

# Contents

---

<i>Foreword</i> .....	(vii)
<i>Preface and Acknowledgments</i> .....	(ix)

## Chapter 1

### **The Genesis of Agriculture**

1.1 Introduction to Indian Agriculture Heritage .....	1
1.2 Stages / Ages.....	2
1.3 Periods .....	3
1.4 The Genesis of Agriculture and its Chronological Arrangement..	3
1.5 Homes of Evolution of Agriculture “Old and New” World .....	7
1.6 Early Indigenous and Other Domesticated Crops.....	8

## Chapter 2

### **Farmers in Ancient Society**

2.1 Status of Farmers in Ancient Society.....	9
2.2 Status of Women.....	10
2.3 Advice by Sages to Kings on their Duties towards Farmers.....	12
2.4 Ancient Agricultural Practices and Scientific Basis .....	14

## Chapter 3

### Soil and Water Management

3.0	Soil Management .....	19
3.1	Soil Definition and Concept.....	19
3.2	Historical Background .....	20
3.3	Ancient and Medieval Systems of Soil Classification .....	21
3.4	Ancient and Medieval Systems of Soil Management and its Relevance in Modern day Agriculture .....	22
3.5	Use of Amendments.....	24
3.6	Land Management for Salt Affected Soils.....	25
3.7	Water Management.....	27
3.8	Ancient and Prehistoric Methods of Harvesting and Storing of Water.....	27
3.9	Ancient and Prehistoric Structures for Harvesting and Storing water.....	28
3.10	Invention of Irrigation.....	30

## Chapter 4

### Plant Protection and ITKs

4.1	Plant Growth and Development.....	32
4.2	Some special Treatments during or after Planting.....	33
4.3	Plant Protection.....	33
4.4	Ancient Plant Protection Practices Still Followed in India.....	36
4.5	Introduction to ITKs .....	39
4.6	Examples of Traditional Knowledge in Crop Production using ITKs .....	40
4.7	Examples of Traditional Knowledge in Water management using ITKs .....	42

## **Chapter 5**

### **Medicinal Plants and Seed Health**

5.1	Heritage of Medicinal Plants and their Relevance Today.....	44
5.2	Pomegranate- A High Value Medicinal Fruit Tree.....	46
5.3	Seed Health in Ancient and Medieval History and its Relevance to Present day Agriculture.....	48
5.4	Traditional Experiments on Seed Germination.....	51

## **Chapter 6**

### **Civilization- Journey in Agriculture**

6.1	Indian Civilization .....	53
6.2	Agriculture and Art.....	56
6.3	Prehistoric Cropping Pattern.....	56
6.4	Agriculture According to Kautilya's Artha Shastra.....	57
6.5	Our Journey in Agriculture .....	61
6.6	Natural Resources .....	63
6.7	Green Revolution and its Impact and Concerns.....	65
6.8	Sustainable Agriculture.....	67
6.9	Description by Travellers from Foreign Countries (China, Europe and USA).....	68
6.10	Vision for the Future- Challenges Ahead .....	69

<i>Appendix</i> .....	<b>71</b>
-----------------------	-----------

<i>References</i> .....	<b>75</b>
-------------------------	-----------