Secondary Agriculture Syllabus

Years 7 - 9

CURRICULUM DEVELOPMENT DIVISION

Solomon Islands Government

SECONDARY

AGRICULTURE SYLLABUS

Years 7 - 9

Ministry of Education and
Human Resources Development

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MEHRD

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Foreword

The Solomon Islands Education system is currently undergoing significant restructuring and reform to the needs identified through the development of the education sector investment and reform programme (ESIRP) and education strategic plans (ESP). Curriculum review and reform programme (CRRP) is a process identified to develop a comprehensive curriculum that is fair and responsive to the needs of all Solomon Islanders in order to achieve the vision and national goals of the education system advocated in the national education action plans (NEAP 2007 – 2009 & 2010 – 2012) and education strategic framework (2007 – 2015).

The new Agriculture Syllabus is to be used by secondary school teachers to teach Years 7 – 9 secondary schools in Solomon Islands. It is developed as a guiding framework to meet the teaching and learning needs in all secondary schools. The programme of study presented in this syllabus contributes significantly towards the holistic development of the learner as an individual and the achievement of human integral development.

This is a key document and it forms the basis of the curriculum shift from a curriculum defined in terms of subject content to a curriculum defined in terms of what learners are expected to know, understands and be able to do, value and appreciate. This is an outcomes based education model and curriculum approach based on the achievement of learning outcomes through a learner centered, problem posing and the use of multiple intelligence education philosophy.

This syllabus builds upon concepts, skills, attitudes and values from the primary science learning as well as from the learners home environment and links them to the concepts, skills, attitudes and values in this syllabus. It also forms a background for further learning beyond Year 9 as well as preparing individual learners for future life in the Solomon Islands.

The development and implementation of this syllabus is a step towards providing relevant and meaningful learning experiences for our children. It is important that all policy makers, teachers, education authorities and other important education stakeholders support the implementation of this syllabus.

Hon. Rueben Inoana Dick Ha'amori
Honourable Minister of Education, 2013
Ministry of Education and Human Resources Development

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Subject Advisory Committee and Workshop participants

- Secondary Agriculture Advisory Committee members (2004 – 2009)
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- Secondary Agriculture Working Group members (2007-2010)

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- The Solomon Islands Government

Section 1. INTRODUCTION

An outcome based education approach was adapted in Solomon Islands to develop the Agriculture Syllabus and learning and teaching materials. The Agriculture Syllabus has been designed using Learning Outcomes which identify the knowledge, skills, attitudes and values that all Learners should achieve and demonstrate by the end of Year Nine (Yr. 9). The syllabus integrates modern and traditional agriculture knowledge to ensure the syllabus provides relevant skills and knowledge for all learners. Agriculture is one of the national curriculum learning areas and builds on the teaching and learning of fundamental knowledge and skills from Year 1 to 6 in the Primary level.

Learning in Agriculture should enable learners to learn to value and understand the vital role of agriculture in terms of food and fibre production and the natural resources systems in advancing personal and global well-being. Teaching learners about farming and gardening introduces knowledge about how, for example, food gets onto their tables, clothes get onto store shelves, and seeds germinate. Starting agricultural education at a young age helps children get perspective on their lives and the world around them. It also introduces learners to basic scientific procedures and shows them how to apply these lessons to daily life. For example, an agriculture instructor can teach learners about how bees make honey, how trees grow and make fruit or nuts, and how dry coconut fruits can be made into oil. Agriculture puts chemistry, biology and physics into everyday-life application. Furthermore, school gardens planted by learners serve as environmental and agricultural educational tools.

Furthermore, raising animals and growing crops teaches learners about how things grow, live and die. Gardens also help learners develop personally and socially by adding a practical dimension to these agricultural subjects. Most importantly, learners learn about nutrition, where foods come from, how to nourish themselves, and the importance of nutrition for the rest of the world. It is anticipated that while learning Agriculture , learners can also develop skills in leadership, communication, team building and civic engagement through inter-curricular programs in agricultural education. They learn about the importance of farming to a community, and learn to work together in planting gardens and in discovering how their community provides food to the public.

The syllabus emphasises learners working individually and in groups, in planning and conducting investigations and practical tasks. They evaluate issues and problems, identify questions for inquiry and draw evidenced based conclusions from their investigations. Through this problem solving process they develop their critical thinking skills and creativity. The practical nature of the subject must be emphasised through hands on activities that will occupy a substantial amount of time. All learners will be required to undertake practical tasks, research projects', practical investigations and other individual tasks.

Assessment is an important component of teaching and learning and is integrated into the teaching and learning activities of Agriculture. The emphasis is on continuous assessment and as such will provide feedback to learners and the teacher on learner's progress towards achievements of the learning outcomes. It helps learners improve their standards of achievements by knowing what they need to do well and where they need to improve. In Agriculture, teachers will gather evidence from learner's work during the course of the term and uses those continuous assessments to improve their teaching and learner's learning.

To promote a contemporary and comprehensive Agriculture education, this curriculum has been organized into learning strands. The four strands in Agriculture are: Integrated agriculture, Garden crops production, Plantation crops production and Farm animals' production. These strands provide the broad learning contexts and are further subdivided into sub-strands as units and topics in the Secondary Agriculture curriculum.

Section 2. RATIONALE

Agriculture remains an important sector in the economy of this country. It is the major employer and source of livelihood in rural areas where approximately 80% of the population is involved mainly in subsistence agriculture. We need to recognize agriculture's real contribution to economic development, national security, social stability, food security and environmental protection now and in the future. Greater emphasis should be placed on programmes that aim to enhance the productivity and competitiveness of domestic agriculture so that we will ensure the long term sustainability of food security and nutritional status in Solomon Islands.

Education and training in Agriculture will continue to be a principle area of concern in the development of human resources in Solomon Islands. This means it is important to provide Agriculture education at all levels in the education system. Thus, the inclusion of Agriculture in the secondary school curriculum is equally important because it provides learners with the opportunity and venue to acquire knowledge, understanding and relevant skills in the basic aspects of Agricultural production and would be very essential when they exit the education system. It also facilitates entry of learners to specialized tertiary level Agriculture education and training like the School of Natural Resources and other agriculture training institutions.

The shift in education focus from teacher to learner centered approach should enhance and make Agriculture education more relevant to the needs of learners and society. A good knowledge, understanding and skills base in Agriculture helps in capacity building for the rural labor force. School leavers at the end of year 9 should form a new generation of farmers who are able to practice higher levels of farm production techniques by incorporating traditional and improved knowledge of farming concepts. This integration is fundamental to improving quality and size of agricultural commodity exports, maintaining food security and sustainable use and development of our resources.

Agriculture therefore, must be seen as a means of livelihood and employment. It is anticipated that the current focus in this Agriculture Syllabus development provide the basic knowledge, understanding and relevant skills that prepare and equip all learners to make a living and contribute positively towards the betterment of our nation, Solomon Islands.

Section 3. AIMS

The secondary school Agriculture Syllabus aims to;

- provide learners with basic Agriculture knowledge, understanding and skills that is relevant to them and would benefit them in their later life.
- provide learners with a basic knowledge, understanding and skills of agronomy, livestock production, farm management, conservation and sustainable use of resources.
- provide opportunities to acquire practical knowledge and aptitude needed for farming.
- show learners how basic biological and other scientific ideas can be applied to the improvement of plant and animal production.
- develop an appreciation for and an interest in the field of Agriculture.
- establish a basic foundation for learners who wish to study Agriculture at tertiary level.
- help learners develop an awareness of the range of vocational and recreational opportunities available in agriculture through a variety of agricultural experiences.
- help learners develop the ability to apply knowledge, understanding and skills to new situations and make decision leading to solving Agricultural Science problems.
- help learners gain a greater understanding of their responsibilities towards the environment, natural resources and the community.
- enable learners to become aware of the potentials and problems of Agriculture in Solomon Islands.
- help learners make decisions on issues relating to Agriculture.

Section 4. SYLLABUS STRUCTURE

The syllabus for Years 7 to 9 for Secondary Agriculture is presented in Section 12. It is a series of strand, and sub-strand sheets; each sheet has the same structure. This is a copy of the Strand and Sub-strand structure, with an explanation of each part.

Subject: Agriculture	**Year level:**	**Strand : Title**

A strand is the term for the main areas of study into which the subject is divided. In Agriculture there are four main strands: Integrated agriculture, Garden crop production, Plantation crop production and Farm animal production

Strand Theme: **(Total periods)**

A strand is sub-divided into strand themes. This is the theme or main areas of study for that strand in a particular year. For instance in Agriculture the strand "*Integrated agriculture"* has two strand themes each for the respective year levels: Year 7: *Introduction to agriculture/Introduction to soil;* Year 8: F*ood security/ soil properties;* Year 9: *Introduction to farm management and Sustainable land management.*

Sub-strand: Title **(# periods)**

A strand theme is divided into sub-strands. For example, within the Secondary Agriculture, the Year 7 Strand theme " *Introduction to agriculture*" is divided into 4 sub-strands: *What is agriculture?, Types of agriculture, School farm, and Improving agriculture production.* This section contains the title of each sub-strand.

General Learning Outcomes	Specific Learning Outcomes	Suggested Assessment Events
Learners should	***Learners should be able to***	***Learners can be assessed on***
These are statements that specify what learners will know, understand, be able to do or appreciate/value as a result of a learning activity. Outcomes are usually expressed as knowledge, understanding, skills, attitudes or values. ■ know ***(k)*** ■ understand ***(u)*** ■ shows skill (s) ■ appreciate or value ***(a/v)***	These are examples of things learners can do, demonstrate or understand if they have achieved an outcome. They are usually observable and measurable.	This is a suggested way of assessing one or more Outcomes formally for the purposes of recording the learner's progress. Other outcomes will also be assessed but the assessment need not be recorded.

Section 5. STRAND STATEMENTS

This section contains a brief statement for each strand covering Years 7 to 9 in the Agriculture. There are four strands and statements for each strand covered in this syllabus as explained below.

Strand 1: Integrated Agriculture

This strand is designed to provide learners with relevant knowledge, understanding, skills, attitudes and value in Agriculture related concepts, principles and practices. The strand themes or chapters under this strand include: Introduction to agriculture, Introduction to soils, Food security, Soil properties, Introduction to farm management and Sustainable land management. The understanding and application of these concepts, principles and practices should facilitate and compliment learners' success in growing garden and plantation crops and raising farm animals.

Strand 2: Garden crops production

This strand is designed to provide learners with relevant knowledge, understanding, skills, attitudes and value in garden crops production concepts and practices. The strand themes or chapters under this strand include: Introduction to food crops, Growing Vegetables crops, Growing Pulse crops, Growing Root and Tuber crops, Growing Cereal crops and Growing Spice crops. Emphasis on strand themes or chapters is placed on basic garden crops description, aspects of plant reproduction, preparations to grow garden crops, care and management of garden crops, harvesting, preparations and selling of garden crops.

Strand 3: Plantation crops production

This strand is designed to provide learners with relevant knowledge, understanding, skills, attitudes and value in plantation crops production concepts and practices. The strand themes or chapters under this strand include: Introduction to plantation crops, Growing Fruit and Nut crops, Growing Fiber crops, Growing Other useful crops, Growing Beverages and Stimulants crops, Growing Oil crops. Emphasis on strand themes or chapters is placed on basic plantation crops description, preparations to grow plantation crops, care and management of plantation crops, harvesting, preparation and selling of plantation crops.

Strand 4: Farm animals' production

This strand is designed to provide learners with relevant knowledge, understanding, skills, attitudes and value in farm animal production concepts and practices. The strand themes or chapters under this strand include: Introduction to farm animals, Raising livestock, Raising Poultry and Raising Insects. Emphasis on strand themes or chapters is placed on farm animal description, preparation to raise farm animal, care and management of farm animals, harvesting, slaughtering, preparation and selling of farm animals products.

Section 6. PROCESSES AND SKILLS

This section contains a table of skills which learners should acquire in learning the subject and processes which will be used in learning and teaching the subject. Teachers should use this table as a checklist to ensure that skills are being learnt and processes are being used. The skills and processes for this syllabus are outlined below.

Processes and skills	Year 7	Year 8	Year 9
Research and investigation	**Identification** ▪ Identify garden and plantation crops that are ready for harvest ▪ Identify farming practices ▪ Identify signs of weathering **Investigation and field trips** ▪ Investigate issues affecting agricultural production activities	**Identification** ▪ Identify garden and plantation crops that are ready for harvest ▪ Identify farm animals that are ready for harvest (slaughter) **Investigation and field trips** ▪ Investigate issues affecting agricultural production activities	**Identification** ▪ Identify garden and plantation crops that are ready for harvest ▪ Identify farm animals that are ready for harvest **Investigation and field trips** ▪ Investigate issues affecting agricultural production activities
Critical thinking and problem solving	**Critical thinking** ▪ Discuss issues related to agriculture production activities **Problem solving** ▪ Find solution to problems affecting agricultural production	**Critical thinking** ▪ Discuss issues related to agriculture production activities **Problem solving** ▪ Find solution to problems affecting agricultural production	**Critical thinking** ▪ Discuss issues related to agriculture production activities **Problem solving** ▪ Find solution to problems affecting agricultural production
Planning/ organizing/ Establishment	**Practical** ▪ Demonstrate and apply practices necessary for establishing selected garden and plantation crops	**Practical** ▪ Demonstrate and apply practices necessary for establishing selected crops and farm animals	**Practical** ▪ Demonstrate and apply practices necessary for establishing selected crops and farm animals
Maintaining and managing	**Practical** ▪ Demonstrate and apply caring practices on selected garden and plantation crops	**Practical** ▪ Demonstrate and apply caring practices on selected crops and farm animals	**Practical** ▪ Demonstrate and apply caring practices on selected crops and farm animals

Processes and skills	Year 7	Year 8	Year 9
Harvesting, preparation, processing, grading and selling	**Practical** ▪ Harvest selected crops ▪ Prepare and process selected crops ▪ Grade and sell selected crops	**Practical** ▪ Harvest selected crops and farm animals ▪ Prepare and process selected crops and farm animals ▪ Sell selected crops and farm animals	**Practical** ▪ Harvest selected crops and farm animals ▪ Prepare and process selected crops and farm animals ▪ Sell selected crops and farm animals
Reporting/ communication /information processing	**Case study** ▪ Draw information out from case study ▪ Interpret pictures to draw out information	**Case study** ▪ Draw information out from case study ▪ Interpret pictures to draw out information	**Case study** ▪ Draw information out from case study ▪ Interpret pictures to draw out information

Section 7. CONTRIBUTIONS TO KEY LEARNING OUTCOMES

The Agriculture Syllabus promotes the inclusion of the key learning outcomes in the learning of the subject. The table below stipulates how the Agriculture subject contributes to achieving these key learning outcomes.

Key Learning Outcomes	Secondary Agriculture Contribution
1. Culture promotion Awareness of the Solomon Islands culture; in particular, the promotion of the concept of 'unity in diversity', the need for equity, and inclusiveness.	Integration and incorporation of Traditional agricultural knowledge/skills with the improved agricultural knowledge and skills; traditional technologies for appropriate and sustainable use of the resources and promotion of community roles to produce and maintain food security at the household level.
2. Lifelong learning Realization that learning is a lifelong experience; encouragement of innovation, creativity, and a positive view of learning post-school.	Develop open-mindedness, creativity, capacity building, and ability to solve and address problems affecting society and promote learning environment for farmers to gain experience and expand knowledge of crops and animal production.
3. Ethics and good citizenship Development of positive, moral and ethical values, respect for others, based on personal integrity and social responsibility; focused on: values, education, civics and citizenship; peace and reconciliation.	The development of a sense of responsibility and respect (values, decision making, and attitude) for the wellbeing of other people and promote respect of resources and the environment.
4. Peace and Reconciliation Development of positive attitudes with the mind and heart to create peace, reconciliation, and be able to live in harmony in a multi ethnic and diverse community.	Influences peace and reconciliation through individuals (farmers) with high income and status within the community. Farm produce has value related to settling disputes and bringing peace/reconciliation. Adequate food supply and income from agriculture is likely to lead to contented people
5. Technology Use of appropriate traditional and modern technology to improve livelihoods and community standards of living.	Promote the sustainable use of tools and equipment to extract resources for the welfare and livelihood of the present and future generation. Also promote integrations of traditional and improved technology in food production.
6. Entrepreneurship The development of entrepreneurial skills for job creation through initiative and creativity.	Promote risk taking in starting agricultural enterprises, inventions, creativity, prudence, and opportunity for rural income and self-employment. Promotion of production of agricultural commodity/products.
7. Environment, Conservation and Climate change Development of positive attitudes and values toward the preservation and conservation of the environment and adaptation and management of the effects of climate change. This will include understanding of the hazards and planning and management of the impacts of disasters.	Promote sustainable resources management, preservation, conservation and respect of the environment, adaptation and management of the effects of climate in relation to the understanding of hazards and planning and management of the impacts of disasters.
8. Development of the whole person Development of interactive skills, social sensitivity, environmental and health awareness and good practices.	Promote high self-esteem and open mindedness in the production of nutritious farm produces for healthy living. Promote personal/social/health development through active participation and awareness of good agricultural practices and care of the environment.

8.1 Learning and Teaching Approaches

The Agriculture Syllabus places emphasis on the learner-centered approach in an attempt to make learning more flexible, relevant, and meaningful to the experiences and needs of the learners. It allows a teacher to be flexible in determining the most effective and efficient ways to assist learners achieve the Agriculture learning outcomes, in spite of learners differences. It should also provide opportunities for learners to be more responsible for their learning and develop knowledge, understanding, skills, values, and attitudes in Agriculture education. Learners should view learning as a lifelong process and encouraged to use a variety of resources available to use their knowledge, understanding and skills to address issues and able to make informed decision.

Agriculture teachers must therefore approach the teaching of Agriculture in a more practical way so that the cognitive aspects of the learners learning processes and interests are developed. A range of strategies for helping learners to achieve the overall learning outcomes of the Secondary Agriculture education will be used for presenting Agriculture lessons in order to motivate and cater for the learner's different learning abilities, styles and needs.

The types of teaching and learning strategies that Agriculture teachers should use for the presentation of their lessons will depend on the content and aspect of the sub-strand taught and the desired learning outcomes. In the process of arriving at learning outcome(s), it is important to take note of the following.

8.1.1 Safety

Agriculture is a practical oriented subject and learners would be required to carry out and perform practical activities that may involve some degree of risks like handling chemicals, operating farm machines, using sharp tools and equipment, and going on field trips. To ensure that safety prevails in the learning environment, teachers must ensure that precautionary measures and specification are incorporated into every activity that is likely to pose risks to the learners.

8.1.2 Traditional agriculture knowledge

The integration of traditional agricultural knowledge and practices within the appropriate Agriculture Syllabus topics are necessary. All Agriculture teachers must realize the need to put emphasis on the unique traditional agricultural knowledge, skills, and practices which learners are familiar with as it associates with their cultural norms, beliefs, and values. The integration of traditional and improved Agriculture knowledge should enhance learning because the learners start with concepts they are familiar with. As such, they can associate with the more complex and abstract ideas and concepts of agriculture.

8.1.3 Improvisation

The teaching and learning of Agriculture should always be complimented with the use of appropriate and suitable improvise teaching materials outside the normal classroom teaching environments. There is a need for creativity on the part of Agriculture teachers to utilize improvised materials when the need arises. This will enhance the effective teaching and learning of certain topics contained within the Agriculture Syllabus.

Teaching Strategies

A range of strategies for helping learners to achieve the overall learning outcomes are shown below. They are grouped into 8 categories.

8.2 Link with other Subjects

Subject	Link description
Arts and Culture	The promotion and use of traditional farming methods and how different cultures & groups cultivate crops and raise farm animals.
Business Studies	Basic profit and expenditure calculation, planning, resources and production
Christian Education	Appreciation of creation and the notion that 'man is a steward (take good care of resources) and will need to sweat (cultivate) before he eat.
English	The usage of English as a medium of communication is fundamental in the learning of Agriculture concepts, practices and skills.
Health Education	The promotion of healthy living through the consumption of diet based on locally available food produced in the farm or garden.
Home Economics	The production of food, its availability for household use, and its use in relation to nutrients for the normal functioning of the body.
Mathematics	The use of mathematical skills, concepts and their application for example, ratio & proportion, money, percentage, angles and measurement, is important in the understanding and application of some aspects of the agriculture concepts.
Physical Education	The promotion of physical involvement in farming activities as a measure that would enhance physical fitness and endurance.
Science	The study of living and non-living things (plant system, animal systems, physical world, chemical reaction, etc) and their interaction in their natural environment.
Social Studies	The study of farming systems (small and large scale) and their integration with the physical environment.
Technology	The use of technology in terms of traditional and improvised tools and equipment in farming.

8.3 Sensitive Issues

There are sub-cultures; cultural belief, values, traditions, religious restriction, disability and opinion, and gender which are likely to hinder aspect of teaching and learning processes in the Agriculture curriculum. Agriculture teachers must be sensitive and aware of the cultural diversity and background of learners and present lessons conducive to effective learning. For example, some religion would not want learners to learn about pigs or aspects of animal reproduction.

8.4 Assessment, Recording, Monitoring and Reporting

8.4.1 General

The main purpose of assessment is to improve student learning and the teaching approaches of the teachers. Assessment needs to be for learning, as learning as well as of learning. It is used to evaluate and improve teaching and learning, report achievement and provide feedback to learners on their progress. Generally, it is also important for decision making in all levels including the Ministry of Education, Education Authorities and Schools, Teacher Education and Training institution and Donor Partners.

Assessment measures Learners' achievement of, as and for learning outcomes as described in this syllabus. It is the ongoing process of identifying, gathering and interpreting information about Learners' achievement of the learning outcomes. Assessments can be conducted as formative, diagnostic and summative assessments. For Formative assessment, it is recommended that teachers assess at least four (4) assessment events to evaluate the domains of knowledge, understanding, skills and attitudes/values for each sub-strand. This is done as the learner's continuous assessment for the purposes of improving both the learning of the learners and the teaching process. Diagnostic assessment is essential for identifying where your learners are in terms of their achievement level of an assessed outcome at any one time during the year. This is important for teachers to give remedial work as an intervention strategy to allow learners to improve their learning in the classroom. Summative assessment can be conducted at the end of each semester during the year and will involve the assessment of Specific Learning Outcomes that are not assessed as part of the formative assessment. This type of assessments can be integrated with the formative assessment as part of the reporting system with less weighting. Such form of assessments should not be confused with the National Summative Examination at the end of Year 9.

For teaching and learning to be outcome-based, teachers need to plan their teaching and assess learner performances in relation to outcomes using selected criteria derived from those outcomes. Assessment in this syllabus involves focusing less on whether a learner has "passed" or "failed" and more on what outcomes a learner has achieved and in which areas further support is required.

8.4.2 Assessment in Secondary Agriculture

A learner's achievement in Secondary Agriculture at the end of year 9 will be assessed by a written Examination against the General and Specific Learning Outcomes. Assessment of learners' progress towards achieving these broad outcomes is cumulative throughout years 7, 8 and 9 using specific outcomes for each unit. The national examination will be sat by all year 9 Learners throughout the Solomon Islands.
During the course of each strand theme, learners must complete the assessment events specified for the unit or each strand theme. Teachers will expand each task and provide clear guidelines to Learners on how the task will be completed and how the criteria will be applied.

The assessment tasks and criteria in each unit of the learner books will ensure that there is a common focus for internal assessment in the subject across schools while allowing for flexibility in the design of tasks. A variety of tasks are specified to give learners the opportunity to demonstrate all General and Specific learning outcomes in different ways and to improve the validity and reliability of the assessment. The authenticity of learners assessment is an important part of the assessment process. This places the importantce of assessing the learners own work. It is not fair to assess learners work with the assistance or input of teachers and others.

It is also important that teachers plan the teaching and learning sequence so that there is a balanced spread of assessment during the unit. Some tasks, such as investigations or case studies can be designed so that they are completed over a period of time rather than at the end of the unit/topic. Other tasks can be done immediately after the relevant section of the unit/topic has been covered.

8.4.3 Suggested Assessment Strategy and Criteria

Type of assessment	Assessment Strategy	Assessment Criteria Learners can be assessed on
• Practical Experiments	• Weigh or measure an object • Read a chart or thermometer • Use a piece of equipment • Demonstrate a technique • Perform an experiment	The ability to write appropriate titles, aims and objectives; brief statements of what to do and what the learner is expected to find; the ability to follow instruction; the ability to design and use a product, the ability to collect, record, calculate, analyze and interpret data; the ability to use equipment correctly; accurately and clearly, draw scientific conclusions and recommendations.
• Research • Investigation	• Conduct research or an investigation	Brief statements on aims and objectives; and what to do and what the learner is expected to find; the ability to follow instruction; the ability to design and use a product, the ability to collect, record, calculate and analyze and interpret data; the ability to use equipment correctly; accurately and clearly, draw scientific conclusions and recommendations.
• Oral Presentation	• Make a verbal report • Explain an event or procedure	The ability to make clear introduction; clarity of voice; clear instruction; clear explanation; link to scientific concepts and clear summary on scientific conclusion and recommendations
• Written test • Assignments • Home work • Quiz	• Provide a written report • Write short answer in response to questions • Complete a written test • Perform a calculation from data provided	The ability to answer questions correctly; apply correct use of formula and units; clear explanations and link with scientific concepts and clear scientific conclusion.

8.4.4 Recording, Monitoring and Reporting

Teachers must keep ***accurate*** and ***consistent*** records of learner's achievements of the specific learning outcomes by recording the results from assessment events. They must report these achievements in fair and accurate way to *parents, guardians, teachers* and *Learners*. Suggested recording methods includes anecdotal notes in a journal or diary, checklists, portfolios of learners work, progressive records and work samples with comments written by the teacher. Teachers should use the records to properly monitor the learners' achievements, progress and performances on a consistent way to help teachers provide effective guidance for the learner. Such records should also guide the teacher to plan and implement remedial teaching to assist learners to acquire the learning outcomes required by the approved school curriculum.

The purpose of reporting is to give information to learners about the extent to which they have achieved the expected learning outcomes. Reporting also gives feedback to teachers and parents. For every sub strand, the learning and teaching situation will have many assessment activities. Each sub strand of this syllabus presents at least one example of an assessment event. Teachers are encouraged to design assessment tasks to evaluate the four domains of knowledge, understanding, skills and attitudes or values.

Teachers are encouraged to use an effective recording, monitoring and reporting system. This is a requirement and is important for teachers to keep accurate records of Specific Learning Outcomes assessed for both individual students and the whole class. It is essential for teachers to keep accurate and updated record of all assessments for the purposes of monitoring and reporting of results from formative assessment or continuous assessment in the classroom. This is the teacher's reference to measure learner's performances, progress and achievements. Learning outcomes in the syllabuses are simplified into two categories; namely the **General Learning Outcomes (GLO) and Specific Learning Outcomes (SLO)**. The GLO are general and open ended statements whereas SLO are clear and specific statements that can be measured, observed and demonstrated. These are the **Curriculum Benchmarks or Standards** that teachers would need to assess formatively as part of the continuous assessment and summatively at the end of each term, semester or year. The learning outcomes in the syllabus are coded.

Recording of Assessment events should be described in the appropriate columns in the recording form. Teachers must take note of how to record the learner's achievement using the approved recording format. Learners achievement should be recorded and described as achieved, partially achieved and not achieved. The assessment events will be used to build a report on the learner's achievement over a period of time and should be kept as learner's folio. A record of the learner's achievement of specific learning outcomes must be recorded in the form of a learner's report.

Reporting of learning outcomes must be based on learners' achievement. This is a descriptive reporting system to inform learners, parents and other stakeholders on the learners' performance, progress and achievements. For transparency and accountability in education, teachers through the school administration must ensure that learner reports are prepared, distributed and made known to parents, guardians, learners themselves and other key stakeholders. These results must be communicated and discussed with the parents and guardians in the presence of the learners. Parents shall then make further discussion about the results with their own children. Teachers' must use recommended recoding, monitoring and reporting templates or forms described in the National Curriculum Statement and the Teacher Guides for effective recording, monitoring and reporting.

Section 9. CURRICULUM PROFILE

This section contains a brief explanation on the required time allocation and the number of periods per day and per week. It also outlines the time allocation for teaching Agriculture syllabus.

Notes:

1) All periods are 40 minutes. There should be 8 periods per day, 40 periods per week.
2) All subjects are compulsory. All subjects must be continuously assessed through the Suggested Assessment Events in the main syllabuses. At present only English, Maths, Science and Social Science are assessed nationally in year 9.
3) All learners will take Core Home Economics and Core Technology, 2 periods per week each, and will have a choice between Extension Home Economics and Extension Technology for a further 2 periods.
4) Personal development subjects are grouped together. Schools may either timetable 2 periods per week for each through out the course or block the periods so learners take more periods of one subject at one time and more periods of another subject later e.g. 4 periods of P.E. one semester and 4 periods of Health the next semester.

Suggested Secondary Curriculum profile: Years 7 - 9

Subject	Periods per week	Total time in minutes per week	% of total timetable (1600 mins)	Status
Academic subjects				
English	5	200	12.5	Compulsory assessed
Mathematics	5	200	12.5	Compulsory assessed
Science	4	160	10.0	Compulsory assessed
Social Studies	4	160	10.0	Compulsory assessed
Total Academic	18	720	45.0	Compulsory assessed
Practical/vocational subjects				
Agriculture	**4**	**160**	**10.0**	**Compulsory assessed**
Business Studies	4	160	10.0	Compulsory assessed
Home Economics/ Technology	2 core each = 4 plus 2 extension, either H.E. or Technology	160 80	10.0 5.0	Compulsory assessed
Total Practical/ vocational	14	560	35.0	Compulsory assessed
Personal development subjects: Christian Education Arts and Culture Physical Education Health	8	320	20.0	Compulsory assessed
Total	40	1600	100	

Year 7	Year 8	Year 9
Integrated agriculture		
Introduction to Agriculture 7.1. What is Agriculture? 7.2. Types of Agriculture 7.3. School Farm 7.4. Improving agricultural production	**Food Security Agriculture** 8.1. What is food security? 8.2. Food type, quality and supply 8.3. Improving food security	**Introduction to F/management** 9.1. What is Farm Management? 9.2. Farm Planning 9.3. Farm Resources
Introduction to Soil 7.5. What is soil? 7.6. Where does soil comes from? 7.7. What is in the soil? 7.8. What is soil profile?	**Soil Properties** 8.4. Physical Soil properties 8.5.Chemical Soil properties 8.6. Biological Soil properties	**Sustainable Land Management** 9.4. What is Sustainable Land Management? 9.5. Issues in Sustainable Land Management 9.6. Addressing Sustainable Land Management issues
Garden crops production		
Introduction to Food crops 7.9. Why grow food crops? 7.10. Plant reproduction 7.11. Types of food crops 7.12. Preparing to grow food crops 7.13. Sowing seeds 7.14. Caring for the seedlings	**Growing Pulse crops** 8.7. Why grow Pulse crops? 8.8. Preparing to grow Pulse crops 8.9. Caring for Pulse crops 8.10.Harvesting, preparing and selling	**Growing Cereal crops** 9.7. Why grow Cereal crops? 9.8. Preparing to grow Cereal crops 9.9. Caring for Cereal crops 9.10. Harvesting, preparing and selling
Growing Vegetable crops 7.15. Why grow vegetable crops? 7.16. Preparing to grow vegetable crops 7.17. Caring for vegetable crops 7.18. Harvesting, preparing and selling	**Growing Root/Tuber crops** 8.11. Why grow Root/Tuber crops? 8.12. Preparing to grow Root/ Tuber crops 8.13. Caring for Root/Tuber crops 8.14. Harvesting, preparing and selling	**Growing Spice crops** 9.11. Why grow Spice crops? 9.12. Preparing to grow Spice crops 9.13. Caring for Spice crops 9.14. Harvesting, preparing and selling

Year 7	Year 8	Year 9
Plantation crops production		
Introduction to Plantation crops 7.19. Plantation agriculture in Solomon Islands 7.20. Crops grown in the plantation 7.21. Preparing to grow plantation crops 7.22. Seedling nurseries	**Growing an agro-forestry** 8.15. Why grow Agro-forestry? 8.16. Preparing to grow an agro-forestry 8.17. Caring for agro-forestry 8.18. Harvesting, preparing and selling	**Growing Stimulant/Beverage crops** 9.15. Why grow stimulant/beverage crops 9.16. Preparing to grow stimulant/ beverage crops 9.17. Caring for stimulant/beverage crops 9.18. Harvesting , preparing and selling
Growing Fruit/Nut crops 7.23. Why grow Fruit and Nut crops? 7.24. Preparing to grow fruit/nut crops 7.25. Caring for fruit/nut crops 7.26. Harvesting, preparing and selling	**Growing Other useful crops** 8.19. Why grow Other useful crops? 8.20. Preparing to grow Other useful crops 8.21. Caring for Other useful crops 8.22. Harvesting, preparing and selling	**Growing Oil crops** 9.19. Why grow oil crops? 9.20. Preparing to grow oil crops 9.21. Caring for oil crops 9.22. Harvesting, preparing and selling
Farm Animals production		
Introduction to Farm Animals 7.27. Why raise farm animals? 7.28. Preparing to raise farm animals 7.29. Animal nutrition 7.30. Components of food	**Raising Livestock** 8.23. Why raise livestock? 8.24. Preparing to raise livestock 8.25. Caring for livestock 8.26. Harvesting, preparing and selling **Raising Poultry** 8.27. Why raise poultry? 8.28. Preparing to raise poultry 8.29. Caring for poultry 8.30. Harvesting, preparing and selling	**Raising Insects** 9.23. Why raise insects? 9.24. Preparing to raise insects 9.25. Caring for insects 9.26. Harvesting, preparing and selling `

This section shows the entire learning programme for the three years of the Secondary Agriculture course and the suggested teaching times based on **17 Teaching Weeks per Semester and 34 Teaching weeks per Year** in Years 7 and 8. Year 9 has 17 weeks and 11 weeks i.e. 28 weeks only, due to year 9 National Examinations.

SEMESTER 1

Year 7																				
Week	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
		Integrated agriculture							Garden crops production										Exams	
		3 ¼ weeks			3 weeks				6 weeks					4 ¾ weeks						
		Chapter 1: Introduction to Agriculture (13 periods)			Chapter 2: Introduction to soil (12 periods)				Chapter 3: Introduction to food crops (24 periods)					Chapter 4: Growing Vegetable Crops (19 periods)						

Year 8																				
Week	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
		Integrated agriculture							Garden crops production										Exams	
		3 weeks			4 weeks				5 weeks					5 weeks						
		Chapter 1: Food security (12 periods)			Chapter 2: Soil properties (16 periods)				Chapter 3: Growing Pulse crops (20 periods)					Chapter 4: Growing Root and Tuber crops (20 periods)						

Year 9																				
Week	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
		Integrated agriculture							Garden crops production										Exams	
		3 weeks			4 weeks				5 weeks					5 weeks						
		Chapter 1: Food security (12 periods)			Chapter 2: Soil properties (16 periods)				Chapter 3: Growing Pulse crops (20 periods)					Chapter 4: Growing Root and Tuber crops (20 periods)						

SEMESTER 2

Year 7																				
Week	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
		Plantation crops production												Farm animals productions					Exam	
		6 weeks						6 weeks						5 weeks						
		Chapter 5: Introduction to Plantation Crops (24 periods)						Chapter 6: Growing Fruit and Nut Crops (24 periods)						Chapter 7: Introduction to Farm Animals (20 periods)						

Year 8																				
Week	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
		Plantation crops production							Farm animals productions										Exam	
		3 weeks			3 weeks				5 weeks					5 weeks						
		Chapter 5: Growing an agro-forestry (12 periods)			Chapter 6: Growing Other useful crops (16 periods)				Chapter 7: Raising Livestock (20 periods)					Chapter 8: Raising Poultry (20 weeks)						

Year 9																				
Week	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
		Plantation crops production										Farm animals productions					Revision and Exams			
		5 weeks					5 weeks					5 weeks								
		Chapter 5: Growing Stimulant/Beverage crops (20 periods)					Chapter 6: Growing Oil crops (20 periods)					Chapter 7: Raising Insects (20 periods)								

12.1 Agriculture Year 7 Syllabus

Subject: Agriculture	Year: 7	Strand: Integrated agriculture
Strand Theme: Introduction to agriculture		**(13 periods)**
Sub-strand 7.1: What is agriculture?		**(3 periods)**
This sub-strand should enable learners to acquire relevant knowledge and understanding of how people get food from the land, the meaning and importance of agriculture and agriculture as a primary industry.		

General Learning Outcomes	Specific Learning Outcomes	Suggested Assessment Events
Learners should	***Learners should be able to***	***Learners can be assessed on***
7.1.1 know how people get food ***(k)***	**7.1.1.1** describe how people get food	**1.** identify other ways in which people get food. E.g. food aid, buys from shop, barter system, buy from market and getting it from others
7.1.2 understand the importance of agriculture ***(u)***	**7.1.2.1** explain the importance of agriculture	**2.** interview three people to find out how they regard agriculture
7.1.3 understand agriculture as a primary industry ***(u)***	**7.1.3.1** explain agriculture as a primary industry	**3.** name examples of primary industries that are also involve in secondary industry E.g. Soltai, GPPOL, Eagon.

Subject: Agriculture	Year: 7	Strand: Integrated agriculture
Strand Theme: Introduction to agriculture		**(13 periods)**

Sub-strand 7.2: Types of agriculture **(4 periods)**

This sub-strand should enable learners to acquire relevant knowledge and understanding of the development and types of agriculture in Solomon Islands society including subsistence, semi-subsistence and commercial agriculture.

General Learning Outcomes	Specific Learning Outcomes	Suggested Assessment Events
Learners should	***Learners should be able to***	***Learners can be assessed on***
7.2.1 know how agriculture is developed ***(k)***	**7.2.1.1** describe the development of agriculture	**1.** find out how farmers around your home or school area practice agriculture
7.2.2 understand subsistence agriculture ***(u)***	**7.2.2.1** explain subsistence agriculture	**2.** investigate how a farmer around your home or school area practice subsistence agriculture
7.2.3 understand semi-subsistence agriculture ***(u)***	**7.2.3.1** explain semi-subsistence agriculture	**3.** investigate how a farmer around your home or school area practice semi-subsistence agriculture
7.2.4 understand commercial agriculture ***(u)***	**7.2.4.1** explain commercial agriculture	**4.** investigate how a farmer around your home or school area practice commercial agriculture

Subject: Agriculture	Year: 7	Strand: Integrated agriculture
Strand Theme: Introduction to agriculture		**(13 periods)**

Sub-strand 7.3: School farms **(2 periods)**

This sub-strand should enable learners to acquire relevant knowledge and understanding of the school farm and the farming problems affecting schools to effectively address carry out agricultural production activity at the school level.

General Learning Outcomes	Specific Learning Outcomes	Suggested Assessment Events
Learners should	***Learners should be able to***	***Learners can be assessed on***
7.3.1 know school farm ***(k)***	**7.3.1.1** describe the term 'school farm' **7.3.1.2** state the benefits of a farm to a school	**1.** outline some disadvantages of not having a school farm
7.3.2 understand problems affecting school farm ***(u)***	**7.3.2.1** explain problems affecting school farm **7.3.2.2** suggest solutions to farming problems school face	**2.** investigate farming problems experienced by farmers around your home or school area

Subject: Agriculture	Year: 7	Strand: Integrated agriculture
Strand Theme: Introduction to agriculture		**(13 periods)**
Sub-strand 7.4: Improving agricultural production **(4 periods)** This sub-strand should enable learners to acquire relevant knowledge and understanding of the factors that help to improve agriculture production activities in Solomon Islands		

General Learning Outcomes	Specific Learning Outcomes	Suggested Assessment Events
Learners should	***Learners should be able to***	***Learners can be assessed on***
7.4.1 know ways in which agriculture is improved ***(k)***	**7.4.1.1** state ways in which agriculture is improved	**1.** investigate specific ways in which agriculture has been improved around your own home
7.4.2 understand contributions of science and technology in agriculture ***(u)***	**7.4.2.1** explain contribution of science and technology in agriculture	**2.** investigate ways in which science and technology contribute in agriculture production around your home
7.4.3 understand contributions of improved agricultural practices in agriculture ***(u)***	**7.4.3.1** explain the contribution of improved practices in agriculture	**3.** investigate improved agricultural practices used around your home
7.4.4 appreciate government roles in agriculture ***(a)***	**7.4.4.1** form an opinion about government roles in agriculture	**4.** share experiences of how the government assists in agricultural production around your area

Subject: Agriculture	Year: 7	Strand: Integrated agriculture
Strand Theme: Introduction to soil		**(12 periods)**
Sub-strand 7.5: What is soil?		**(2 periods)**
This sub-strand should enable learners to acquire relevant knowledge and an understanding of soil as valuable resources in relation to its importance, functions and uses.		

General Learning Outcomes	Specific Learning Outcomes	Suggested Assessment Events
Learners should	***Learners should be able to***	***Learners can be assessed on***
7.5.1 know soil as a valuable resources ***(k)***	**7.5.1.1** describe the term 'soil' and how it is a valuable resource	**1.** around your home or school area, identify a practice that shows good care of soil and a practive that shows poor care of soil
7.5.2 understand the importance of soil ***(u)***	**7.5.2.1** explain the importance, functions and uses of soil	**2.** investigate how people use and look after soil around your home

Subject: Agriculture	Year: 7	Strand: Integrated agriculture
Strand Theme: Introduction to soil		**(12 periods)**

Sub-strand 7.6: Where does soil comes from? (2 periods)
This sub-strand should enable learners to acquire relevant knowledge and an understanding of how soil is formed as a result of the influence of weathering and other soil forming processes.

General Learning Outcomes	Specific Learning Outcomes	Suggested Assessment Events
Learners should	***Learners should be able to***	***Learners can be assessed on***
7.6.1 understand how soil is formed ***(u)***	**7.6.1.1** explain how soil is formed	**1.** around your home or school area, observe and identify an example of soil forming factors
7.6.2 understand the influence of weathering in soil formation ***(u)***	**7.6.2.1** explain the term 'weathering' **7.6.2.2** classify the different types of weathering	**2.** around your home or school area, observe and identify an example of the impact of weathering

Subject: Agriculture	Year: 7	Strand: Integrated agriculture
Strand Theme: Introduction to soil		**(12 periods)**
Sub-strand 7.7: What is in the soil?		**(6 periods)**
This sub-strand should enable learners to acquire relevant knowledge, understanding and skills in relation to investigating and identifying things that makes up the soil.		

General Learning Outcomes	Specific Learning Outcomes	Suggested Assessment Events
Learners should	***Learners should be able to***	***Learners can be assessed on***
7.7.1 know the main component of soil ***(k)***	**7.7.1.1** list the main components of soil	**1.** investigate components of soil on a given site
7.7.2 understand soil particles as component of soil ***(u)***	**7.7.2.1** explain soil particles as a component of soil	**2.** collect and display examples of soil particles according to their size
7.7.3 understand air as componentof soil ***(u)***	**7.7.3.1** explain air as a component of soil	**3.** list some things that enhance the movement of air in the soil
7.7.4 understand water as a component of soil ***(u)***	**7.7.4.1** explain water as a component of soil	**4.** give two reasons why it is important to have water in soil
7.7.5 understand organ matter as a component of soil ***(u)***	**7.7.5.1** explain organic matter as a component of soil	**5.** draw a simple poster showing organic matter being naturally re-cycle
7.7.6 understand organisms as a component of soil ***(u)***	**7.7.6.1** explain organisms as a component of soil	**6.** choose one soil organism and justify why it is useful to a farmer

Subject: Agriculture	Year: 7	Strand: Integrated agriculture
Strand Theme: Introduction to soil		**(12 periods)**
Sub-strand 7.8: What is a soil profile?		**(2 periods)**
This sub-strand should enable learners to acquire relevant knowledge, understanding and skills to examine soil surfaces, profiles and horizons.		

General Learning Outcomes	Specific Learning Outcomes	Suggested Assessment Events
Learners should	***Learners should be able to***	***Learners can be assessed on***
7.8.1 know soil profile and horizons ***(k)***	**7.8.1.1** describe the terms 'soil profile' and 'soil horizons'	**1.** describe features of different soil horizons
7.8.2 shows skill in examining a soil profile ***(s)***	**7.8.2.1** examine soil profile of a given site	**2.** write a small descriptive report about soil profiles and horizons of the site examined in activity 2.16
	7.8.2.2 draw and label soil profiles and horizons of the site examined	

Subject: Agriculture	Year: 7	Strand: Garden crops production
Strand Theme: Introduction to food crops		**(24 periods)**
Sub-strand 7.9: Why grow food crops?		**(2 periods)**
This sub-strand should enable learners to acquire relevant knowledge and understanding of growing food in Solomon Islands and benefits obtain from growing food crops.		

General Learning Outcomes	Specific Learning Outcomes	Suggested Assessment Events
Learners should	***Learners should be able to***	***Learners can be assessed on***
7.9.1 know the concept of growing food crops in Solomon Islands ***(u)***	**7.9.1.1** define the terms 'farm' and 'garden' **7.9.1.2** describe the concept of growing food in Solomon Islands	**1.** estimate the average size of food crops farm or garden around your home or school area
7.9.2 appreciate the benefits of growing food crops ***(a)***	**7.9.2.1** share the benefits of growing food crops	**2.** assist family or school to grow food crops

Subject: Agriculture	Year: 7	Strand: Garden crops production
Strand Theme: Introduction to food crops		**(24 periods)**
Sub-strand 7.10: Plant reproduction		**(3 periods)**
This sub-strand should enable learners to acquire relevant knowledge and an understanding of plant reproduction concepts involving the use of seeds vegetative parts of the plants.		

General Learning Outcomes	Specific Learning Outcomes	Suggested Assessment Events
Learners should	***Learners should be able to***	***Learners can be assessed on***
7.10.1 know plant reproduction ***(k)***	**7.10.1.1** define and describe the term 'plant reproduction'	**1.** identify food crops around your home or school area that can reproduce both sexually and asexually
7.10.2 understand sexual reproduction in plants ***(u)***	**7.10.2.1** explain sexual reproduction in plants	**2.** collect and display seeds of food crops grown around your home or school area
7.10.3 understand asexual reproduction in plants ***(u)***	**7.10.3.1** explain asexual reproduction in plants	**3.** observe garden or farm around your home or school area and determine how the crop grown are being reproduced

Subject: Agriculture	Year: 7	Strand: Garden crops production
Strand Theme: Introduction to food crops		**(24 periods)**
Sub-strand 7.11: Types of food crops		**(2 periods)**
This sub-strand should enable learners to acquire relevant knowledge and an understanding of the different food crops grown in Solomon Islands.		

General Learning Outcomes	Specific Learning Outcomes	Suggested Assessment Events
Learners should	***Learners should be able to***	***Learners can be assessed on***
7.11.1 understand the different types of food crops grown ***(u)***	**7.11.1.1** classify food crops	**1.** investigate why farmers around your home or school area continue to grow the common food crops such as sweet potatoes and cassava
7.11.2 appreciate the food crops grown in Solomon Islands ***(a)***	**7.11.2.1** share idea about the different food crops grown	**2.** design a simple awareness poster to encourage people around your home or school area to grow food crops

Subject: Agriculture	Year: 7	Strand: Garden crops production
Strand Theme: Introduction to food crops		**(24 periods)**

Sub-strand 7.12: Planning to grow food crops **(7 periods)**

This sub-strand should enable learners to acquire relevant knowledge, understanding and skills in terms of planning to grow food, methods used for growing food crops, select suitable sites, using the right tools, clearing and preparing sites and selecting planting materials.

General Learning Outcomes	Specific Learning Outcomes	Suggested Assessment Events
Learners should	***Learners should be able to***	***Learners can be assessed on***
7.12.1 shows skill in planning to grow food crops ***(s)***	**7.12.1.1** plan to grow food crops	**1.** design a simple budget which would enable you to grow one food crop, eg chinese cabbage
7.12.2 shows skill in choosing food crops to grow ***(s)***	**7.12.2.1** choose food crops to grow	**2.** justify the choice of farmers to grow certain types of food crops around your home or school area
7.12.3 shows skill in using different cropping method to grow food crops ***(s)***	**7.12.3.1** use different cropping methods to grow food crops	**3.** justify advantages and disadvantages of use cropping methods by farmers around your home or school area
7.12.4 shows skill in choosing a suitable site for growing food crops ***(s)***	**7.12.4.1** choose a suitable site for growing food crops	**4.** plan how you would utilize an unsuitable area around your home or school area to grow food crops
7.3.4.5 shows skill in using the right tools ***(s)***	**7.12.5.1** use the right tools to grow food crops	**5.** investigate factors that may hinder people around your home or school area from obtaining farm tools
7.12.6 shows skill in clearing and preparing a site ***(s)***	**7.12.6.1** clear and prepare site	**6.** explain how people around your home or school area clear and prepare selected site
7.12.7 shows skill in selecting planting materials ***(s)***	**7.12.7.1** select planting materials	**7.** prepare planting materials for a given food crop

Subject: Agriculture	Year: 7	Strand: Garden crops production
Strand Theme: Introduction to food crops		**(24 periods)**

Sub-strand 7.13: Raising seedlings **(4 periods)**

This sub-strand should enable learners to acquire relevant knowledge, understanding and skills in relation to direct sowing, establishing seedling nursery, preparing soil mix and sowing seeds in the nursery.

General Learning Outcomes	Specific Learning Outcomes	Suggested Assessment Events
Learners should	***Learners should be able to***	***Learners can be assessed on***
7.13.1 understand direct sowing ***(u)***	**7.13.1.1** explain the term 'direct sowing'	**1.** demonstrate the direct sowing of one food crop
7.13.2 shows skill in establishing seedling nursery ***(u)***	**7.13.2.1** establish a seedling nursery	**2.** construct a simple open bed or ground nursery
7.13.3 shows skill in collecting and preparing soil mix ***(s)***	**7.13.3.1** collect and prepare soil mix for nursery	**3.** prepare suitable soil mix for the nursery using other appropriate materials
7.13.4 show skill in sowing seeds in the nursery ***(s)***	**7.13.4.1** sow seeds in the nursery	**4.** demonstrate sowing seeds in an open bed nursery

Subject: Agriculture	Year: 7	Strand: Garden crops production
Strand Theme: Introduction to food crops		**(24 periods)**

Sub-strand 7.14: Caring for the seedlings **(6 periods)**
This sub-strand should enable learners to acquire relevant knowledge, understanding and skills involve in seedlings care and nursery management.

General Learning Outcomes	Specific Learning Outcomes	Suggested Assessment Events
Learners should	***Learners should be able to***	***Learners can be assessed on***
7.14.1 know the important caring practices for a seedling nursery ***(k)***	**7.14.1.1** list important seedlings caring practices for a seedling nursery	**1.** investigate caring practices carried out on a seedling nursery
7.14.2 shows skill in watering seedling nursery ***(s)***	**7.14.2.1** water a seedling nursery	**2.** prepare and apply water mixture containing animal manure to seedling nursery
7.14.3 shows skill in pricking newly germinated seedlings ***(s)***	**7.14.3.1** prick newly germinated seedlings	**3.** demonstrate pricking newly germinated seedlings
7.14.4 shows skill in controlling weeds in the seedling nursery ***(s)***	**7.14.4.1** control weeds in the seedling nursery	**4.** demonstrate the most appropriate way to control weeds in the nursery
7.14.5 shows skill in controlling pests and diseases in the seedling nursery ***(s)***	**7.14.5.1** control pests and diseases in the seedling nursery	**5.** justify common pests and diseases in a seedling nursery
7.14.6 shows skill in hardening seedlings ***(s)***	**7.14.6.1** harden seedlings	**6.** demonstrate hardening of seedlings from an open bed nursery

Subject: Agriculture	Year: 7	Strand: Garden crops production
Strand Theme: Growing Vegetable crops		**(19 periods)**
Sub-strand 7.15: Why Grow Vegetable crops?		**(2 periods)**
This sub-strand should enable learners to acquire relevant knowledge and understanding of vegetables crops in relation to their features and types.		

General Learning Outcomes	Specific Learning Outcomes	Suggested Assessment Events
Learners should	***Learners should be able to***	***Learners can be assessed on***
7.15.1 knows vegetable crops ***(k)***	**7.15.1.1** define and describe the term 'vegetables'	**1.** find out what factors may hinder people around your home or school area from eating more vegetable crops
7.15.2 understand the different vegetable crops grown in Solomon Islands ***(u)***	**7.15.2.1** classify vegetable crops **7.15.2.2** identify examples of different vegetable crops	**2.** collect and display examples of different vegetable crops

Subject: Agriculture	Year: 7	Strand: Garden crops production
Strand Theme: Growing Vegetable crops		**(19 periods)**

Sub-strand 7.16: Preparing to grow vegetable crops **(4 periods)**

This sub-strand should enable learners to acquire relevant knowledge, understanding and skills in relation to starting, preparing and establishing vegetable crops.

General Learning Outcomes	Specific Learning Outcomes	Suggested Assessment Events
Learners should	***Learners should be able to***	***Learners can be assessed on***
7.16.1 shows skill in preparing soil for growing vegetable crops ***(s)***	**7.16.1.1** prepare soil for growing vegetable crops	**1.** investigate how farmers around your home or school area prepare soil for growing vegetable crops
7.16.2 shows skill in using correct planting space when growing vegetable crops ***(s)***	**7.16.2.1** use correct planting space when growing vegetable crops	**2.** take measurements of vegetable crops planting spaces around your home
7.16.3 shows skill in transplanting vegetable crops planting materials ***(s)***	**7.16.3.1** transplants vegetable crops planting materials	**3.** investigate how farmers around your home or school area transplant vegetable crops planting materials

Subject: Agriculture	Year: 7	Strand: Garden crops production
Strand Theme: Growing Vegetable crops		**(19 periods)**
Sub-strand 7.17: Caring for vegetable crops		**(10 periods)**
This sub-strand should enable learners to acquire relevant knowledge, understanding and skills in vegetable crops care and management.		

General Learning Outcomes	Specific Learning Outcomes	Suggested Assessment Events
Learners should	***Learners should be able to***	***Learners can be assessed on***
7.17.1 know the steps to care for vegetable crops ***(k)***	**7.17.1.1** identify steps to care for vegetable crops	**1.** observe your school farm and identify caring practices that need to be carried out
7.17.2 shows skill in watering vegetable crops ***(s)***	**7.17.2.1** water vegetable crops	**2.** construct simple storage facility for storing water
7.17.3 shows skill in providing mulch to vegetable crops ***(s)***	**7.17.3.1** provide mulch to vegetable crops	**3.** construct composting structure using appropriate materials
7.17.4 shows skill in controlling weeds in vegetable crops ***(s)***	**7.17.4.1** control weeds in vegetable crops	**4.** demonstrate weed control measures using other methods apart from the one mentioned in the text
7.17.5 shows skill in thinning vegetable crops ***(s)***	**7.17.5.1** thin vegetable crops	**5.** thin seedlings of the seedling nursery
7.17.6 shows skill in staking and trellising vegetable crops ***(s)***	**7.17.6.1** stake and trellis vegetable crops	**6.** construct stake and trellis structures for vegetable crops
7.17.7 shows skill in pruning vegetable crops ***(s)***	**7.17.7.1** prune vegetable crops	**7.** observe and identify vegetable crops that requires pruning around your home or school area
7.17.8 shows skill in applying fertilizer to vegetable crops ***(s)***	**7.17.8.1** apply fertilizers to vegetable crops	**8.** calculate the amount of fertilizer required for a given plot of vegetable crops
7.17.9 shows skill in controlling pests in vegetable crops ***(s)***	**7.17.9.1** control pests in vegetable crops	**9.** identify one common vegetable crop pest and describe how it causes damage
7.17.10 shows skill in controlling diseases in vegetable crops ***(s)***	**7.17.10.1** control diseases in vegetable crops	**10.** identify one common vegetable crops disease and describing how it causes damage

Subject: Agriculture	Year: 7	Strand: Garden crops production
Strand Theme: Growing Vegetable crops		**(19 periods)**
Sub-strand 7.18: Harvesting, preparing and selling		**(3 periods)**
This sub-strand should enable learners to acquire relevant knowledge, understanding and skills in vegetable crops harvesting, preparation and selling.		

General Learning Outcomes	Specific Learning Outcomes	Suggested Assessment Events
Learners should	***Learners should be able to***	***Learners can be assessed on***
7.18.1 shows skill in harvesting vegetable crops ***(s)***	**7.18.1.1** identify features that indicate vegetable crops are ready for harvest **7.18.1.2** harvest vegetable crops correctly	**1.** harvest some vegetable crops that are ready
7.18.2 shows skill in preparing and selling vegetable crops ***(s)***	**7.18.2.1** prepare and sell vegetable crops	**2.** prepare and display one vegetable crop ready for sale

Subject: Agriculture	Year: 7	Strand: Plantation crops production
Strand Theme: Introduction to plantation crops		**(24 periods)**
Sub-strand: 7.19: What is plantation agriculture?		**(4 periods)**
This sub-strand should enable learners to acquire relevant knowledge and an understanding of plantation agriculture concepts and practices.		

General Learning Outcomes	Specific Learning Outcomes	Suggested Assessment Events
Learners should	***Learners should be able to***	***Learners can be assessed on***
7.19.1 Know what a plantation is ***(k)***	**7.19.1.1** describe the term 'plantation'	**1.** identify examples of big plantation in Solomon Islands
7.19.2 understand the development of plantation agriculture in Solomon Islands ***(u)***	**7.19.1.2** explain the development of plantation agriculture in Solomon Islands	**2.** research and find examples of raw materials produced by early plantations owners in Solomon Islands as well in other countries
7.19.3 understand the benefits of plantation agriculture ***(u)***	**7.19.3.1** explain the benefits of plantation agriculture	**3.** investigate additional benefits to be obtained from plantation agriculture
7.19.4 understand the contributions of small holdings in plantation agriculture ***(u)***	**7.19.4.1** explain the term 'small holdings' **7.19.4.2** outline the contribution of small holdings in plantation agriculture	**4.** investigate the contribution of any small holders towards agriculture production around your home or school area

Subject: Agriculture	Year: 7	Strand: Plantation crops production
Strand Theme: Introduction to plantation crops		**(24 periods)**
Sub-strand 7.20: Crops grown in the plantation		**(4 periods)**
This sub-strand should enable learners to acquire relevant knowledge and an understanding of the different plantation crops grown in Solomon Islands.		

General Learning Outcomes	Specific Learning Outcomes	Suggested Assessment Events
Learners should	***Learners should be able to***	***Learners can be assessed on***
7.20.1 understand plantation crops ***(u)***	**7.20.1.1** explain the term 'plantation crop'	**1.** outline potential products that can be obtained from one plantation crop grown around your home or school
7.20.2 appreciate the different plantation crops grown ***(a)***	**7.20.2.1** classify plantation crops	**2.** group plantation crops according to local or introduced crops
	7.20.2.2 study the different plantation crops grown in Solomon Islands	

Subject: Agriculture	Year: 7	Strand: Plantation crops production
Strand Theme: Introduction to plantation crops		**(24 periods)**
Sub-strand 7.21: Preparing to grow plantation crops **(8 periods)** This sub-strand should enable learners to acquire relevant knowledge, understanding and skills for planning and preparing farm resources necessary to grow plantation crops.		

General Learning Outcomes	Specific Learning Outcomes	Suggested Assessment Events
Learners should	***Learners should be able to***	***Learners can be assessed on***
7.21.1 shows skill in planning to grow plantation crops ***(s)***	**7.21.1.1** plan to grow plantation crops	**1.** draw up a simple plan showing how you would grow a plantation crop
7.21.2 shows skill in choosing suitable plantation crops to grow ***(s)***	**7.21.2.1** choose a plantation crop to grow	**2.** investigate how a farmer around your home or school area chooses a plantation crop to grow
7.21.3 shows skill in choosing a suitable site for growing plantation crops ***(s)***	**7.21.3.1** choose a suitable site	**3.** investigate how a farmer around your home or school area would select a site for growing plantation crops
7.21.4 shows skill in preparing site for growing plantation crops ***(s)***	**7.21.4.1** prepare a site for growing plantation crops	**4.** observe how farmers around your home or school area prepare a site for growing plantation crops
7.21.5 shows skill in selecting plantation crops planting materials ***(s)***	**7.21.5.1** select plantation crops planting materials	**5.** observe and report how farmers around your home or school area select planting materials
7.21.6 shows skill in using different planting layouts to grow plantation crops ***(s)***	**7.21.6.1** use different planting layouts to grow plantation crops	**6.** calculate number of coconut seedlings required for one hectare of land using a square planting layout and a spacing of 9m × 9m

Subject: Agriculture	Year: 7	Strand: Plantation crops production
Strand Theme: Introduction to plantation crops		**(24 periods)**
Sub-strand 7.22: Seedling nurseries		**(8 periods)**
This sub-strand should enable learners to acquire relevant knowledge, understanding and skills in starting and managing seedling nursery.		

General Learning Outcomes	Specific Learning Outcomes	Suggested Assessment Events
Learners should	***Learners should be able to***	***Learners can be assessed on***
7.22.1 shows skill in choosing a suitable seedling nursery site ***(s)***	**7.22.1.1** choose a suitable nursery site	**1.** construct a plantation crops nursery using available resources
7.22.2 shows skill in preparing soil mix for the seedling nursery ***(s)***	**7.22.2.1** prepare a good soil mix for a nursery	**2.** investigate how farmers around your home or school area prepare soil mix for a plantation crop nursery
7.22.3 shows skill in caring for plantation crops seedling nursery ***(s)***	**7.22.3.1** care for plantation crops seedling nursery	**3.** observe farm around your home or school area and report how a seedling care practices are carried out
7.22.4 shows skill in hardening plantation crops seedlings ***(s)***	**7.21.4.1** harden seedlings	**4.** observe farmers around your home or school area and report how they harden seedlings

Subject: Agriculture	Year: 7	Strand: Plantation crops production
Strand Theme: Growing fruit and nut crops		**(24 periods)**
Sub-strand 7.23: Why grow fruit and nut crops?		**(4 periods)**
This sub-strand should enable learners to acquire relevant knowledge and understanding of fruit and crops formation, the need to grow them and their classification.		

General Learning Outcomes	Specific Learning Outcomes	Suggested Assessment Events
Learners should	***Learners should be able to***	***Learners can be assessed on***
7.23.1 know the formation of fruit and nut crops ***(k)***	**7.23.1.1** describe how fruit and nut crops are formed	**1.** observe the different stages of fruit and nut crops flowers development
7.23.2 appreciate the need to grow fruit and nut crops ***(a)***	**7.23.2.1** initiate the need to grow fruit and nut crops	**2.** suggest how you could increase fruit and nut crops production in your home area
7.23.3 understand the different fruit and nut crops grown ***(s)***	**7.23.3.1** classify fruit and nut crops	**3.** collect data of fruit and nut crops growing around your home in terms of type and number

Subject: Agriculture	Year: 7	Strand: Plantation crops production
Strand Theme: Growing Fruit and Nut crops		**(24 periods)**
Sub-strand 7.24: Preparing to grow fruit and nut crops		**(4 periods)**
This sub-strand should enable learners to acquire relevant knowledge, understanding and skills involved in preparing to grow fruit and nut crops.		

General Learning Outcomes	Specific Learning Outcomes	Suggested Assessment Events
Learners should	***Learners should be able to***	***Learners can be assessed on***
7.24.1 shows skill in using correct planting spaces to grow fruit and nut crops ***(s)***	**7.24.1.1** use correct planting spacesto grow fruit and nut crops	**1.** investigate planting layout methods used by farmers around your home or school area
7.24.2 shows skill in transplanting fruit and nut crops planting materials ***(s)***	**7.24.2.1** transplant fruit and nut crops planting materials	**2.** prepare planting holes for fruit and nut crops

Subject: Agriculture	Year: 7	Strand: Garden crops production
Strand Theme: Growing Fruit and Nut crops		**(24 periods)**
Sub-strand 7.25: Caring for fruit and nut crops		**(10 periods)**
This sub-strand should enable learners to acquire relevant knowledge, understanding and skills involved in fruit and nut crops care and management.		

General Learning Outcomes	Specific Learning Outcomes	Suggested Assessment Events
Learners should	***Learners should be able to***	***Learners can be assessed on***
7.25.1 shows skill in controlling weeds in fruit and nut crops ***(s)***	**7.25.1.1** control weeds in fruit and nut crops	**1.** demonstrate weed control using other methods
7.25.2 shows skill in de-suckering fruit and nut crops ***(s)***	**7.25.2.1** de-sucker fruit and nut crops	**2.** investigate how farmers around your home or school area carry out de-sucking
7.25.3 shows skill in pruning fruit and nut crops ***(s)***	**7.25.3.1** prune fruit and nut crops	**3.** investigate how a farmer prune fruit and nut crops around your home or school area
7.25.4 shows skill in applying fertilizers to fruit and nut crops ***(s)***	**7.25.4.1** apply fertilizers to fruit and nut crops	**4.** investigate how a farmer apply fertilizers to fruit and nut crops around your home or school area
7.25.5 shows skill in de-belling and propping fruit and nut crops ***(s)***	**7.25.5.1** de-bell and prop fruit and nut crops	**5.** observe how a farmer carry out de-belling and propping around your home or school area
7.25.6 shows skill in controlling pests and diseases in fruit and nut crops ***(s)***	**7.25.6.1** control pests and diseasesin fruits and nut crops	**6.** control any pest and diseases in fruit and nut crops using appropriate methods

Subject: Agriculture	Year: 7	Strand: Plantation crops production
Strand Theme: Growing Fruit and Nut crops		**(24 periods)**
Sub-strand 7.26: Harvesting, preparing and selling		**(6 periods)**
This sub-strand should enable learners to acquire relevant knowledge, understanding and skills involve in fruit and nut crops harvesting, preparation and selling.		

General Learning Outcomes	Specific Learning Outcomes	Suggested Assessment Events
Learners should	***Learners should be able to***	***Learners can be assessed on***
7.26.1 understand signs that indicate fruit and nut crops are ready for harvest ***(s)***	**7.26.1.1** determine signs that indicate fruit and nut crops are ready for harvest	**1.** compare the quality and taste of fruit crops that ripen natural and force to ripe
7.26.2 shows skill in harvesting fruitand nut crops with correct timing and methods ***(s)***	**7.26.2.1** harvest fruit and nut crops correctly	**2.** harvest fruit and nut crops using the appropriate method
7.26.3 shows skill in preparing and processing fruit and nut crops ***(s)***	**7.26.3.1** prepare and process fruit and nut crops	**3.** investigate other ways in which fruit and nut crops can be preserved
7.26.4 shows skill in selling fruit and nut crops ***(s)***	**7.26.4.1** sell fruit and nut crops	**4.** investigate the market potential of one local fruit and nut crops growing around your school area

Subject: Agriculture	Year: 7	Strand: Farm animals production
Strand Theme: Introduction to farm animals		**(20 periods)**

Sub-strand 7.27: Why raise farm animals? **(3 periods)**

This sub-strand should enable learners to acquire relevant knowledge and understanding of raising farm animals, the benefits of raising them and their classification.

General Learning Outcomes	Specific Learning Outcomes	Suggested Assessment Events
Learners should	***Learners should be able to***	***Learners can be assessed on***
7.27.1 knows farm animals ***(k)***	**7.27.1.1** define and describe the term 'farm animal'	**1.** state one economic reason for raising farm animals
7.27.2 appreciate the benefits of raising farm animals ***(a)***	**7.27.2.1** share the benefits of raising farm animals	**2.** investigate how people around your home or school area benefit from raising farm animals.
7.27.3 understand the different types of farm animals ***(u)***	**7.27.3.1** classify farm animals	**3.** go to a farm around your home or school area, collect data and put it in a table like the one below Type of farm animal | Number of animals |---|---| | | | | | | | | |

Subject: Agriculture	Year: 7	Strand: Farm animals production
Strand Theme: Introduction to farm animals		**(20 periods)**

Sub-strand 7.28: Preparing to raise farm animals **(8 periods)**

This sub-strand should enable learners to acquire relevant knowledge, understanding and skills in planning, selecting farm animals, choosing suitable site and using different method of management to raise farm animals.

General Learning Outcomes	Specific Learning Outcomes	Suggested Assessment Events
Learners should	***Learners should be able to***	***Learners can be assessed on***
7.28.1 shows skill in planning to raise farm animals ***(s)***	**7.28.1.1** plan to raise farm animals	**1.** list the materials you need to raise one rooster and five hens
7.28.2 shows skill in selecting farm animals to raise ***(s)***	**7.28.2.1** select farm animals to raise	**2.** investigate other factors that may influence which animals a farmer will select to raise
7.28.3 shows skill in selecting a suitable site to raise farm animals ***(s)***	**7.28.3.1** select a suitable site to raise farm animals	**3.** what other factors should be considered when selecting a site for raising farm animals
7.28.4 shows skill in using different management methods to raise farm animals ***(s)***	**7.28.4.1** use different management methods to raise farm animals	**4.** what method of farming is most suitable to do in your area

Subject: Agriculture	Year: 7	Strand: Farm animals production
Strand Theme: Introduction to farm animals		**(20 periods)**
Sub-strand 7.29: Animal Nutrition		**(4 periods)**
This sub-strand should enable learners to acquire relevant knowledge and understanding of the importance of nutrition to the diet of farm animals.		

General Learning Outcomes	Specific Learning Outcomes	Suggested Assessment Events
Learners should	***Learners should be able to***	***Learners can be assessed on***
7.29.1 understand animal food ***(u)***	**7.29.1.1** explain the term 'animal food'	**1.** plan a balance diet for farm animals of your choice using locally available food materials
7.29.2 understand the importance of animal nutrition ***(u)***	**7.29.2.1** explain the importance of animal nutrition	**2.** observe and report the nutritional status of farm animals raised around your home or school area

Subject: Agriculture	Year: 7	Strand: Farm animals production
Strand Theme: Introduction to farm animals		**(20 periods)**

Sub-strand 7.30: Components of food **(5 periods)**

This sub-strand should enable learners to acquire relevant knowledge, understanding and skills in relation to different types of nutrients, their functions, types of animals' feeds, proper storage of animals feed and feeding of farm animals.

General Learning Outcomes	Specific Learning Outcomes	Suggested Assessment Events
Learners should	***Learners should be able to***	***Learners can be assessed on***
7.30.1 understand nutrients and their functions ***(u)***	**7.30.1.1** explain the different nutrients and their functions	**1.** investigate and report the status of farm animals' diet around your home or school area
7.30.2 shows skill in classifying and storing animal feed ***(s)***	**7.30.2.1** classify and store different animal feeds	**2.** observe a farm around your home or school area and report the type of farm animal feed used and how it is stored
7.30.3 shows skill in feeding farm animals ***(s)***	**7.30.3.1** feed farm animals	**3.** design and construct appropriate feeding equipment for farm animals using available resources

12.2 Agriculture Year 8 Syllabus

Subject: Agriculture	Year: 8	Strand: Integrated agriculture
Strand Theme: Food Security		**(12 periods)**
Sub-strand 8.1: What is food security?		**(4 periods)**
This sub-strand should enable learners to acquire relevant knowledge and an understanding of food security in relation to its concepts, importance,causes and efffect of food insecurity.		

General Learning Outcomes	Specific Learning Outcomes	Suggested Assessment Events
Learners should	***Learners should be able to***	***Learners can be assessed on***
8.1.1 know food security ***(k)***	**8.1.1.1** define and describe the term 'food security'	**1.** describe a food security situation in a given household
8.1.2 appreciate the importance of food security ***(a)***	**8.1.2.1** outline the importance of food security	**2.** design a simple food security to illustrate its importance
8.1.3 understand the causes of food insecurity ***(u)***	**8.1.3.1** explain the term 'food insecurity' **8.1.3.2** determine the causes of food insecurity	**3.** investigate and identify an exampleof situation around your area
8.1.4 understand the effects of food insecurity ***(u)***	**8.1.4.1** explain the effects of food insecurity	**4.** investigate and identify an examples of the effects of food insecurity around your home or school area

Subject: Agriculture	Year: 8	Strand: Integrated agriculture
Strand Theme: Food Security		**(12 periods)**
Sub-strand 8.2: Food type, quality and supply		**(4 periods)**
This sub-strand should enable learners to acquire relevant knowledge and understanding of food type, food quality and food supply.		

General Learning Outcomes	Specific Learning Outcomes	Suggested Assessment Events
Learners should	***Learners should be able to***	***Learners can be assessed on***
8.2.1 know the different types of food ***(k)***	**8.2.1.1** describe the different types of food	**1.** list the different types of food available around your home or school area
8.2.2 understand the food requirement of different age group ***(u)***	**8.2.2.1** explain the food requirement of different age group	**2.** observe and report factors that may hinder household from meeting the food requirement of young children
8.2.3 appreciate the need to have quality food ***(a)***	**8.2.3.1** justify the need to have quality food	**3.** investigate and report the quality of food consumed around your area
8.2.4 understand the factors that affects food supply ***(u)***	**8.2.4.1** explain the factors that affects food supply	**4.** investigate and report the food supply situation around your area

Subject: Agriculture	Year: 8	Strand: Integrated agriculture
Strand Theme: Food Security		**(12 periods)**
Sub-strand 8.3: Assessing and improving food security		**(4 periods)**
This sub-strand should enable learners to acquire relevant knowledge, understanding and skills involved in assessing and improving food security level.		

General Learning Outcomes	Specific Learning Outcomes	Suggested Assessment Events
Learners should	***Learners should be able to***	***Learners can be assessed on***
8.3.1 shows skill in assessing household food security ***(s)***	**8.3.1.1** assess household food security	**1.** outline a survey to assess a household food security situation aroud your area
8.3.2 shows skill in improving food security ***(u)***	**8.3.2.1** improve food security	**2.** outline a simple plan that aimed at improving food security situation around your area

Subject: Agriculture	Year: 8	Strand: Integrated agriculture
Strand Theme: Soil Properties		**(16 periods)**
Sub-strand 8.4: Soil Physical properties		**(8 periods)**
This sub-strand should enable learners to acquire relevant knowledge and understanding of soil physical properties and their importance on the soil processes.		

General Learning Outcomes	Specific Learning Outcomes	Suggested Assessment Events
Learners should	***Learners should be able to***	***Learners can be assessed on***
8.4.1 know soil physical properties ***(k)***	**8.4.1.1** describe the term 'soil physical properties'	**1.** list examples of soil physical properties
8.4.2 understand soil texture ***(u)***	**8.4.2.1** explain soil texture	**2.** demonstrate one way to test soil texture
8.4.3 understand soil structure ***(u)***	**8.4.3.1** explain soil structure	**3.** investigate status of soil structure of a given site
8.4.4 understand water in soil ***(u)***	**8.4.4.1** explain water in soil	**4.** draw poster showing natural cycle of water
8.4.5 understand air in soil air ***(u)***	**8.4.5.1** explain air in soil	**5.** demonstrate how air in soil can be displaced
8.4.6 understand soil temperature ***(u)***	**8.4.6.1** explain soil temperature	**6.** measure temperature of soil at different depth

Subject: Agriculture	Year: 8	Strand: Integrated agriculture
Strand Theme: Soil Properties		**(16 periods)**
Sub-strand 8.5: Soil Chemical Properties		**(4 periods)**
This sub-strand should enable learners to acquire relevant knowledge and understanding of soil chemical properties and their importance on the soil processes.		

General Learning Outcomes	Specific Learning Outcomes	Suggested Assessment Events
Learners should	***Learners should be able to***	***Learners can be assessed on***
8.5.1 know soil chemical properties ***(k)***	**8.5.1.1** describe soil chemical properties	**1.** state examples of soil chemical properties
8.5.2 understand soil pH ***(u)***	**8.5.2.1** explain the term 'soil pH'	**2.** determine pH of a given soil using simple test
8.5.3 understand soil nutrients ***(u)***	**8.5.3.1** explain soil nutrients and nutrient cycle	**3.** group soil nutrients as micro, macro and trace

Subject: Agriculture	Year: 8	Strand: Integrated agriculture
Strand Theme: Soil Properties		**(16 periods)**
Sub-strand 8.6: Soil Biological Properties		**(4 periods)**
This sub-strand should enable learners to acquire relevant knowledge and understanding of soil biological properties and their importance on the soil processes.		

General Learning Outcomes	Specific Learning Outcomes	Suggested Assessment Events
Learners should	***Learners should be able to***	***Learners can be assessed on***
8.6.1 know soil biological properties ***(k)***	**8.6.1.1** describe soil biological properties	**1.** list example of soil biological properties
8.6.2 understand organism in soil ***(u)***	**8.6.2.1** explain organism in soil	**2.** group organisms in soil as micro and macro
8.6.3 understand organic matter in soil ***(u)***	**8.6.3.1** explain organic matter in soil	**3.** show examples of organic matter in different stages of decomposition

Subject: Agriculture	Year: 8	Strand: Garden crops production
Strand Theme: Growing Pulse crops		**(20 periods)**
Sub-strand 8.7: Why grow Pulse crops?		**(2 periods)**
This sub-strand should enable learners to acquire relevant knowledge and understanding of Pulse crops in relation to their features and types.		

General Learning Outcomes	Specific Learning Outcomes	Suggested Assessment Events
Learners should	***Learners should be able to***	***Learners can be assessed on***
8.7.1 know Pulse crops ***(k)***	**8.7.1.1** define and describe the term 'Pulse crops'	**1.** find out what factors may hinder people around your home or school area from growing pulse crops
8.7.2 understand the different Pulse crops grown ***(u)***	**8.7.2.1** classify Pulse Crops	**2.** collect and display examples of pulse crops

Subject: Agriculture	Year: 8	Strand: Garden crops production
Strand Theme: Growing Pulse crops		**(20 periods)**
Sub-strand 8.8: Preparing to grow Pulse crops		**(4 periods)**
This sub-strand should enable learners to acquire relevant knowledge, understanding and skills in relation to starting, preparing and establishing pulse crops.		

General Learning Outcomes	Specific Learning Outcomes	Suggested Assessment Events
Learners should	***Learners should be able to***	***Learners can be assessed on***
8.8.1 shows skill in preparing soil for growing Pulse crops ***(s)***	**8.8.1.1** prepare soil for growing Pulse crops	**1.** investigate how farmers around your home or school area prepare soil for growing pulse crops
8.8.2 shows skill in using correct spacing when growing pulse crops ***(s)***	**8.8.2.1** use correct planting space when growing Pulse crops	**2.** calculate number of pulse crops seeds required to plant a given plot (e.g. 2m x 5m)
8.8.3 shows skill in transplantng Pulse crops planting materials ***(s)***	**8.8.3.1** transplant Pulse crops planting materials	**3.** prepare Pulse crops planting materials before transplanting

Subject: Agriculture	Year: 8	Strand: Garden crops production
Strand Theme: Growing Pulse crops		**(20 periods)**
Sub-strand 8.9: Caring for Pulse crops		**(8 periods)**
This sub-strand should enable learners to acquire relevant knowledge, understanding and skills in Pulse crops care and management.		

General Learning Outcomes	Specific Learning Outcomes	Suggested Assessment Events
Learners should	***Learners should be able to***	***Learners can be assessed on***
8.9.1 shows skill in controlling weeds in Pulse crops ***(s)***	**8.9.1.1** control weed in pulse crops	**1.** demonstrate weed control measure using other appropriate methods
8.9.2 shows skill in staking in pulse crops ***(s)***	**8.9.2.1** stake pulse crops	**2.** collect and prepare staking materials for pulse crops
8.9.3 shows skill in applying fertilizers to pulse crops ***(s)***	**8.9.3.1** apply fertilizer to pulse crops	**3.** place mulching materials around pulse crops
8.9.4 shows skills in thinning out pulse crops	**8.9.4.1** thin out Pulse crops	**4.** demonstrate thinning out of Pulse crops
8.9.5 shows skill in controlling pests and diseases in pulse crops ***(s)***	**8.9.5.1** control pests and diseases in pulse crops	**5.** demonstrate use of integrated pest control on pulse crops

Subject: Agriculture	Year: 8	Strand: Garden crops production
Strand Theme: Growing Pulse crops		**(20 periods)**
Sub-strand 8.10: Harvesting, preparing and selling		**(6 periods)**
This sub-strand should enable learners to acquire relevant knowledge, understanding and skills in pulse crops harvesting, preparation and selling.		

General Learning Outcomes	Specific Learning Outcomes	Suggested Assessment Events
Learners should	***Learners should be able to***	***Learners can be assessed on***
8.10.1 shows skill in harvesting pulse crops ***(s)***	**8.10.1.1** identify features that indicate pulse crops are ready for harvest **8.10.1.2** harvest pulse crops correctly	**1.** demonstrate one way to harvest pulse crops
8.10.2 shows skill in preparing pulse crops ***(s)***	**8.10.2.1** prepare pulse crops	**2.** display other ways to prepare pulse crops ready for sale
8.10.3 shows skill in selling pulse crops ***(s)***	**8.10.3.1** sell pulse crops	**3.** investigate demand for pulse crops at the market outlets

Subject: Agriculture	Year: 8	Strand: Garden crops production
Strand Theme: Growing Root and Tuber crops		**(20 periods)**
Sub-strand 8.11: Why grow Root and Tuber crops? **(2 periods)** This sub-strand should enable learners to acquire relevant knowledge and understanding of Root and Tuber crops in relation to their features and types.		
General Learning Outcomes	**Specific Learning Outcomes**	**Suggested Assessment Events**
Learners should	***Learners should be able to***	***Learners can be assessed on***
8.11.1 know Root and Tuber crops ***(k)***	**8.11.1.1** define and describe the term 'Root and Tuber crops'	**1.** find out how people around your home or school area regard root and tuber crops
8.11.2 understand the different types of Root and Tuber crops grown ***(u)***	**8.11.2.1** classify Root and Tuber crops	**2.** collect and display examples of root and tuber crops

Subject: Agriculture	Year: 8	Strand: Garden crops production
Strand Theme: Growing Root and Tuber crops		**(20 periods)**
Sub-strand 8.12: Preparing to grow Root and Tuber crops farm (6 periods) This sub-strand should enable learners to acquire relevant knowledge, understanding and skills in relation to starting, preparing and establishing root and tuber crops.		
General Learning Outcomes	**Specific Learning Outcomes**	**Suggested Assessment Events**
Learners should	***Learners should be able to***	***Learners can be assessed on***
8.12.1 shows skill in preparing soil for growing root and tuber crops ***(s)***	**8.12.1.1** prepare soil for growing root and tuber crops	**1.** investigate and report how farmers around your home or school area prepare soil for growing root and tuber crops
8.12.2 shows skill in using correct planting spaces when growing root and tuber crops ***(s)***	**8.12.2.1** use correct planting spaces when growing root and tuber crops	**2.** measure planting spaces of root and tubers grown by farmers around your home or school area
8.12.3 shows skill in transplanting root and tuber crops planting materials ***(s)***	**8.12.3.1** transplant root and tuber crops planting materials	**3.** demonstrate how to prepare one root and tuber crop planting materials prior to transplanting

Subject: Agriculture	Year: 8	Strand: Garden crops production
Strand Theme: Growing Root and Tuber crops		**(20 periods)**
Sub-strand 8.13 Caring for Root and Tuber crops		**(8 periods)**
This sub-strand should enable learners to acquire relevant knowledge, understanding and skills in root and tuber crops care and management.		

General Learning Outcomes	Specific Learning Outcomes	Suggested Assessment Events
Learners should	***Learners should be able to***	***Learners can be assessed on***
8.13.1 shows skill in controlling weeds in root and tuber crops ***(s)***	**8.13.1.1** control weeds in root and tubers crops	**1.** demonstrate other ways to control weeds in root and tuber crops
8.13.2 shows skill in applying fertilizers to root and tuber crops ***(s)***	**8.13.2.1** apply fertilizer to root and tuber crops	**2.** apply organic fertilizers to root and tuber crops
8.13.3 shows skill in hilling root and tuber crops ***(s)***	**8.13.3.1** hill root and tuber crops	**3.** investigate and report how farmers around your home or school are carrying out hilling in root and tuber crops
8.13.4 shows skill in staking root and tuber crops ***(s)***	**8.13.4.1** stake root and tuber crops	**4.** prepare stake materials for staking root and tuber crops
8.13.5 shows skill in controlling pests and diseases in root and tuber crops ***(s)***	**8.13.5.1** control pests and diseases in root and tuber crops	**5.** demonstrate ways to control one pest and disease of root and tuber crops

Subject: Agriculture	Year: 8	Strand: Garden crops production
Strand Theme: Growing Root and Tuber crops		**(20 periods)**
Sub-strand 8.14: Harvesting, preparing and selling		**(4 periods)**
This sub-strand should enable learners to acquire relevant knowledge, understanding and skills in Root and Tuber crops harvesting, preparation and selling.		

General Learning Outcomes	Specific Learning Outcomes	Suggested Assessment Events
Learners should	***Learners should be able to***	***Learners can be assessed on***
8.14.1 shows skill in harvesting root and tuber crops ***(s)***	**8.14.1.1** identify features that indicate root and tuber crops are ready for harvest **8.14.1.2** harvest root and tuber crops correctly	**1.** demonstrate ways to harvest different root and tuber crops
8.14.2 shows skill in preparing and processing root and tuber crops ***(s)***	**8.14.2.1** prepare and process root and tuber crops	**2.** demonstrate one traditional way to process root and tuber crops
8.14.3 shows skill in grading and selling root and tuber crops ***(s)***	**8.14.3.1** grade and sell root and tuber crops	**3.** observe and report how farmers around your home or school area grade and sell root and tuber crops

Subject: Agriculture	Year: 8	Strand: Plantation crops production
Strand Theme: Growing an agro-forestry		**(12 periods)**
Sub-strand 8.15: Why grow agro-forestry?		**(2 periods)**
This sub-strand should enable learners to acquire relevant knowledge and understanding of agro-forestry in relation to its features and types.		

General Learning Outcomes	Specific Learning Outcomes	Suggested Assessment Events
Learners should	***Learners should be able to***	***Learners can be assessed on***
8.15.1 know an agro-forestry ***(k)***	**8.15.1.1** define and describe the term 'agro-forestry'	**1.** find out how people around your home or school area practiced agro-forestry
8.15.2 understand the different types of agro-forestry system ***(u)***	**8.15.2.1** classify different types of agro-forestry	**2.** investigate different types of agro-forestry practices around your home or school area

Subject: Agriculture	Year: 8	Strand: Plantation crops production
Strand Theme: Growing an agro-forestry		**(12 periods)**
Sub-strand 8.16: Preparing to grow agro-forestry		**(3 periods)**

This sub-strand should enable learners to acquire relevant knowledge, understanding and skills in relation to starting, preparing and establishing an agro-forestry.

General Learning Outcomes	Specific Learning Outcomes	Suggested Assessment Events
Learners should	***Learners should be able to***	***Learners can be assessed on***
8.16.1 shows skill in preparing soil for planting an agro-forestry ***(s)***	**8.16.1.1** prepare soil for planting a agro-forestry	**1.** investigate how farmers around your home or school area prepare soil for planting an agro-forestry
8.16.2 shows skill in using correct planting spaces when planting an agro-forestry ***(s)***	**8.16.2.1** use correct planting spaces when planting an agro-forestry	**2.** measure planting spaces of plants grown in an agro-forestry around your home or school area
8.16.3 shows skill in transplanting agro-forestry planting materials ***(s)***	**8.16.3.1** transplant agro-forestry planting materials	**3.** demonstrate how to prepare planting materials prior to transplanting in an agro-forestry

Subject: Agriculture	Year: 8	Strand: Plantation crops production
Strand Theme: Growing an agro-forestry		**(12 periods)**
Sub-strand 8.17: Caring for an agro-forestry		**(4 periods)**
This sub-strand should enable learners to acquire relevant knowledge, understanding and skills in an agro-forestry care and management.		

General Learning Outcomes	Specific Learning Outcomes	Suggested Assessment Events
Learners should	***Learners should be able to***	***Learners can be assessed on***
8.17.1 shows skill in controlling weeds in an agro-forestry ***(s)***	**8.17.1.1** control weeds in an agro-forestry	**1.** demonstrate controlling weed in an agro-forestry using different methods
8.17.2 shows skill in pruning an agro-forestry ***(s)***	**8.17.2.1** prune an agro-forestry	**2.** investigate how people around your home or school area prune an agro-forestry
8.17.3 shows skill in applying fertilizers to an agro-forestry ***(s)***	**8.5.2.3.1** apply fertilizers to an agro-forestry	**3.** identify different mulching materials suitable for an agro-forestry
8.17.4 shows skill in controlling pests and diseases in an agro-forestry ***(s)***	**8.17.4.1** control pests and diseases in an agro-forestry	**4.** identify different pests/diseases infestation in an agro-forestry

Subject: Agriculture	Year: 8	Strand: Plantation crops production
Strand Theme: Growing an agro-forestry		**(12 periods)**
Sub-strand 8.18: Harvesting, preparing and selling		**(3 periods)**
This sub-strand should enable learners to acquire relevant knowledge, understanding and skills in agro-forestry harvesting, preparation and selling.		

General Learning Outcomes	Specific Learning Outcomes	Suggested Assessment Events
Learners should	***Learners should be able to***	***Learners can be assessed on***
8.18.1 shows skill in harvesting agro-forestry ***(s)***	**8.18.1.1** identify an agro-forestry that is ready for harvest **8.18.1.2** harvest an agro-forestry	**1.** investigate and report how people around your home or school area harvest and agro-forestry
8.18.2 shows skill in preparing an agro-forestry product ***(s)***	**8.18.2.1** prepare an agro-forestry products	**2.** demonstrate how to prepare one agro-forestry
8.18.3 sell agro-forestry products ***(s)***	**8.18.3.1** sell an agro-forestry products	**3.** investigate how people around your home or school area sell agro-forestry products

Subject: Agriculture	Year: 8	Strand: Plantation crops production
Strand Theme: Growing Other Useful crops		**(16 periods)**
Sub-strand 8.19: Why grow other useful crops?		**(3 periods)**
This sub-strand should enable learners to acquire relevant knowledge and understanding of Other Useful crops in relation to their features and types.		

General Learning Outcomes	Specific Learning Outcomes	Suggested Assessment Events
Learners should	***Learners should be able to***	***Learners can be assessed on***
8.19.1 know Other Useful crops ***(k)***	**8.19.1.1** define and describe the term 'Other Useful crops	**1.** find out how people around your home or school area regard other useful crops
8.19.2 understand other useful crops grown ***(u)***	**8.19.2.1** classify other useful crops	**2.** collect and display examples of other useful crops growing around your home or school area

Subject: Agriculture	Year: 8	Strand: Plantation crops production
Strand Theme: Growing Other useful crops		**(16 periods)**
Sub-strand 8.20: Preparing to grow Other useful crops		**(3 periods)**
This sub-strand should enable learners to acquire relevant knowledge, understanding and skills in relation to starting, preparing and establishing other root crops.		

General Learning Outcomes	Specific Learning Outcomes	Suggested Assessment Events
Learners should	***Learners should be able to***	***Learners can be assessed on***
8.20.1 shows skill in preparing soil for growing other useful crops ***(s)***	**8.20.1.1** prepare soil for growing other useful crops	**1.** investigate how farmers around your home or school area prepare soil for planting other useful crops
8.20.2 shows skill in using correct planting spaces when growing other useful crops ***(s)***	**8.20.2.1** use correct planting spaces when growing other useful crops	**2.** measure planting spaces of other useful crops grown in around your home or school area
8.20.3 shows skill in transplanting other useful crops planting materials ***(s)***	**8.20.3.1** transplant other useful crops planting materials	**3.** demonstrate how to prepare other useful crops planting materials

Subject: Agriculture	Year: 8	Strand: Plantation crops production
Strand Theme: Growing Other useful crops		**(16 periods)**
Sub-strand: 8.21: Caring for other useful crops		**(4 periods)**
This sub-strand should enable learners to acquire relevant knowledge, understanding and skills in other useful crops care and management.		

General Learning Outcomes	Specific Learning Outcomes	Suggested Assessment Events
Learners should	***Learners should be able to***	***Learners can be assessed on***
8.21.1 shows skill in controlling weeds in other useful crops ***(s)***	**8.21.1** control weeds in other usefulcrops	**1.** demonstrate other ways of controlling weeds in other useful crops
8.21.2 shows skill in pruning other useful crops ***(s)***	**8.21.2.1** prune other useful crops	**2.** investigate how people around your area prune other useful crops
8.21.3 shows skill in applying fertilizers to other useful crops ***(s)***	**8.21.2.1** apply fertilizers to other useful crops	**3.** observe and write report about how people around your home or school apply fertilizer to other useful crops
8.21.4 shows skill in controlling pests and diseases in other useful crops ***(s)***	**8.21.4.1** control pests and diseases in other useful crops	**4.** identify common pests and diseases infesting other useful crops

Subject: Agriculture	Year: 8	Strand: Plantation crops production
Strand Theme: Growing Other Useful crops		**(16 periods)**
Sub-strand 8.22: Harvesting, preparing and selling		**(6 periods)**
This sub-strand should enable learners to acquire relevant knowledge, understanding and skills in relation to other useful crops harvesting, preparation, and selling.		

General Learning Outcomes	Specific Learning Outcomes	Suggested Assessment Events
Learners should	***Learners should be able to***	***Learners can be assessed on***
8.22.1 shows skill in harvesting other useful crops ***(s)***	**8.22.1.1** identify other useful crops that are ready for harvest **8.22.1.2** harvest other useful correctly	**1.** investigate and report how people around your home or school area harvest other useful crops
8.22.2 shows skill in preparing and processing other useful crops ***(s)***	**8.22.2.1** prepare and process other useful crops	**2.** demonstrate way to prepare one other useful crop
8.22.3 shows skill in other useful crops ***(s)***	**8.22.3.1** sell other useful crops	**3.** investigate demand for other useful crops and their products aroud your home or school area

Subject: Agriculture	Year: 8	Strand: Farm animals production
Strand Theme: Raising livestock		**(20 periods)**
Sub-strand 8.23: Why raise livestock?		**(2 periods)**
This sub-strand should enable learners to acquire relevant knowledge and understanding of livestock in relation to their features and types.		

General Learning Outcomes	Specific Learning Outcomes	Suggested Assessment Events
Learners should	***Learners should be able to***	***Learners can be assessed on***
8.23.1 know livestock ***(k)***	**8.23.1.1** define and describe the term 'livestock'	**1.** find out how people regard livestock around your home or school area
8.23.2 understand the different types of livestock raised ***(u)***	**8.23.2.1** classify livestock	**2.** collect data of livestock in terms of type and number around your home or school area

Subject: Agriculture	Year: 8	Strand: Farm animals production
Strand Theme: Raising livestock		**(20 periods)**
Sub-strand 8.24: Preparing to raise livestock		**(5 periods)**
This sub-strand should enable learners to acquire relevant knowledge, understanding and skills in relation to starting, preparing and establishing livestock.		

General Learning Outcomes	Specific Learning Outcomes	Suggested Assessment Events
Learners should	***Learners should be able to***	***Learners can be assessed on***
8.24.1 shows skill in identifying resources require to raise livestock ***(s)***	**8.24.1.1** identify resources require to raise livestock	**1.** identify resources required to raise cattle
8.24.2 shows skill in setting simple budget to raise livestock ***(s)***	**8.24.2.1** set simple budget to raise livestock	**2.** develop simple budget to raise broiler
8.24.3 shows skill in constructing simple livestock facilities and accessories ***(s)***	**8.24.3.1** construct simple livestock facilities and accessories	**3.** design and construct a simple livestock accessory (eg cattle paddock)

Subject: Agriculture	Year: 8	Strand: Farm animals production
Strand Theme: Raising livestock		**(20 periods)**
Sub-strand 8.25: Caring for livestock		**(8 periods)**
This sub-strand should enable learners to acquire relevant knowledge, understanding and skills in livestock care and management.		

General Learning Outcomes	Specific Learning Outcomes	Suggested Assessment Events
Learners should	***Learners should be able to***	***Learners can be assessed on***
8.25.1 shows skill in handling livestock ***(s)***	**8.25.1.1** handle livestock	**1.** investigate and report how farmers around your home or school area handle livestock
8.25.2 shows skills in caring for young Livestock ***(s)***	**8.25.2.1** care for young livestock	**2.** demonstrate one young livestock caring practice (eg. castration)
8.25.3 shows skill in caring for adult Livestock ***(s)***	**8.25.3.1** care for adult livestock	**3.** demonstrate one adult livestock caring practice (eg. moving livestock)
8.25.4 shows skill in feeding livestock ***(s)***	**8.25.4.1** feed livestock	**4.** investigate how farmers around your home or school area feed livestock
8.25.5 shows skill in controlling pests and diseases in livestock ***(s)***	**8.25.5.1** control pests and diseases in livestock	**5.** observe and report health status of livestock raised by farmers around your home or school area

Subject: Agriculture	Year: 8	Strand: Farm animals production
Strand Theme: Raising livestock		**(20 periods)**

Sub-strand 8.26: Harvesting, preparing and selling **(5 periods)**
This sub-strand should enable learners to acquire relevant knowledge, understanding and skills in livestock harvesting, preparation, and selling.

General Learning Outcomes	Specific Learning Outcomes	Suggested Assessment Events
Learners should	***Learners should be able to***	***Learners can be assessed on***
8.26.1 shows skill in harvesting livestock ***(s)***	**8.26.1.1** identify livestock ready for harvest or slaughter **8.26.1.2** harvest Livestock correctly	**1.** observe and report how farmers around your home or school area prepare livestock for harvest
8.26.2 shows skill in preparing and slaughtering livestock ***(s)***	**8.26.2.1** prepare and slaughter livestock	**2.** investigate how farmers around your home or school area prepare and slaughter livestock
8.26.3 shows skill in processing livestock carcass ***(s)***	**8.26.3.1** process livestock carcass	**3.** observe how farmers around your home or school area process livestock
8.26.4 shows skill in selling livestock products ***(s)***	**8.26.4.1** sell livestock products	**4.** calculate simple livestock profit and loss statement

Subject: Agriculture	Year: 8	Strand: Farm animals production
Strand Theme: Raising Poultry		**(20 periods)**
Sub-strand 8.27: Why raise Poultry?		**(2 periods)**
This sub-strand should enable learners to acquire relevant knowledge and understanding of poultry in relation to their features and types.		

General Learning Outcomes	Specific Learning Outcomes	Suggested Assessment Events
Learners should	***Learners should be able to***	***Learners can be assessed on***
8.27.1 know poultry ***(k)***	**8.27.1.1** define and describe the term 'poultry'	**1.** find out how people regard poultry around your home or school area
8.27.2 understand the different types of poultry raised ***(u)***	**8.27.2.1** classify poultry	**2.** collect data of poultry in terms of type and number around your home or school area

Subject: Agriculture	Year: 8	Strand: Farm animals production
Strand Theme: Raising Poultry		**(20 periods)**
Sub-strand 8.28: Preparing to raise poultry		**(5 periods)**
This sub-strand should enable learners to acquire relevant knowledge, understanding and skills in starting, preparing and establishing poultry.		

General Learning Outcomes	Specific Learning Outcomes	Suggested Assessment Events
Learners should	***Learners should be able to***	***Learners can be assessed on***
8.28.1 shows skill in identifying resources require to raise poultry ***(s)***	**8.28.1.1** identify resources require to raise poultry	**1.** identify resources required to raise broiler
8.28.2 shows skill in setting simplebudget to raise poultry ***(s)***	**8.28.2.1** set simple budget to raise poultry	**2.** develop simple budget to raise layer
8.28.3 shows skill in constructing simple poultry facilities and accessories ***(s)***	**8.28.3.1** construct simple poultry facilities and accessories	**3.** design and construct a simple poultry facilities and accessories eg. simple poultry house, brooder

Subject: Agriculture	Year: 8	Strand: Farm animals production
Strand Theme: Raising Poultry		**(20 periods)**
Sub-strand 8.29: Caring for poultry		**(8 periods)**
This sub-strand should enable learners to acquire relevant knowledge, understanding and skills in poultry care and management.		

General Learning Outcomes	Specific Learning Outcomes	Suggested Assessment Events
Learners should	***Learners should be able to***	***Learners can be assessed on***
8.29.1 shows skill in handling poultry ***(s)***	**8.29.1.1** handle poultry	**1.** investigate and report how farmers around your home or school area handle poultry
8.29.2 shows skills in caring for young poultry ***(s)***	**8.29.2.1** care for young poultry	**2.** demonstrate one young poultry caring practice
8.29.3 shows skill in caring for adult poultry ***(s)***	**8.29.3.1** care for adult poultry	**3.** demonstrate one adult poultry caring practice
8.29.4 shows skill in feeding poultry ***(s)***	**8.29.4.1** feed poultry	**4.** investigate how farmers around your home or school area feed poultry
8.29.5 shows skill in controlling pests and diseases in poultry ***(s)***	**8.29.5.1** control pests and diseases in poultry	**5.** observe and report health status of poultry raised by farmers around your home or school area

Subject: Agriculture	Year: 8	Strand: Farm animals production
Strand Theme: Raising Poultry		**(20 periods)**
Sub-strand 8.30: Harvesting, preparing and selling **(5 periods)** This sub-strand should enable learners to acquire relevant knowledge, understanding and skills in poultry harvesting, preparation, and selling.		

General Learning Outcomes	Specific Learning Outcomes	Suggested Assessment Events
Learners should	***Learners should be able to***	***Learners can be assessed on***
8.30.1 shows skill in harvesting poultry ***(s)***	**8.30.1.1** identify poultry ready for harvest or slaughter **8.30.1.2** harvest poultry correctly	**1.** observe and report how farmers around your home or school area identify livestock for harvest or slaughtered
8.30.2 shows skill in preparing, slaughtering and collecting poultry and its products ***(s)***	**8.30.2.1** prepare, slaughter and collect poultry and its product	**2.** investigate how farmers around your home or school area prepare, slaughter and collect poultry and its product
8.30.3 shows skill in processing poultry carcass and egg ***(s)***	**8.30.3.1** process poultry carcass and egg	**3.** observe and report how farmers around your home or school area process poultry carcass and egg
8.30.4 shows skill in selling poultry ***(s)***	**8.30.4.1** sell poultry	**4.** prepare simple profit and loss statement

12.3 Agriculture Year 9 Syllabus

Subject: Agriculture	Year: 9	Strand: Integrated agriculture
Strand Theme: Introduction to farm management		**(12 periods)**
Sub-strand 9.1: What is farm management?		**(4 periods)**
This sub-strand should enable learners to acquire relevant knowledge and an understanding of farm management concepts, component and roles of farm manager.		

General Learning Outcomes	Specific Learning Outcomes	Suggested Assessment Events
Learners should	***Learners should be able to***	***Learners can be assessed on***
9.1.1 know farm management ***(k)***	**9.1.1.1** define and describe the term 'farm management'	**1.** observe and report how farmers around your home or school area managed their farms
9.1.2 understand component of farm management ***(u)***	**9.1.2.1** explain component of farm management	**2.** identify an example of farm management component carried out on a given farm around your home or school area
9.1.3 understand farm manager ***(u)***	**9.1.3.1** explain the term 'farm manager'	**3.** interview farmers around your home or school area and find out how they carry out their role as farm managers

Subject: Agriculture	Year: 9	Strand: Integrated agriculture
Strand Theme: Introduction to farm management		**(12 periods)**
Sub-strand 9.2: Farm Planning		**(4 periods)**
This sub-strand should enable learners to acquire relevant knowledge and understanding of farm planning and setting short and long term farming goals.		

General Learning Outcomes	Specific Learning Outcomes	Suggested Assessment Events
Learners should	***Learners should be able to***	***Learners can be assessed on***
9.2.1 understand farm planning ***(u)***	**9.2.1.1** explain the term 'farm planning' **9.2.1.2** outline different forms of farm planning	**1.** design a simple physical plan for a given enterprise
9.2.2 understand farming goals ***(u)***	**9.2.2.1** explain the term 'farming goals' **9.2.2.2** differentiate between short and long term farming goals	**2.** give examples of short and long term farming goals for a given farm enterprise

Subject: Agriculture	Year: 9	Strand: Integrated agriculture
Strand Theme: Introduction to farm management		**(12 periods)**
Sub-strand 9.3: Farm Resources		**(4 periods)**
This sub-strand should enable learners to acquire relevant knowledge and understanding of farm resources (land, labor and capital) and their use in a sustainable manner.		

General Learning Outcomes	Specific Learning Outcomes	Suggested Assessment Events
Learners should	***Learners should be able to***	***Learners can be assessed on***
9.3.1 know farm resources ***(k)***	**9.3.1.1** define and describe the term 'farm resources'	**1.** identify farm resources on any farm around your home or school area
9.3.2 understand land as a farm resources ***(u)***	**9.3.2.1** explain land as farm resources	**2.** investigate status of land as a farm resource on a given farm around your home or school area
9.3.3 understand labour as farm resources ***(u)***	**9.3.3.1** explain labour as farm resources	**3.** investigate and report how people regard working on the farm or garden
9.3.4 understand capital as farm resources ***(u)***	**9.3.4.1** explain capital as farm resources	**4.** investigate status of capital as a farm resource on a given farm around your home or school area

Subject: Agriculture	Year: 9	Strand: Integrated agriculture
Strand Theme: Introduction to Sustainable Land Management		**(16 periods)**
Sub-strand 9.4: Why Sustainable Land Management?		**(6 periods)**
This sub-strand should enable learners to acquire relevant knowledge and understanding of Sustainable Land Management concepts, importance, practices and roles of environmental impact assessment.		

General Learning Outcomes	Specific Learning Outcomes	Suggested Assessment Events
Learners should	***Learners should be able to***	***Learners can be assessed on***
9.4.1 know Sustainable Land Management ***(k)***	**9.4.1.1** define and describe the term 'Sustainable Land Management'	**1.** write down the meaning of SLM using examples of local situation around your home or school area
9.4.2 appreciate the importance of Sustainable Land Management ***(a)***	**9.4.2.1** explain the importance of Sustainable Land Management	**2.** investigate and report two importance of SLM and their application to your local situation
9.4.3 understand different Sustainable Land Management practices ***(u)***	**9.4.3.1** outline the different Sustainable Land Management practices	**3.** investigate Sustainable Land Management practices used around your home or school area
9.4.4 appreciate the roles of Environment Impact Assessment as planning and management tools ***(a)***	**9.4.4.1** explain Environmental Impact Assessment as a planning and management tool	**4.** carry out Environment Impact Assessment around your home or school area

Subject: Agriculture	Year: 9	Strand: Integrated agriculture
Strand Theme: Introduction to Sustainable Land Management		**(16 periods)**
Sub-strand 9.5: Key issues in Sustainable Land Management		**(5 periods)**
This sub-strand should enable learners to acquire relevant knowledge and understanding of the key issues related to Sustainable Land Management.		
General Learning Outcomes	**Specific Learning Outcomes**	**Suggested Assessment Events**
Learners should	***Learners should be able to***	***Learners can be assessed on***
9.5.1 know land degradation ***(k)***	**9.5.1.1** define and describe the term 'land degradation'	**1.** identify examples of land degradation around your home or school area
9.5.2 understand the effects of population pressure on land ***(u)***	**9.5.2.1** explain the effects of population pressure on land	**2.** investigate and report the effects of population pressure on land around your home or school area
9.5.3 understand the effects of logging on land ***(u)***	**9.5.3.1** explain the effects of logging on land	**3.** investigate and report of logging on land around your home or school area
9.5.4 understand the effects of commercial agriculture on land ***(u)***	**9.5.4.1** explain the effects of commercial agriculture on land	**4.** investigate and report the effects of commercial agriculture on land around your home or school area

Subject: Agriculture	Year: 9	Strand: Integrated agriculture
Strand Theme: Introduction to Sustainable Land Management		**(16 periods)**
Sub-strand 9.6: Addressing Sustainable Land Management issues (5 periods) This sub-strand should enable learners to acquire relevant knowledge and understanding of ways to addressing Sustainable Land Management issues.		
General Learning Outcomes	**Specific Learning Outcomes**	**Suggested Assessment Events**
Learners should	***Learners should be able to***	***Learners can be assessed on***
9.6.1 know land management ***(k)***	**9.6.1.1** define and describe the term 'land management'	**1.** find out how land resources are managed around your home or school area
9.6.2 understand the importance and application of Land-Use Planning ***(u)***	**9.6.2.1** explain the importance and application of Land-Use Planning'	**2.** investigate and report how people plan and use land aorund your home or school area
9.6.3 shows skill in applying Sustainable Land Management practices ***(s)***	**9.6.3.1** apply Sustainable Land Management practices	**3.** identify one Sustainable Land Management practice and explain how you would use it to address land degradation
9.6.4 appreciate the roles of legislation in land management ***(a)***	**9.6.4.1** justify roles of legislation in land management	**4.** write a simple rule about how you want to use your land around your home or school area

Subject: Agriculture	Year: 9	Strand: Garden crops production
Strand Theme: Growing Cereal crops		**(20 periods)**
Sub-strand 9.7: Why grow Cereal crops?		**(3 periods)**
This sub-strand should enable learners to acquire relevant knowledge and understanding of cereal crops in relation to their features and types.		

General Learning Outcomes	Specific Learning Outcomes	Suggested Assessment Events
Learners should	***Learners should be able to***	***Learners can be assessed on***
9.7.1 know cereal crops ***(k)***	**9.7.1.1** define and describe the term 'cereal crops'	**1.** find out how people regard cereal crops around your home
9.7.2 understand different the different Cereal crops grown ***(u)***	**9.7.2.1** classify Cereal crops	**2.** display examples of cereal crops growing around your home or school area

Subject: Agriculture	Year: 9	Strand: Garden crops production
Strand Theme: Growing Cereal crops		**(20 periods)**
Sub-strand 9.8: Preparing to grow Cereal crops		**(6 periods)**
This sub-strand should enable learners to acquire relevant knowledge, understanding and skills in starting, preparing and establishing cereal crops.		

General Learning Outcomes	Specific Learning Outcomes	Suggested Assessment Events
Learners should	***Learners should be able to***	***Learners can be assessed on***
9.8.1 shows skill in preparing soil for growing Cereal crops ***(s)***	**9.8.1.1** prepare soil for growing Cereal crops	**1.** investigate and report how farmers prepare soil for planting cereal crops around your home
9.8.2 shows skill in using correct planting spaces when growing Cereal crops ***(s)***	**9.8.2.1** use correct planting space when growing Cereal crops	**2.** measure planting spaces of cereal crops grown in around your home or school area
9.8.3 shows skill in transplanting Cereal crops planting materials ***(s)***	**9.8.3.1** transplant Cereal crops planting materials	**3.** demonstrate how to prepare cereal crops planting materials

Subject: Agriculture	Year: 9	Strand: Garden crops production
Strand Theme: Growing Cereal crops		**(20 periods)**
Sub-strand 9.9: Caring for Cereal crops		**(7 periods)**
This sub-strand should enable learners to acquire relevant knowledge, understanding and skills in Cereal crops care and management.		

General Learning Outcomes	Specific Learning Outcomes	Suggested Assessment Events
Learners should	***Learners should be able to***	***Learners can be assessed on***
9.9.1 shows skill in controlling weeds in Cereal crops ***(s)***	**9.9.1.1** control weeds in Cereal crops	**1.** control weed in cereal crops using other appropriate method
9.9.2 shows skill in watering Cereal crops ***(s)***	**9.9.2.1** water Cereal crops	**2.** observe and report how farmers around your home or school apply water to cereal crops
9.9.3 shows skill in applying fertilizers in Cereal crops ***(s)***	**9.9.3.1** apply fertilizer in Cereal crops	**3.** demonstrate how to place mulching materials around cereal crops
9.9.4 show skills in thinning out cereal crops ***(s)***	**9.9.4.1** thin out cereal crops	**4.** demonstrate one way to thin cereal crops
9.9.5 shows skill in controlling pests and diseases in cereal crops ***(s)***	**9.9.5.1** control pests and diseases in Cereal crops	**5.** collect and display examples of cereal crop pests and diseases

Subject: Agriculture	Year: 9	Strand: Garden crops production
Strand Theme: Growing Cereal crops		**(20 periods)**
Sub-strand 9.10: Harvesting, preparing and selling		**(4 periods)**
This sub-strand should enable learners to acquire relevant knowledge, understanding and skills in Cereal crops harvesting, preparation, and selling.		

General Learning Outcomes	Specific Learning Outcomes	Suggested Assessment Events
Learners should	***Learners should be able to***	***Learners can be assessed on***
9.10.1 shows skill in harvesting Cereal crops ***(s)***	**9.10.1.1** identify cereal crops ready for harvest **9.10.1.2** harvest Cereal crop correctly	**1.** investigate and report how farmers harvest cereal crops around your home or school area
9.10.2 shows skill in preparing and processing Cereal crops ***(s)***	**9.10.2.1** prepare and process cereal crops using appropriate methods	**2.** demonstrate how to prepare one cereal crops using appropriate methods
9.10.3 shows skill in selling Cereal crops ***(s)***	**9.10.3.1** sell Cereal crops according to quality	**3.** identify examples of cereal crops around your home or school area

Subject: Agriculture	Year: 9	Strand: Garden crops production
Strand Theme: Growing Spice Crops		**(20 periods)**
Sub-strand 9.11: Why grow Spice crops?		**(3 periods)**
This sub-strand should enable learners to acquire relevant knowledge and understanding of Spice crops in relation to their features and types.		

General Learning Outcomes	Specific Learning Outcomes	Suggested Assessment Events
Learners should	***Learners should be able to***	***Learners can be assessed on***
9.11.1 know Spice crops ***(k)***	**9.11.1.1** define and describe the term 'Spice crops'	**1.** find out how people around your home or school area regard spice crops
9.11.2 understand the different spice crops grown ***(u)***	**9.11.2.1** classify Spice Crops	**2.** collect and display examples of spice crops

Subject: Agriculture	Year: 9	Strand: Garden crops production
Strand Theme: Growing Spice Crops		**(20 periods)**
Sub-strand 9.12: Preparing to start a Spice crops farm **(7 periods)** This sub-strand should enable learners to acquire relevant knowledge, understanding and skills in starting, preparing and establishing spice crops.		
General Learning Outcomes	**Specific Learning Outcomes**	**Suggested Assessment Events**
Learners should	***Learners should be able to***	***Learners can be assessed on***
9.12.1 shows skill in preparing soil for growing Spice crops ***(s)***	**9.12.1.1** prepare soil for growing Spice crops	**1.** investigate and report how farmers around your home or school area prepare soil for growing spice crops
9.12.2 shows skill in using correct spacing when growing Spice crops ***(s)***	**9.12.2.1** use correct planting space	**2.** measure and find out spacing between plants and rows of existing spice crops growing around your home
9.12.3 shows skill in transplanting Spice crops planting materials ***(s)***	**9.12.3.1** transplant Spice crops planting materials	**3.** demonstrate how to prepare spice crops planting materials before planting out into the field

Subject: Agriculture	Year: 9	Strand: Garden crops production
Strand Theme: Growing Spice Crops		**(20 periods)**
Sub-strand 9.13: Caring for Spice crops		**(7 periods)**
This sub-strand should enable learners to acquire relevant knowledge, understanding and skills in Spice crops care and management.		

General Learning Outcomes	Specific Learning Outcomes	Suggested Assessment Events
Learners should	***Learners should be able to***	***Learners can be assessed on***
9.13.1 shows skill in establishing shade tree in Spice crops ***(s)***	**9.13.1.1** establish shade tree in Spice crops	**1.** demonstrate the planting of shade tree for spice crops
9.13.2 shows skill in training, trellising and pruning Spice crops ***(s)***	**9.13.2.1** train, trellis and prune Spice crops	**2.** demonstrate the training, trellising and pruning of spice crops
9.13.3 shows skill in controlling weeds in Spice crops ***(s)***	**9.13.3.1** control weeds in Spice crops	**3.** control weed in spice crops using other appropriate method
9.13.4 shows skill in applying frtilizers in Spice crops ***(s)***	**9.13.4.1** apply fertilizers in Spice crops	**4.** place mulching materials around spice crops
9.13.5 shows skill in performing hilling and looping in Spice crops ***(s)***	**9.13.5.1** perform hilling and looping in Spice crops	**5.** demonstrate hilling and looping of spice crops
9.13.6 shows skill in controlling pests and diseases in Spice crops ***(s)***	**9.13.6.1** control pests and diseases in Spice crops	**6.** demonstrate use of integrated pest control on pulse crops

Subject: Agriculture	Year: 9	Strand: Garden crops production
Strand Theme: Growing Spice Crops		**(20 periods)**
Sub-strand 9.14: Harvesting, preparing and selling		**(4 periods)**
This sub-strand should enable learners to acquire relevant knowledge, understanding and skills in Spice crops harvesting, preparation and selling.		

General Learning Outcomes	Specific Learning Outcomes	Suggested Assessment Events
Learners should	***Learners should be able to***	***Learners can be assessed on***
9.14.1 shows skill in harvesting Spice crops ***(s)***	**9.14.1.1** identify spice crops ready for harvest **9.14.1.2** harvest Spice crops correct	**1.** investigate and report how people harvest spice crops around your home or school area
9.14.2 shows skill in preparing and processing Spice crops ***(s)***	**9.14.2.1** prepare and process Spice crops	**2.** prepare and process one spice crops
9.14.3 shows skill in selling Spice crops ***(s)***	**9.14.3.1** sell Spice crops	**3.** investigate demand for spice crops around your home or school area

Subject: Agriculture	Year: 9	Strand: Plantation crops production
Strand Theme: Growing Stimulants and Beverage crops		**(20 periods)**
Sub-strand 9.15: Why grow Stimulant and Beverage crops? (2 periods) This sub-strand should enable learners to acquire relevant knowledge and understanding of Stimulant and Beverage crops in relation to their features and types.		

General Learning Outcomes	Specific Learning Outcomes	Suggested Assessment Events
Learners should	***Learners should be able to***	***Learners can be assessed on***
9.15.1 know Stimulant and Beverage crops ***(k)***	**9.15.1.1** define and describe the term 'Stimulant and Beverage crops'	**1.** investigate the demand and supply for stimulant and beverage crops around your home or school area
9.15.2 understand the different Stimulant and Beverage crops grown in Solomon Islands ***(u)***	**9.15.2.1** classify Stimulant and Beverage Crops	**2.** collect and display examples of stimulant and beverage crops

Subject: Agriculture	Year: 9	Strand: Plantation crops production
Strand Theme: Growing Stimulant and Beverage Crops		**(20 periods)**
Sub-strand 9.16: Preparing to grow Stimulant/ Beverage crops (7 periods) This sub-strand should enable learners to acquire relevant knowledge, understanding and skills in starting, preparing and establishing stimulant and beverage crops.		
General Learning Outcomes	**Specific Learning Outcomes**	**Suggested Assessment Events**
Learners should	***Learners should be able to***	***Learners can be assessed on***
9.16.1 shows skill in preparing soil for growing stimulant and beverage crops ***(s)***	**9.16.1.1** prepare soil for growing Stimulant and beverage crops	**1.** demonstrate how to prepare soil for a particular stimulant and beverage crops
9.16.2 shows skill in using correct spacing when growing stimulant and beverage crops ***(s)***	**9.16.2.1** use correct space whengrowing Stimulant and Beverage crops	**2.** calculate spacing for different stimulant and beverage crops using different layout methods
9.16.3 shows skill in transplanting stimulant and beverage crops planting materials ***(s)***	**9.16.3** transplant Stimulant and Beverage crops planting materials	**3.** prepare stimulant and beverage crops planting materials before planting out

Subject: Agriculture	Year: 9	Strand: Plantation crops production
Strand Theme: Growing Stimulants and Beverages Crops (20 periods)		
Sub-strand 9.17: Caring for Stimulants and Beverages crops (7 periods) This sub-strand should enable learners to acquire relevant knowledge, understanding and skills in Stimulant and Beverage crops care and management.		
General Learning Outcomes	**Specific Learning Outcomes**	**Suggested Assessment Events**
Learners should	***Learners should be able to***	***Learners can be assessed on***
9.17.1 shows skill in controlling weeds in stimulant and beverage crops ***(s)***	**9.17.1.1** control weed in stimulant and beverage crops	**1.** demonstrate how to remove weeds from stimulant and beverage crops using any method
9.17.2 show skill in pruning stimulant and beverage crops ***(s)***	**9.17.2.1** prune Stimulant and Beverage crops	**2.** investigate and report how farmers prune stimulant and beverage crops
9.17.3 shows skill In applying fertilizer in stimulant and beverage crops ***(s)***	**9.17.3.1** apply fertilizer to stimulant and beverage crops	**3.** calculate fertilizer amount for a given stimulant and beverage crop
9.17.4 shows skill in controlling pests and diseases in stimulant and beverage crops ***(s)***	**9.17.4.1** control pests and diseases in Stimulant and Beverage crops	**4.** collect and display examples of pests and diseases in stimulant and beverage crops

Subject: Agriculture	Year: 9	Strand: Plantation crops production
Strand Theme: Growing Stimulant and Beverage Crops		**(20 periods)**
Sub-strand 9.18: Harvesting, preparing and selling		**(4 periods)**
This sub-strand should enable learners to acquire relevant knowledge, understanding and skills in Stimulants and Beverages crops harvesting, preparation and selling.		

General Learning Outcomes	Specific Learning Outcomes	Suggested Assessment Events
Learners should	***Learners should be able to***	***Learners can be assessed on***
9.18.1 shows skill in harvesting stimulant and beverage crops ***(s)***	**9.18.1.1** identify stimulant / beverage crops ready for harvest **9.18.1.2** harvest stimulant and beverage crops correctly	**1.** investigate and report how farmers harvest stimulant and beverage crops around your home or school area
9.18.2 shows skill in preparing and processing stimulant and beverage crops ***(s)***	**9.18.2.1** prepare and process stimulant and beverage crops using appropriate technology	**2.** demonstrate how to prepare one stimulant and beverage crop using any appropriate method
9.18.3 shows skill in selling stimulant and beverage crops ***(s)***	**9.18.3.1** sell stimulant and Beverage crops	**3.** investigate demand and supply for stimulant and beverage crops around your home or school area

Subject: Agriculture	Year: 9	Strand: Plantation crops production
Strand Theme: Growing Oil crops		**(20 periods)**
Sub-strand 9.19: Why grow Oil crops?		**(2 periods)**
This sub-strand should enable learners to acquire relevant knowledge and understanding of Oil crops in relation to their features and types.		

General Learning Outcomes	Specific Learning Outcomes	Suggested Assessment Events
Learners should	***Learners should be able to***	***Learners can be assessed on***
9.19.1 know Oil crops ***(k)***	**9.19.1.1** define and describe the term 'Oil crops'	**1.** investigate how people regard oil crops around your home or school area
9.19.2 understand the different oil crops grown ***(u)***	**9.19.2.1** classify Oil crops	**2.** collect and display examples of oil crops

Subject: Agriculture	Year: 9	Strand: Plantation crops production
Strand Theme: Growing Oil crops		**(20 periods)**
Sub-strand 9.20: Preparing to start an Oil crops farm (7 periods) This sub-strand should enable learners to acquire relevant knowledge, understanding and skills in starting, preparing and establishing oil crops.		
General Learning Outcomes	**Specific Learning Outcomes**	**Suggested Assessment Events**
Learners should	***Learners should be able to***	***Learners can be assessed on***
9.20.1 shows skill in preparing soil for growing oil crops ***(s)***	**9.20.1.1** prepare soil for growing Oil crops	**1.** demonstrate how to prepare soil for a particular oil crops
9.20.2 shows skill in using correct spacing when growing oil crops ***(s)***	**9.20.2.1** use correct planting spaces when growig oil crops	**2.** calculate spacing for different oil crops using different layout methods
9.20.3 shows skill in transplanting oil crops planting materials ***(s)***	**9.20.3.1** transplant Oil crops planting materials	**3.** prepare oil crops planting materials before planting out

Subject: Agriculture	Year: 9	Strand: Plantation crops production
Strand Theme: Growing Oil Crops		**(20 periods)**
Sub-strand 9.21: Caring for Oil crops		**(7 periods)**
This sub-strand should enable learners to acquire relevant knowledge, understanding and skills in Oil crops care and management.		

General Learning Outcomes	Specific Learning Outcomes	Suggested Assessment Events
Learners should	***Learners should be able to***	***Learners can be assessed on***
9.21.1 shows skill in controlling weeds in oil crops ***(s)***	**9.21.1.1** control weed in Oil crops	**1.** demonstrate how to remove weeds from oil crops using any appropriate method
9.21.2 shows skill in pruning oil crops ***(s)***	**9.21.2.1** prune Oil crops	**2.** investigate and report how farmers prune oil crops
9.21.3 shows skill in applying fertilizer in oil crops ***(s)***	**9.21.3.1** apply fertilizer application in oil crops	**3.** calculate fertilizer application rate for a given oil crop
9.21.4 show skills in thinning out Oil crops	**9.21.4.1** thin out Oil crops	**4.** demonstrate one way to thin oil crops
9.21.5 shows skill in controlling pests and diseases in oil crops ***(s)***	**9.21.5.1** control pests and diseases in Oil crops	**5.** observe and report one pest or disease damage in oil crops

Subject: Agriculture	Year: 9	Strand: Plantation crops production
Strand Theme: Growing Oil crops		**(20 periods)**
Sub-strand 9.22: Harvesting, preparing and selling		**(4 periods)**
This sub-strand should enable learners to acquire relevant knowledge, understanding and skills in Oil crops harvesting, preparation and selling.		

General Learning Outcomes	Specific Learning Outcomes	Suggested Assessment Events
Learners should	***Learners should be able to***	***Learners can be assessed on***
9.22.1 shows skill in harvesting oil crops ***(s)***	**9.22.1.1** identify oil crops that are ready for harvest **9.22.1.2** harvest Oil crops correctly	**1.** investigate and report how farmers harvested crops around your area
9.22.2 shows skill in preparing and processing oil crops ***(s)***	**9.22.2.1** prepare and processoil crops using appropriate technology	**2.** prepare and process one oil crops using any appropriate method
9.22.3 shows skill in selling oil crops and products ***(s)***	**9.22.3.1** sell Oil crops and products	**3.** investigate and report about demand for one oil crop product around your school or area

Subject: Agriculture	Year: 9	Strand: Farm animals production
Strand Theme: Raising Insect		**(20 periods)**
Sub-strand 9.23: Why raise insects?		**(2 periods)**
This sub-strand should enable learners to acquire relevant knowledge and understanding of Insect in relation to their features, and types.		

General Learning Outcomes	Specific Learning Outcomes	Suggested Assessment Events
Learners should	***Learners should be able to***	***Learners can be assessed on***
9.23.1 know Insect farming ***(k)***	**9.23.1.1** define and describe the term 'Insect farming'	**1.** find out how people regard insect farming around your home or school area
9.23.2 understand the different insects raised ***(u)***	**9.23.2.1** classify insects	**2.** collect examples of different insects

Subject: Agriculture	Year: 9	Strand: Farm animals production
Strand Theme: Insect Farming		**(20 periods)**
Sub-strand 9.24: Preparing to raise Insects **(4 periods)** This sub-strand should enable learners to acquire relevant knowledge, understanding and skills in starting, preparing and establishing an insect farm.		

General Learning Outcomes	Specific Learning Outcomes	Suggested Assessment Events
Learners should	***Learners should be able to***	***Learners can be assessed on***
9.24.1 know the factors to consider when raising Insects ***(k)***	**9.24.1.1** outline the factors to consider when raising insect	**1.** find out the factors that may hinder farmers from establishing an insect farm around your home or school area
9.24.2 shows skill in planning to enrich insect habitat ***(s)***	**9.24.2.1** plan area for enriching insect habitat	**2.** demonstrate one way to enrich an insect habitat
9.24.3 shows skill in preparing and constructing insects facilities and accessories ***(s)***	**9.24.3.1** prepare and construct insects facilities and accessories	**3.** construct one insect accessory

Subject: Agriculture	Year: 9	Strand: Farm animals production
Strand Theme: Insect Farming		**(20 periods)**
Sub-strand 9.25: Caring for Insects		**(6 periods)**
This sub-strand should enable learners to acquire relevant knowledge, understanding and skills in Insects care and management.		

General Learning Outcomes	Specific Learning Outcomes	Suggested Assessment Events
Learners should	***Learners should be able to***	***Learners can be assessed on***
9.25.1 show skills in introducing and transfering insects ***(s)***	**9.25.1.1** introduce and transfer insects	**1.** investigate and report on how farmers introduce and transfer insects around your area
9.25.2 shows skill in controlling weeds around the insect habitat ***(s)***	**9.25.2.1** control weed around Insect habitat	**2.** demonstrate how to remove weeds around an insect habitat using any appropriate method
9.25.3 shows skill in maintaining the insect habitat ***(s)***	**9.25.3.1** maintain insect habitat	**3.** demonstrate one way to maintain an insect habitat
9.25.4 shows skill in controlling pests and diseases in an insect habitat ***(s)***	**9.25.4.1** control pests and diseases in insect habitat	**4.** investigate and report pests and diseases infestation in an insect habitat

Subject: Agriculture	Year: 9	Strand: Farm animals production
Strand Theme: Insect Farming		**(20 periods)**
Sub-strand 9.26: Harvest, preparing and selling		**(5 periods)**
This sub-strand should enable learners to acquire relevant knowledge, understanding, and skills in insect harvesting, preparation and selling.		

General Learning Outcomes	Specific Learning Outcomes	Suggested Assessment Events
Learners should	***Learners should be able to***	***Learners can be assessed on***
9.26.1 shows skill in harvesting insects and their products ***(s)***	**9.26.1.1** harvest insects and their product correctly	**1.** investigate and report how farmers harvest insect products around your area
9.26.2 shows skill in preparing, processing and preserving insects and their products ***(s)***	**9.26.2.1** prepare, process and preserve insects and their product	**2.** demonstrate one way to prepare, process and preserve an insect product
9.26.3 shows skill in selling of insects and their products ***(s)***	**9.26.3.1** sell insects and their product	**3.** identify insect products sold around your home or school area

Section 13. LEARNING AND TEACHING RESOURCES

This section contains a list of learner's books, teacher's guides and other learning and teaching resources for effective teaching and learning of Secondary Agriculture syllabus for years 7 to 9.

No	Title	Publication Date	Publisher
1	Solomon Islands Agricultural Science Year 7 Learner's Book	2012	Pearson Education, Australia
2	Solomon Islands Agricultural Science Year 7 Teacher's Guide	2013	Pearson Education, Australia
3	Solomon Islands Agriculture Year 8 Learner's Book	2013	Pearson Education, Australia
4	Solomon Islands Agriculture Year 8 Teacher's Guide	2013	Pearson Education, Australia
5	Solomon Islands Agriculture Year 9 Learner's Book	2014	Pearson Education, Australia
6	Solomon Islands Agriculture Year 9 Teacher's Guide	2014	Pearson Education, Australia

Section 14. TOOLS AND EQUIPMENT

This section contains a list of tools and equipment for effective teaching and learning of Secondary Agriculture syllabus for years 7 to 9.

Basic garden and plantation tools and materials

No.	Description of items
1	Bush knife
2	Brushing knife
3	Copra knife
4	Pruning knife
5	Grafting knife
6	Axe
7	Pruning saw
8	Secateur
9	Sickles
10	Spade
11	Banana spade
12	Shovel
13	Garden hoe
14	Mattock
15	Garden fork
16	Metal rake
17	Nursery trays
18	Measuring tape
19	Grafting tape
20	Watering can
21	Metal bucket
22	Nursery screen net
23	Twine
24	Poly bags
25	Knife file
26	Oil stone
27	Wheel barrow
28	Gum boot
29	Hand glove
30	Vegetable seeds
31	Inorganic fertilizer - NPK - Sulphate of Ammonia - Muriate of Potash

Basic farm animal's tools and materials

No.	Description of items
1	Chicken feeder
2	Chicken drinker
3	Chicken wire mesh
4	Layer cage
5	Table scale
6	Kerosene lamp
7	Chicken medication (disinfectant/coccus powder)
8	Hive boxes
9	Nucleus box
10	Frames
11	Top lid
12	Bottom lid
13	Wax
14	Bee suit
15	Hand glove
16	Embedder
17	Roll wire
18	Bee brush
19	Extractor
20	Smoker
21	Containers (20/10 litres capacity)
22	Smoker
23	Hive tool
24	Scalpel
25	Disinfectant (savolene)
26	Weighing tape
27	Dehorner
28	Staple nails
29	Pliers
30	Barb wire
31	Pig wire mesh
32	Chicken commercial rations
33	Pig commercial rations
34	Elastrator
35	Burdizzo pincers
36	Caustic stick
37	Dehorning saw (stiff back)
38	Tube calf dehorner
39	Barnes-type dehorner

Section 15. FORMATIVE AND SUMMATIVE ASSESSMENT

The Secondary Agriculture Syllabus for Years 7 – 9 is written using the outcomes - based approach to education in Solomon Islands. This syllabus is based on an outcomes - based curriculum framework with a philosophy of a learner centred teaching pedagogy. It is based on learning outcomes as *curriculum standards*. These are *curriculum requirements* that should guide the planning for effective teaching and learning strategies as well as designing and setting of valid, fair and reliable assessments. These standards or curriculum requirements will become the *assessment benchmarks* for assessment at the school and national levels using both the formative and summative form of assessments.

Assessment is defined as a continued planned process of gathering, analysing and interpreting information and data about students learning. It is a process of seeking and interpreting evidences used by learners and their teachers, to identify where the learners are in their learning, and where they need to go to and how best to get there. It is important that teachers diagnose and identify learning abilities of the learners in order for them to develop and implement intervention strategies to improve both the learning process of learners and teaching approaches of the teachers. Teachers should support learners who have acquired the learning outcomes or curriculum requirements in order to maintain their level of performance and similarly assist leaners who have not acquired the requirements with remedial tasks. This is to enable learners to acquire curriculum requirements and progressed on with their learning. Therefore such assessment strategy is aiming towards improving learning and teaching processes and should focus more on a learner centred teaching pedagogy.

The assessment component in this syllabus involves both internal and external assessments and national examinations. Such an assessment approach is sometimes referred to as formative and summative assessments. However, assessment of learning outcomes differs in some ways from the traditional way of assessing objectives using the norm – referenced assessment. Assessment of learning outcomes focuses more on the criteria – referenced assessment and will allow learners to compete against set and agreed curriculum standards. The emphasis is more on formative and diagnostic form of assessments because it is an ongoing assessment in the classroom. The assessment of learning outcomes will be based on achievement levels. These levels have descriptors of possible performance abilities or skills at different intellectual and hierarchical competencies for each of the learning outcome assessed. Teachers will then be able to identify achievement levels for each student and be able to set remedial tasks to assist underachieving learners. The assessment data and information should be recorded and kept in a systematic and orderly manner as learning records in the schools.

The assessment information and data gathered from such assessments can be used for improving the learning and teaching processes in the classroom and for making informed decisions regarding assessments in the schools and national assessments and examinations. Furthermore, such information and data will also inform the Curriculum Development Division (CDD) and National Examination and Standards Unit (NESU) of the Ministry of Education and Human Resources Development (MEHRD) as well as the School of Education and Humanities (SOEH) of the Solomon Islands National University (SINU) on how the prescribed or the intended curriculum was taught and learnt in schools and how best to improve both the teaching and learning processes and implementation of valid, fair and reliable formative and summative assessments.

It is the Ministry's plan to examine *all subjects* at the end of Year Nine (9), the final year level at the end of the Universal Basic Education in Solomon Islands. It would mean that all subjects offered in the national curriculum would need to offer school base assessment (SBA) as part of the formative or continuous/internal assessment. The SBA should be implemented as part of the teaching and learning processes and is focussed more on learner centred teaching philosophy. The purpose of having an SBA is for assessing skills that are not assessable in the summative and national examinations at the end of the term, semester or a year. Furthermore, such an assessment

approach is required to strengthen key components of the formative assessment, that is, to be more valid, fair and reliable in terms of having common assessment tasks (CAT) in a more organized manner as well as creating provisions for teacher designed assessment tasks (TDAT) to meet the learning needs of learners within the school context and learning environment.

Detailed information, guidelines and appropriate weightings for SBA and internal assessment for Secondary Agriculture can be obtained from the subject prescription handbook.

Achievement Levels

Particular levels in the development of a learner towards a learning outcome; where the top level is the outcome.

Aims

Broad statement of what the curriculum or a syllabus hopes that learners will achieve as a result of the learning processes.

Assessment

Judging and describing the learning outcomes that learners have achieved.

Assessment event

An opportunity for a learner to demonstrate achievement on a specific learning indicator, usually recorded to give a record of learner's progress.

Attitude

Ideas or beliefs in what is right and wrong, good or bad. The way you think or feel about something.

Competency Levels

Similar to achievement levels, but usually referring to a stage in the development towards command of a particular skill.

Curriculum

All learning opportunities planned, guided and supported by the school. The curriculum includes all subjects taught and all other activities, including extra-curricular activities, which the learners take part in.

Entrepreneurial thinking

Considering and planning to start or organize a commercial enterprise involving a financial risk.

Improvisation

The process of making something from whatever resources are available rather than relying on resources or equipment bought or supplied. Doing something without advanced planning or practice.

Specific Learning Outcomes

Statement of an observable behaviour which shows that a learner has achieved some level of competence on a learning outcome.

Key Learning Areas

The main areas of learning considered important for all learners to be exposed to throughout the whole curriculum. All or most subjects will make some contribution to the achievement of each of these Key Learning Areas.

Learner

A person who is in the process of learning something, in our case in a school situation. In the outcomes-based syllabuses Learner is used rather than Student or Pupil.

Learner – centred

An approach to supporting learning that focuses on an individual learner or a group of learners rather than on the teacher. The Outcomes approach is learner-centred.

Learning

The process of finding, exchanging or being given information which leads to changes in, or an increase in, our knowledge, abilities or feelings.

Learning material

The core textbooks or other written material that presents the sequenced content for an entire course of study at a given Year level, at a conceptual level appropriate for the learners.

General Learning Outcome

A statement which specifies what the learner is expected to know, understand or be able to do, or the attitude or values expected to have developed as a result of a learning process.

Lesson

A simple, planned segment of instruction that takes place within a certain time – usually part of a unit of work. The school day in Primary schools is divided into a certain number of Lessons, similar to Periods in Secondary schools.

Outcomes-based

A curriculum or syllabus based on the setting and achievement of Outcomes, as explained above.

Period

A unit of time within the school day in a Secondary school, equivalent to a Lesson in Primary schools. The recommended length of a period in Secondary schools is 40 minutes.

Process skill

An action or reaction which a person performs in a competent way – with four component activities namely; perception, planning, recall of pre–requisite knowledge and execution

Programme of study

Detailed plan for teaching a course over a period of time.

Programme Planner

A tool which gives the overview of the planned course of study – showing the strands and sub strands of the overall course.

Rationale

Statement of the principles or reasons for the inclusion of a particular subject in the curriculum.

Scheme of work

Similar to a programme of study – usually linked to the syllabus.

Scope

The extent of the understanding, concepts, skills and attitudes or values to be acquired by a learner as a consequence of a particular course of study at a particular grade level.

Sequence

The order of the introduction or teaching of concepts and skills with in a subject, which reflect the progression of understanding or competence over a period of time.

Strand

The areas of learning into which a course is divided. Each syllabus is divided into a number of Strands which continue throughout each year of the course. Each Strand concentrates on a different topic or theme within this area of learning each year. Each Strand is further divided into sub-strands.

Strand statement

Overall statement of the understanding, concepts, skills and attitudes intended to be acquired by learners for a particular strand of a course over the whole period of the course.

Strand year statement

Statement of understanding, concepts, attitudes and skills intended to be acquired by a learner within a particular strand during a specific year of study.

Strand theme statement

An alternative term for Strand Year Statement: statement of understanding, concepts, attitudes and skills intended to be acquired by a learner with in a particular strand during a specific year of study.

Subject

One of the traditional categories in to which the content of a school curriculum is sub – divided; subjects drive strongly from the range of disciplines of knowledge.

Sub-strand

A sub-division of a strand dealing with a particular topic within that strand.

Syllabus

A document which prescribes the course of the study by learners within a given curriculum area or subject. The syllabus presents the strands, sub strands and their intended learning outcomes, as well as other guidance for teachers.

Teaching material

Range of teaching materials utilized by teachers to assist with the process of facilitating learning.

Value

Moral standard of behaviour; principles which govern a person's actions.

Vernacular Language

Language spoken by a group of people within a particular region or country. The vernacular languages of Solomon Islands are all the languages spoken by people as their first language or mother tongue. This now includes Pijin.

Curriculum Development Division, Sol Ag resources material, MEHRD

Ekpo Ossom and Michael Kapari: Agriculture for Melanesia-book 1 & 2, Longmans, 1996.

Farm animals: A resource book for secondary school agriculture science teachers in the region served by the University of the South Pacific, 1992.

H.Y.Nakasone and R.E.Paull: Tropical Fruits, 1998.

J.A.Sutherland: Introduction to Tropical Agriculture, 3rd edition, 1981.

MEHRD, (2002) *Education Strategic Plan 2002 to 2004*. MEHRD, Honiara.

MEHRD, (2005) *Education Strategic Plan 2004 to 2006*. MEHRD, Honiara.

MEHRD, (2007) *Education Strategic Framework 2007 to 2015*. MEHRD, Honiara.

MEHRD, (2005) *Education for Living: Policy on TVET*. MEHRD, Honiara.

MEHRD, (2004) *Curriculum Review and Reform Project Implementation Document*. MEHRD, Honiara.

MEHRD, 2005) *Curriculum Reform Management Plan 2005 to 2009*. MEHRD, Honiara.

MEHRD, (2007) *National Education Action Plan 2007 to 2009*. MEHRD, Honiara.

MEHRD, (2009) *National Education Action Plan 2010-2012*. MEHRD, Honiara.

MEHRD, (2011) *National Curriculum Statement*. MEHRD, Honiara.

MEHRD, (2011) *Policy Statement and Guidelines for the Development and Implementation of the National Curriculum*. MEHRD, Honiara.

O.Akinsanmi: Senior Secondary Agricultural Science, 1975.

W.Y.Chew, C.N.Williams and J.A. Rajaratnam: Tree and Field Crops of the Wetter Regions of the Tropics, 1980.