Market Landscape Review of Fertility Awareness-based Apps in LMICs

October 18, 2023
Why are fertility awareness-based apps important for global health supply chains?

• **Explosion of smartphones around the world.** In 2022, smartphone adoption reached 50% in sub-Saharan Africa. Smartphone connections are anticipated to reach 600 million in 2024, pushing smartphone adoption to 61% in the region by 2025.

• **Increased desire for non-hormonal contraceptive options.**

• **Popularity of FAM apps could affect demand for FP commodities moving forward.** Important to better understand how women are using apps to inform contraceptive decision-making and the role that FAM apps play in ensuring contraceptive security.
42matters is a mobile data intelligence company that offers app intelligence from millions of mobile apps and publishers and has previous experience with USAID projects.

- **Data Depth**: Granular data by mobile application and country, app downloads, monthly active users, ratings, and sentiment analysis.

- **Coverage**: 63% of USAID FP/RH priority countries.
### Countries covered by 42matters

<table>
<thead>
<tr>
<th>USAID FP/RH priority</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(26/41)</td>
<td></td>
</tr>
</tbody>
</table>

1. Bangladesh
2. Benin
3. Burkina Faso
4. Cambodia
5. Cameroon
6. Cote d’Ivoire
7. Egypt
8. Ghana
9. Haiti
10. India
11. Kenya
12. Mali
13. Mozambique
14. Nepal
15. Niger
16. Nigeria
17. Pakistan
18. Philippines
19. Rwanda
20. Senegal
21. Tanzania
22. Togo
23. Uganda
24. Yemen
25. Zambia
26. Zimbabwe
Top apps with highest monthly active users (MAU)

<table>
<thead>
<tr>
<th>App</th>
<th>Total Downloads in the past 12 months</th>
<th>MAU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flo Ovulation &amp; Period Tracker</td>
<td>5,486,233</td>
<td>2,860,463</td>
</tr>
<tr>
<td>Period Calendar Period Tracker</td>
<td>1,999,742</td>
<td>1,954,298</td>
</tr>
<tr>
<td>Mylo Pregnancy &amp; Parenting App</td>
<td>3,118,511</td>
<td>1,356,117</td>
</tr>
<tr>
<td>My Calendar - Period Tracker</td>
<td>823,585</td>
<td>945,590</td>
</tr>
<tr>
<td>MeetYou - Period Tracker</td>
<td>10,008,841</td>
<td>809,440</td>
</tr>
<tr>
<td>Clue Period Tracker &amp; Calendar</td>
<td>562,738</td>
<td>469,869</td>
</tr>
<tr>
<td>Ovulation &amp; Period Tracker</td>
<td>1,032,880</td>
<td>467,010</td>
</tr>
<tr>
<td>Ovulation Calendar &amp; Fertility</td>
<td>312,635</td>
<td>369,617</td>
</tr>
<tr>
<td>Wocute - Period Calendar</td>
<td>2,550,021</td>
<td>177,999</td>
</tr>
</tbody>
</table>

These 9 apps generated:

- 82% or 26 million out of 32 million total downloads for one year (July 25, 2022 – July 24, 2023) in PRH supported countries

- 90% or 11 million out of 12.2 million total MAUs for one month (June 25 – July 24, 2023) in PRH supported countries

The data on the left is sorted by MAU which can be an indicator of retention and engagements rates. However, more in-depth research is required to determine engagement or retention rates.
According to Flo, more than 250 million people around the globe use Flo as their ovulation and period tracker app, fertility calendar, and pregnancy assistant.

Features
1) Tracking including predictive ovulation calculators
2) Education: evidence-based articles created by doctors and health experts
3) Help Center to speak with experts on demand
4) Basic version is free

4.73 ★★★★★
3,108,993 reviews globally

Ads Detected: No
In-App Purchases: Yes ($7.99 - $39.99 per item)
Flo – country downloads

The number of downloads is trending upwards (July 2022 and July 2023 data not included).

Downloads in selected period 4,587,348

- Cameroon: 776,027 (17%)
- Indonesia: 599,448 (13%)
- Benin: 409,869 (9%)
- Kenya: 353,851 (8%)
- Philippines: 297,617 (6%)
- Nigeria: 279,801 (6%)
- Uganda: 249,873 (5%)
- Zambia: 208,064 (5%)
- Mali: 202,115 (4%)
- Zimbabwe: 195,683 (4%)
- India: 185,248 (4%)
- Senegal: 158,297 (3%)
- Ghana: 157,315 (3%)
- Vietnam: 93,527 (2%)
- Kyrgyzstan: 74,321 (2%)
- Tanzania: 70,636 (2%)
- Niger: 61,232 (1%)
Period Tracker Period Calendar – #2 app

Features
1) Focus is on period tracking, including predictive ovulation calculators and reminders
2) No educational content claims
3) Free

4.93 ★★★★★
6,022,388 reviews globally

Ads Detected ✔ Yes
In-App Purchases ✔ Yes ($0.99 - $0.99 per item)
Period Tracker Period Calendar – country downloads

The split between Asian and African country downloads is about 50%-50%.

Downloads in selected period 1,940,545

- Indonesia: 475,474 (25%)
- India: 200,715 (10%)
- Cameroon: 180,622 (9%)
- Kenya: 148,890 (8%)
- Egypt: 98,004 (5%)
- Nigeria: 96,759 (5%)
- Philippines: 83,738 (4%)
- Mozambique: 65,585 (3%)
- Benin: 63,357 (3%)
- Vietnam: 47,195 (2%)
- Sudan: 46,811 (2%)
- Uganda: 45,088 (2%)
- Zambia: 44,456 (2%)
- Mali: 39,934 (2%)
- Ghana: 37,192 (2%)
- Zimbabwe: 35,367 (2%)
- Tanzania: 30,724 (2%)
MeetYou Period & Ovulation Tracker – #5 app

Available on

MeetYou
Period & Ovulation Tracker

App with the highest number of MAUs in Southeast Asia

Features
1) Tracking, including predictive ovulation calculators
2) Supports pregnancy and parenting
3) Basic version is Free

4.83 stars
105,690 ratings globally

Ads Detected: No
In-App Purchases: Yes ($0.99 - $9.99 per item)
MeetYou Period & Ovulation Tracker – country downloads

98% of downloads came from Indonesia, Vietnam, Philippines.

The remainder was shared among African countries.
Comparing PRH supported countries against all countries with data

<table>
<thead>
<tr>
<th>PRH supported countries</th>
<th>Total Downloads in the past 12 months</th>
<th>MAU</th>
<th>Global</th>
<th>Total Downloads in the past 12</th>
<th>MAU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flo Ovulation &amp; Period Tracker</td>
<td>5,486,233</td>
<td>2,860,463</td>
<td></td>
<td>22,349,648</td>
<td>11,378,989</td>
</tr>
<tr>
<td>Period Calendar Period Tracker</td>
<td>1,999,742</td>
<td>1,954,298</td>
<td></td>
<td>13,536,099</td>
<td>13,091,923</td>
</tr>
<tr>
<td>Mylo Pregnancy &amp; Parenting App</td>
<td>3,118,511</td>
<td>1,356,117</td>
<td></td>
<td>3,804,434</td>
<td>1,621,158</td>
</tr>
<tr>
<td>My Calendar - Period Tracker</td>
<td>823,585</td>
<td>945,590</td>
<td></td>
<td>3,276,767</td>
<td>3,711,190</td>
</tr>
<tr>
<td>MeetYou - Period Tracker</td>
<td>10,008,841</td>
<td>809,440</td>
<td></td>
<td>31,226,659</td>
<td>2,659,910</td>
</tr>
<tr>
<td>Clue Period Tracker &amp; Calendar</td>
<td>562,738</td>
<td>469,869</td>
<td></td>
<td>3,088,721</td>
<td>2,626,867</td>
</tr>
<tr>
<td>Ovulation &amp; Period Tracker</td>
<td>1,032,880</td>
<td>467,010</td>
<td></td>
<td>3,514,592</td>
<td>1,564,046</td>
</tr>
<tr>
<td>Ovulation Calendar &amp; Fertility</td>
<td>312,635</td>
<td>369,617</td>
<td></td>
<td>791,937</td>
<td>798,344</td>
</tr>
<tr>
<td>Wocute - Period Calendar</td>
<td>2,550,021</td>
<td>177,999</td>
<td></td>
<td>8,254,874</td>
<td>687,955</td>
</tr>
</tbody>
</table>
Ghana – downloads for 12 months and MAUs for 1 month

<table>
<thead>
<tr>
<th>#1</th>
<th>#2</th>
<th>#3</th>
<th>#4</th>
<th>#5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flo</td>
<td>Period Calendar Period Tracker</td>
<td>MeetYou</td>
<td>My Calendar</td>
<td>Ovulation &amp; Period Tracker</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Title</th>
<th>12 Months Downloads Country Specific</th>
<th>Monthly Active Users for GH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flo Ovulation &amp; Period Tracker</td>
<td>151,100</td>
<td>76,397</td>
</tr>
<tr>
<td>Period Calendar Period Tracker</td>
<td>36,250</td>
<td>34,905</td>
</tr>
<tr>
<td>MeetYou - Period Tracker</td>
<td>322,663</td>
<td>24,585</td>
</tr>
<tr>
<td>My Calendar - Period Tracker</td>
<td>18,292</td>
<td>20,900</td>
</tr>
<tr>
<td>Ovulation &amp; Period Tracker</td>
<td>33,799</td>
<td>14,966</td>
</tr>
<tr>
<td>Mylo Pregnancy &amp; Parenting App</td>
<td>26,692</td>
<td>11,581</td>
</tr>
<tr>
<td>Ovulation Calendar &amp; Fertility</td>
<td>5,934</td>
<td>6,956</td>
</tr>
<tr>
<td>Grace Health period tracker</td>
<td>113,410</td>
<td>5,911</td>
</tr>
<tr>
<td>AI Fertility Ovulation Tracker</td>
<td>16,145</td>
<td>4,371</td>
</tr>
<tr>
<td>Clue Period Tracker &amp; Calendar</td>
<td>4,219</td>
<td>3,806</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>728,504</td>
<td>204,378</td>
</tr>
</tbody>
</table>
Ghana – comparing app data to FP commodity deliveries

- Top 10 FAM apps had 728,504 downloads in one year and 204,378 MAUs in one month.

- When compared to other methods delivered during the same one-year period, apps appear to be a significant option selected by women for contraception.

- Although MAUs are more indicative of engagement than downloads, there are limitations to comparing one month of MAUs to FP deliveries in the past year.

<table>
<thead>
<tr>
<th>Product</th>
<th>Quantity delivered (July 2022-July 2023)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard Days Method</td>
<td>5,000</td>
</tr>
<tr>
<td>Etonogestrel 68 mg/rod, 1 Rod Implant</td>
<td>98,006</td>
</tr>
<tr>
<td>Levonorgestrel 1.5 mg Tablet, 1 Tablet</td>
<td>3,906</td>
</tr>
<tr>
<td>Levonorgestrel 30 mcg Tablet, 35 Tablets/Cycle</td>
<td>141,840</td>
</tr>
<tr>
<td>Levonorgestrel 75 mg/rod, 2 Rod Implant</td>
<td>36,700</td>
</tr>
<tr>
<td>Levonorgestrel/Ethinyl Estradiol 150/30 mcg + Ferrous Fumarate 75 mg, 28 Tablets/Cycle</td>
<td>6,620,139</td>
</tr>
<tr>
<td>Medroxyprogesterone Acetate 104 mg/0.65 mL, Subcutaneous</td>
<td>1,040,200</td>
</tr>
<tr>
<td>Norethisterone Enantate/Estradiol Valerate 50/5 mg/mL Ampoule, Intramuscular</td>
<td>420,700</td>
</tr>
<tr>
<td>TCu380A Intrauterine Device</td>
<td>24,350</td>
</tr>
<tr>
<td>Male Condoms</td>
<td>2,059,200</td>
</tr>
</tbody>
</table>
Summary

- The fertility awareness-based mobile app market is consolidated: 9 apps cover 82% of downloads and 90% of MAUs. Of these 9 apps, 6 are global and have a strong user base across multiple geographical locations while Flo is a market leader with the highest number of unique MAUs.

- With the explosion of smartphones globally and the increased interest in non-hormonal contraception options, the popularity of FAM apps is expected to continue to increase and may affect the demand for FP commodities in LMICs.

- Thus, it is essential to continue monitoring FAM app user data to better understand this growing trend and how women are using FAM apps to inform contraceptive decision-making.
Recommendations for next steps

1. Conduct further research and analysis of MAUs over a longer period as well as customer reviews to better understand user experience and sentiment of women in LMICs who use fertility awareness-based apps.

2. Using a secondary data source, examine the most popular features of widely used apps. This will lead to increased understanding of how women are using the apps.

3. Assess the quality of the most popular apps and assign a score or ranking for each. The quality measure should include both for use as a fertility tracker to get pregnant and a contraceptive method to avoid pregnancy.

4. Develop a more appropriate CYP measurement for FAM apps to better estimate the protection provided and compare to other methods. Currently, the conversion factor for FAM is 1.5 CYP per trained adopter. However, many app users are unlikely to be trained.

5. Increase understanding of the relationship between overall downloads and MAUs. Why do some apps have more MAUs than downloads? Why do some apps attract, retain, and/or lose users? What does this mean for contraceptive security?

6. Explore opportunities for collaboration between donors and FAM app developers, especially in those LMICs where FAM apps are increasingly popular.
The USAID Global Health Supply Chain Program-Procurement and Supply Management (GHSC-PSM) project is funded under USAID Contract No. AID-OAA-I-15-0004. GHSC-PSM connects technical solutions and proven commercial processes to promote efficient and cost-effective health supply chains worldwide. Our goal is to ensure uninterrupted supplies of health commodities to save lives and create a healthier future for all. The project purchases and delivers health commodities, offers comprehensive technical assistance to strengthen national supply chain systems, and provides global supply chain leadership. For more information, visit ghsupplychain.org.

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