (SRH) services. MSI continually evolves its delivery models to expand voluntary family planning (FP) access and choice and extend service delivery reach, in the context of changing client preferences and to complement existing health system capacity.

Marie Stopes Tanzania (MST) delivers FP and SRH healthcare to women and men who would otherwise lack access to these critical services. In 2010, MST launched bajaji mobile outreach, an innovative public-private-partnership aimed at reducing client barriers to FP access in peri-urban and urban areas, while reducing service delivery costs.1

Using motorized auto-rickshaws, locally known as bajajis, this adapted mobile outreach model is a streamlined version of MSI’s ‘classic’ rural mobile outreach, with teams comprising one MST nurse and one bajaji driver. Bajajis provide a range of short term and long term FP methods at no cost to the client. With no 4x4 vehicle to purchase and lower fuel and staffing costs, start-up and operating costs for each bajaji team are significantly lower than for ‘classic’ mobile outreach teams.

Flexible for both urban and peri-urban settings, bajajiis can more easily navigate busy neighborhoods and dense traffic but are also suitable for slightly longer journeys between towns. With a single provider, the bajaji model offers flexibility for the location of service delivery. Bajaji nurses can offer services at a public health facility or other community-based static site or in a client’s home. Follow-up is provided at the public facility and during subsequent bajaji visits. Clients report that the option to receive home-based services allows them to circumvent key access challenges, including lack of time to attend clinics, need for discretion in seeking FP, and, in some contexts, cultural norms requiring women to be accompanied when traveling outside of the home.

Promising pilot results led to scale-up of the bajaji model in Tanzania, and implementation of adapted versions of the model in five other MSI country programs, with over 150,000 FP services provided through this less resource intensive model than MSI’s ‘classic’ outreach model in 2014. Tanzania exit interview survey and costing analysis results demonstrate that the bajaji model is able to reach underserved peri-urban women at a lower cost than other service delivery channels, such as static clinics.

This paper documents the model’s innovation and implementation, including challenges faced, initial service delivery results, scale-up, and uptake by other country programs. Sharing these lessons will help increase FP access, choice and equity among underserved groups in a cost-effective manner. It will also contribute operational evidence to the global health community’s wider understanding of effective FP programming models in low resource settings.

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1 This intervention was funded under USAID’s Support for International Family Planning Organisations (SIFPO) Project.
Background

Tanzania is a country with a young and growing population. More than 10.4 million of the country’s 45 million people are women of reproductive age (15 – 49 years). With an average fertility rate of 5.4 children born to each woman and a total modern contraceptive prevalence rate of 27%, over 25% of married and cohabitating Tanzanian women report an unmet need for modern contraception. Both in urban and rural settings, this need is highest amongst poorer women and women with less education.

Established in 1989, MST operates a range of different service delivery channels to reach women with voluntary FP. A national presence enables MST to provide over 20% of all modern FP methods used in Tanzania. Addressing unmet need requires innovative and adaptive service delivery models and MST strives to continually maximize impact and test new models in order to effectively reach women in a variety of contexts.

In rural, isolated, under-served settings, MST mobile outreach teams often provide the only access point for women seeking voluntary FP services. With 4x4 vehicles and clinical teams of nurses and a doctor, MST’s classic rural mobile outreach model is equipped to travel long distances across difficult terrain delivering a broad range of FP methods, including voluntary tubal ligation and vasectomy. To reach rural towns and villages, the classic mobile outreach model requires an investment of time, capital expenditure (4x4 vehicle, equipment), operating expenses (fuel, staff salaries, overnight accommodation) and program management. Typically, mobile outreach sites are public sector health facilities that lack trained providers and / or medical equipment or commodities needed to provide comprehensive FP services to clients in their catchment areas.

In Tanzania’s cities and towns, eleven MST static clinics serve a range of clients, from middle-income women seeking high quality services to low-income women living in slum neighborhoods. Women seek out services at MST clinics because prices are suited to their ability to pay, care is client-focused, and services include a full range of voluntary FP methods, HIV and STI services.

Despite the operational success of the rural mobile outreach and urban static clinic models, MST identified a gap in FP access for low-income urban and peri-urban women. MST’s static clinics serve only a limited catchment area, and the traditional rural outreach model was suited to more dispersed, geographically isolated communities, and therefore not cost-effective for a peri-urban context. Short-term methods were readily available at government clinics, but availability of long acting reversible contraception (LARCs) was more limited. MST saw an opportunity to develop a new model to meet demand for a broader range of FP methods amongst low-income urban and peri-urban women, complementing short term method availability in the public sector.

Through the bajaji model, MST brought services out of static clinics and closer to the client in peri-urban areas. In 2010, MST launched a pilot bajaji outreach model, initially in Zanzibar, a semi-autonomous island off the coast of Tanzania’s mainland; a predominantly Muslim island where many women face restrictive mobility. With a population of over 1 million people, Zanzibar’s unmet need for FP stood at nearly 35% among women of reproductive age, 10% higher than the rest of Tanzania. MST operates one static clinic in Zanzibar, offering a critical referral option for clients wishing to access voluntary permanent methods that nurse-led bajaji outreach is not able to provide.
Pilot implementation and results

Hearing directly from clients: individual experiences from Zanzibar bajaji outreach

Ten is enough. Aisha*, a 36-year-old married woman with 10 children. She and her husband have decided not to have more children. She came to a bajaji outreach site to learn about long-acting FP methods, having experienced unwanted side effects from injectables and expressed concern that remembering to come for her injectable every three months was challenging. She left the bajaji outreach site having chosen an implant. As she left, she said proudly, “I am happy now, 10 is enough.”

Determined to take family planning. Adijah is a married 26-year-old with a nine-month daughter who came to bajaji outreach with an expressed need to make her visit quick. She would like to wait several years to have her next child so that she can devote time and resources to caring for her daughter. However, her husband does not support his wife’s use of family planning. She heard about MST from a community based educator who advised that injectables are an effective and discreet method. After counselling, Adijah received her injectable and left the site in order to be home before her husband returned.

Reaching out to men. Suleiman is a 44-year-old father of four. His wife currently uses contraceptive pills and they agree that for financial reasons they wish to delay having more children. Thinking previously that FP was his wife’s concern, Suleiman attended an FP awareness session for men held by bajaji outreach nurses. Initially attracted by his curiosity about the large crowd, Suleiman found the information session interesting. He has given his wife permission to take an implant or IUD if she chooses.

The pilot launched in late 2010 with inception meetings between MST, the Zanzibar Ministry of Health (MoH), and the district health authorities. The MoH helped MST identify 67 peri-urban outreach sites in districts with low contraceptive prevalence rates. These public health facilities and community-based sites were locations that women in catchment areas could easily reach and were in proximity to places that they already frequented, e.g. markets.

Selection of strategically located sites, as well as the option for home-based service delivery, was important not only for clients’ convenience but also because MST knew, and stakeholder meetings confirmed, that many women accessed FP services without their partners’ knowledge. Convenience and discretion were key to effectively serving these clients.

Once sites were selected, outreach nurses were trained according to MSI’s global clinical standards for voluntary FP service delivery and client-focused care, and a site visit schedule for bajaji outreach was developed. Community educators, recruited from an existing MoH programme, were trained to play a key role in linking communities to services through awareness-raising on FP and information on where and when services could be accessed.

Within several months of service delivery in Zanzibar, the model attracted the attention of government officials in Mwanza City, Tanzania’s second most populous urban centre. As in Zanzibar, the Health department in Mwanza City recognised a pattern of lack of access to a broad range of voluntary FP methods amongst lower income women. In September 2011, MST purchased two bajajis and nurses were trained to provide FP information, counselling and services according to MSI and MoH guidelines. As in Zanzibar, MST partnered with local health authorities to identify districts with the lowest contraceptive prevalence rate and agree specific outreach sites, 27 in total in Mwanza City.

Pilot results were encouraging. During the pilot period (12 months in Zanzibar and seven months in Mwanza), bajaji outreach nurses reached 6,181 women with FP information, counselling and services. Of those clients that took contraception, most chose methods that were often unavailable through government clinics, including IUDs, implants, and injectables. Client interest in voluntary permanent methods resulted in 86 referrals to MST clinics for voluntary tubal ligations (73 in Zanzibar and 13 in Mwanza City).

These results demonstrated the capacity of the nurse-led bajaji model to:

- Fill a gap in increasing access to voluntary LARCs;
- Increasing access to contraception by reducing both financial and geographic barriers (services were provided free of charge);
- Increasing FP method choice; and
- Leverage and build on existing public sector investment and programmes.

Table 1: Tanzania Bajaji pilot (March 2011-March 2012): implant, IUD, and injectable FP service delivery results

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<th>Referral for permanent methods</th>
<th>Total Services</th>
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<td>Implant services</td>
<td>3,554</td>
<td>543</td>
<td>6,724</td>
</tr>
<tr>
<td>IUD services</td>
<td>719</td>
<td>86</td>
<td></td>
</tr>
<tr>
<td>Injectable services</td>
<td>1,908</td>
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Not only did the bajaji pilot demonstrate the model’s capacity to effectively reach underserved urban and peri-urban women, it also provides an example of effective public-private-partnership and collaboration to leverage existing public sector investment. Close working with local MoH’s in Zanzibar and Mwanza City led to successful identification of outreach sites and Ministry buy-in to pilot activities. Engaging with the public sector’s existing programme of community educators leveraged public investment and aligned MST’s work with government health interventions in the catchment areas.

*names have been changed to protect

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Building on the pilot findings, MST scaled-up *bajaji* service delivery between 2012 and 2014, and now operates 15 *bajajis* delivering a range of FP information, counselling and services. USAID seed funding in the *bajaji* service delivery model was leveraged to attract larger investments from a range of donors, including the UK department for International Development (DFID), United Nations Family Planning Association, and the Australian Department of Foreign Affairs and Trade (DFAT). Currently, 10 *bajajis* are operated using the original pilot model, whilst five DFAT-funded *bajajis* operate in partnership with private *bajaji* drivers.

Over 42,000 Tanzanian women received a voluntary FP service from a *bajaji* nurse in 2014 alone, generating around 90,000 CYPs. Women took advantage of the broad range of FP methods on offer from the *bajaji* nurses, as shown below:

**Figure 1: Total clients, by method, served by *bajaji* nurses by MST in 2014.**

- Permanent methods (referral) (495, 1%)
- Implants (18,427, 43%)
- IUDs (4,773, 11%)
- Injectables (14,467, 34%)
- Pill clients (3 cycles per client) (4,817, 11%)

**Scale-up: expanding access and choice for underserved peri-urban women**

**Entrepreneurial *bajaji* drivers for DFAT – funded project**

The model was designed with a financial sustainability focus by identifying five entrepreneurial young men to become owner-drivers of auto rickshaws. The identified drivers signed a contract which included:

- their commitment to maintain and refuel the auto-rickshaws;
- Transporting MST nurses to and from peri-urban service delivery sites each day;
- Participation in awareness raising activities;
- Commitment to make monthly cash repayments for the *bajaji* from income earned running the auto rickshaw as a taxi when not working on MST activities (the drivers kept all income generated from taxi services).

The ownership of auto rickshaw transferred to the driver after full repayment, which on average takes about one year, after which MST buy a new auto rickshaw to sustain the model.

**Reaching undeserved women**

Exit interviews were undertaken with a representative sample of 181 *bajaji* clients in late 2013, revealing that 70% were living under $1.25/day (higher than the national figure of 68%), and over half were not using FP when they came for the service (*FP adopters*). This profile is similar to the client profile for those reached through MST’s traditional mobile outreach, suggesting that the *bajaji* delivery channel is able to reach a similarly underserved (although less remote) population.

*MSI defines FP adopters as clients who were not previously using a modern method in the three months or shorter prior to choosing the MSI-supported FP service.*
A cost-effective model in peri-urban areas

In 2013, with SIFPO support, MSI developed and tested a costing tool enabling country programs to compare the costs of delivering FP services across different delivery channels. This tool was used to undertake a comparative cost analysis of MST’s delivery channels in May 2014. Results showed that, whilst cost per service was low across both outreach models, cost per service for LARCs and short term methods was 30-50% lower for bajajis than for classic mobile outreach.

It should be noted that traditional mobile outreach is reaching more remote rural populations, often requiring extensive travel on poor roads, and therefore higher costs should be expected. Nevertheless, the results suggest that the single, mobile nurse-led bajaji model is a cost-effective delivery mechanism when providing services to more accessible populations in peri-urban areas.

Model expansion to other countries

Widespread potential exists to replicate the bajaji model in new countries and contexts, particularly those with FP access gaps amongst poorer and less educated urban and peri-urban women and where small, motorised transport is commonplace.

Since the promising results of MST’s bajaji pilot and similar streamlined models in the Philippines and Madagascar called ‘Marie Stopes Ladies’, several MSI programs have adapted the nurse/midwife-led mobile model to reach under-served populations in peri-urban and rural areas accessible without a 4x4 vehicle. In Burkina Faso, Mali, Niger and Senegal, nurses travelling on motorbikes and public transport offer a range of voluntary short term FP and LARC methods in peri-urban areas, and visit traditional mobile outreach sites between ‘classic’ outreach team visits, allowing mobile outreach teams to increase the length of time between their visits and thereby cover a greater number of sites. And in Uganda, teams of nurses on auto-rickshaws are providing FP and HIV information and services to at-risk young people in Kampala. In 2014, over 150,000 FP services were provided through the less resource intensive bajaji-style delivery models in 2014 across six countries, and use of these models continues to increase across different country programme contexts.
Lessons learned from the *bajaji* pilot

**Innovation is critical for maximising service delivery impact**

- Existing models may miss important segments of the population of women with an unmet need for FP. To be effective, MSI must continually review the profile of the clients it reaches and determine if important client groups are being missed;

- Existing models can be adapted as client needs evolve. As trends in urbanisation bring more women to cities and towns, addressing unmet need for FP will inevitably require a strong and flexible urban and peri-urban presence. As demand for LARCs increases, smaller nurse/midwife led models with strong referral links for permanent method provision can complement and in some cases replace service channels that rely on larger staffing structures (such as clinics and classic mobile outreach teams. Staying ahead of changes and keeping a nimble, responsive operating model are key to achieving impact; and

- Taking services to the client can be an important strategy in removing a barrier to services and increase access and FP choices.

**Community educator networks and strategically located service delivery sites are key to reaching underserved clients**

- Although MST operates a static clinic in Zanzibar, uptake of voluntary LARCs amongst poorer women was lower than expected in the clinic. In investigating barriers to uptake, MST identified that women wanted close, convenient, and discreet service delivery sites including the possibility of home-based delivery. Further, work with community educators in Zanzibar allowed MST to spread the word about when and where outreach services would be offered. Keeping these community educators active in their role required providing basic travel and transport allowances.

**Public-private-partnership approach enables integration with the health system**

- Establishing strong MoH involvement and an effective public-private-partnership early on allowed MST to leverage existing public sector investment and gain strong Ministry buy-in to the pilot. This was apparent through joint selection of outreach sites and through utilisation of community educators but stretched beyond this, with public sector staff and funds contributed to support service delivery, and alignment of MST activities with public sector strategies, helping cement MST’s inputs as collaborative contributions to the health system for sustainable FP efforts.
Conclusion and Next Steps

MST has been able to adapt its classic rural outreach model to meet the needs of underserved urban and peri-urban women through a new, cost effective model, and to leverage this SIFPO seed funding to attract long-term investment for model scale-up. The pilot has also inspired adaptation of the bajaji model in other MSI country programs and contexts with a similar imperative to bring a broad range of FP services closer to the client. Planned next steps include further documentation and evaluation of the model in a range of contexts to speed replication and scale-up; adaptation of MSI quality assurance and reporting tools for bajaji-style models; and exploration of franchising opportunities.

Acknowledgements

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References

2 Tanzania Demographic and Health Survey 2010. Dar es Salaam, Tanzania: NBS and ICF Macro.
3 MSI Impact 2 estimate.
4 National Bureau of Statistics (NBS) [Tanzania] and ICF Macro. 2011