AIIP 2018 Statistics Assessment Report

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# Introduction

# Study Design

**Sampling discussion:**

Given the known differences in certain variables, the questionnaire was designed in such a way to control these variations. Where bias could not be controlled, sources were randomly selected. In this case households were randomly selected. The study employed multi-stage stratified random sampling.

Replication was also implemented to reduce bias. Household surveys were conducted in the growing seasons 2002/2003 or 2003/2004.

**Bias**

A number of procedures in the sampling design aimed at ensuring reliable and unbiased data production. However, it is impossible to not have bias in a study like this.

Answers are mostly based on people knowledge, memory and opinion. Answers could also be filtered or the interviewer’s presence could affect the response in an unwanted way.

Open questions were used in section VII, Adaptation options. Farmers were asked about their experience and perception of climate changes, their principle adaptation strategies and their constraints for implementing adjustments.

It was not financially feasible of practically possible to do multiple visit surveys to reduce memory and recall biases because of the wide geographic spread of the sample.

The study design was as appropriate as practically possible considering the scale and wide geographic spread of the survey. It certainly includes some self-selection bias in the results. This will have to be considered during further statistical analysis.

This was an observational study which means that relationships shown to be statistically significant can only be considered associative and not necessary causatory.

# Key Questions

Based on the dataset, I would be interested in answering the following two question;

1. Does the change of climate have a negative impact on income generated from farming in Africa?
2. Is there correlation between the farmers education level and their ability to adapt to climate change?

# Statistical Analysis Plan

**…in response to 2 key questions**

Lets look at question 1.

**Ho & Ha**

**Which tests & why**

**How will I determine significance?**

# Results Interpretation

**How will I interpret results if**

1. **Significant effect resulted**
2. **Results were not significant**

# Conclusion

about the population and your research question