Agriculture in the primary school curriculum: Providing the impetus to the Zimbabwe Agenda for Sustainable Socio-Economic Transformation

Richard Bukaliya
Zimbabwe Open University, Mashonaland East Region, Marondera
Email: bukaliar@gmail.com

Abstract

Zimbabwe is an agro-based country and the majority of citizens rely on agriculture for their livelihoods. In order to foster a culture meant towards the realisation of adequate agriculture output, a number of initiatives have been put in place. Among these is the introduction of agriculture in the primary schools. The introduction has come with its own successes and challenges. This study sought to establish the successes and challenges in implementation of agriculture in primary schools. This study adopted the descriptive survey approach in which questionnaires were used to solicit data required to answer the research questions. The research data were obtained from 100 primary school teachers in Chegutu district. The teachers were drawn from different categories of primary schools which included urban, farm and mine schools. Results show that most schools in Chegutu district have a sustainable programme on Agriculture for Grade 7 pupils. Most schools are on track to implement the subject as evidenced by the establishment of Agriculture subject committees among other initiatives. Pupils have been sensitised on the importance of agriculture and show a greater sense of motivation and are well prepared to keep the programme going. Some few teachers seem to be just fulfilling the mandatory requirements of implementing the curriculum on teaching Agriculture as an examinable subject at Grade 7 level. Owing to the importance of Agriculture, the subject should be stand alone subject and be schemed and planned for. Thorough supervision of teachers and pupils’ work should be undertaken by both the school heads and District Education Officers. The Civil Service Commission Inspectors should also supervise the full implementation of the programme in the schools. Some schools do not have even one qualified teacher for agriculture and for this reason; the Ministry of Primary and Secondary Education (MoPSE) should through the Public Service Commission (PSC) engage at least one qualified agriculture teacher per school.

Key Words: Agriculture, Primary School Curriculum, ZIMASSET

Introduction

Unlike most of the industrialised economies, Zimbabwe is an agro-based country and citizens rely heavily on agriculture. To underpin this view, The Zimbabwe Agenda for Sustainable Socio-Economic Transformation (ZIMASSET) blue print (2014) reiterates this view that the agriculture sector is the backbone of the economy that underpins economic growth, food security and poverty eradication. According to the Commercial Farmers’ Union of Zimbabwe (CFU) (2013), agriculture contributes between 15-18% of Zimbabwe’s GDP and 70% of the population derives livelihoods from agriculture, CFU (2013) also notes that 33%
of the population is employed in the agriculture sector and 2.2m tonnes of maize are required to feed Zimbabwe’s population. To this end, the education system in Zimbabwe must be working in support of the agriculture endeavours as determined by the ZIMASSET blue print. While the pillars of the blue print are sustained by different line ministries through different contributions, the Ministry of Primary and Secondary Education (MOPSE) has seen it fit to introduce Agriculture at primary school as an examinable subject contrary to previous arrangements where the subject was only being given lip service. This move has been hailed by the majority of stakeholders as it makes primary education equitable and of quality as well as of relevance to the children of Zimbabwe in view of the fact that the citizens rely heavily on agriculture. However, challenges have arisen in the manner in which the subject has been introduced with some arguing that there is an already loaded curriculum in the primary school amidst a myriad of other constraints bedevilling the existing subjects among which is the scarcity of resources. This has seen some schools have not positively responded to the ministerial moratorium for the inclusion of the subject as an examinable subject at Grade Seven level. At infancy stage of implementation, there is bound to be a myriad of misconceptions, beliefs and drawbacks given the different environments under which different schools operate (Bennaars, Otiende, and Boisvert, 1994). This study therefore, sought to answer the question: What prospects and challenges are being faced by primary schools by including Agriculture as an examinable subject at grade seven level?

Research questions

The following research questions stood as sub-problems:

1. What resources are available for the introduction of Agriculture as an examinable subject at primary school?
2. What are the attitudes of different stakeholders towards the introduction of Agriculture as an examinable subject in primary schools?
3. To what extent have primary schools implemented Agriculture as an examinable subject at grade seven level?
4. What measures are being taken by administrators to support the effective teaching and learning of Agriculture?

Statement of the problem

Agriculture related activities were used as a punitive measure for errant pupils (Phipps, Osborne, Dyer and Ball, 2016). This eventually led it to be of less importance compared to other examinable subjects in the school curriculum. In Zimbabwe, learners are taught agriculture at secondary school level to develop self reliance in agriculture, to demonstrate that farming is a dignified and profitable occupation and to enhance skills needed in carrying out agricultural practices (Biriwasha, 2012). This is to develop occupational outlook in agriculture and to enable schools to take an active part in national development through agricultural activities. However, at primary school, agriculture was not given the same prominence as in the secondary sector until recently when the subject was introduced as a fully fledged and stand alone subject. At infancy stage of implementation, there is bound to be a myriad of misconceptions, beliefs and drawbacks given the different environments under which different schools operate (Bennaars, Otiende, and Boisvert, 1994). This study therefore, sought to answer the question: What prospects and challenges are being faced by primary schools by including Agriculture as an examinable subject at grade seven level?
Review of related literature

Conceptualising agriculture

Manson (2003) defines agriculture as the science art or practice of cultivating the soil, producing crops and raising livestock and in varying degrees the preparation and marketing of the resulting products. Phipps, et al. (2016) have a more comprehensive definition of agriculture as they define agricultural education as the teaching of agriculture, natural resources and land management through hands on experience and guidance to prepare students for entry level jobs to further education and to prepare them for advanced agricultural jobs. From these definitions, the researcher is inclined to refer to agriculture as a hands-on subject which helps in the understanding of crop and livestock production as well value adding the raw materials for food as well as economic gain.

Theoretical framework

The study is based on Mitzel (1969) model. The model advances the view that teaching involves interplay between sets of variable: institutional variables, teachers and students, their interactions and the product of those interactions. Dunkin and Biddle (1974) expanded on the Mitzel (1969) model to include four major variable types which are; presage, context, process and product.

The presage variable includes teacher personality, preparation, general characteristics, background, competencies and inadequacies, teacher education experiences and teacher properties among others (Mitzel, 1969). The context variable addresses the student characteristics and classroom environment (Mitzel, 1969). Process variables show the interaction or interrelationship between the teacher and the student. All activities within the classrooms or laboratories are considered process variables. The product variables are those associated with the effect of instruction (Mitzel, 1969; Dunkin and Biddle, 1974). In this instance the product variable is considered to be the number of students enrolled in the subject. Mitzel’s (1969) model recognises the presage, context and process variables as fundamental in understanding the challenges faced which will translate to low commitment and uptake in a particular subject.

The experience of the classroom teacher and the availability of teaching and learning resources tend to affect the learning environment (context), interaction between the teacher and the students (process) and effects of the instruction (product). This study therefore adopted Mitzel’s model to investigate the related prospects and challenges in the teaching and learning of agriculture in the primary school.

Related studies

A number of studies have indirectly explored on the factors which affect the teaching and learning of agriculture in schools.

Availability of resources

Oladele et al. (1993) in Medina (2007) discovered that lack of qualified teachers, lack of well-equipped libraries, parental or guardian influence, attitude of students, instructional materials and time allocation were other important factors affecting the teaching and learning of Agricultural Science. In a study by Kiadese (2011), poor school infrastructure, lack of qualified teachers, poorly equipped workshops and laboratories were seen to inhibiting the teaching and learning of technical and vocational subjects. Thus, the location, ownership and financial status of schools do count in the implementation of given subjects. However, Saiduddin (2003) argues that it is a convenient
scapegoat to pass the blame and responsibility for the low levels of uptake and undertaking in certain subjects to factors such as socio-economic status, family, culture and the learner being less intelligent than the others. The research he conducted at high schools in South Dakota showed that all learners are educable, and that the way in which the school is managed is the most critical factor in determining the quality of education and thus enrolment of the learners. If a school offering a subject cannot provide the necessary requirements, there is a possibility that less students will enrol in the subject. Schools that offer students a positive learning environment, including the use of technology in the classroom and a quality library, give students an edge in mastering. Up-to-date textbooks and other materials to use during lessons are also important in making subject implementation a success (Mbugua, Kibet, Muthaa, and Nkonke, 2012).

Some studies have shown that motivation is a requirement for effective learning especially where new subject areas are being introduced (Mullins, 2005; Gilman and Anderman, 2006). Once an individual has experienced something, and has stored that experience, the individual is able to refer to and use it at a later stage. As such, learning and memory are inextricably linked. The reward and punishment levelled at learners in the past will affect their motivation and attitude towards learning in the present. The expectations of others and the climate which surround learners will determine their readiness to learn (Mullins, 2005). Another study suggests that maintenance of high motivation influences psychological and social functioning and facilitates desire to engage in certain subjects (Gilman and Anderman, 2006). The learning environment therefore has an impact on enrolment levels by students as well stimulating teacher enthusiasm in a particular subject.

Characteristics of the educator are considered as key elements for the learner’s personal and academic development (Gilman and Anderman, 2006; Marsh and Willis, 2003). Hence, it is crucial that educators should be role models worth emulating by the learners. A study by Gilman and Anderman (2006) revealed that the teachers are significant role players in shaping students’ attitudes towards certain subjects. Therefore, Agricultural Science teachers are the main source and facilitators of the knowledge transfer in the subject schools. In this respect, the level of knowledge being acquired by students depends, in part, on the level of knowledge and attitude of their teachers (Marsh and Willis, 2003). Therefore, the teacher’s qualification and attitude towards his/her work have a significant impact on student performance, subject success and the level of enrolment in the subject.

Some studies have revealed challenges in the teaching and learning of various subjects implemented in the primary school (Magodora, 2008; Okello and Kagoire, 1996; Muringani, 1999; Murare, 2011). Magodora (2008) explored the successes and challenges in the teaching and learning of Physical Education. He/she concluded that the fact that the subject was not examined at the end of the primary school course made it not to be taken seriously in schools. The same study concluded that the complexity of some activities in Physical Education made some teachers shun implementing the subject. The study, however, recommended that there was need to engage teachers who specialised in Physical education to teach the subject across the board. Some administrators were also hiring some experts from the local community so that children do not miss out in the subject area.

Murare (2011) also concluded that material taught at some teachers’ colleges was not enough to equip the teachers to fully teach the subject because some concepts would not be familiar to the teachers hence, quite challenging to deliver to the pupils. The other problem that caused negativity was the lack of
infrastructure for the implementation of the subject as inadequate classrooms caused double or triple shifts in schools caused teachers to concentrate more on examinable subjects leaving out home economics.

Muringani (1999) investigated the implementation of the Environmental Science syllabus in schools. From the study, it was concluded that even though workshops were being carried out through the Better Environmental Science Teaching (BEST) programmes, schools were facing challenges of relevant textbooks related to the subject. Muringani (1999) also concluded that even though the subject was more practical in nature requiring a lot of outdoor lessons, time as well as the geographical location of some schools did not allow for such scenarios.

School facilities and teaching and learning resources

Quality of facilities in learning institutions affects the way a curriculum is implemented (Okello and Kagoire, 1996; Kelly, 1999; Makopa, 2011). Inadequate classroom accommodation causes hot sitting which compromises time that is allocated to particular subjects (Okello and Kagoire, 1996). Some facilities hamper the taking off of an introduced curriculum because they will not be related to given situation. Instructional materials which are in short supply or which may totally be unavailable compromise the quality of curriculum implementation. In most developing countries schools, because of population explosion classrooms are overcrowded and learners are made to share whatever little stocks of material and furniture available (Kelly, 1999). In situations like these, teacher effectiveness is deterred and rendering individual pupil attention becomes a challenge. Most schools in the Midlands Province of Zimbabwe are rural based and poorly resourced. In another study in Zimbabwe, Makopa (2011) discovered that schools with more resources had higher potential to implement programmes and project than those with fewer resources. Therefore, where there were limited or no implementation is hindered.

Teachers are the most important human resource in curriculum implementation since they are the ones who adopt and implement ideas and aspirations of the designers (Okello and Kagoire, 1996). This view implies that the success of the curriculum is solely depended on teachers. However, if teacher-pupil ratio is too high and when untrained teachers are involved, quality of implementation is compromised (Makopa, 2011). When a school has few teachers they will be over-stretched/overloaded hence effectiveness is compromised. Subject specialisation may make some subjects suffer if they do not have experienced personnel. The quality of teachers will therefore determine the effectiveness of curriculum implementation (Marsh and Willis, 2003). Furthermore, poor salaries, no housing and generally poor conditions of service demoralise the teachers who may have resort to go into private commercial enterprises to supplement meagre salaries (Okello and Kagoire, 1996). Highly motivated teachers are better curriculum implementers as compared to demoralised teachers. From these assertions, it can be argued that motivation among and between teachers and learners paved way for positive attitudes which also lead to full and whole hearted implementation of the curriculum (Chekacheke, Gandiwa, Kamba, Mereki, Muchaurawa, Nyoni, 2013).

School administrators’ management functions

School heads need to delegate, supervise, manage time and provide funding for any programme in the school (Kiadesne, 2011; Sibulwa, 1996). Time is an integral part of curriculum implementation. In some institutions, pupils learning time is mismanaged by administrators whereby such activities as
assemblies, meetings and co-curricular activities competitions infiltrate into the pupils’ learning time (Okello and Kagoire, 1996; Kelly, 1999). If time is not properly managed to accommodate new programmes, there will be poor curriculum implementation (Kiadese, 2011). A teacher who is not time conscious is not disciplined and a drawback to curriculum implementation (Okello and Kagoire, 1996; Kelly, 1999). Curriculum implementation is very difficult when there is under funding. The economy of the country will determine the success of the curriculum implementation. The social demand for education in developing countries has been souring but government money for education is less (Sibulwa, 1996). Manpower in the education sector in most developing countries including Zimbabwe is absorbing the bulk of money allocated to it in form of salaries thus leaving very little for teaching materials, books, in service training monitoring as well as other requirements for curriculum implementation.

Stakeholders’ attitude towards Agriculture

Medinat (2007) revealed through her study that pupils’ attitude towards Agricultural Science had an impact on students’ uptake and performance in the subject. She discovered that students with a positive attitude towards Agricultural Science performed better in the subject compared to students with a negative attitude. As mentioned by Medinat (2007), the subject (agriculture) is sometimes associated with less academically gifted students which enhances pupils’ negative attitude towards the subject. In a study by Kiadese (2011), teachers’, pupils’ and parents’ attitudes were found to be some of the factors that affected the teaching of prevocational subjects like Agriculture. These findings are consistent with those of Uwaifo and Uwaifo (2009) who established that in Nigeria there was still a strong tendency towards white-collar jobs as a result of the low status associated with most kinds of technical and vocational education. Because of this cold attitude towards technical and vocational education, some decision makers do not think the subject is sufficiently important to deserve funding.

In a study by Muringani (1999), it was also revealed that teachers were disgruntled because of the abrupt changes being implemented in the school curriculum. Hence, this had negative impact on how the teachers perceived some of the subjects in the primary school curriculum. A study by Murare (2011) on attitudes of the teachers towards the teaching of Home Economics in Kadoma urban primary schools revealed that gender stereotyping, whereby the subject was associated with the female folk caused some male teachers not to be keen to teach the subject.

Mbugua et al. (2012) indicated that the cause of most curricula failures in schools might not be due to insufficient or inadequate instruction material but due to active resistance by the learners and teachers. This argument suggests that favourable attitudes towards a subject should be developed for the success of the subject. In her study, Biriwasha (2012) noted that the dwindling popularity of Agriculture among the younger generation reflects a general trend towards de-agrarianisation in the continent linked to environmental degradation and reduced availability of land, economic pressures which have undermined peasant agriculture, and a realignment of rural populations’ changing aspirations. This leads to both teachers and students not taking the subject seriously thereby affecting performance, enrolment levels and implementation (Marsh and Willis, 2003).
Research methodology

The study sought to find out the successes and challenges on the introduction of agriculture as an examinable subject at primary school level. This study employed the descriptive survey research design. This design gives a quick description of how things are (Best and Khan, 2004; Borg and Gall, 2006; Orodho, 2005). The design aims at describing the state of affairs as they exist. According to Gay (2003), a descriptive survey is a process of collecting data in order to answer questions concerning the current status of the subject. A survey is a method of collecting information by interviewing or administering questionnaires to a sample of individuals (Orodho, 2005). It is the most frequently used method for collecting information about people’s attitudes, opinions, habits or any of the variety of social issues related to education. A survey design was therefore, appropriate because it enabled the researcher to obtain pertinent and precise information from the respondents to establish the successes and challenges in implementation of agriculture in selected primary schools in Chegutu District with the view of explaining the state of preparedness towards the adoption of the subject as a stand-alone and examinable subject at primary school level and subsequently making agriculture the cornerstone of the Zimbabwean economy once again.

The researcher made use of the questionnaire as the data collection technique. One hundred questionnaires were distributed and there was a 100% response rate on the questionnaires owing to the fact that the researcher appealed for the return of the questionnaires and made follow ups where no responses had been provided. The questionnaire made it possible for the researcher to collect vast amounts of data within a very short space of time.

Population and sample

The population for the current study consisted 322 prospective respondents drawn from peri-urban, urban and rural schools. This enabled the researcher to have a diversity of views as expressed by teachers from different school backgrounds. Out of the 322 teachers, 100 made it into the sample that was selected through simple random sampling. These respondents furnished the researcher with data that was then used to ascertain the prospects and challenges that were being faced by primary schools’ inclusion of Agriculture as an examinable subject at Grade 7 level.

Presentation and discussion of results

Data for the study were solicited from a sample of 100 teachers drawn for an assortment of primary schools that ranged from rural, urban, peri-urban and communal. The first research question sought to establish what resources were available towards the introduction of Agriculture as an examinable subject in the primary schools. Human resources and infrastructure availability were sought.

Distribution of teachers by highest professional qualification

The data presented above shows that there were 15(15%) teachers with T3 qualification, 35(35%) had Certificate in Education, 30(30%) had Diploma in Education, 12(12%) had Bachelor of Education and 8(8%) had a Master of Education degree. The majority of the respondents had very appropriate and higher qualifications in the teaching profession.
Figure 1.1: Distribution of teachers by highest professional qualification

Distribution of teachers by main subject at teachers’ college

(N=100)

Figure 1.2: Distribution of teachers by main subject at teachers’ college

Figure 1.2 shows that 18(18%) teachers majored in Mathematics, while English had 20(20%), Shona 10(10%), Physical Education 8(8%), Art 6(6%), Environmental Science 8(8%), SS 8(8%), the same as Religious and Moral Education, Home Economics 7(7%), Music 5(5%) and Agriculture had 2(2%). This shows that the implementation of agriculture could be hampered by lack of trained manpower in the subject as only 2(2%) had majored in the subject. However, what is pleasing is that these could be in a position to assist other teachers through staff development programmes on issues to do with agriculture content. The right type and calibre of teachers is required and some
studies (e.g Magodora, 2008; Okello and Kagoire, 1996; Miringani, 1999; Murare, 2011) have highlighted that teachers are the most important resource in curriculum implementation since they are the ones who adopt and implement ideas and aspirations of the designers (Miringani, 1999), Okello and Kagoire, 1996). This is also in line with Mitzel (1969) theory on the presage variable which views teachers, their personality, preparation, general characteristics, background, competencies and inadequacies, teacher education experiences and teacher properties among others as very critical factors in successful implementation of curriculum.

**Attitudes of different stakeholders towards the introduction of Agriculture as an examinable subject in primary schools**

Teachers were asked to furnish the study with information on the attitudes of teachers, pupils and the community on the introduction of agriculture in primary schools. Table 1.1 shows their responses.

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. In your own opinion, should Agriculture be a stand-alone subject?</td>
<td>65</td>
<td>35</td>
</tr>
<tr>
<td>2. Agriculture is meant for less gifted pupils?</td>
<td>45</td>
<td>55</td>
</tr>
<tr>
<td>3. Have you sensitised pupils on the importance of Agriculture?</td>
<td>60</td>
<td>40</td>
</tr>
<tr>
<td>4. Are you motivated to teach Agriculture at your school?</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>5. Do you have adequate Agriculture textbooks at your school?</td>
<td>30</td>
<td>70</td>
</tr>
<tr>
<td>6. Teachers are not qualified to teach Agriculture hence they dislike the subject.</td>
<td>55</td>
<td>45</td>
</tr>
<tr>
<td>7. Do teachers dislike Agriculture because they are not qualified to teach it?</td>
<td>45</td>
<td>55</td>
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<tr>
<td>8. Teachers are not conversant with the Agriculture syllabus interpretation.</td>
<td>55</td>
<td>45</td>
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<tr>
<td>9. Agriculture material is beyond the ability of teachers.</td>
<td>20</td>
<td>80</td>
</tr>
<tr>
<td>10. Teachers have scanty knowledge of Agriculture concepts and issues.</td>
<td>30</td>
<td>70</td>
</tr>
<tr>
<td>11. Teachers do not scheme/plan Agriculture lessons. Do you agree?</td>
<td>20</td>
<td>80</td>
</tr>
<tr>
<td>12. Agriculture schemes/plans are not evaluated. If evaluated, it is only lip service. Do you agree?</td>
<td>40</td>
<td>60</td>
</tr>
<tr>
<td>13. Agriculture is recognised on prize giving days at school and at district level. Do you agree?</td>
<td>10</td>
<td>90</td>
</tr>
<tr>
<td>14. With poor remuneration for teachers, teachers feel Agriculture is extra burden that can be dispensed of. Do you agree?</td>
<td>10</td>
<td>90</td>
</tr>
<tr>
<td>15. Teachers are put off by the community which does not offer support and resources for Agriculture. Do you agree?</td>
<td>30</td>
<td>70</td>
</tr>
<tr>
<td>16. There is no motivation at all to teach Agriculture in schools. Do you agree?</td>
<td>50</td>
<td>50</td>
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</table>
When asked whether Agriculture should be a stand-alone subject 65(65%) teachers agreed and 35(35%) said no. From further analysis, it was established that there was no choice for the teacher on whether or not to agree to the introduction. This is concurrence with the assertions in several studies (e.g Ben-Peretz, 1990; Marsh and Willis, 2003). According to Ben-Peretz (1990), the authoritarian approach to curriculum implementation was an approach whereby the teachers were directed by authority figures through a memorandum. Marsh and Willis (2003) are also in concurrence. On whether Agriculture is meant for less gifted pupils, 45(45%) teachers said yes and 55(55%) said no. Sixty (60%) of the teachers indicated that pupils had been sensitised on the importance of Agriculture and 40(40%) had not been sensitised. When asked whether teachers were motivated to teach Agriculture, 50(50%) said yes and 50(50%) said no. On whether there were adequate Agriculture textbooks at their school 30(30%) said yes and 70(70%) said no. When asked whether they were qualified to teach Agriculture hence they dislike the subject 55(55%) said yes and 45(45%) said no. When asked whether teachers disliked Agriculture because they were not qualified to teach it 45(45%) said yes and 55(55%) said no. When asked whether they were conversant with the Agriculture syllabus interpretation 55(55%) said yes and 45(45%) said no. On whether Agriculture material was beyond the ability of teachers 20(20%) said yes and 80(80%) said no. When asked whether teachers had scanty knowledge of Agriculture concepts and issues 30(30%) answered yes and 70(70%) said no. This was despite the fact that the majority of the teachers in the primary schools surveyed did not possess the agriculture qualifications. In this case, the quality of implementation of agriculture as a standalone subject was compromised (Makopa, 2011; Okello and Kagoire, 1996). This is because the success of the curriculum is solely dependent on teachers. On whether teachers did not scheme/plan Agriculture lessons 20(20%) said yes and 80(80%) said no. On whether Agriculture schemes/plans are evaluated or not 40(40%) said yes and 60(60%) said no. When asked on whether Agriculture is recognised on prize giving days at school and at district level 10(10%) answered yes and 90(90%) answered no. On whether poor remuneration for teachers made them feel Agriculture is extra burden that can be dispensed with 10(10%) said yes and 90(90%) said no. When asked whether teachers are put off by the community which did not offer support and resources for Agriculture, 30(30%) agreed and 70(70%) said no. On whether there was no motivation at all to teach Agriculture in schools 50(50%) said yes and 50(50%) said no. Despite this scenario, Okello and Kagoire (1996) argue that highly motivated teachers are better curriculum implementers as compared to demoralised teachers. Regardless of the view, the majority teachers seem to be fulfilling the mandatory requirements of implementing the curriculum on teaching Agriculture as an examinable subject at Grade 7 level. The Nziramasanga Commission of 1999 makes it compulsory for

<table>
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<tr>
<th>Questions</th>
<th>Yes</th>
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<tr>
<td>Do the pupils have interest in the subject?</td>
<td>80</td>
<td>20</td>
</tr>
<tr>
<td>Pupils dislike the subject because it overloads them.</td>
<td>10</td>
<td>90</td>
</tr>
<tr>
<td>Pupils dislike Agriculture because teachers have a negative attitude towards the subject.</td>
<td>25</td>
<td>75</td>
</tr>
<tr>
<td>There is no motivation at all to learn Agriculture in schools.</td>
<td>40</td>
<td>60</td>
</tr>
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Table 1.2: Pupil attitudes towards the introduction of Agriculture as an examinable subject at primary school level (N=100)
all primary schools to have Agriculture as an examinable subject hence the availability of the syllabus in all schools.

When asked whether the pupils have interest in the subject, 80(80%) said yes and 20(20%) said no. On whether pupils dislike the subject because it overloads them, 10% said yes and 90(90%) said no. When asked whether pupils dislike Agriculture because teachers have a negative attitude towards the subject, 25(25%) said yes and 75(75%) said no. On whether there is no motivation at all to learn Agriculture in schools, 40% said yes and 60(60%) no.

When asked how often pupils entered information into their agriculture diaries, 23(23%) said daily and 37(37%) indicated that they did so twice a week. Some 40(40%) said they did that once a fortnight. Also when asked how often pupils replaced Agriculture books when used up or lost, some 84(84%) said they did that regularly when used up or lost. Some 16(16%) said pupils took their time before replacing them. The findings by Medinat (2007) revealed that some pupils had a negative attitude towards Agricultural Science and this tended to have an impact on students’ uptake and performance in the subject. This is probably why some of them took time to replace very important books that are required as part of the course work in Agriculture. Medinat (2007) also discovered that students with a positive attitude towards Agricultural Science performed better in the subject compared to students with a negative attitude. As mentioned by Medinat (2007), the subject (agriculture) is sometimes associated with less academically gifted students and this gives rise to pupils’ negative attitude towards the subject. In this case, the study concurs with the assumptions of Mitzel (1969) theory which highlights context variable as being of a major influence in programme uptake. By the same token, Kiadese (2011) and Uwaifo and Uwaifo (2009) also established that learners’ characteristics in terms of their attitudes were found to factors that affected the teaching of prevocational subjects like Agriculture.

When asked whether parents are paying practical fees for agriculture 12(12%) said yes and 88% said no. On whether parents have purchased diaries for their children 10(10%) said yes and 90(90%) said no. This therefore goes to show that teachers in the affected schools may not be fully executing their duties due to acute shortages of instructional resources. In support of these findings, Okello and Kagoire (1996) pointed that curriculum implementers were faced with barriers which hindered successful implementation of the curriculum which include underfunding. When asked whether the parents purchased practical work clothing for their children 5(5%) said yes and 95(95%) said no. This is a demonstration that most parents did not support their children by providing them with the needed school equip-

![Table 1.3: The extent to which the community has been receptive of the introduction of Agriculture in Primary Schools (N=100)](image)
ment. By and large these findings are in tandem with these by Kiadese (2011) and Uwaifo and Uwaifo (2009). In their study, they concluded that parents’ attitudes were a drawback to the successful implementation of technical subjects as they a strong inclination towards white-collar jobs as a result of the low status associated with most kinds of technical and vocational education. However, this could be a result of the fact that some were impoverished and could not afford to provide for their children.

On whether the community is benefitting from the introduction of Agriculture, 85(85%) said yes and 15(15%) said no. On whether the community is contributing towards the successful implementation of the subject, 90(90%) said yes and 10(10%) said no. When asked whether the community is purchasing Agriculture produce produced at the school 70(70%) said yes and 30(30%) said no. This demonstrates that the community was in support of the agriculture department, though they could not purchase material needed by their children for use in Agriculture. Despite lack of economic support through direct cash injection into the school coffers for various reasons, it would appear parents were doing their best to support the programme through purchasing of some produce from the schools. Chekacheke et al (2013) also concluded from his findings that communities were very receptive of the introduction of Agriculture in Primary school through acting as a market for the agriculture products from the school.

Table 1.5 shows that when asked if they had implemented Agriculture at their school, 88(88%) said yes and 12(12%) said no. Another required to know if the schools had an Agriculture subject committee to which 60(60%) said yes and only 40(40%) said no. When asked whether they have a Head of Department for Agriculture at their school, 60(60%) answered yes and 40(40%) said no. When asked whether they have space for Agriculture projects at their school, 70% said yes and 30(30%) said no. When asked if they have adequate equipment for Agriculture at their school, 80(80%) said yes and 20(20%) said no.

Table 1.4: The extent to which schools have implemented Agriculture as an examinable subject at grade seven level (N=100)

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th></th>
<th>No</th>
<th></th>
</tr>
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<tbody>
<tr>
<td>1. Have you implemented Agriculture at your school?</td>
<td>88</td>
<td>88</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>2. Do you have an Agriculture subject committee at your school?</td>
<td>60</td>
<td>60</td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>3. Do you have space for Agriculture projects at your school?</td>
<td>70</td>
<td>70</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>4. Do you have adequate equipment for Agriculture at your school?</td>
<td>80</td>
<td>80</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>5. Do you have any agriculture projects at your school?</td>
<td>40</td>
<td>40</td>
<td>60</td>
<td>60</td>
</tr>
<tr>
<td>6. Is there any produce from the Agriculture lessons at your school?</td>
<td>30</td>
<td>30</td>
<td>70</td>
<td>70</td>
</tr>
<tr>
<td>7. Are there any sales that have been realized from Agriculture projects?</td>
<td>20</td>
<td>20</td>
<td>80</td>
<td>80</td>
</tr>
<tr>
<td>8. Have the proceeds from the sales been used to benefit the pupils’ learning in Agriculture?</td>
<td>10</td>
<td>10</td>
<td>90</td>
<td>90</td>
</tr>
<tr>
<td>9. Has Agriculture been timetabled at your school?</td>
<td>80</td>
<td>80</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>10. Do you have specialised teachers who teach Agriculture at your school?</td>
<td>10</td>
<td>10</td>
<td>90</td>
<td>90</td>
</tr>
<tr>
<td>11. Have pupils had field trips in Agriculture?</td>
<td>25</td>
<td>25</td>
<td>75</td>
<td>75</td>
</tr>
<tr>
<td>12. Is there an Agriculture Club at your school?</td>
<td>10</td>
<td>10</td>
<td>90</td>
<td>90</td>
</tr>
<tr>
<td>13. Have the parents and guardians been formally sensitised on the introduction of Agriculture as an examinable subject?</td>
<td>40</td>
<td>40</td>
<td>60</td>
<td>60</td>
</tr>
</tbody>
</table>
On whether they have any agriculture projects at school, 40(40%) said yes and 60(60%) said no. When asked whether any produce from the Agriculture lessons were available at their school, 20(20%) said yes and 80(80%) said no. On whether there are any sales that have been realised from Agriculture projects 20(20%) answered yes and 80(80%) answered no. When asked whether the proceeds from the sales have been used to benefit the pupils’ learning in Agriculture, 10(10%) said yes and 90(90%) said no. When asked whether Agriculture had been timetabled at their school, 80(80%) said yes and 20(20%) said no.

On how adequate the number of periods per week allocated to Agriculture were, 70(70%) answered yes and 30(30%) answered no.

When asked whether they have specialised teachers who teach Agriculture at their school, 10(10%) said yes and 90(90%) said no. On whether pupils had field trips in Agriculture, 25(25%) said yes and 75(75%) said no. Such trips were seen to be very effective in previous researches particularly the one undertaken by Kiadese (2011) and Uwaifo and Uwaifo (2009) and Chekacheke et al. (2013), though resources were militating against the effective implementation of the intended programme activities. Those going for trips would surely get to understand the importance of agriculture from those involved, thus changing the attitudes of learners who continue to opt for white collar jobs, which in most cases have ceased to exist.

When asked whether there is an Agriculture Club at their school 10(10%) said yes and 90(90%) said no. When asked whether the parents and guardians have been formally conscientised on the introduction of Agriculture as an examinable subject, 40(40%) said yes and 60(60%) said no.

Table 1.5 shows that on whether the school administration engages resource persons in the teaching of Agriculture, 10(10%) said yes and 90(90%) said no. Given such a case whereby there are shortages of manpower, Mason (2003) argues that there could not be any sustainable agriculture programme in the absence of skilled manpower. This could be so given that most schools were finally crippled to an extent that they could not afford to hire extra personnel. Some heads could be confident with the present manpower available in their schools. However, this shows that the main purpose of the agriculture syllabus which is to develop basic Agricultural knowledge, skills, attitudes and to provide learners with opportunities to expose the various branches of agriculture through scientific enquiry (MOPSE Agriculture Syllabus, 2012:1) may not be fully accomplished in view of the fact that they were only 2(2%) teachers qualified to teach agriculture in the selected schools. When asked whether Ag-

<table>
<thead>
<tr>
<th>Question</th>
<th>True</th>
<th>False</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The school administration engages resource persons in the teaching of Agriculture.</td>
<td>10</td>
<td>90</td>
</tr>
<tr>
<td>2. Agriculture is getting the same budgetary treatment as other subjects from the school administration.</td>
<td>30</td>
<td>70</td>
</tr>
<tr>
<td>3. Staff development programmes have been organised by the school administration on the teaching of Agriculture.</td>
<td>70</td>
<td>30</td>
</tr>
<tr>
<td>4. The Agriculture syllabus is available at your school.</td>
<td>90</td>
<td>10</td>
</tr>
<tr>
<td>5. Competitions are held on Agriculture produce in your cluster.</td>
<td>80</td>
<td>20</td>
</tr>
<tr>
<td>6. Agriculture lessons are observed by the heads.</td>
<td>10</td>
<td>90</td>
</tr>
<tr>
<td>7. Heads allocate adequate minutes for Agriculture.</td>
<td>95</td>
<td>5</td>
</tr>
</tbody>
</table>
Agriculture is getting the same budgetary treatment as other subjects from the school administration. 30(30%) said yes and 70(70%) said no. Results from the findings show that 70(70%) of the respondents had had staff development programmes organised by the school administration on the teaching of Agriculture. Above all, 90(90%) of the respondents had been issued with agriculture syllabus and 40(40%) had adequate textbooks. Eighty (80%) of the respondents indicated positively that competitions on agriculture were being held in their clusters. The results of this study show that 95(95%) of heads allocate the appropriate number of periods stipulated in the syllabus which is four periods of thirty minutes per week. However, 5(5%) felt the time table had become congested making some to ignore the requirements of the national syllabus.

Of concern was the view expressed by 90(90%) respondents who responded that Agriculture lessons were not observed by the heads. This is in line with the *laissez faire* approach to curriculum implementation assumes that curriculum implementers are knowledgeable of the matter they are expected to deliver and hence give little work for supervisors within an organisation (Chung, 2003; Bennaaars, Otiende, and Boisvert, 1994). There is clear evidence that supervision was lacking in Agriculture. This could be attributed to lack of knowledge by the concerned school heads.

**Conclusions**

From the above findings, it is concluded that:

- Most schools in Chegutu district have a sustainable programme on Agriculture teaching and learning for Grade 7 pupils.
- The majority of primary schools are on track to implement the subject as evidenced by the establishment of Agriculture subject committees among other initiatives.
- Agriculture is an important subject for national development which should be a standalone subject and be schemed and planned for.
- Pupils, parents and teachers have been sensitised on the importance of agriculture and show a greater sense of motivation and are well prepared to keep the programme going.
- A few teachers seem to be just fulfilling the mandatory requirements of implementing the curriculum on teaching Agriculture as an examinable subject at Grade 7 level.
- Some parents are not providing equipment needed for Agriculture hence stunting efforts towards successful implementation of the subject.
- Staff development programmes organised by the school administration on the teaching of Agriculture are a positive step towards the success of the subject in primary schools.
- Though some resources are available for the successful implementation of the subject, there are inadequate textbooks in the schools curtailing the successful implementation of the agriculture programme in the primary school.
- School heads have been supportive of the subject through allocating the appropriate number of periods stipulated in the syllabus which is four periods of thirty minutes per week and providing the syllabuses required.

**Recommendations**

From the above conclusions, it is therefore, recommended that:

- The few schools in the district that have not embraced the programme should emulate those that have established Ag-
riculture subject committees and availed the much needed requirements.
• Thorough supervision of teachers and pupils’ work should be undertaken by both the head and District Education Inspectors. The Civil Service Commission Inspectors should also supervise the full implementation of the programme in the school.
• There is need for programmes meant to sustain teachers’ and pupils’ interest in the subject and to motivate to do Agriculture without making them overloaded. Trips to agro-based industries should be intensified rather than concentrate on trips to recreational facilities.
• Communities should invigorate their support for the full introduction of agriculture through active participation in the school programmes meant to enhance the uplifting of the subject.
• More staff development programmes should be organised by the school administration on the teaching of Agriculture in an attempt to create positive attitudes among all stakeholders in an attempt to successfully implement the subject in primary schools.
• There is need to employ agriculture graduates that have been churned out of a local agriculture college rather than depend of teachers who are qualified to teacher other subjects.
• There is need for accelerated hiring of resource persons in light of the few trained teachers in Agriculture. AGRITEX officers can be roped in to offer their services in schools in their vicinity.

References


