



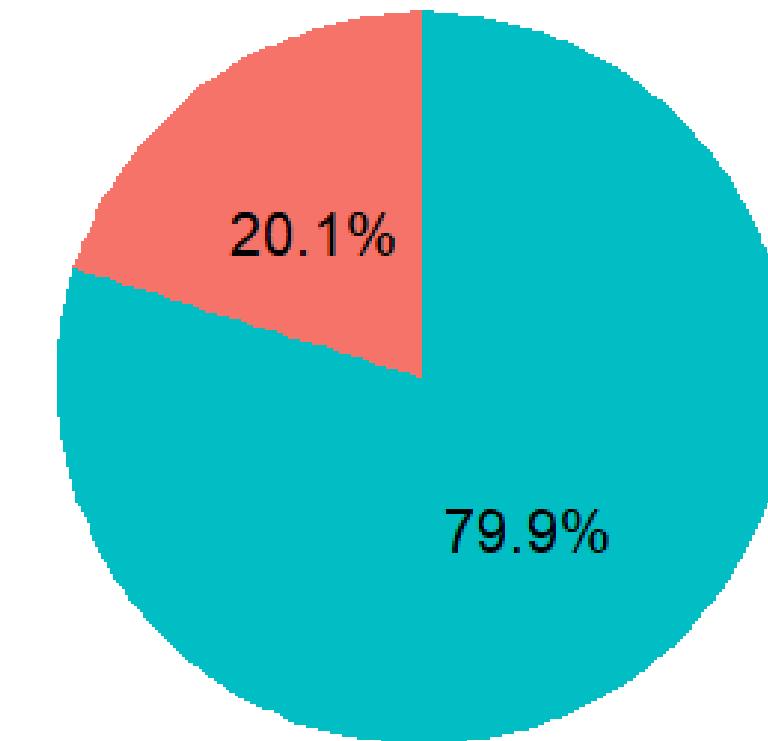
City Analytics - Pune

By - Pawar Abhijeet Vijay

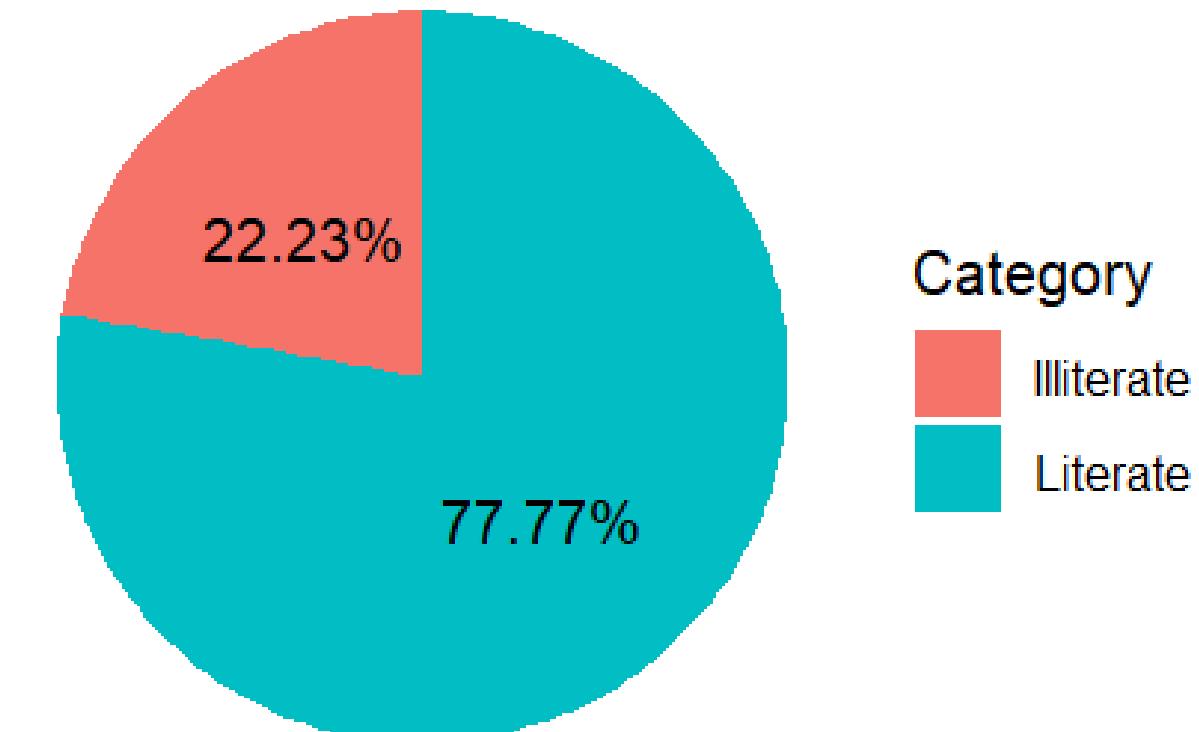
Literacy and Employment

Comparison between Wards of Pune Municipal Corporation (PMC) and Pimpri Chinchwad Municipal Corporation (PCMC)

Literacy and Illiteracy in PMC

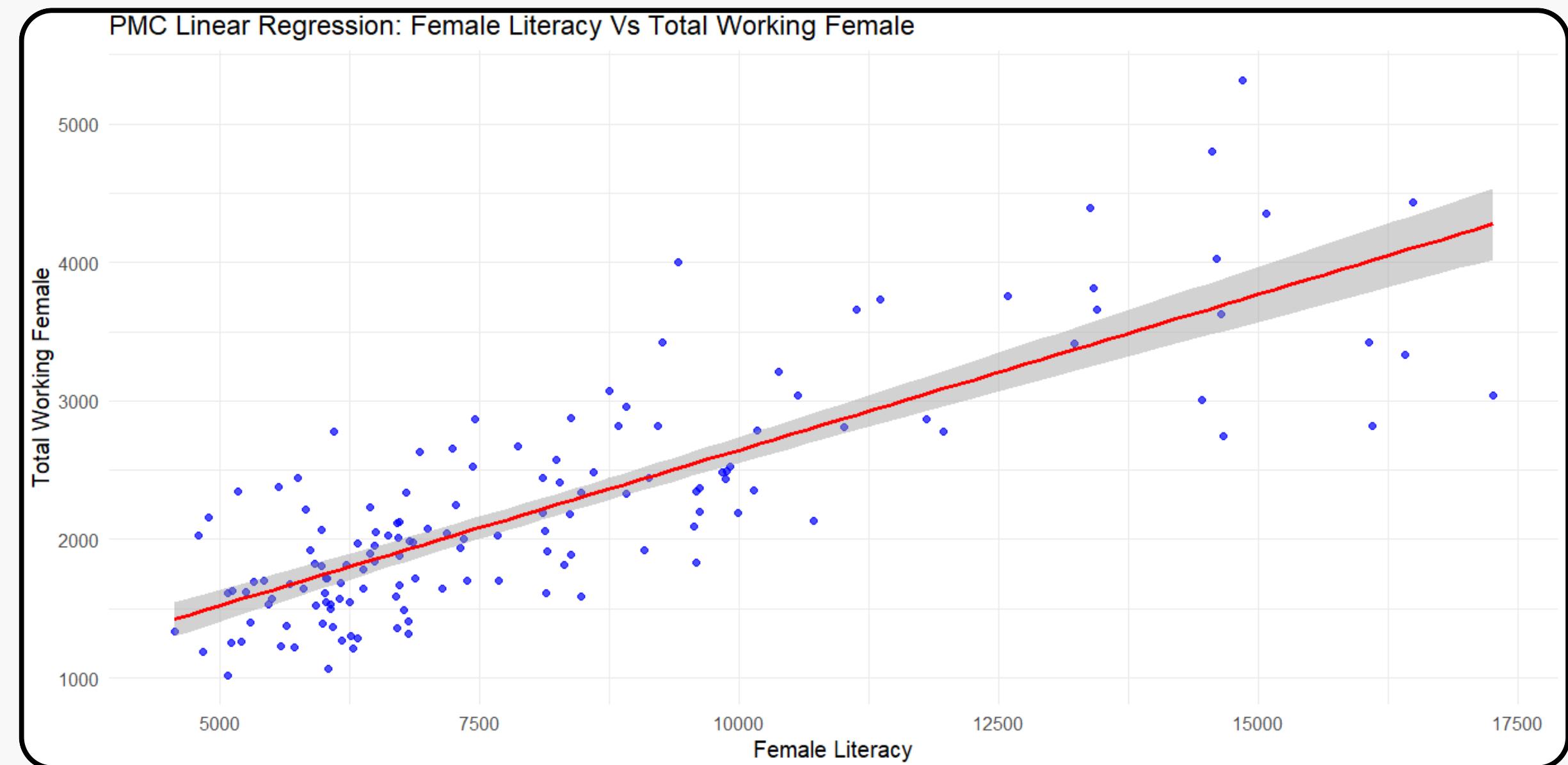


Literacy and Illiteracy in PCMC



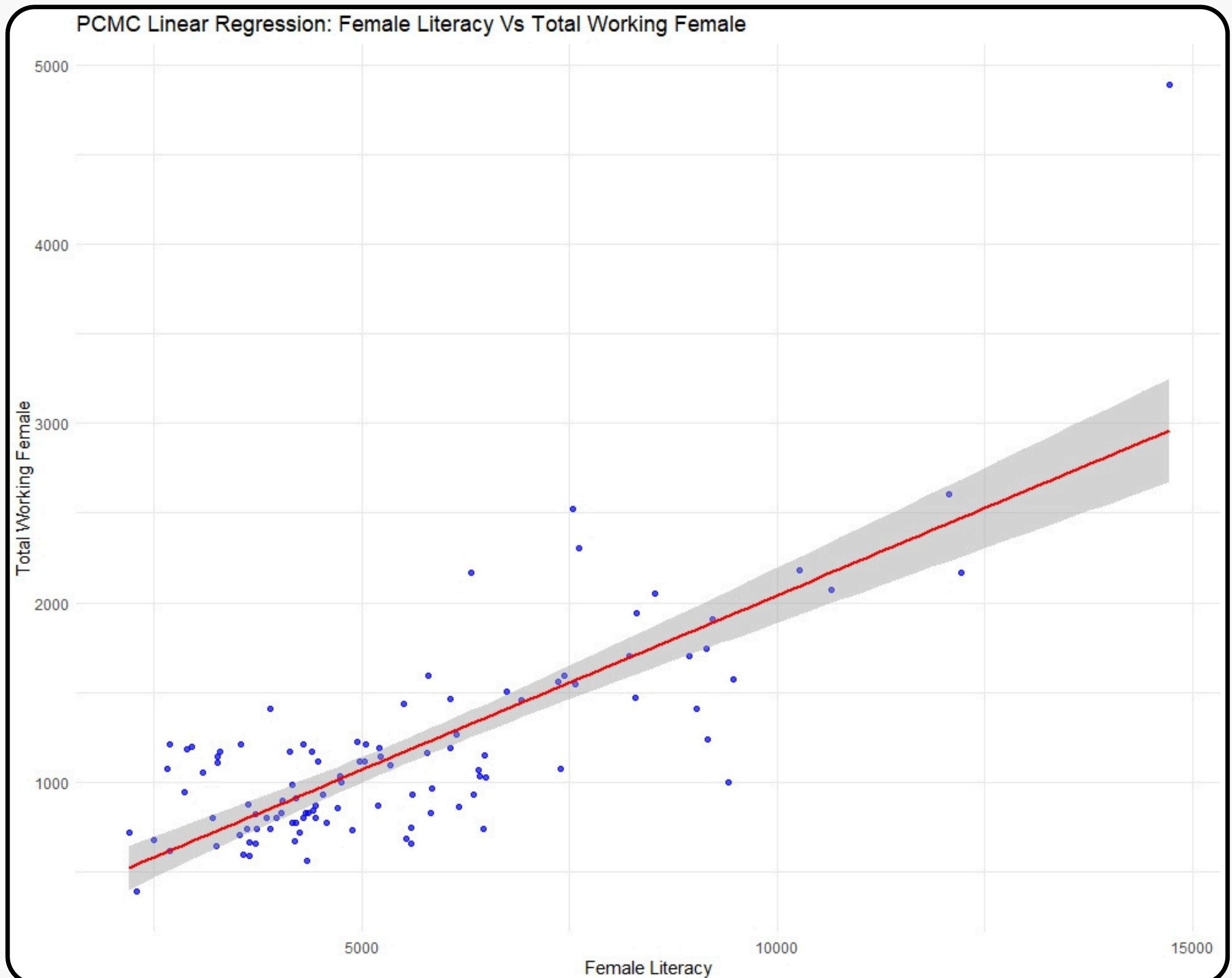
Linear Regression - PMC

- Female Literacy Vs Total Working Female
- R = 0.81
- R Squared = 0.657
- Weak positive correlation
- Confidence Interval - 95%

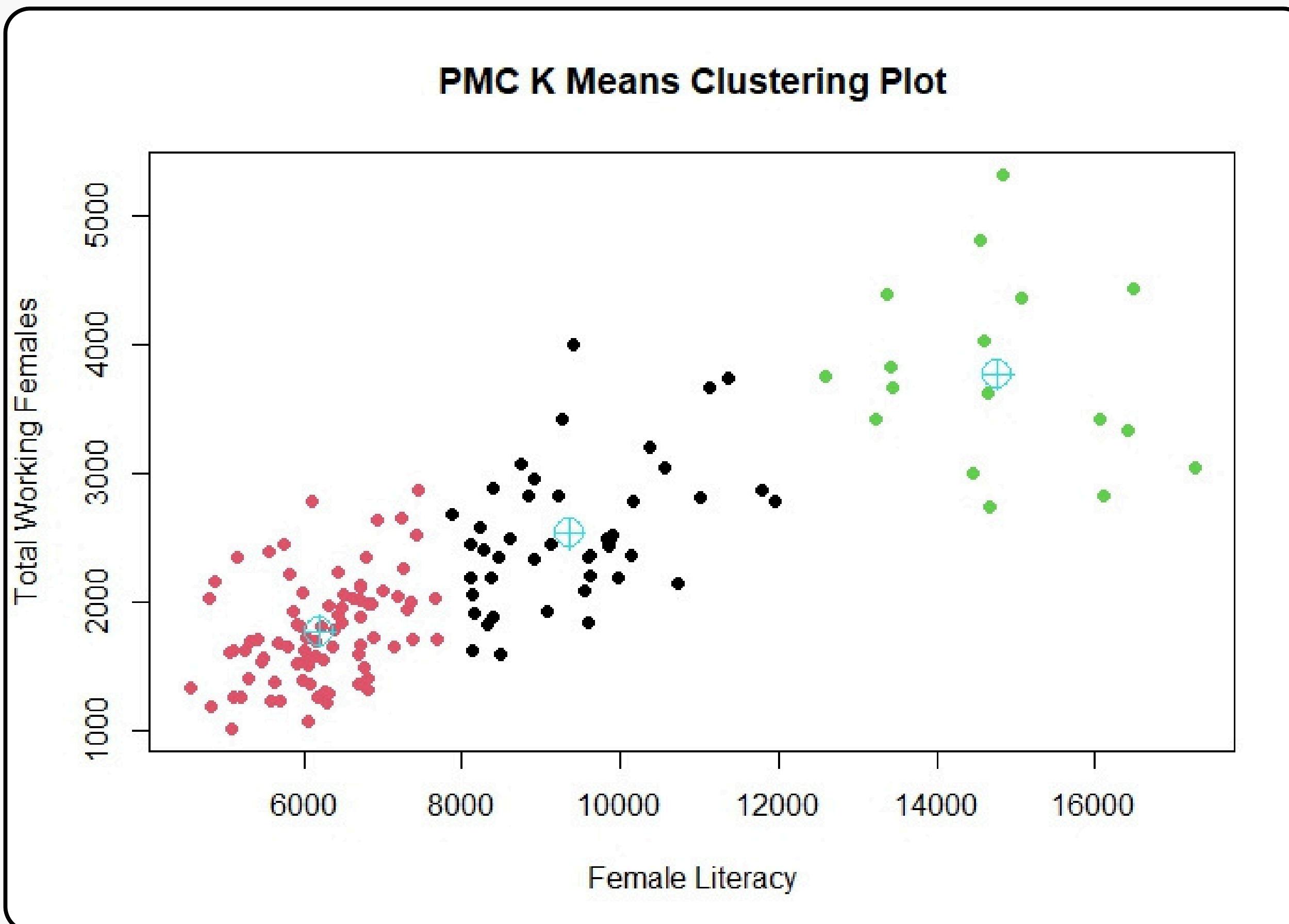


Linear Regression - PCMC

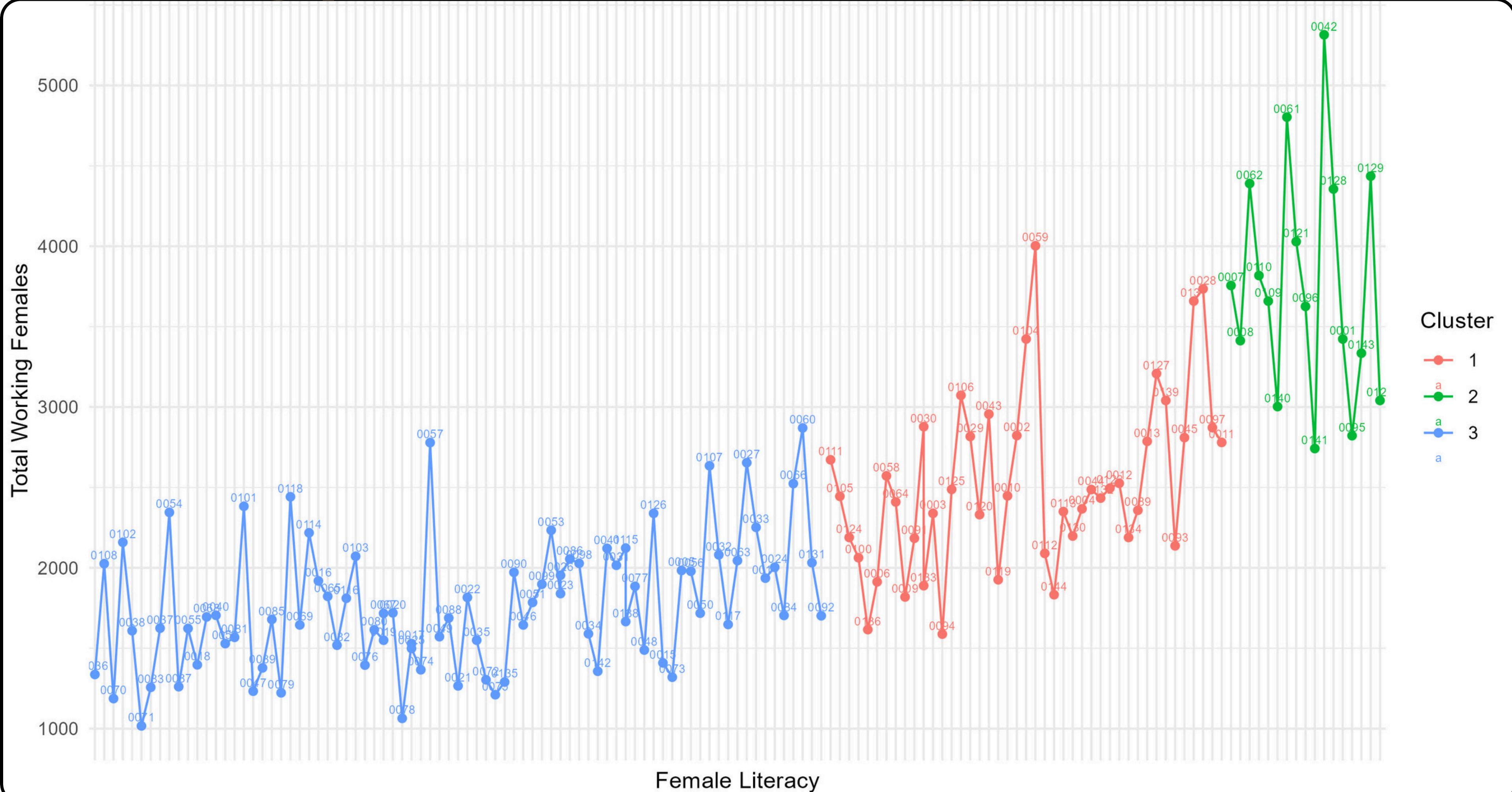
- Female Literacy Vs Total Working Female
- R = 0.78
- R Squared = 0.61
- Weak positive correlation
- Confidence Interval - 95%



K Means Clustering - PMC



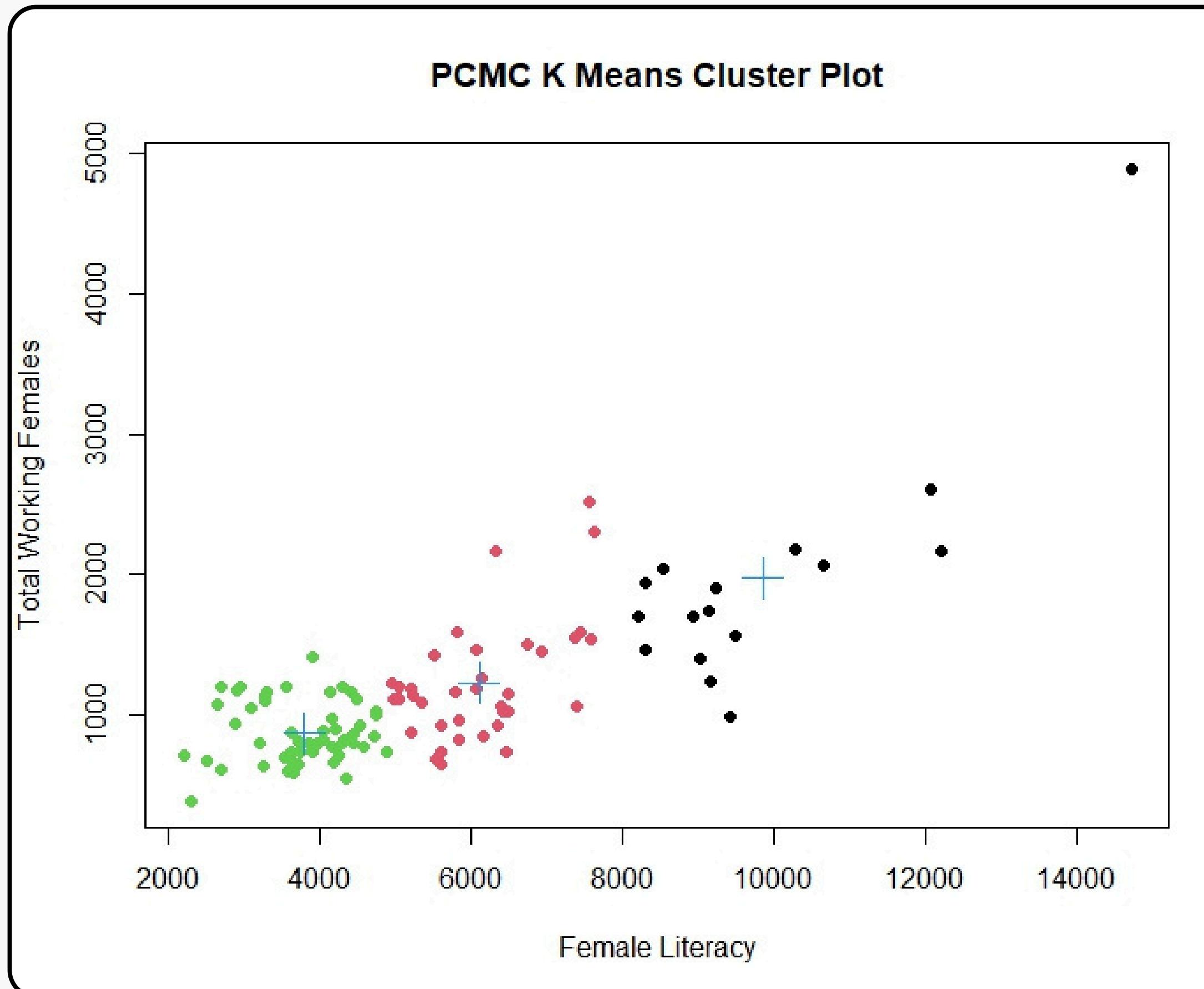
PMC - Line graph of Female Literate and Total Working Female



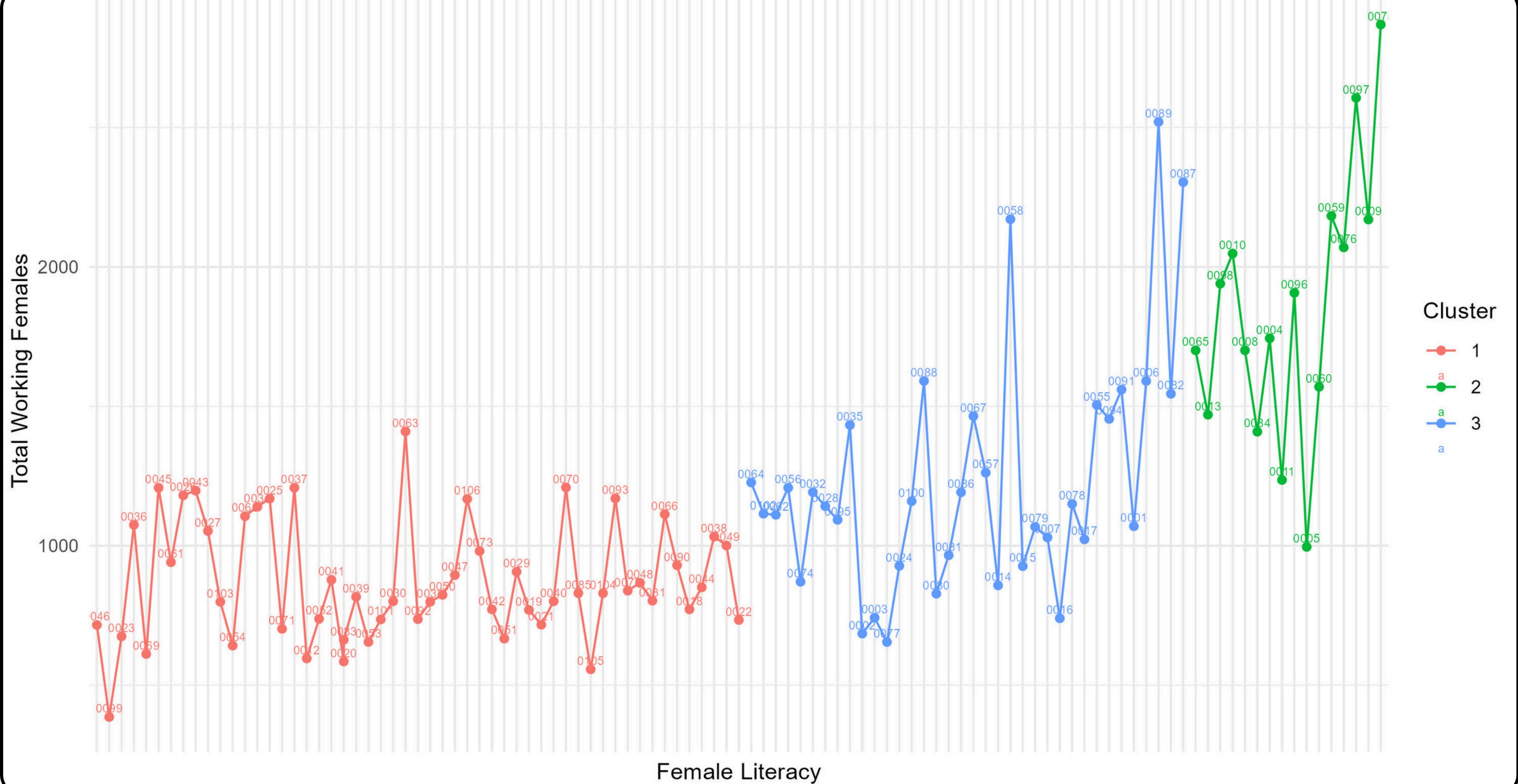
Inference

- For PMC - Female Literacy and Total Working Female
- Pink Cluster: Mixed variability and moderate increase, indicating wards with varied conditions but generally improving female workforce participation with higher literacy. How to Improve?
- Green Cluster: Clear, steep trend, showing a strong positive correlation between female literacy and working females, with wards having higher literacy generally benefiting more in workforce participation. How to Improve?
- Blue Cluster: Minimal increase with tightly packed data points, indicating that wards with very low literacy see less significant increases in working females, possibly due to other socio-economic factors. How to Improve?

K Means Clustering - PCMC



PCMC - Line graph of Female Literate and Total Working Female

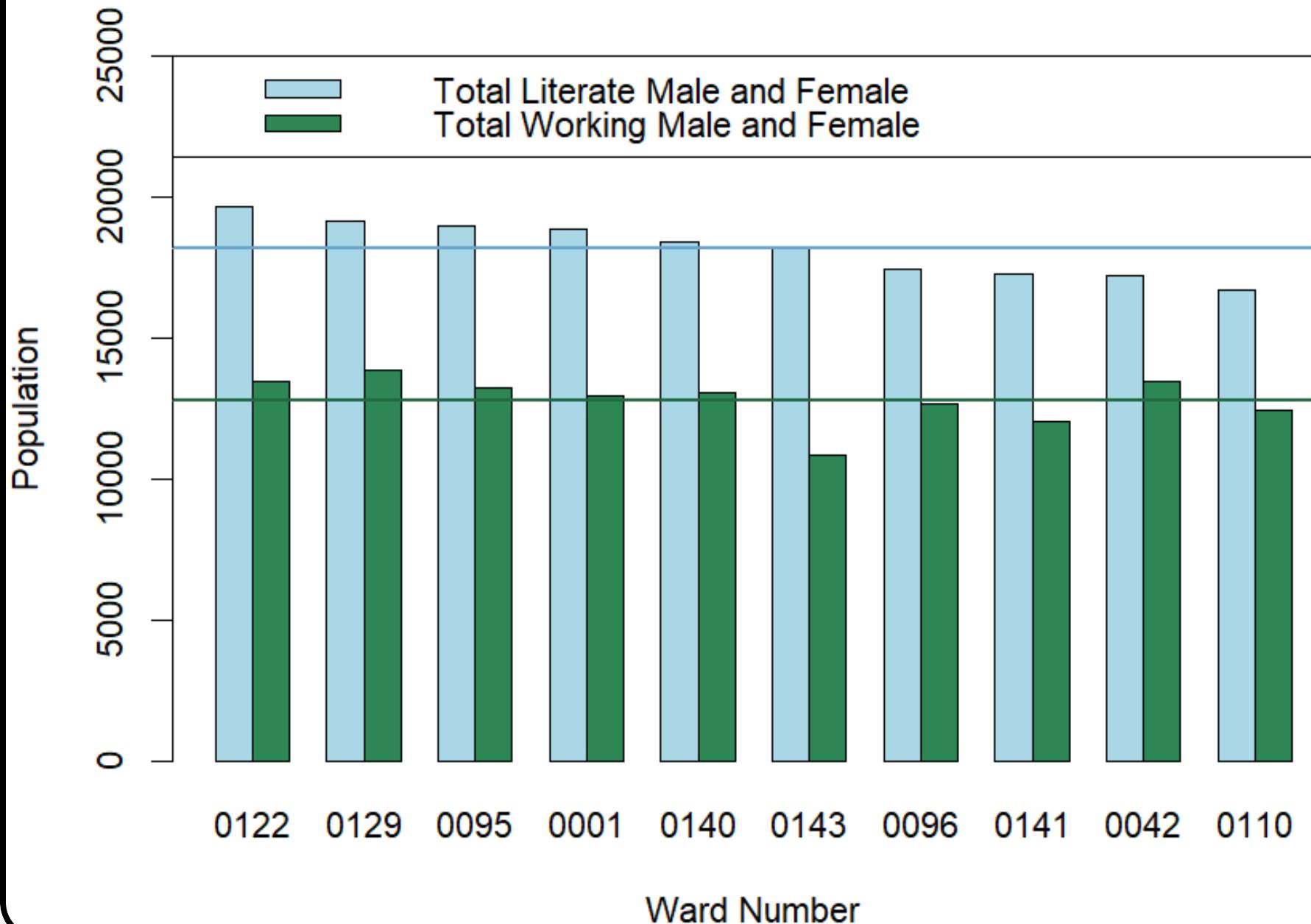


Inference

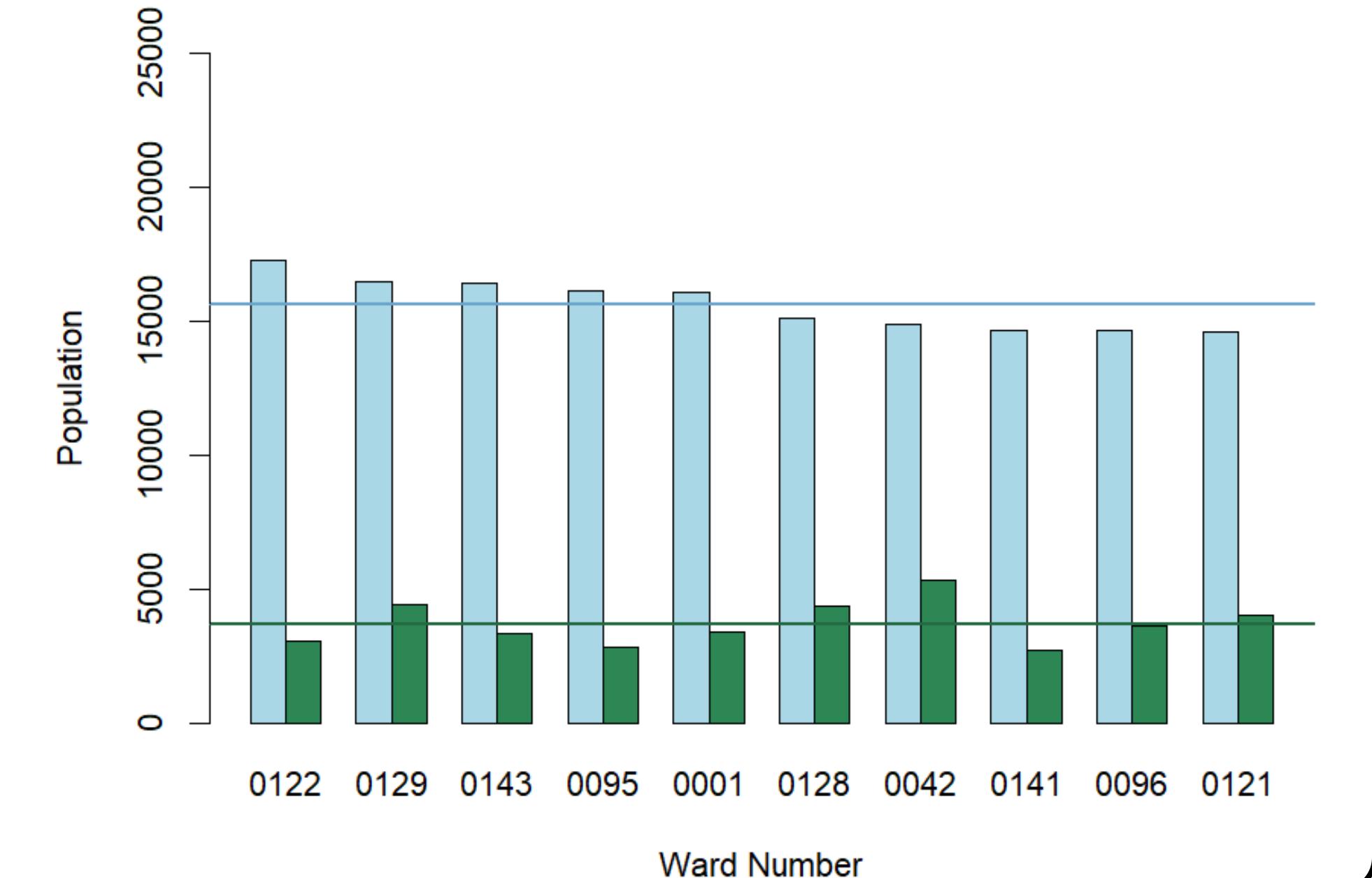
- For PCMC - Female Literacy and Total Working Female
- Pink Cluster: High variability and wards with varied conditions but no significant increase in female workforce participation with higher literacy. How to Improve?
- Blue Cluster: High Variability with moderate increase, weak positive correlation between female literacy and working females. How to Improve?
- Green Cluster: High Variability with scattered data points, increase and decrease with weak positive correlation between female literacy and working females. How to Improve?

"Top 10 Wards: Male & Female Literacy vs. Workforce"

Working Male in wards with Highest Male Literacy (Top 10)

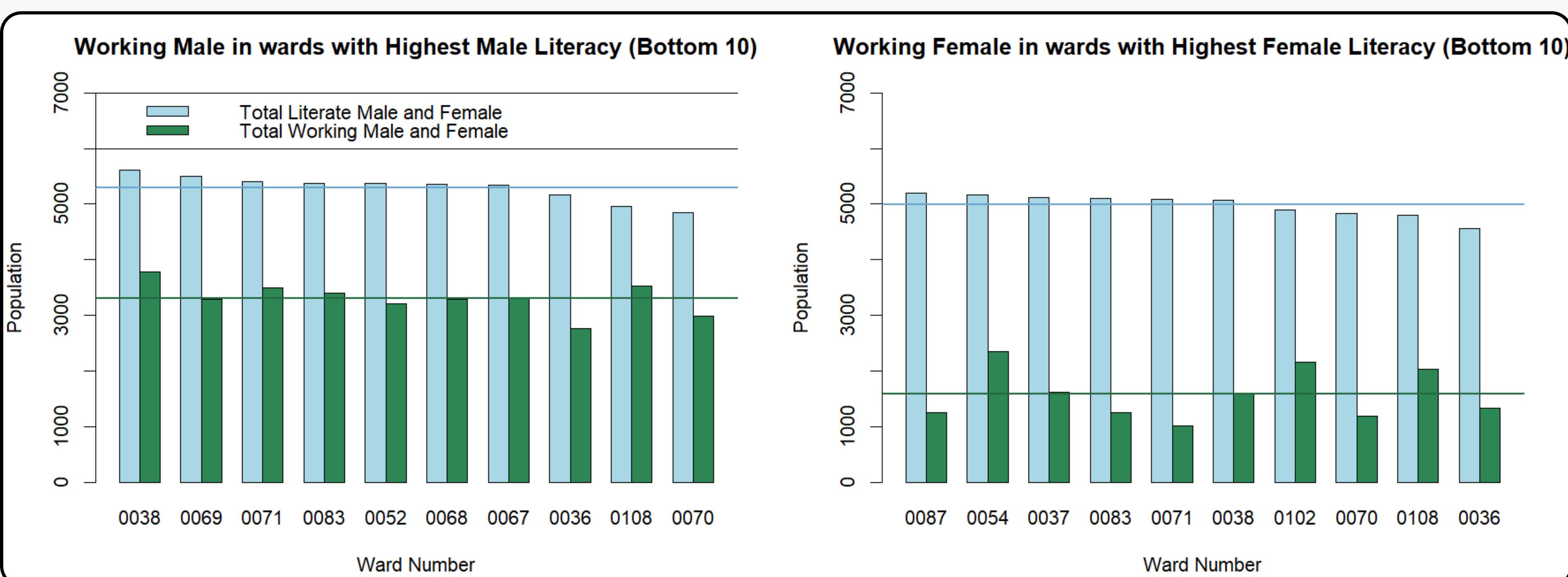


Working Female in wards with Highest Female Literacy (Top 10)



- Gap in average of Male Literate and Male Working = 5384
- Gap in average of Female Literate and Female Working = 11,904
- Significant gap in Literate Female and Working Female population compared to male gap due to socio economic factors.

"Bottom 10 Wards: Male & Female Literacy vs. Workforce"



- Gap in average of Male Literate and Male Working = 1987
- Gap in average of Female Literate and Female Working = 3403
- Significant gap in Literate Female and Working Female population compared to male gap due to socio economic factors.