

CONTENTS

	Introduction	1
1.1	Agriculture in perspective	1
1.2	What is agriculture?	3
1.3	Towards an integrated food supply chain	6
1.4	Agriculture and global trade	9
1.5	Agricultural food production	14
	Production and handling practices	17
2.1	Farming systems	17
2.2	Crop production and handling	20
2.3	Livestock farming	31
2.4	Hygienic practices	36
2.5	Social and environmental issues	39
2.6	Summary	43
	Food safety issues	44
3.1	What are food safety hazards?	44
3.2	Routes of contamination	45
3.3	Preventing contamination	46
3.4	Micro-organisms of concern	47
3.5	Chemical hazards of concern	53
3.6	Physical hazards of concern	67
3.7	Conclusions	68
	Food quality attributes	69
4.1	Food quality concepts	69
4.2	Specifying product quality attributes	70
4.3	Product quality issues - examples	72
4.4	Extended product quality issues	77
4.5	Product range and consumer choice	79

5.	Quality assurance of food raw materials	81
5.1	Specifications	82
5.2	Production standards and quality management schemes	85
5.3	Food safety systems	88
5.4	Traceability	91
5.5	Food business supplier approval systems	96
5.6	The role of auditing	97
5.7	Conclusions	98
6.	Agricultural legislation and regulation	99
6.1	Legislation - background	100
6.2	Legislation - some examples	102
6.3	Self-regulation and codes of practice	108
7.	Conclusions	113
8.	Glossary	114
9.	Further reading	123
	About CCFRA and RASE	127