



FIG WORKING WEEK 2023

28 May - 1 June 2023 Orlando Florida USA

Protecting
Our World,
Conquering
New Frontiers

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Impact of Surface Mining on Food Security in Amansie West and South Districts of Ghana

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Organized By



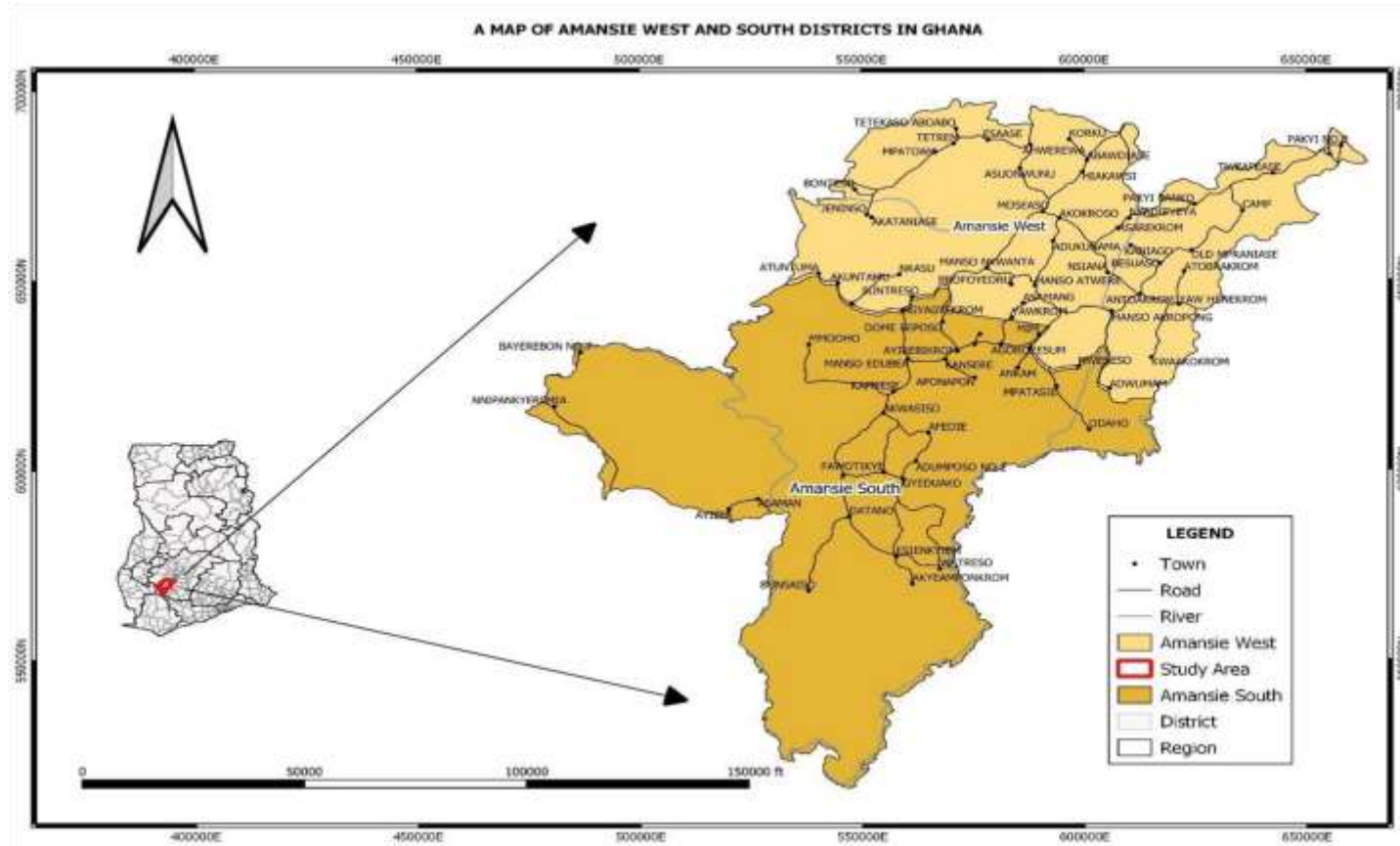
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Introduction

- Surface mining and agricultural production are competing for the same land
- Change in land use is likely to affect food security especially in rural areas – most productive for food
- The objective of this paper is to investigate the impact of surface mining on food security in the study area

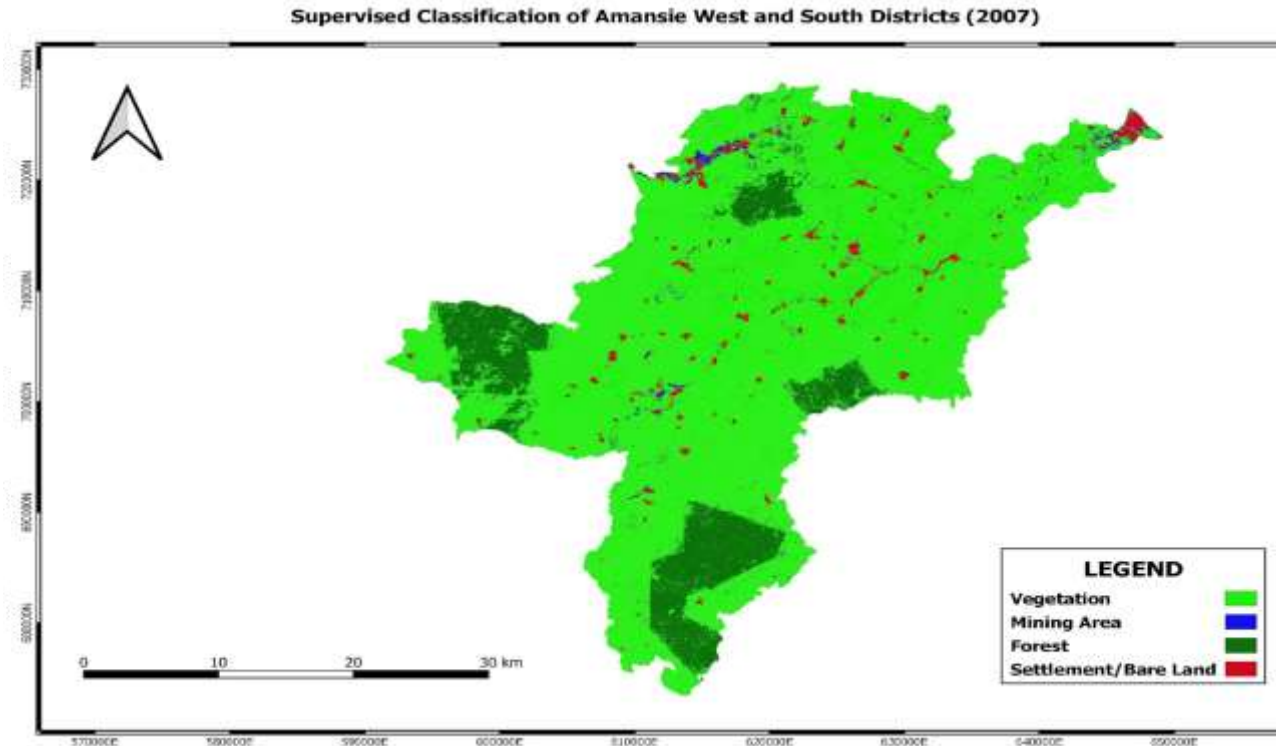
Study Area



Methodology

- Satellite images were used to produce LULC and Change Detection maps.
- Questionnaires were also administered to ascertain the perception of stakeholders on the effect of mining on food security

Supervised Classification of Study Area



Bar Chart Representing Temporal Changes of Benchmark Period

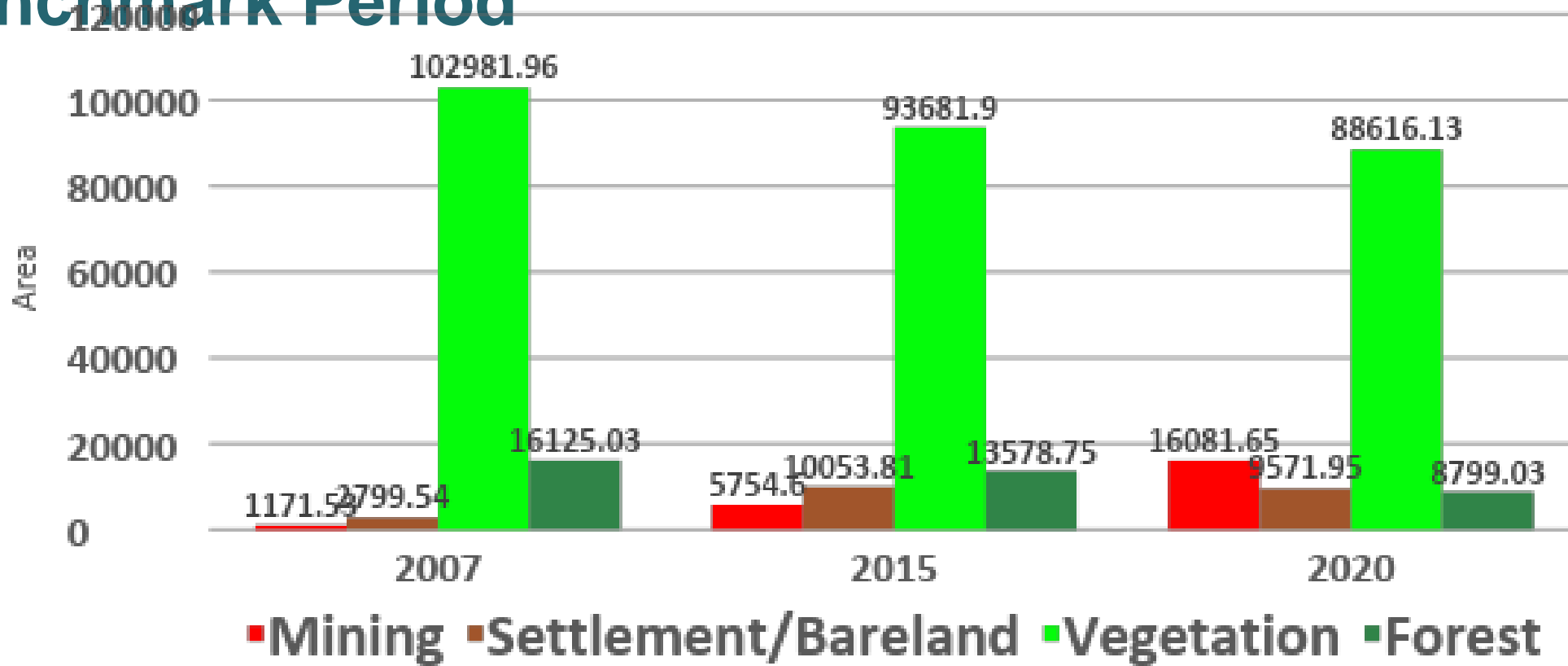
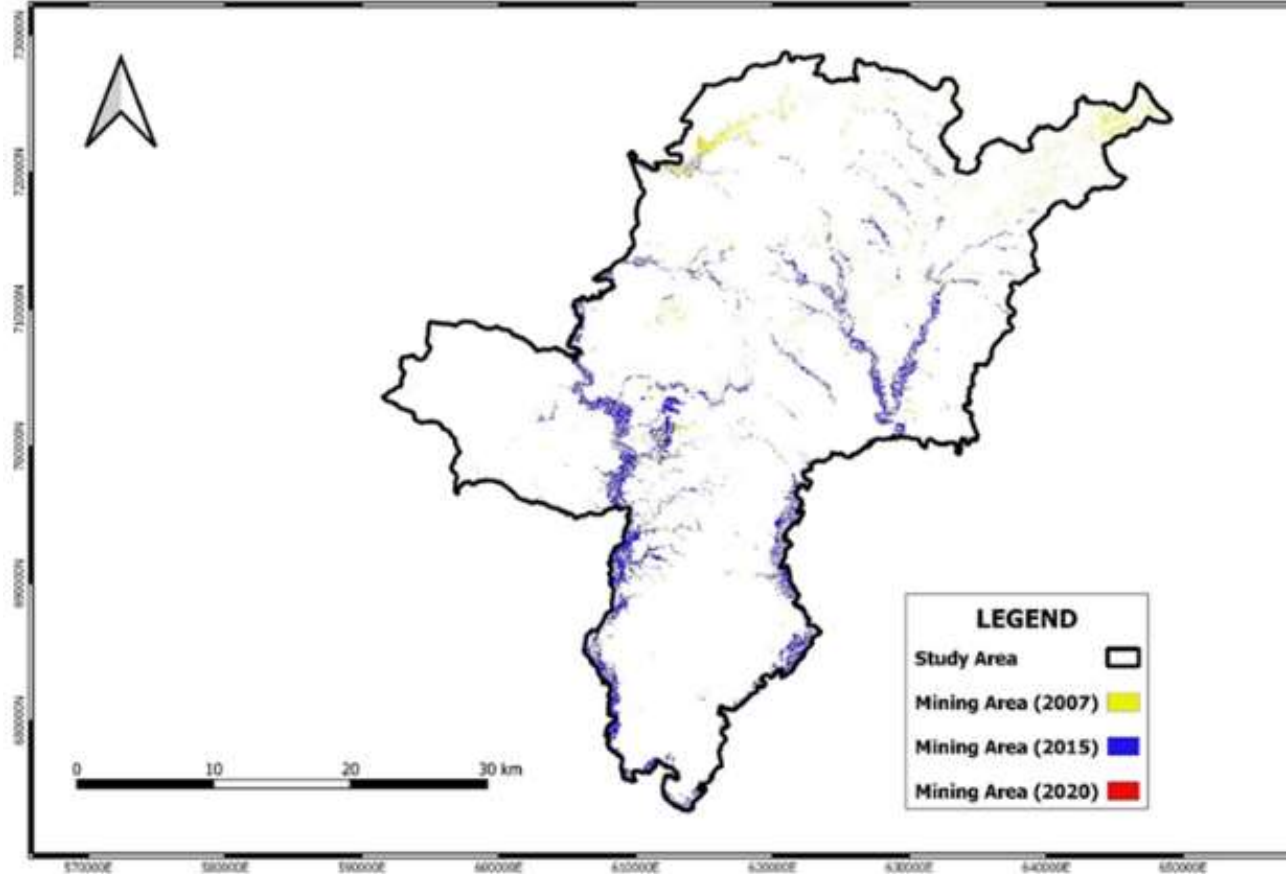


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Title



Effects of Surface Mining on Crops Production

- A number of farmers have lost their farms at the expense of increasing mining operations.
- Loss of the communities' once dense vegetation cover to less dense vegetation.
- The new technologies implemented "Planting for Food and Jobs (PFJ)" have reversed the declined rate of productivity since its implementation.

Effects of Surface Mining on Food Security

- Contamination of water bodies were used for farming.
- Road network caused by the heavy machineries used by the miners has denied a smooth access and transfer of food produce.
- Food utilization and access are the most affected component of food security.

Conclusion

- Land acquisition by surface miners is mainly through the traditional leaders but tenant farmers are left out during land acquisition processes.
- The classification shows that mining areas continue to increase but forest areas and vegetation are decreasing.
- The components of food security that are of concern to the communities are utilization and access.

Recommendations

- A look into the extent at which the chemical used penetrate into the soil.
- For further studies, health implications of farm produce from the mining communities should be analyzed.
- Implementation of farm security policies.

Acknowledgement

- NELGA-KNUST
- LSD-GhIS
- Other stakeholders

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THANK YOU