



UIDAI DATA HACKATHON, 2026

**BRIDGING GAPS IN AADHAAR UPDATES:
DATA-DRIVEN INSIGHTS FOR INCLUSION**

Team Registration No: UIDAI_3165

Team Members:

1. Rayyan Sayed
2. Parnavi Wanare
3. Mrunmayee Datar
4. Jujhaar Singh Aidhen
5. Arjun Chambarge

Institution: Vishwakarma University

SUMMARY

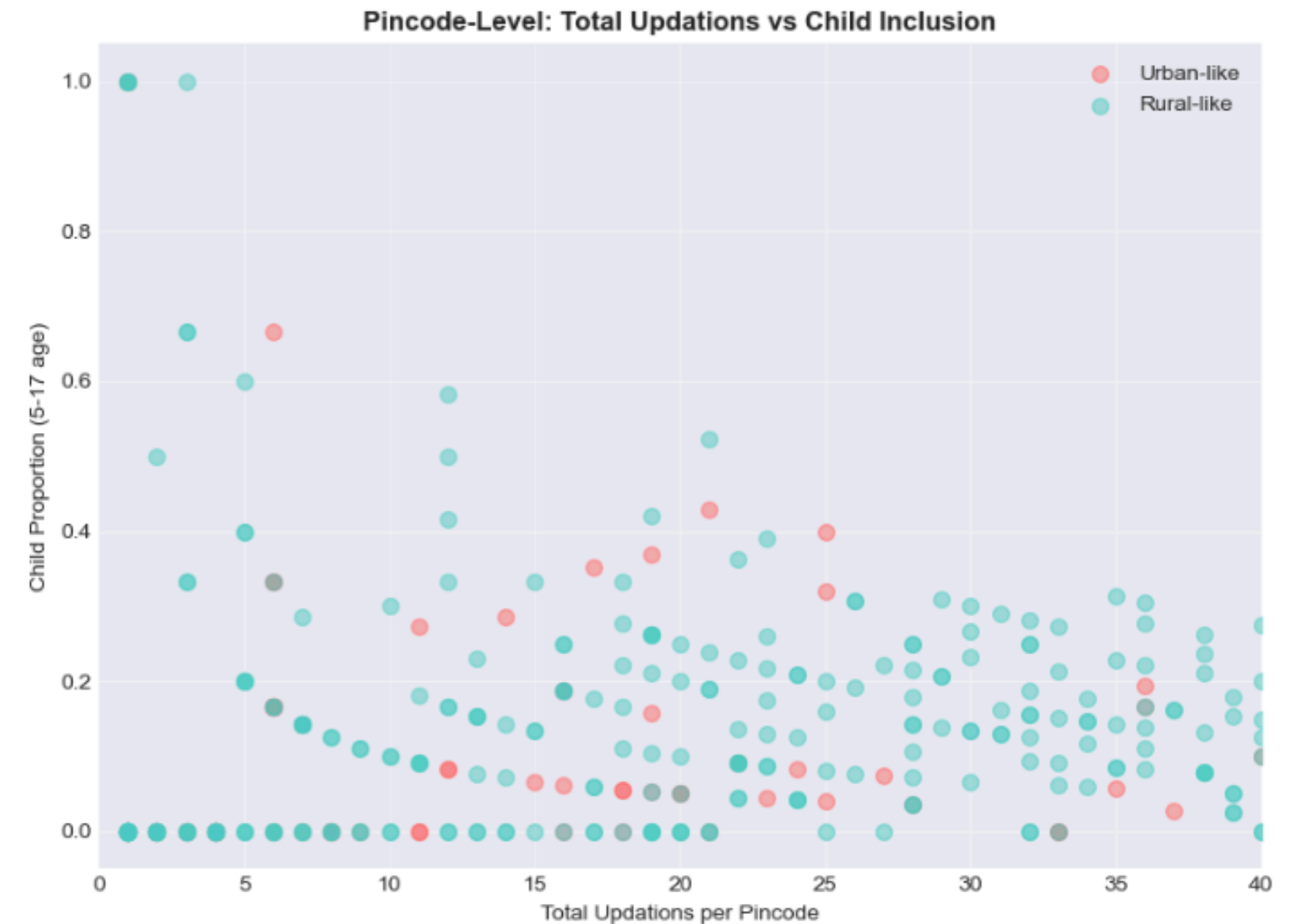
- Aadhaar enables access to welfare, education, health, and financial services
- While enrolment is near-universal, rate of updates remains uneven
- Low rates of updates leads to invisible exclusion, especially amongst:
 - a. Rural populations
 - b. Children aged 5–17 years
- This project uses large-scale Aadhar update data to identify:
 - a. 6 under-performing states
 - b. 80 high-risk districts
 - c. 255 critical pincodes
- Outputs include interactive dashboards and a proposed citizen-facing application

PROBLEM CONTEXT

- Aadhaar update failures are often overlooked compared to enrolment
- Consequences include:
 - a. Authentication failures
 - b. Denial of education-linked benefits to children
 - c. Reduced welfare access in rural areas
- The issue is not only low rate of updates, but systemic inequality across:
 - a. Geography
 - b. Settlement type
 - c. Age groups
- Objective: Convert raw Aadhar update data into actionable intelligence for targeted policymaking

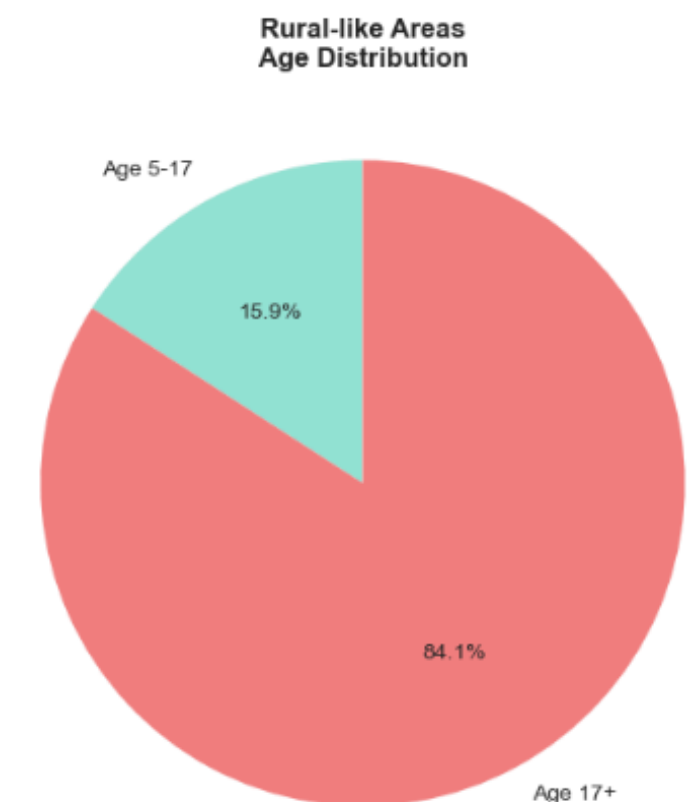
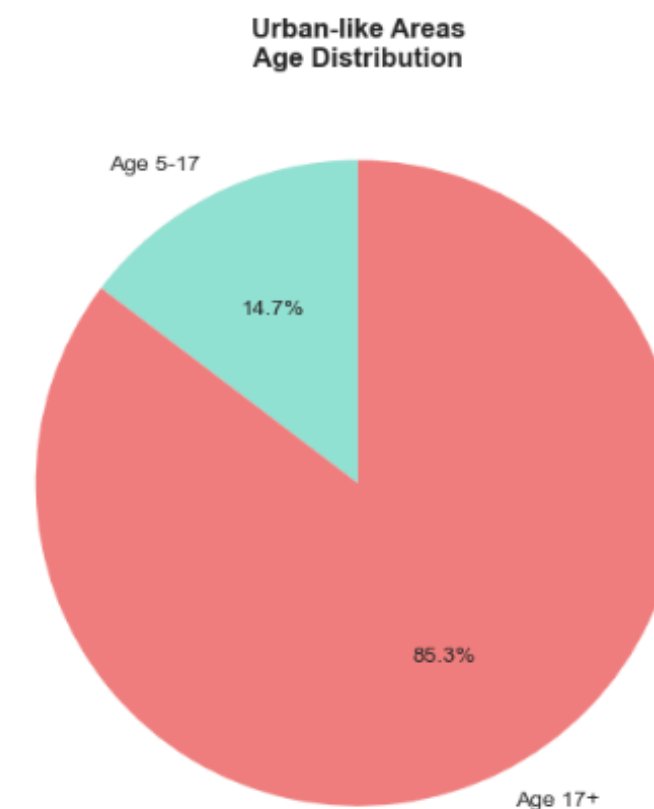
DATA DESCRIPTION & SCOPE

- Geographic Coverage: Multiple Indian states
- Granularity: State → District → Pincode
- Temporal Coverage: Daily Aadhaar update records
- Key Variables:
 - a. Total updates
 - b. Age groups: 5–17 and 17+
 - c. Area type: Urban-like vs Rural-like
- Enables both macro-level comparison and micro-level targeting



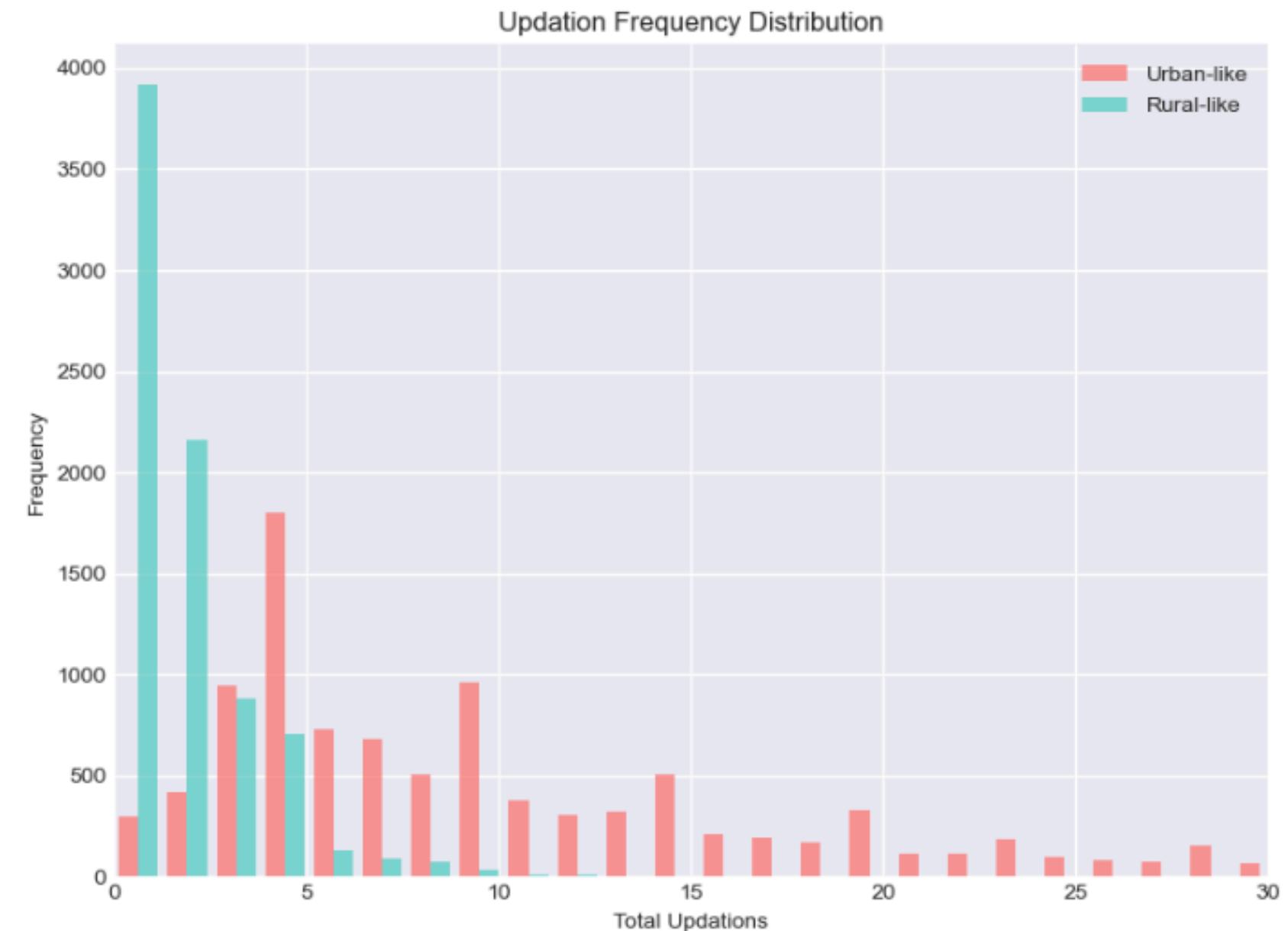
METHODOLOGY

- Identification of low-performing states using update volume and growth trends
- Classification of pincodes as urban-like or rural-like using district median logic
- Segmentation into policy-relevant age groups (5–17, 17+)
- Statistical validation using t-tests and p-values
- Growth, gap, and risk analysis to identify:
 - a. High-risk districts
 - b. Top-performing districts
 - c. Critical pincodes



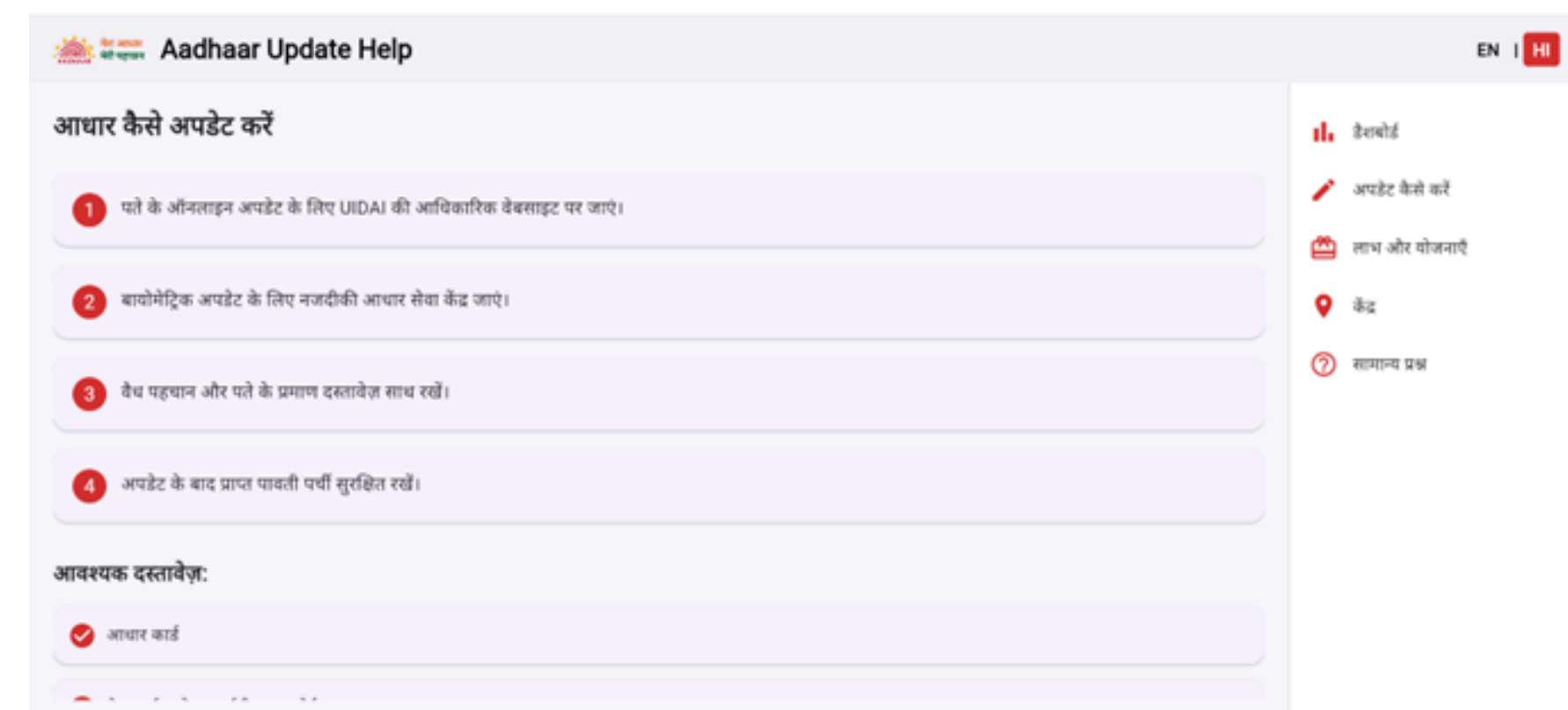
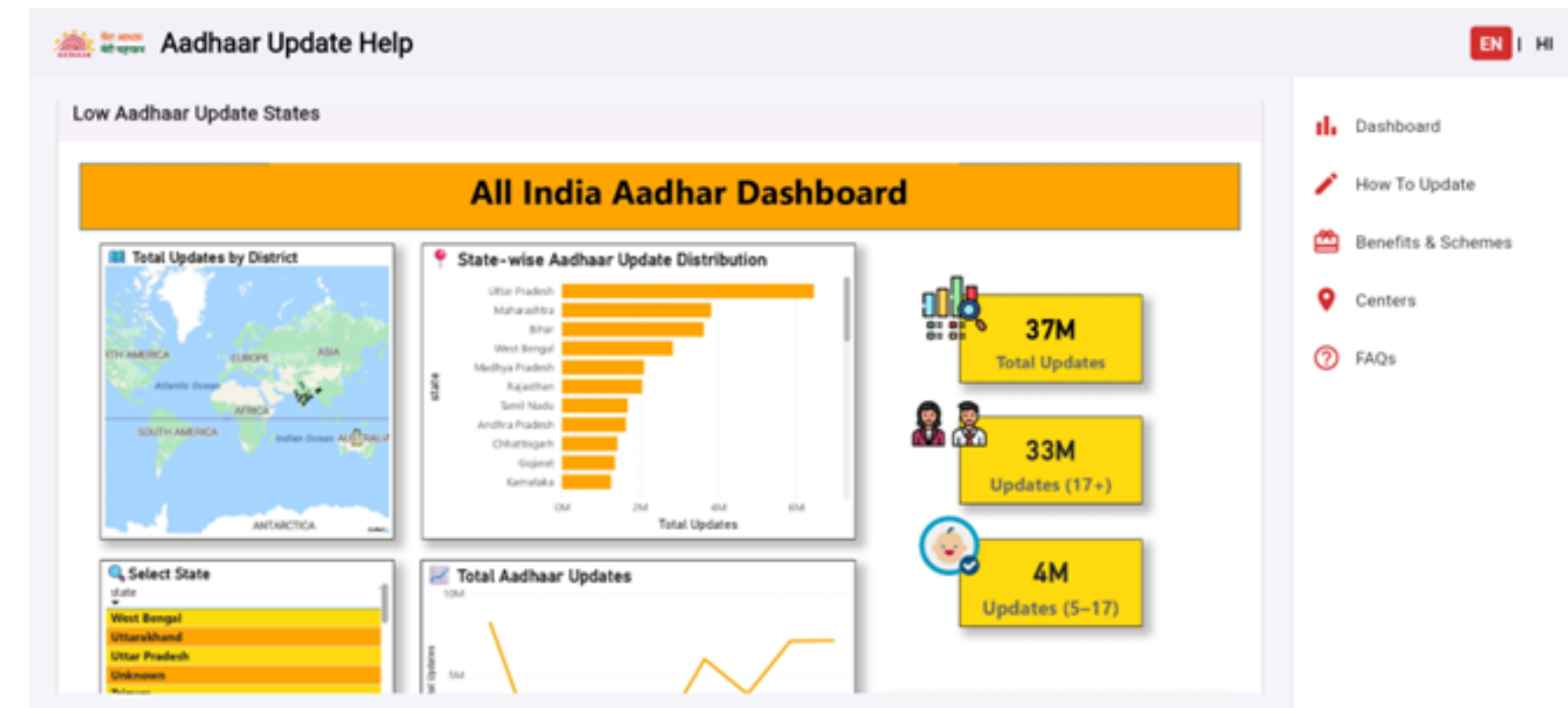
ANALYSIS & KEY FINDINGS

- High rates of updates are heavily concentrated in urban-like areas
- Rural-like areas show:
 - a. Lower absolute rate of updates
 - b. Slower cumulative growth
 - c. Children (5–17) are significantly under represented in rural updates
 - d. Strong inter-state inequality in Aadhar update efficiency
 - e. Several districts and pincodes emerge as priority intervention zones



CITIZEN-FACING APPLICATION

- Integrates insights into a citizen-accessible platform
- Features include:
 - a. Embedded dashboards for transparency
 - b. Step-by-step Aadhaar update guidance
 - c. Clear explanation of benefits of timely Aadhaar updates.
 - d. FAQs to address information gaps
 - e. Language support in English and Hindi
- Future Scope: Expansion to multiple regional Indian languages



RECOMMENDATIONS & POLICY IMPLICATIONS

Immediate (0–6 months)

- Mobile Aadhar update camps in high-risk districts
- School-based Aadhar update drives (ages 5–17)
- District-level dashboard monitoring

Short-Term (6–18 months)

- Incentivised rural campaigns
- Integration with school and anganwadi systems
- Capacity building of enrolment operators

Long-Term (18+ months)

- Lifecycle-based Aadhar update policy
- Automated reminders via SMS/app
- Continuous data-driven governance monitoring

IMPACT & WAY FORWARD

- Prevents exclusion of children and rural populations
- Enables targeted, data-driven interventions
- Scalable and feasible using existing infrastructure
- Reframes the process of updating Aadhaar as an inclusion-focused governance challenge
- Aligns with the vision of Digital India