# FACTORS INFLUENCING THE USE OF GOOD AGRICULTURAL PRACTICES BY POTATO FARMERS IN KENYA

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## Introduction

Irish potato is the top most consumed commodity under the non-grain foods in the world with an estimated production of 376 million tons (FAO, 2019).

The current Irish potato yield is not sufficient to meet the demand in the rural areas.

There are only a few farmers who engage in commercial production of Irish potato.

This study seeks to assess the factors influencing the use of GAPs by Irish potato farmers in Kenya.

We believe that socio-economic characteristics influence the use good agricultural practices among Irish potato farmers in the study area.

Figure 1 shows a   farmer in Bungoma County where I sort to identify key issues along the Irish potato production.



**Figure 1: Potato Farmers in Bungoma**

## Material and methods

Study area: Bungoma and Nyandarua County.

Participatory Research – Learning from farmers' experiences through a household survey.

Figure 2 shows an enumerator administering a questionnaire to an Irish potato farmer.

Descriptive statistics and Poisson regression model  were used to present data from this study.



**Figure 2. Interview of respondents by enumerator**
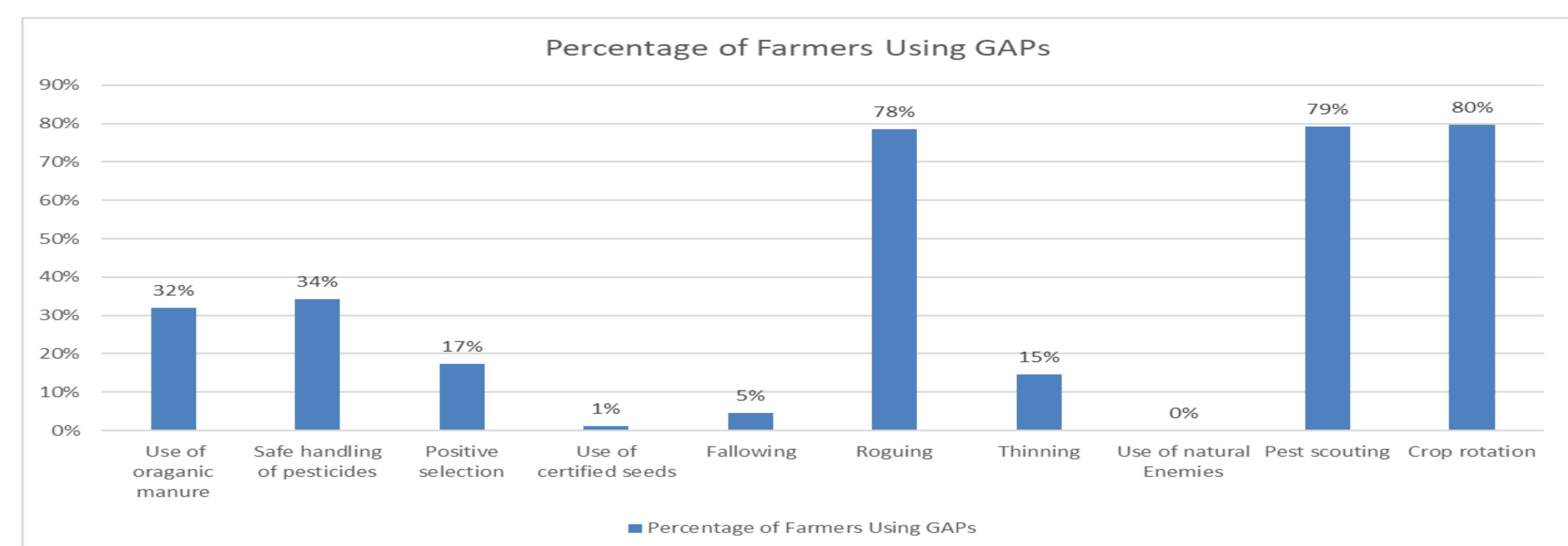
## Results and Discussion



**Figure 3: Use of GAPs among Irish potato farmers**

**Table 1: Poisson Regression Results**

| Dependent Variable = Number Gaps | Pooled sample (n=234) | | Nyandarua (n=119) | | Bungoma (n=115) | |
|---|---|---|---|---|---|---|
| | Coefficient | p-value | Coefficient | p-value | Coefficient | p-value |
| Education_Years | -0.004 | (-0.38) | -0.002 | (-0.16) | 0.002 | (0.10) |
| HHSize | -0.002 | (0.72) | 0.013 | (0.38) | 0.003 | (0.69) |
| INplotsize | 0.007 | (0.84) | 0.039 | (0.34) | -0.198 | (0.32) |
| INAssetValue | 0.135*** | (0.01) | 0.089 | (0.19) | 0.106 | (0.13) |
| DistProduceMarket | -0.148*** | (0.01) | -0.009 | (0.94) | -0.174*** | (0.00) |
| INDistAllWeatherRoad | 0.008 | (0.84) | -0.140** | (0.04) | 0.218*** | (0.00) |
| DistAgricOffice | 0.000 | (0.86) | -0.000 | (0.57) | -0.000 | (0.85) |
| HiredLabour | -0.130** | (0.02) | -0.248*** | (0.00) | 0.160** | (0.04) |
| INExperiencePotato | 0.1401** | (0.03) | 0.1772** | (0.04) | -0.001 | (0.99) |
| Need Credit | 0.0808* | (0.06) | 0.0313 | (0.68) | 0.0921 | (0.14) |
| Need Extension | 0.017 | (0.75) | -0.024 | (0.77) | 0.141** | (0.02) |
| _cons | 0.615** | (0.03) | 0.742* | (0.08) | 0.391 | (0.32) |
| N | 234.000 | | 119.000 | | 115.000 | |

## Conclusions

Support services like access to credit and extension advise should be improved to allow farmers and traders to invest in Irish potato production

•There is need for training of farmers and traders on better use of GAPs. This will help increase the volume of yield and encourage commercialization.