

# Community-Engaged Efforts in Addressing the Youth Substance Abuse in the Democratic Republic of the Congo

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## Background

- Youth substance abuse has been both a result and a cause of complex social problems in the Democratic Republic of the Congo (DRC).
- In the northeastern region of the DRC, the territory of Aru, approximately 40% of the 150,000 individuals aged between 15 and 35 are impacted by substance abuse.

## Objective

- The primary objective of this project is to create a process map delineating the roles and interactions of local churches, community workers, and non-governmental organizations in preventing youth substance abuse.
- The process involves stakeholder identification, survey distribution, and using technology to solve current problems.

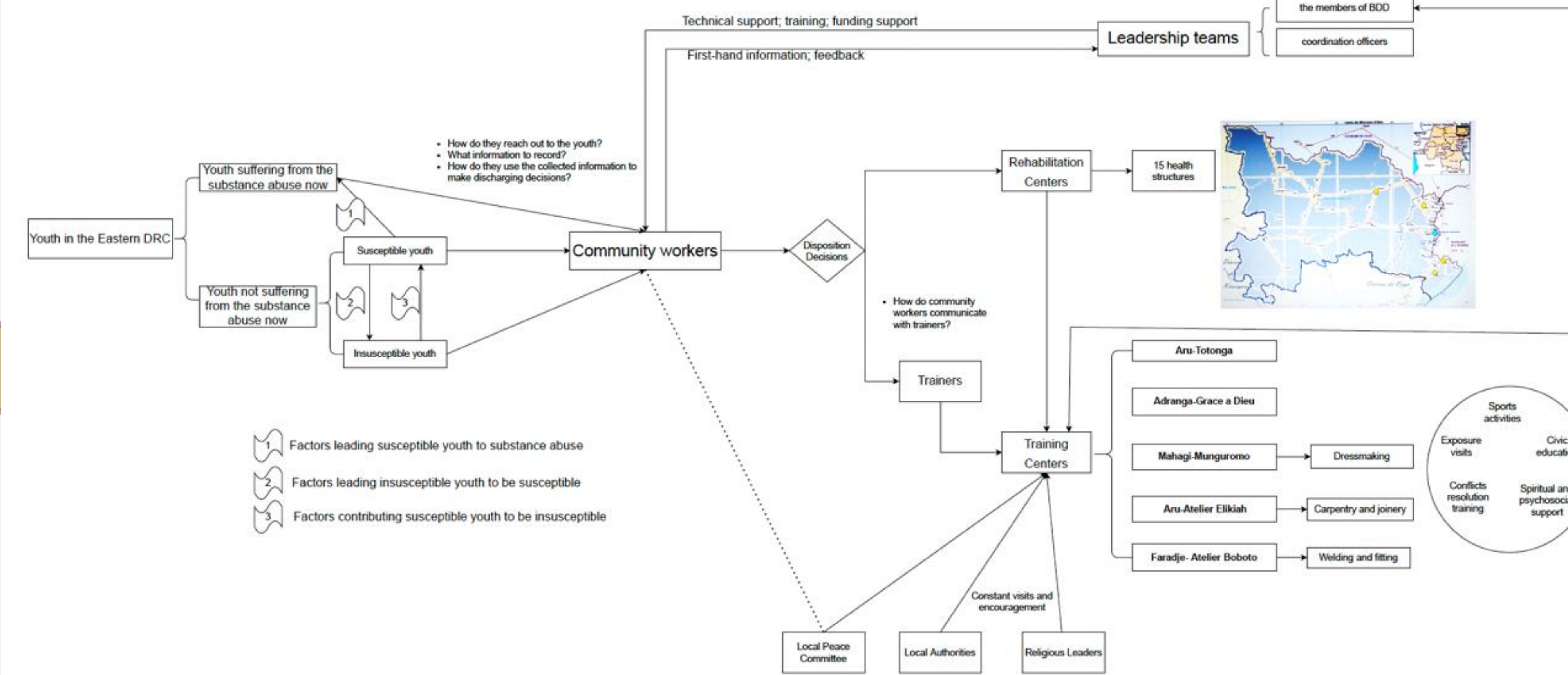
## Methods

- This study was approved by the Purdue University IRB.
- We used open-ended surveys to get a basic understanding of the situation in Aru.
- Then we used closed-ended surveys to know about the daily workflows, barriers encountered, and suggestions for improvement from each stakeholder.
- The study was guided by a part of the Integrate, Design, Assess, and Share (IDEAS) framework.

## Results

- In the process map, we identified five stakeholders: youths, youth leaders, community workers, religious leaders, and teachers.
- Youth leaders and community workers reach out to youth and decide whether to send the youth to rehabilitation centers or to match youth with training centers. Teachers provide youth with professional skills training. Religious leaders coordinate other stakeholders and providing funding or operational support.
- Two responses were obtained from the first-round open-ended survey. Based on those responses, we were able to enrich the process map.
- For second-round closed-ended survey, we received six responses from teachers, eighteen responses from the students and thirty-five responses from the youth leaders.
- Part of survey results are showed here by the figures.

## Process Mapping



## Survey Result Data

Figure 1 Student Age Distribution

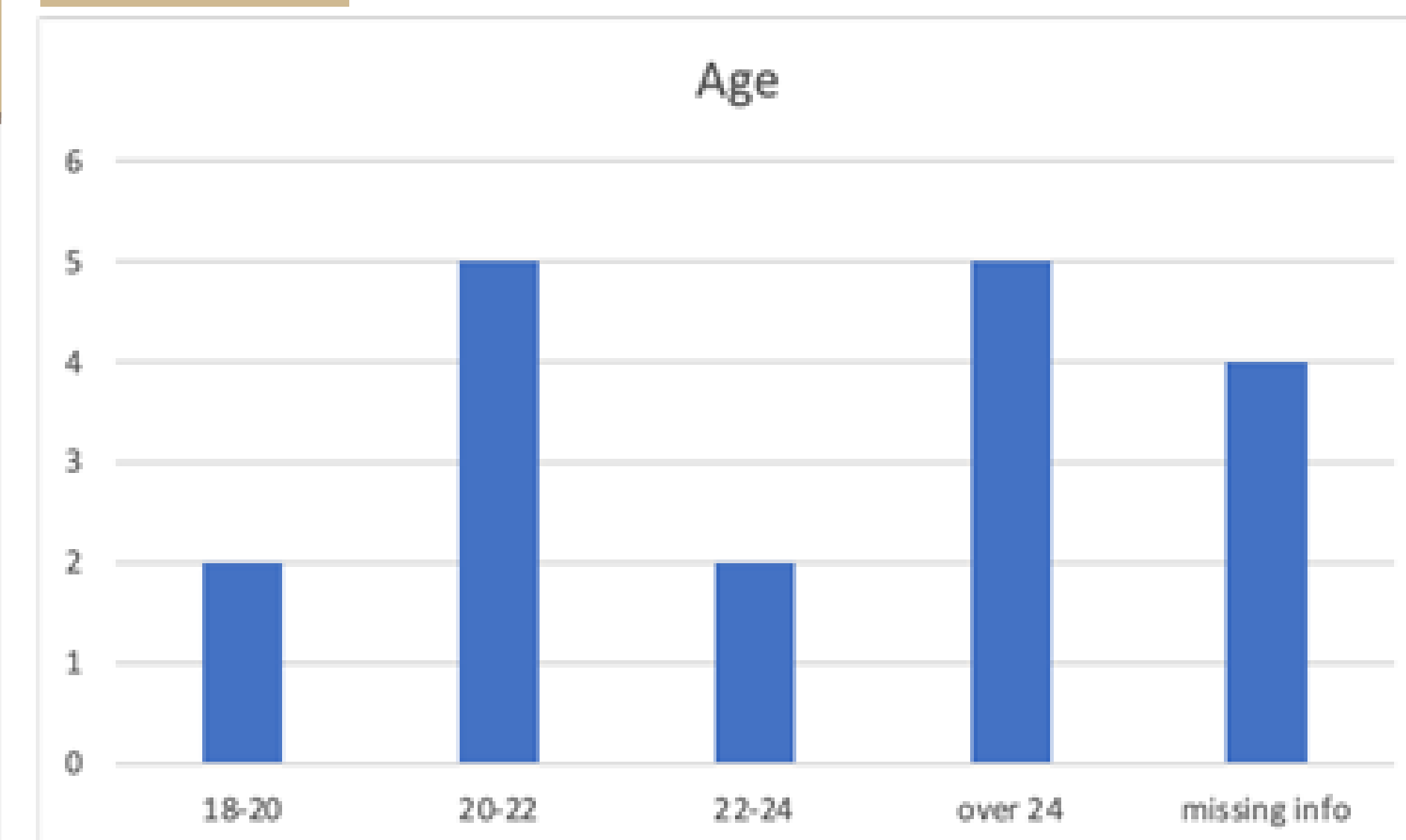


Figure 2 Time students spend on commuting to training center.

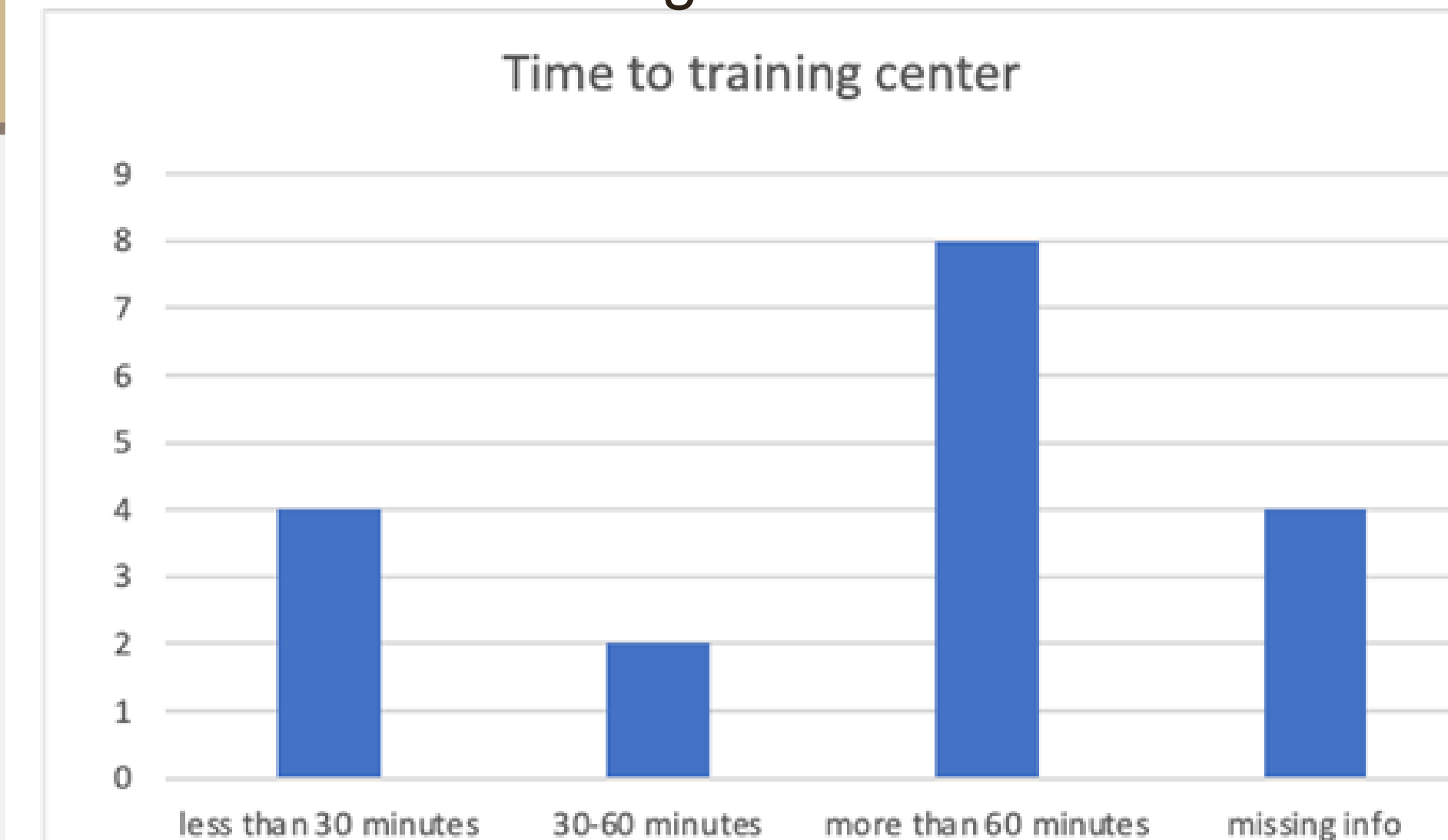


Figure 3 Ways student know about training center

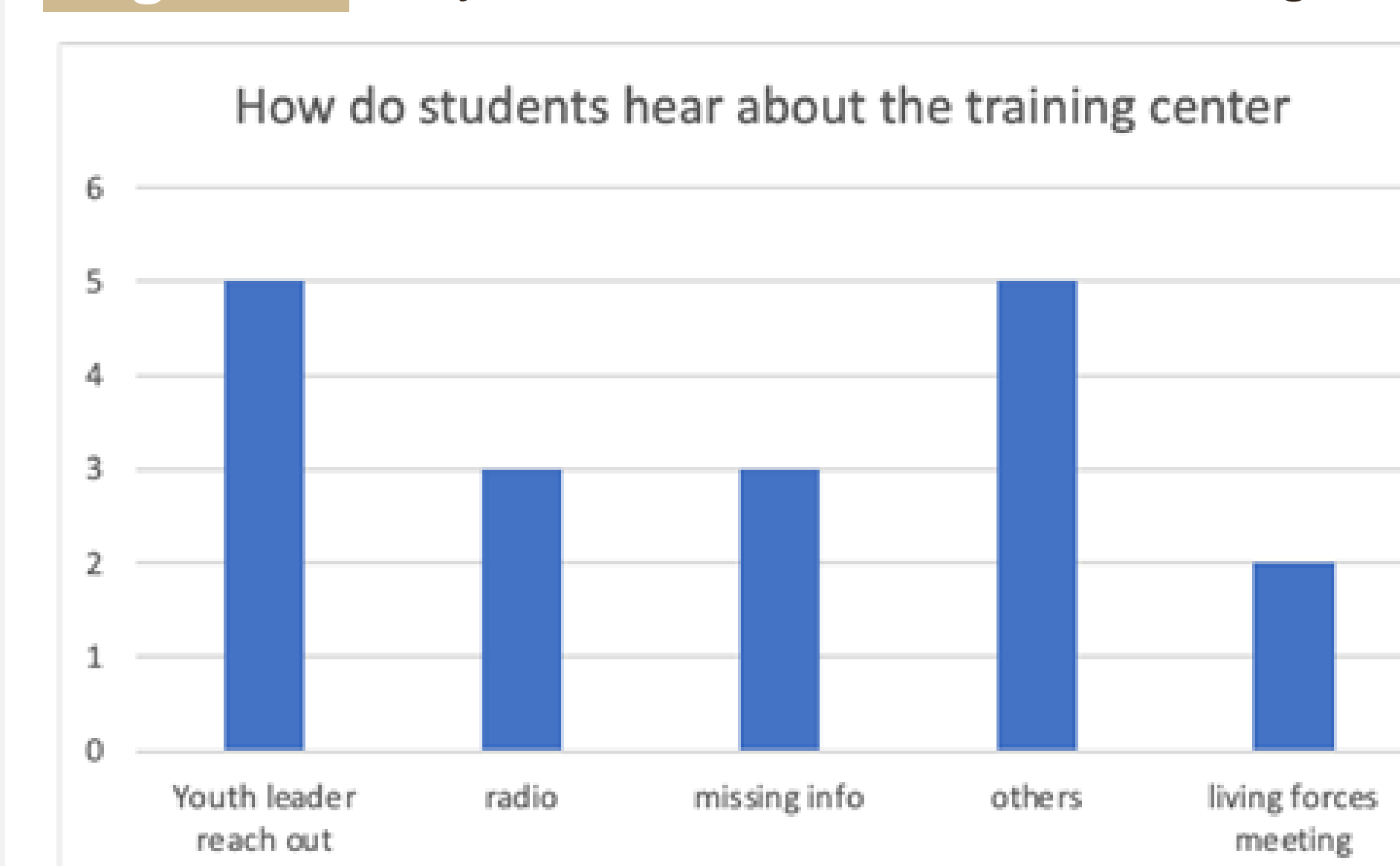


Figure 4 Youth leader distribution around Aru

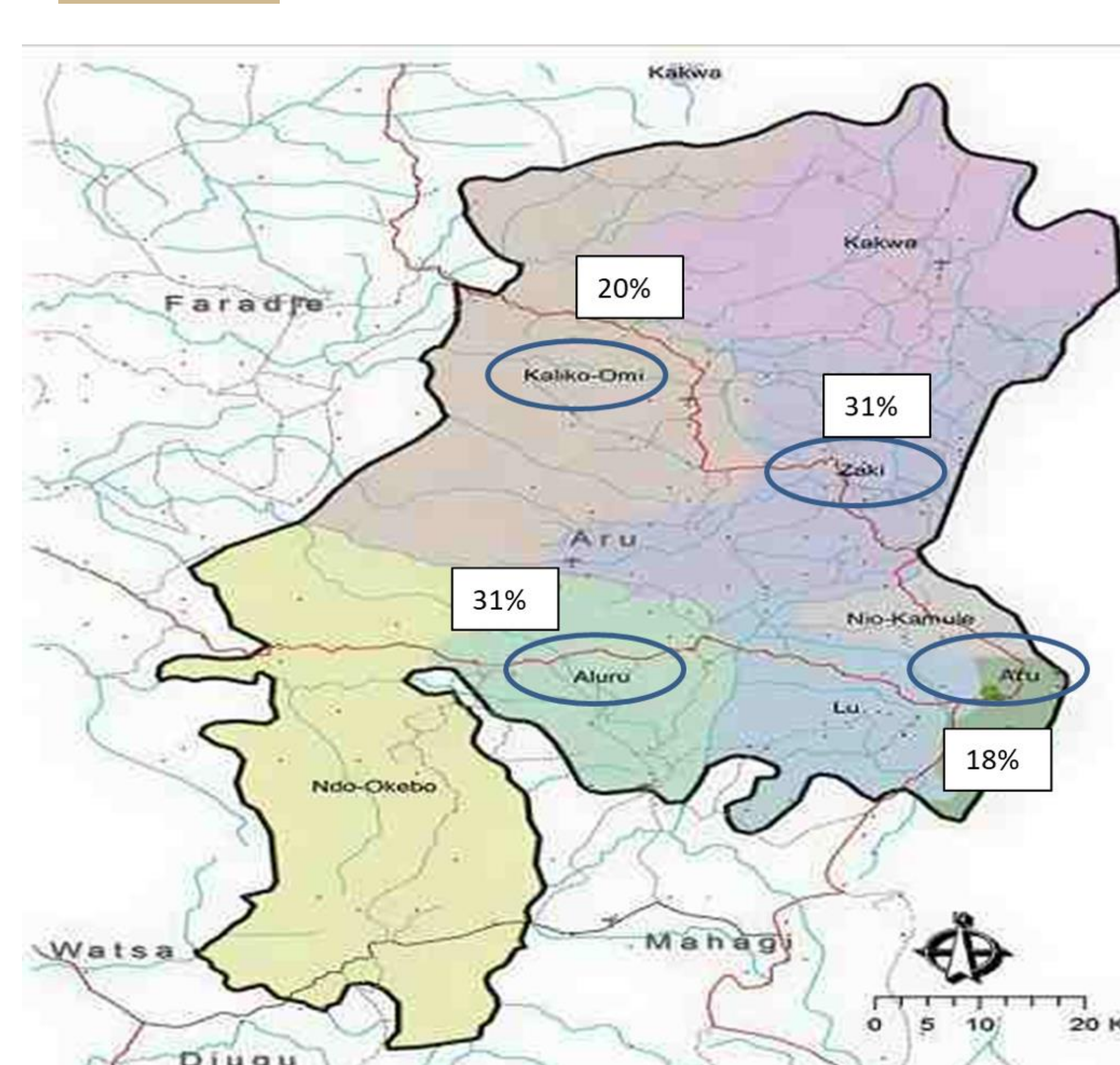


Figure 5 New training center location

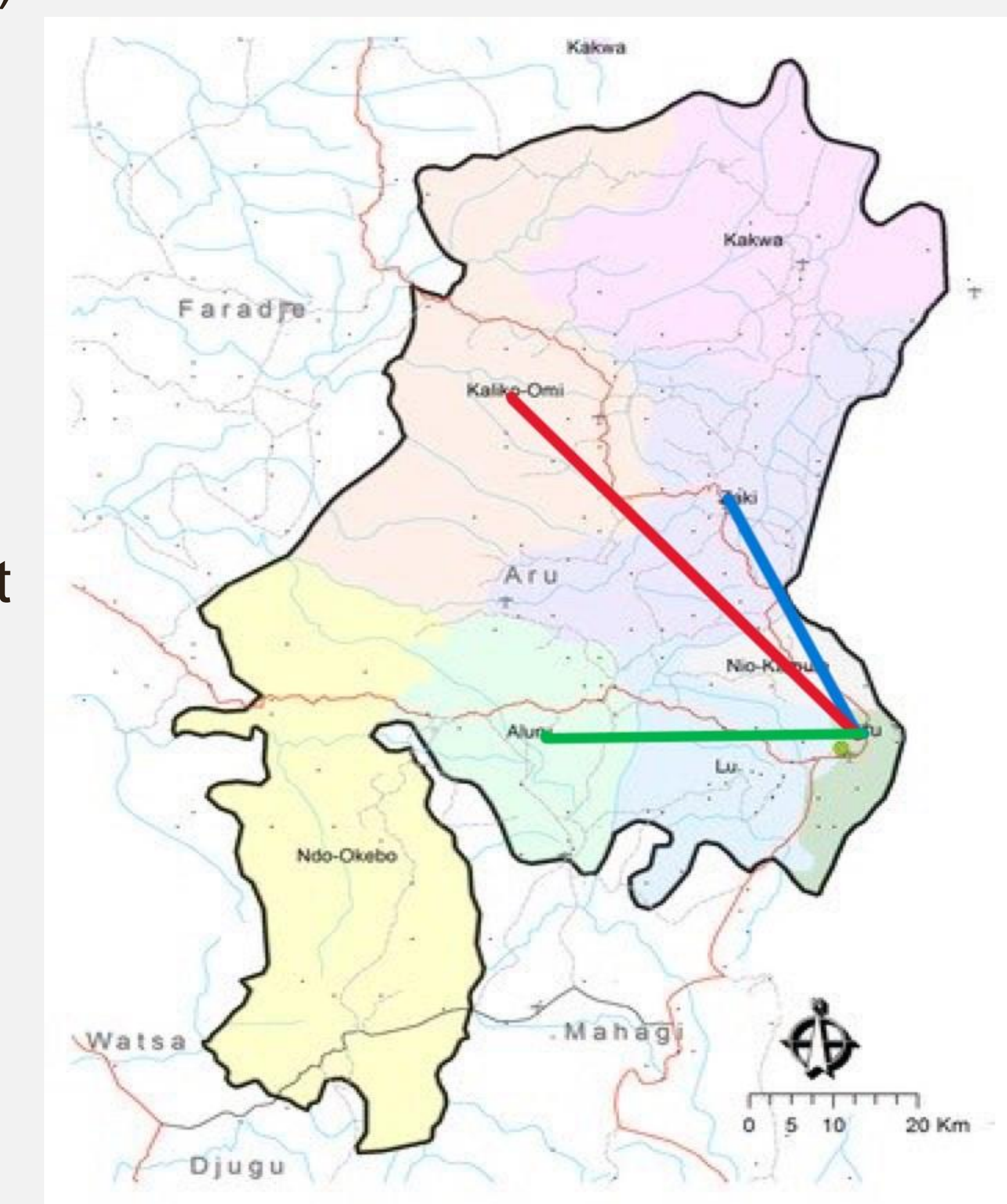


## Summary

- Our survey and interview found five training centers in the DRC.
- Further surveys continue to explore challenges these training centers faced, including a shortage of teachers, reliance on paper-based data collection, and lack of local transportation.
- Both teachers and students mentioned in the surveys that more students wanted to come to the training centers, but they either lived far away or cannot come due to the limited spaces of current training centers.
- We saw the need to build a new training center at a more convenient locations.
- According to the survey results, we decided to work on 1) finding a new location 2) designing a vehicle routing map.
- We believe by addressing the current problems, we could further prevent substance abuse in Aru, DRC.

## Next Step

- After finding the coordinates of each Chiefdom and weighting them based on the number of patients, we were able to incorporate the Center of Gravity formula to find a Hub location within the Aru territory.
- Our results show that Ariwara, a city within the Aru territory, was the optimal location. (Figure 5)
- We've devised a Vehicle Routing Map to shape our solution for including vehicles in serving patients in their respective areas. The next steps involve improving pinpoint coordinates and distance estimation to make it more effectively.
  - Route 1
    - Aru > Zaki > Aru (70km)
  - Route 2
    - Aru > Kaliko-Omi > Aru (94km)
  - Route 3
    - Aru > Aluru > Aru (93km)



## References

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