

TABLE OF CONTENTS

	<u>Page</u>
Summary and Recommendations	vii
I. Rationale and Directions for Reducing Food Losses in Perishable Crops	xi
II Post-Harvest Losses in Perishable Crops	1
INTRODUCTION	1
1.1 The Problem	1
1.2 Importance of Perishable Crops	3
1.3 Definition of Terms	5
1.4 Causes of Losses	6
1.5 Sites of Losses	8
1.6 Magnitude of Losses	9
1.7 Loss Assessment	11
1.8 Effects of the Environment on Food Losses	11
1.9 Environmental Considerations	14
2. FACTORS RELATED TO THE POST-HARVEST SYSTEM	16
2.1 Technologies	16
2.1.1 Gentle handling	16
2.1.2 Temperature control	16
2.1.3 High humidity	18
2.1.4 Waxing of the surface	19
2.1.5 Controlled atmosphere storage	19
2.1.6 Field factors	20
2.1.7 Suberization and curing	20
2.1.8 Genetic control of shelf life	21
2.1.9 Shorten the time between harvest and consumption	22
2.1.10 Processing	22
2.1.11 Heat treatment	23
2.1.12 Sanitation	23
2.1.13 Use of chemicals	23
2.2 Pests	27
2.3 Marketing and Distribution	30
2.4 Socio-economic Aspects	32
2.5 Future Developments for Horticultural Products	33
3. ROOTS AND TUBER CROPS	36
3.1 The Root/Tuber Crop Resource	36
3.2 The Major Root/Tuber Crops	37
3.2.1 Cassava (<u>Manihot esculenta</u> Crantz)	37
3.2.2 Yam (<u>Dioscorea</u> Spp.)	39
3.2.3 The Potato (<u>Solanum</u> Spp.)	40
3.2.4 Sweet Potato (<u>Ipomoea batatas</u> (L.)	42
3.2.5 Taro (<u>Colocasia esculenta</u>) and Other Edible Aroids	42
4. FRUITS AND VEGETABLES	43
4.1 General Considerations	43
4.2 Individual Fruits and Vegetables	49
4.3 Institutional Aspects	50
Appendix 1	53
Appendix 2	65
Literature References	66