

Hakeem A. Ajeigbe^{1*}, Abubakar H. Inuwa¹, Ahmadu Kamara², Polycarp O. Odoyo³, Michael B. Vabi¹,

Ignatius I. Angarawai¹ and Kunihya Ayuba¹

¹International Crops Research Institute for the Semi-Arid Tropics, Kano Station Nigeria

²Obafemi Awolowo University Ile-Ife, Nigeria

³Food and Agriculture Organization, Nigeria

*Corresponding Author: h.ajeigbe@cgiar.org

Introduction

Harnessing the genetic potential inherent in crops for higher yields requires the supporting role of all inputs (Manjunatha *et al.*, 2015), of which, quality seed is the most important. In many countries in Sub-Saharan Africa (SSA), a recurrent conflict has become a major factor distorting the availability of quality seeds and the seed system; this has since been the case in northeastern Nigeria. Farmers need quality seeds and planting materials of preferred crops to enable them resume agricultural activities after conflicts. Similarly, seed security is an important component of overall resilience in risk prone environments (FAO, 2016). This study was set-out to analyze existing seed systems in Borno, Adamawa and Yobe States of Northern Nigeria in order to identify practical ways of improving farmer's access to quality seed.

Materials and Methods

Purposive, random sampling and rapid appraisal techniques were used to select 453 households from whom appropriate data was collected. Complementary data were collected from 89 seed growers, 37 agro-input service providers, 13 seed aids organizations, 88 Focus Group Discussions (FGD), 41 market surveys and 9 key informants.

Major Findings

- Majority of farmers (71 %) rely on informal seed sources for nearly all crops (72 % for maize), (41 % for rice); with 6% of farmers relying on private seed companies (Fig. 1).
- Low coverage by private seed companies in the area indicate less availability of improved seeds, including that of maize and rice that are most traded by the seed companies in the country.
- Majority of farmers (84%) had seed sources located within their LGAs (Fig. 2).
- Most farmers use seeds from their own production (51 %) or purchase seeds directly (40 %) with cash (Fig. 4).
- Majority of the farmers (86 %) gave a good germination rating for all their seed sources (Fig. 5). Own seed scored relatively low with 78 % of farmers scoring it good and 21 % scored it as fair.
- Farmers do not have diverse options of acquiring quality seeds and therefore are more susceptible to the occurrence of droughts and/or conflicts.
- 40% of farmers were at risk because they do not find the seeds affordable.

Conclusion and Recommendations

- Community-based seed production is the best option to ensure timely access to quality seeds of preferred varieties to farmers considering the fact that majority of farmers (71 %) rely on informal seed sources for nearly all crops.
- Organizations should promote the adoption of improved crop varieties and accompanying crop management practices using different technology scaling approaches - varietal demonstrations, thematic capacity enhancement, seed fairs, etc.
- Facilitate market opportunities for linking value chain actors through seed fairs

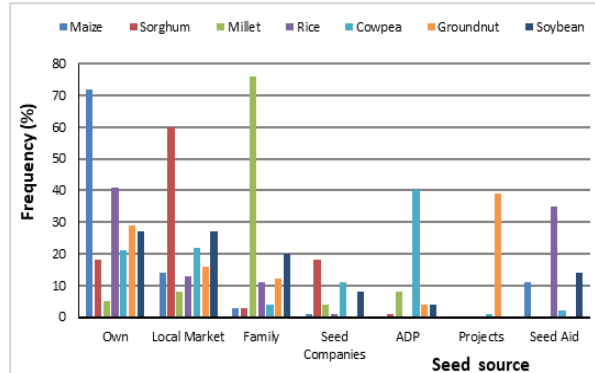
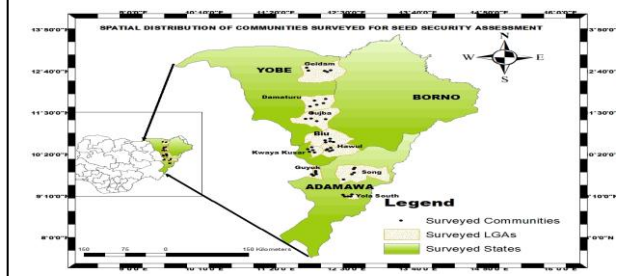


Figure 1: Seed source for farmers

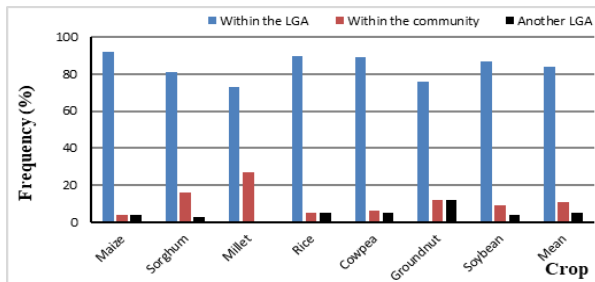


Figure 2: Farmers' proximity to seed source

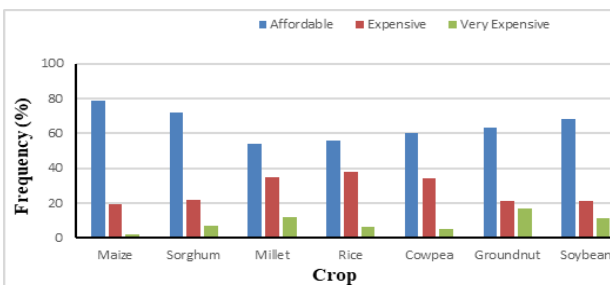


Figure 3: Seed affordability

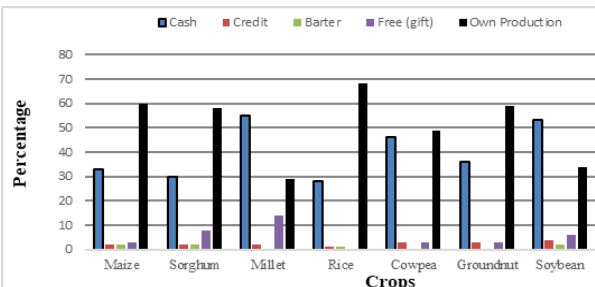


Figure 4: Methods of acquiring the different crops seed

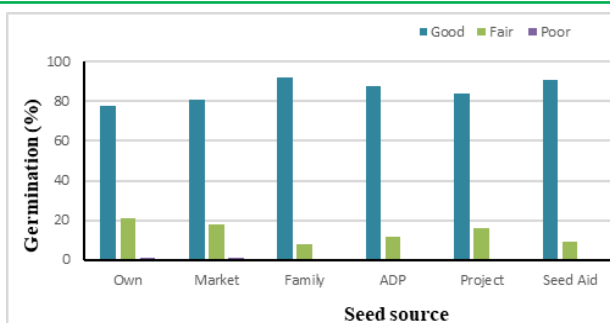


Figure 5: Seed germination rate