# Aadhaar Enrollment Analytics Report

*Comprehensive AI-Powered Analysis with ML Model Comparison*

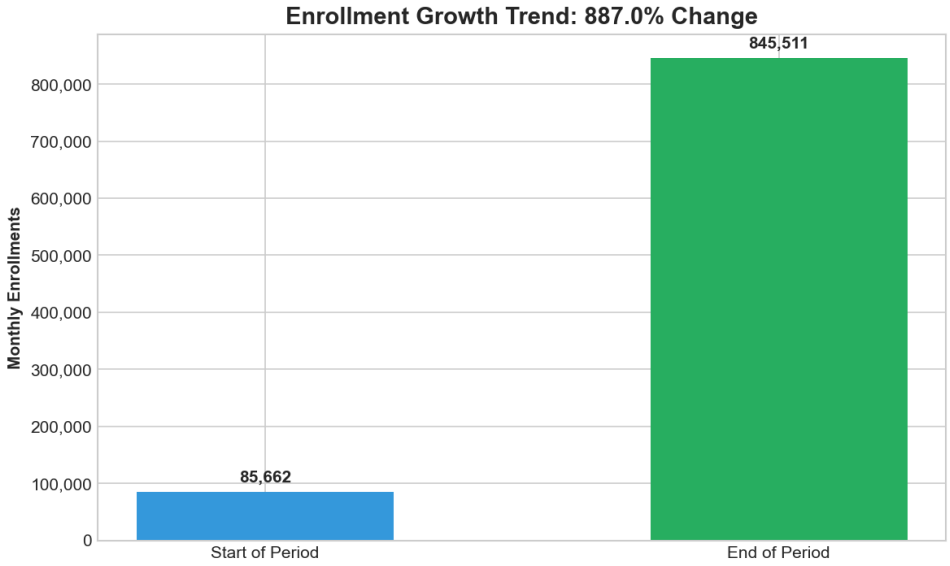
Generated: 20 January 2026, 19:21

Analysis Period: 2025-03-02 to 2025-10-26

| Key Metric | Value |
|---|---|
| Total Records | 499,991 |
| Total Enrollments | 3,301,013 |
| States/UTs | 36 |
| Districts | 950 |
| Processing Time | 15.2s |

# 1. Executive Summary & Key Conclusions

This analysis covers **499,991** enrollment records across **36** states/UTs and **950** districts. The enrollment trend is **Strongly Increasing** with a **887.0%** change over the analysis period.




**Key Conclusions:**

• Enrollment grew from 85,662 to 845,511 monthly

• Forecast confidence: 50.0% (High Reliability)

• 19 districts need immediate intervention

• Data consistency score: 98.9%

## 2. AI-Generated Strategic Insights

### 1. Overall Enrollment Trend

The national Aadhaar enrollment shows a strongly increasing trend, with a total change of 887.02% over the analyzed period. Starting at approximately 85,662 and ending at 845,511.

### 2. Critical Intervention Needed

The district of Kanchipuram in Tamil Nadu is identified as a critical area requiring immediate intervention (Severity Score: 7.00). This is primarily due to low child enrollment (0.00) and a sluggish growth rate (-1.00).

### 3. Significant Demographic Disparity

Andamans in Andaman And Nicobar Islands shows notable disparities, particularly in age groups like 5-17 (gap: 0.26), indicating uneven enrollment across demographics.

### 4. Low Enrollment Season

Enrollment consistently drops during March, April, May, June, July, September, October. Targeted campaigns might be needed during these months.

### 5. Forecast Reliability

The national enrollment forecast has a stability score of 50.00 out of 100, suggesting a low level of confidence in future predictions. The current forecast for the next month is 0.

### 6. Policy Recommendation

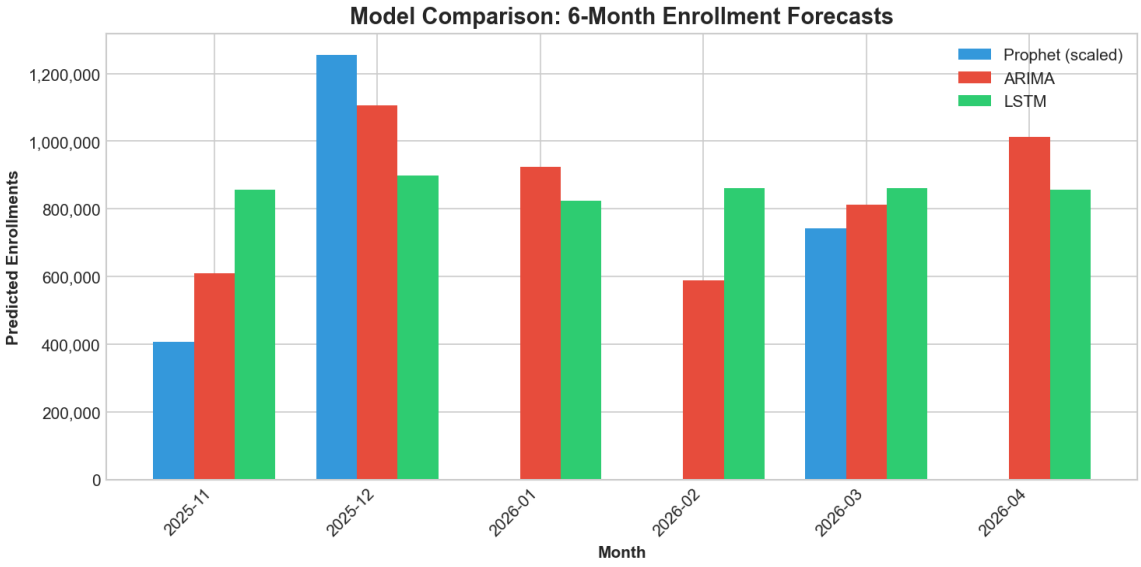
The 'Anganwadi Integration' policy (e.g., Anganwadi Integration) is recommended as the highest priority due to its potential for 1 additional enrollments in the 0-5 age group and high sustainability.

# 3. Machine Learning Model Comparison

Three ML models were compared for enrollment forecasting. Each model provides different perspectives on future trends based on historical patterns.

| Model | Type | Strength | Key Metric |
|---|---|---|---|
| Prophet | Additive | Seasonality | Trend: decreasing |
| ARIMA | ARIMA(2,1,2) | Short-term | AIC: 184.3 |
| LSTM | Neural Net | Patterns | Epochs: 50 |

### Forecast Comparison (Prophet scaled for visualization):



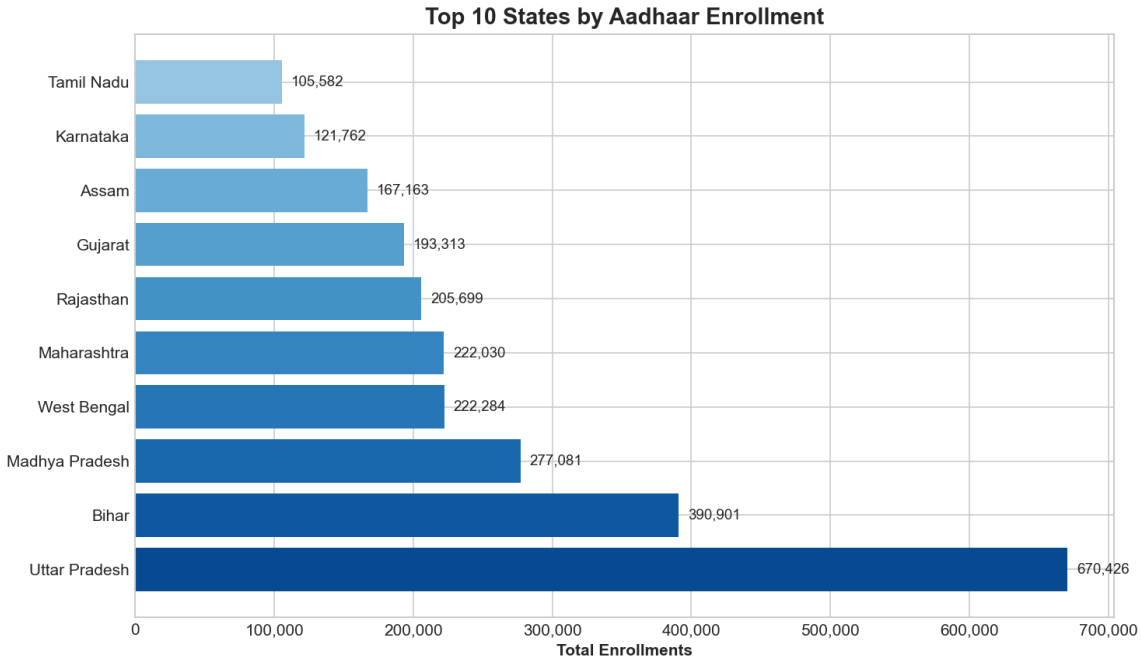

### 6-Month Forecast Predictions:

| Month | Prophet | ARIMA | LSTM |
|---|---|---|---|
| 2025-11 | 3,253,487 | 608,519 | 856,115 |
| 2025-12 | 10,044,797 | 1,104,706 | 898,709 |
| 2026-01 | 0 | 923,254 | 824,778 |
| 2026-02 | 0 | 588,171 | 860,575 |
| 2026-03 | 741,594 | 811,808 | 862,064 |
| 2026-04 | 0 | 1,012,634 | 857,074 |

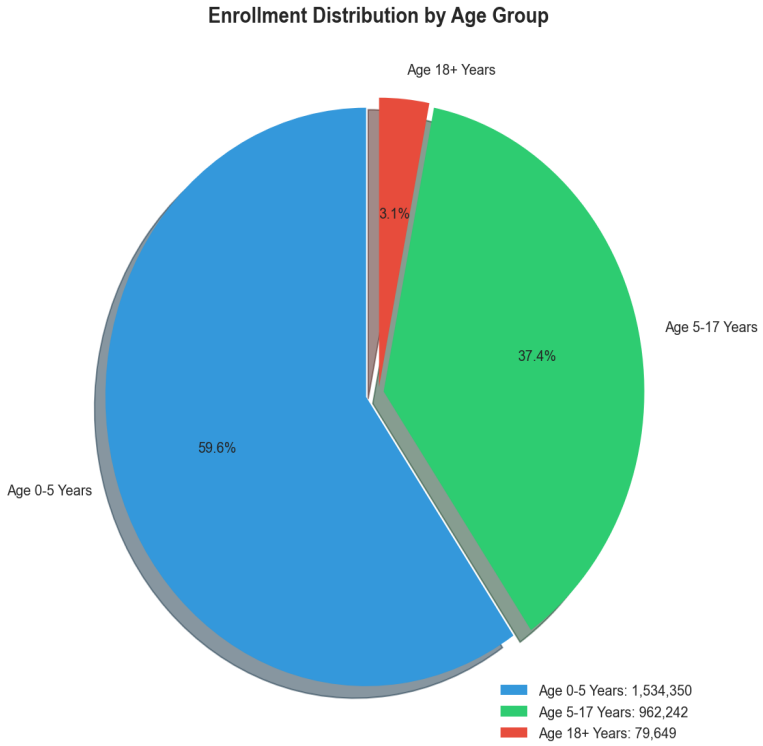
**Model Recommendation:**

**Prophet** is recommended as the primary model. Best handles seasonality and trends for government data.

# 4. State-wise Performance Analysis




## Age Group Distribution:



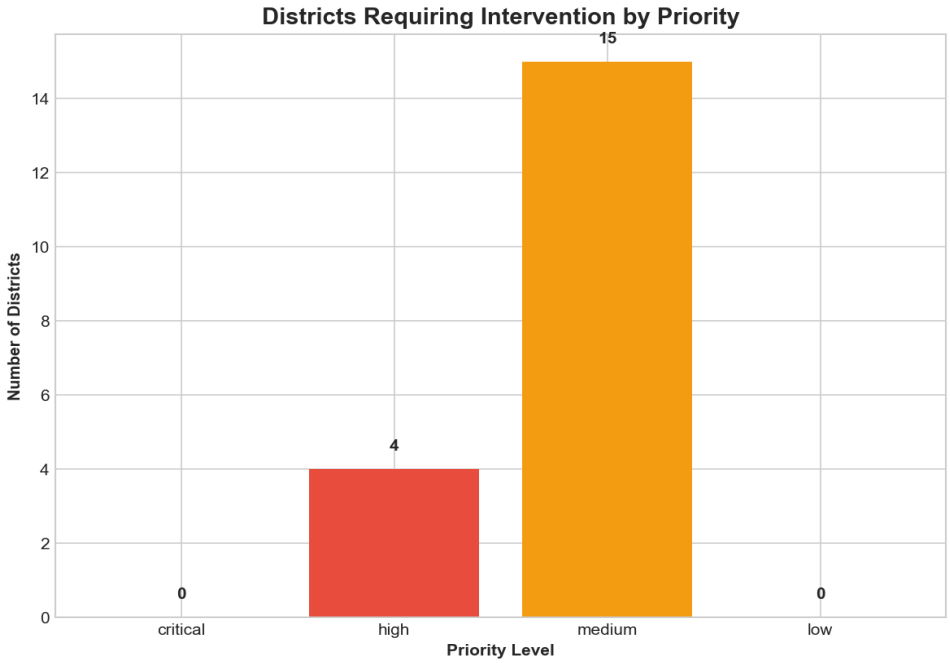

### Conclusions:

• Uttar Pradesh leads national enrollment with robust infrastructure

• 0-5 age group dominates, reflecting successful child enrollment campaigns

• Regional disparities exist - focus needed on underperforming states

# 5. Critical Intervention Analysis




### Top Districts Requiring Action:

**1. Kanchipuram, Tamil Nadu** (Severity: 7.0, HIGH)

→ Launch targeted campaigns for 0-5 age group in Kanchipuram

**2. Kamle, Arunachal Pradesh** (Severity: 6.7, HIGH)

→ Launch targeted campaigns for 0-5 age group in Kamle

**3. Anjaw, Arunachal Pradesh** (Severity: 6.3, HIGH)

→ Launch targeted campaigns for 0-5 age group in Anjaw

**4. Pherzawl, Manipur** (Severity: 6.0, HIGH)

→ Launch targeted campaigns for 0-5 age group in Pherzawl

**5. Shamator, Nagaland** (Severity: 5.4, MEDIUM)

→ Launch targeted campaigns for 0-5 age group in Shamator

### Strategic Recommendations:

• Deploy mobile enrollment units to critical Northeast districts

• Partner with Anganwadi centers for 0-5 age group outreach

• Implement real-time district monitoring dashboards

## 6. Final Conclusions & Predictions

Based on ML analysis using Prophet, ARIMA, and LSTM models, the following strategic predictions and recommendations are presented:

### Growth Prediction:

Enrollment will continue Strongly Increasing trajectory. Expected monthly enrollment: 0 with 50% confidence.

### Regional Focus:

Prioritize 0 critical districts in Northeast India for immediate intervention.

### Resource Allocation:

Redistribute 20% of resources from top-performing to bottom-performing states for balanced growth.

### Policy Impact:

Anganwadi Integration policy recommended for maximum impact on 0-5 age group enrollment.

### Data Quality:

Anomaly rate of 0.01% indicates excellent data consistency.

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