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About the authors

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Advisors and contributors

This book was produced in close consultation with advisors from across the Caribbean, who have been instrumental in providing Caribbean content, and local teaching and agricultural practices:

- Simon Drakes (Presentation Brothers’ College, Grenada)
- Sylvia JnoBaptise (St Mary’s Academy, Dominica)
- Suzette Johnson (Tacius Golding High School, Jamaica)
- Carlington Lindsay (McGrath High School, Jamaica)
- Makela Oblington (Brazil Secondary School, Trinidad)

Local case studies have been sourced from across the Caribbean, including contributions by CARDI, Genaro Chiac (Belize), John Jogie (Grenada) and Tyrone Sankar (St Lucia), providing relevant and up-to-date examples of Agricultural Science in the real world.

Students of Agricultural Science from Grenville Secondary School (Grenada), Presentation Brothers’ College (Grenada), Brazil Secondary School (Trinidad) and St Andrew Technical High School (Jamaica) provided valuable feedback on the book’s design and overall approach to help create a student-friendly and engaging text.

The following farmers supplied photographs for use in this edition:

- Drone photos: Neil and Sarah Robson, GM & LD Robson, Barratts Cottage Farm, Marton, Warwickshire CV23 9RN
- Butchery photos: Graham Marshall (butcher) at A & N Ellis & Sons, Hilltop Farm Shop and Butchers, Fosse Way, Hunningham, Leamington Spa, Warwickshire CV33 9EL
- Digger with crawler tracks photo: Tim Parton, SS & SD Kirk, Brewood Park Farm, Coven, Wolverhampton, Staffordshire WV9 5BW
- Digital weather station information and photo: Simon Deacon, JW & BA Deacon & Son, Top Barn Farm, Rugby Road, South Kilworth, Leicestershire LE17 6DW
- Variable rate Nitrogen, nutrient mapping and data management tools: Jim Reeve, Newfields Farm, Shakers Lane, Long Itchington, Southam, Warwickshire CV47 9QB
- Cattle with sensors and feeding trough with scale photos: Henry Dingle, Moreton Morrell College Farm (Nethermoreton Farm), Warwick New Road, Warwick, Warwickshire CV32 5JE
Preface

Modern farming is more and more a team effort. Agriculture is increasingly a local, regional, national and international effort. A great deal of expert support is available, both agricultural and financial, and this book will help readers to use it to their best advantage.

As the 21st century progresses there is greater emphasis on the farmer’s role as a business person and entrepreneur, not only in large-scale enterprises but also where the farm may be a family undertaking. If this book helps to maintain a love of farming and encourages readers to succeed in it and enjoy the fulfilment it can bring, it will be a success.

This new edition has been constructed with the needs of the latest CSEC syllabus in mind. The book covers the requirements of both the single and double awards and the changes in order and importance of topics, between the old and the more recent.

The edition draws on material from the first edition where this is still applicable, but new material has been carefully written to cover the demands of the technological age and the increasing importance personal and corporate initiative.

The format of the new book has been retained from the familiar previous edition, but with amendments designed to make the book easier to use as a text and a revision aid. There are short-answer questions (called In-text Questions, ITQs) that allow readers to test their grasp of the current topic. If you can answer, good! If you cannot, go back over the section and try again. Diagrams and pictures are placed on the page in such a way that they can readily be consulted, but interrupt the text as little as possible – a framework that will be maintained for every book in the Science series.

Dr Mike Taylor
Series Editor
How to use this book

The second edition of *Agricultural Science for CSEC Examinations* includes a wealth of pedagogical features to support teaching and to engage students. Each unit opens with a checklist of objectives and a concept map to show students what they are going to learn. Within each unit are real-life case studies from across the Caribbean, in-text questions to check comprehension, and practical activities for hands-on practice inside, outside and online. Key terms are also highlighted where they are defined – an index at the back helps show where these can be found. Each unit ends with examination-style questions to help students prepare, and a new revision map feature that shows how concepts link together. At the back of the book is a sample SBA project to show students what they need to do to achieve top marks. There is also additional SBA guidance for teaching available online at www.macmillan-caribbean.com.

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**ITQ 1**
What does ITQ stand for?

**Answers to ITQs**

‘ITQ1’ ITQ stands for in-text question. The questions appear in the margins. You can find the answers at the back of the book.

**Practical activities:**

Look out for these boxes in the margins of each unit. They provide hands-on activities for students to practise concepts outside, in the classroom or online.

**Revision maps**

- appear at the end of each unit
- summarise and link topics
- student-friendly way to organise notes

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**Examination-style questions**

**Multiple-choice questions**

A. consolidate knowledge  
B. help students prepare for assessment  
C. are useful homework tasks  
D. all of the above.

---

The introduction to the SBA and model sample project at the back of the book shows students how their work should be approached. Detailed guidance to potential projects is provided for teachers online at www.macmillan-caribbean.com.

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**Case studies**

Real-life case studies from across the Caribbean featuring in every unit to help students engage with relevant and up-to-date examples of agricultural science in practice.