

TABLE OF CONTENTS

Executive Summary.....	iii
1. Summary.....	1
1.1 The Context.....	1
1.2 The results of the case studies.....	6
1.3 The options for action	9
2. Background and approach.....	13
2.1 STOA Project “Agricultural technologies for developing countries”	13
2.2 Understanding of agricultural production systems	14
2.3 Objectives and approaches.....	15
3. The context of agricultural technologies for developing countries	18
3.1 Agriculture in developing countries.....	18
3.1.1 Agriculture, small-scale farmers and poverty	18
3.1.2. Productivity growth	26
3.1.3 Agricultural knowledge, science and technology	30
3.1.4 Public spending and development assistance	36
3.2 Framing conditions	39
3.2.1 Land rights and access	39
3.2.2 Water.....	42
3.2.3 Climate change	45
3.2.4 Inputs	47
3.2.5 Financing	50
3.2.6 Infrastructure.....	51
3.2.7 Changing food chains	52
3.2.8 Education and Health.....	54
3.2.9 Gender.....	55
3.2.10 Governance	57
3.3 Strategies for development	60
4. The results of the case studies.....	63
4.1 Rainwater Harvesting.....	63
4.2 Conservation Agriculture.....	66
4.3 System of Rice Intensification	71

4.4 Organic Farming	77
4.5 Agroforestry systems	81
4.6 Transgenic Crops	88
4.7 Conclusions.....	95
5. Options for action	102
5.1 Need for action.....	102
5.2 Policy commitment	105
5.3 Incorporation into European development policies	106
5.4 Approaches for scaling-up	110
5.5 Introducing financial support.....	114
5.6 Science and technology development.....	115
5.7 Assessing the agricultural potential of GM plants.....	118
5.8 European Agriculture.....	119
References.....	120
Abbreviations	126
Overview Annexes.....	128
Annex 1: Case study “Rain Water Harvesting”	
Annex 2: Case study “Conservation Agriculture”	
Annex 3: Case study “System of Rice Intensification”	
Annex 4: Case study “Organic Farming”	
Annex 5: Case study “Agroforestry systems”	
Annex 6: Case study “Transgenic Crops”	