**Report on ECDE Enrollment Trends in Kaiti Sub-County (2018–2022)**

**Introduction**

This report presents an analysis of Early Childhood Development Education (ECDE) enrollment trends in Kaiti Sub-County, focusing on four wards: Ukia, Kilungu, Ilima, and Kee. The data encompasses both public and private ECDE enrollments across a five-year period (2018–2022). The purpose of this report is to examine total enrollments, identify trends, and explore the relationship between public and private enrollments in these wards.

Data Summary

The enrollment data was analyzed for both public and private ECDE centers, considering the following parameters:

Public enrollments from 2018 to 2022

Private enrollments from 2018 to 2022

Total enrollments, computed as the sum of public and private enrollments

The wards included in this study are:

Ukia

Kilungu

Ilima

Kee

Total Enrollment Trends (2018–2022)

The analysis reveals significant variations in public and private enrollments across the wards for the years 2018 to 2022:

| **Ward** | **Total Public Enrollment (2018–2022)** | **Total Private Enrollment (2018–2022)** | **Total Enrollment (2018–2022)** |
| --- | --- | --- | --- |
| Ukia | 8,825 | 1,958 | 10,783 |
| Kilungu | 6,821 | 1,126 | 7,947 |
| Ilima | 7,147 | 123 | 7,270 |
| Kee | 4,524 | 0 | 4,524 |

Ukia recorded the highest total public and private enrollments across the five-year period.

Kee had no private enrollments, indicating a reliance solely on public ECDE centers.

Ilima had minimal private enrollments, totaling only 123 over five years.

Proportions of Public vs. Private Enrollment

Overall, public enrollments far outnumber private enrollments across all wards. The proportions of public vs. private enrollment for all wards from 2018 to 2022 are as follows:

Public Enrollment: 91.07%

Private Enrollment: 8.93%

These figures underscore the dominance of public ECDE centers in Kaiti Sub-county, with private enrollments contributing a smaller share of the total.

Visual Representation

Bar Plot: Public vs Private Enrollment by Ward (2018–2022)

The bar plot visually represents the distribution of public and private enrollments across the four wards. Public enrollments far surpass private enrollments, particularly in Kee and Ilima.



Pie Charts: Public vs Private Enrollment per Ward (2018–2022)

Ukia: Public enrollment constitutes 81.85%, while private enrollment stands at 18.15%.

Kilungu: Public enrollment constitutes 85.83%, while private enrollment stands at 14.17%.

Ilima: Public enrollment is overwhelming at 98.31%, while private enrollment is minimal at 1.69%.

Kee: Public enrollment is 100%, indicating no private enrollment in this ward.











These pie charts highlight the overall dominance of public ECDE enrollments across all wards, with Kee and Ilima showing nearly exclusive public enrollments.

Correlation Analysis

**Correlation between Public and Private Enrollment (2018–2022)**

The correlation between public and private enrollments across the wards from 2018 to 2022 is 0.843, indicating a strong positive correlation. This suggests that, an increase in public enrollments are associated with a increase in private enrollments.

Scatter Plots

**Scatter Plot:** Public vs Private Enrollment This scatter plot shows a strong positive relationship between public and private enrollments, suggesting that increases in public enrollment are associated with increases in private enrollment.



**Scatter Plot:** Public vs Total Enrollment This scatter plot illustrates that public enrollments significantly influence total enrollments, with the points closely aligned along the line, indicating a strong correlation.



**Scatter Plot:** Private vs Total Enrollment The scatter plot displays a weaker correlation for private enrollments, indicating they contribute less significantly to the total enrollments compared to public enrollments.



Conclusion

The analysis of ECDE enrollments in Kaiti Sub-county reveals that public enrollments dominate across all wards, with private enrollments playing a smaller, though varying, role. Ukia had the highest overall enrollments, while Kee relied entirely on public ECDE centers. The strong positive correlation between public and private enrollments suggests that an in increase in public enrollment are associated with private enrollment.