



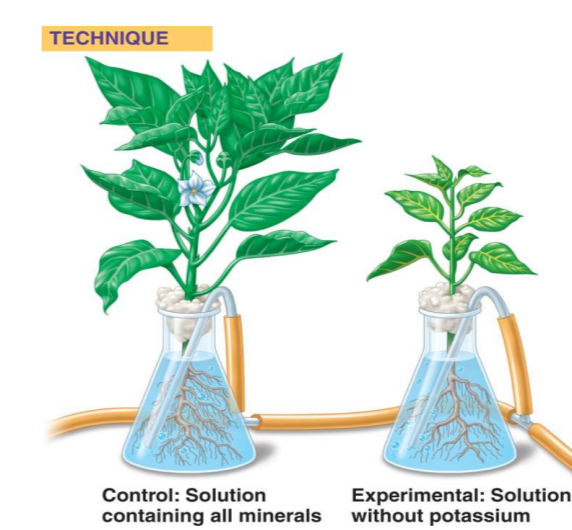
What is Causing Low Yields In Lindi?

9. Mahiwa

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Abstract:

Most areas in Lindi Region are observed that crop yield is low despite early planting, adequate rainfall, weeding and keeping away cereals eating birds. Our project is based on Biology and Agriculture. We have used small beans (kunde) as the plants which can give us the results. The aim of our experiments is to determine the soil fertility of our land.



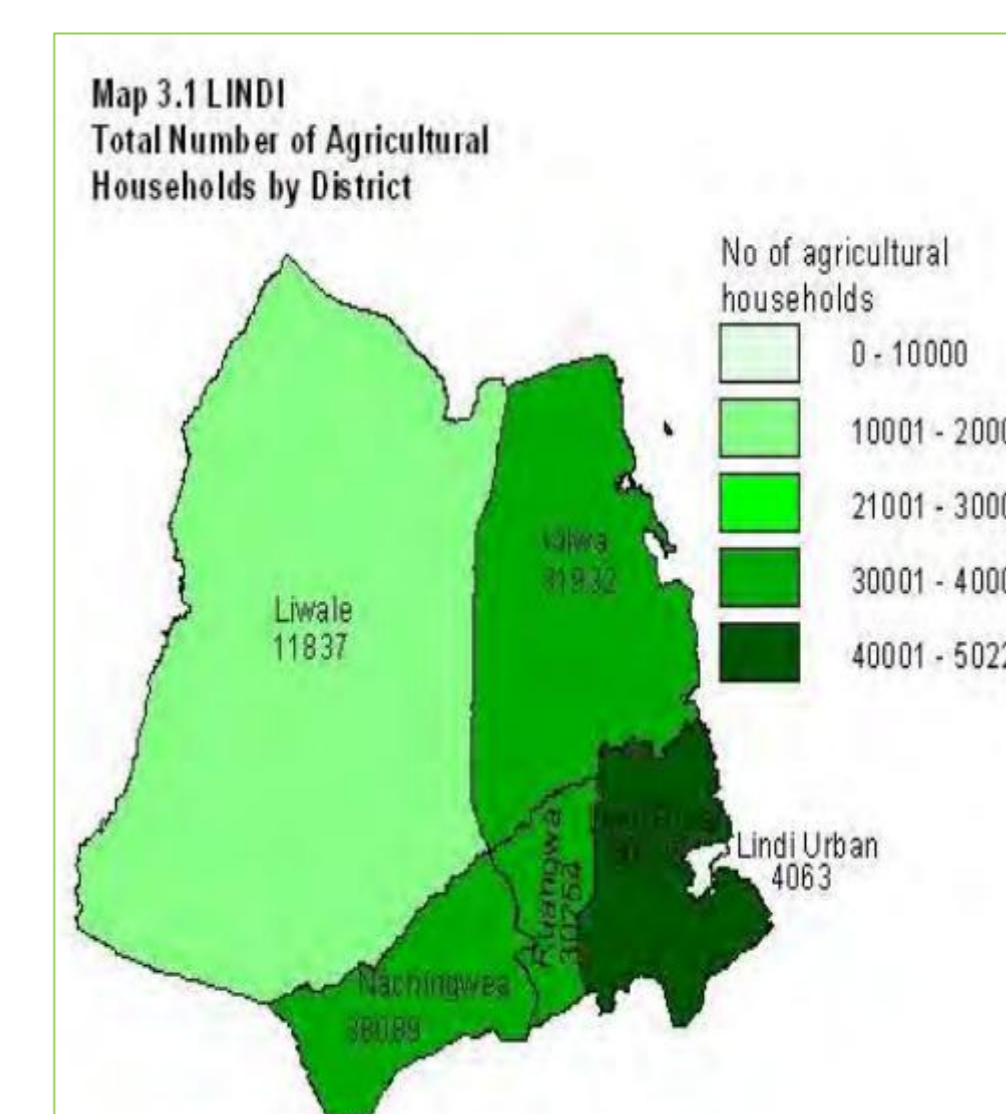
Materials:

The materials/requirements used in our project are fertilizers, watering can, knapsack sprayer, insecticides, herbicides, cutting knives, panga, tape measure, kunde seeds, fork hoe

We first made a survey so as to get a place which we could create plots. The survey went on successfully. We finally got a place, and it is in this place where our project was done.

Procedure:

- Using panga and fork hoe students prepared two plots A and B.
- In plot A we applied fertilizers but in plot B we did not. Then sprinkled each plot with water.
- After three days we germinated the kunde seeds, sprayed them with Insecticides using the knapsack sprayer.
- After the seedling attain a height of between 6 to 12 inches we sprayed them with the herbicides.
- Close follow up is made to the plots daily, watering and removing weeds. When the beans attain maturity, we harvest them and compare the yields of individual plots.



Results:

(i) Problem Identification-it has been observed that in Lindi region crop yield was low despite early planting, adequate rainfall, weeding and keeping away the cereals eating birds.

QUESTION-what could have caused low yields despite all the efforts made?

(ii) Formulation of Hypothesis

Low yield of kunde is caused by low soil fertility.

The application of fertility could increase the wheat yield.

(iii) Experimentation

Two plots were set and named as A and B. Both plots are subjected in the same ecological conditions.

In plot A fertilizers were applied, and plot B served as control experiments. Then the students will harvest and compare the yields of the plots.

(iv) Observation and data collection

Still careful observation and recording all events are going on.

(v) Interpretation of data

In our plots it is clearly observed that in plot A we are going to have higher yields than plot B despite being subjected to the same ecological conditions.

(vi) Conclusion Possibly the result could be that the application of fertilizers increased kunde yield. meaning that low kunde yield was caused by low soil fertility.

Crop	Number of Household	Planted Area (hectare)	Quantity Harvested (tons)	Yield (T/Ha)
Beans	2,711	877	401	0.46
Cowpeas	18,112	5,889	3,413	0.58
Green gram	455	67	38	0.56
Bambaranuts	3,362	971	376	0.39
Field Peas	188	87	8	0.09
Total	24,829	7,892	4,236	0.54



In our plots it was clearly observed that plot A has higher healthier yields than plot B despite being subjected to the same ecological conditions.



Conclusions:

In our plots it was clearly observed that plot A has higher healthier yields than plot B despite being subjected to the same ecological conditions.

(vi) In our project, the results have revealed that the application of fertilizers increased kunde yield.

Fertilizers applied help to enrich soil so as to promote plant growth.

References:

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Further information:

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