Research Application Summary

Potential of school gardening as a laboratory for developing life skills in agriculture: The case of Universal Primary Education Schools in Kamuli and Soroti districts, Uganda

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Abstract

School curricula in Africa emphasise competitive academic subjects and prioritize terminal examinations over practical skills. Although it has been argued that schools can serve as platforms for reaching rural communities with farming innovations through pupils, school gardening is often viewed as a labor-based activity that offers pupils few learning opportunities. Majority of these leave school without employability skills. This study was conducted in two primary (elementary) schools under the Universal Primary Education (UPE) programme in Uganda to determine the potential of school gardening in providing life skills in agriculture but also to mitigate short-term hunger in UPE schools. Data were collected for two cropping seasons (4 school terms) using qualitative methods of focus group discussions (FGDs), interviews, and observation. Findings showed that there was strong interest by pupils to participate in school gardening activities and enhanced learning transfer of skills from the school garden to home gardens. The agricultural clubs offered the social energy that formed the foundation for learning technical aspects of agriculture in a more supportive environment of work and fun. Benefits of participating in school gardening included acquisition of knowledge and practical skills on crop production skills by pupils, food eaten by pupils and teachers acquisition of people oriented skills such as leadership, teamwork among others. It is recommended that school gardening activities be extended to the various education stakeholders and the communities Furthermore, the primary school agriculture curriculum in Uganda necessitates review to include the practical component.

Key words: Life skills, primary schools, school gardening

Résumé

Les programmes scolaires en Afrique mettent l’accent sur la concurrence des sujets académiques et mettent la priorité sur les examens finaux au-delà des compétences pratiques. Même si on a fait valoir que les écoles peuvent servir de plates-formes
Background

School gardening is an instructional strategy that utilizes a garden to let educators incorporate and sustain hands-on learning in a diversity of interdisciplinary standards. The garden engages pupils to observe, discover, experiment, nurture and learn from real-life experiences. These experiences can be turned into production and last a lifetime. School gardens existed in the 1950s through 1980s for purposes of supplying food (midday meals) for pupils and teachers at school and complementing science lessons through experimental learning. They were then

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ignored for reasons that ranged from negative attitude of pupils, teachers and parents as well as changing government policies. This study mainly set out to test the potential of school gardening in developing life skills and attitude change towards agriculture among pupils and for primary schools to serve as centers for agricultural knowledge in communities in Kamuli and Soroti districts. Specifically, this study was intended to (1) establish the benefits of school gardening as a learning laboratory to enhance knowledge and skills in agriculture in primary schools (2) assess whether agricultural clubs can motivate and inspire pupils to learn and practice agriculture (3) assess the transfer of knowledge and skills acquired from school gardening activities to the pupils’ homes (4) establish the attitudes of the pupils, teachers, parents and the local community towards school gardening.

**Literature Summary**

School curricula in Africa are dominated by competitive academic subjects and prioritize terminal examinations over practical skills and contextualized learning. Consequently, education systems in Africa are rated as short of life skills that link well with the needs of communities (Vandenbosch, et al., 2002). Whereas agriculture is the most important source of livelihood in the rural communities, its requisite knowledge and skills are largely acquired through experience and not so much through the education system. This phenomenon creates disconnect challenges to the relevance of education in preparing the young people for better livelihood.

The Uganda government White Paper on Education for national integration and development recommended Universal Primary Education (UPE) programme and vocationalization of education through teaching of agriculture and other practical subjects (Government of Uganda, 1992). The UPE programme that was then introduced in 1997 faces a number of challenges including high dropout rate which Murphy (2003) estimated at about 80%. Besides, less than 30% of the children who enroll in primary one complete primary seven yet most of these turn to farming as a source of livelihood (Kibwika et al., 2010). The new Primary School Agriculture (PSA) curriculum seeks to vocationalise the education system at primary school level as a response to the high UPE drop-out rates to enable the pupils gain some transferable life skills in agriculture. However, five years after the introduction of the agriculture curriculum, it was still uncertain whether pupils actually made significant learning achievements in the subject and applied their school knowledge
Study Description

The study was conducted in two consecutive cropping seasons in 2010/2011. Purposive selection was employed to select a sample of 200 pupils (100 per school) in the two primary schools of Nalango and Tubur primary in Kamuli and Soroti districts, respectively. The two districts were purposively selected based on their relatively higher vulnerability to hunger, poverty incidences (Uganda Poverty Status Report, 2005) and being in two different cultural settings. Soroti district experienced floods in 2007/2008 also posing another dimension of food shortage vulnerability. The study employed a case study methodology applied in action research framework to engage with pupils organized in agricultural clubs and teachers in the two schools. Qualitative case study design was suitable for understanding relationships between the context, mechanism and outcome of an intervention like school gardening. The action research framework allows mutual learning through practice while posing critical and reflective questions on the action. Data were collected using in-depth interviews with respondents, informed interviews with key stakeholders, theoretical tests administration, focus group discussions and participant observation. Thematic analysis of data was applied to the qualitative data which was clustered in respective themes based on content. The processes of interviews from various pupils produced five major and recurring themes: enjoyment from participating in the garden, previous gardening experience, parental influence on school gardening
experience, school influence on knowledge application, and classroom reinforcement for gardening and knowledge retention.

**Research Application**

Findings showed that there was strong interest by pupils to willingly participate in school gardening activities and enhanced learning transfer of skills from the school garden to pupils’ home gardens. The agricultural clubs offered the social energy that formed the foundation for learning technical aspects of agriculture in a more supportive environment of work and fun. School gardening had a number of benefits to pupils such as acquisition of knowledge and practical skills on crop production (life skills), food eaten by pupils and teachers and people oriented skills such as leadership, teamwork among others. Results also showed immense potential of using schools as social change centers for communities as they connect parents back to school. It is thus recommended that various education stakeholders and the communities be exposed and engaged to appreciate the processes and outcomes of school gardening. The primary school agriculture curriculum in Uganda necessitates review to include the practical component in the school timetables. Funding support should be incorporated into school budgets to ensure continued implementation of school gardening activities by school administrators as well as their supervision by district education inspectors. The implementation of school gardening should ensure ownership of benefits by pupils for their motivation. Publicity challenge could be offset by engaging a wide range of stakeholders including the media to create awareness, advocate for and popularize the best practices of school gardening.

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