

## Table of Contents

In	Introduction		
1	Ove	erview of Agriculture Heritage	3
		Introduction to Agriculture Heritage Some Historical Facts 1.2.1 Early History 1.2.2 Archaeological and Historical Facts Geological Aspects 1.3.1 China 1.3.2 Indian Subcontinent. References	3 5 7 9 9 9
2	Dev	elopment of Human Culture	16
	2.1	Introduction to Human Culture	16

	2.2	Defining Human Culture	17
		2.2.1 Anthropology	17
		2.2.2 Sociology	18
		2.2.3 Culture Studies	19
		2.2.4 Psychology	19
	2.3		19
		2.3.1 Culture is Learned	20
		2.3.2 Culture is an Adaptive Mechanism	
		2.3.3 Culture Gives Us a Range of Permi	issible
		Behavior Patterns	21
		2.3.4 Cultural Change	21
	2.4		22
		2.4.1 Tools used by Early Human Beings	5 22
		2.4.2 New Subsistence Patterns	22
		2.4.3 Occupation of New Environment Z	
	2.5	0	23
		2.5.1 Material Culture of Stone Age	23
		2.5.2 Stone Age Rituals and Beliefs	24
	2.6		24
		Iron Age	25
	2.8	References	27
3	Beg	inning of Agriculture	30
	3.1	Agriculture and the World	31
	3.2	Indian Agriculture	34
		3.2.1 Indus Valley Civilization	35
		3.2.2 The Vedic Civilization	36
	3.3	Indian civilization	40
	3.4	Developments in Agriculture	42
		3.4.1 Developments in Indian Agricultur	re 43
	3.5	Status of farmers in the society	45
	3.6	References	47
4	Agri	iculture and Related Activities in Literat	ture 49
	4.1	Animal Husbandry	50
	-	4.1.1 History of Animal Husbandry	50
		4.1.2 Present Situation	50
		4.1.3 Significance of Animal Husbandry	51

viii

Tab	Table of Contents			ix
	4.2 4.3 4.4		Practices Used in Fisheries Ancient Fishing Techniques History of Fishing Current Situation and Significance g	51 52 54 54 55 55
5	Glo	oally Im	portant Agricultural Heritage System	59
	5.1 5.2 5.3 5.4 5.5 5.6 5.7	Future Goals a Strateg Cultura Strateg Heritag 5.7.1 5.7.2 5.7.3 5.7.4 5.7.5 5.7.6 5.7.6 5.7.7 5.7.8 5.7.9 5.7.10	ology of Development of the GIAHS Program GIAHS Development and Objectives gy and Approaches al Management in China al Management in Korea gy and approaches followed for Agricultural ge Systems Capacity Building of Local Farming RG-CCA-Nig has Worked on Several Projects: Mitigate Risks of Erosion of Biodiversity and Traditional Knowledge Land Degradation and threats Posed by Globalization Processes Strengthen Conservation and Sustainable use of Biodiversity Conserving Natural Recourses Reducing Vulnerability to Climate Change Enhancing Sustainable Agriculture and Rural Development Food Security and Poverty Alleviation Environmental Services Eco-labeling Eco-tourism and other Incentive Mechanisms and Market Opportunities Sustainable Agricultural Practices	60 62 62 65 66 67 68 68 69 70 72 73 75 76 78 79 80 80 80 80 81 82
	5.8	Refere		83

AGRICULTURE HERITAGE

х			Agricultur	e Heritage
6	Anc	ient Ag	ricultural Practices	86
	6.1	Crops	& Their Origin	87
		6.1.1	Rice	87
		6.1.2	Wheat	88
		6.1.3	Coffee	89
		6.1.4	Pulse	90
		6.1.5	Jowar	91
	6.2		omy in Agriculture	92
	6.3		tion of Monsoon Rain	93
	6.4		assification	94
			Classification of Soil in different ways	95
			Unified Soil Classification System	96
	6.5		Management	96
		-	Communal Type	97
		-	Enterprise Type	97
		6.5.3		98
		6.5.4		
	6.6	6.5.5	Principles of Water Distribution Protection	99 100
			sting & Threshing and Winnowing in Ancient	
	6.8		arvest Management	102
	6.9		g and Marketing	105
		Refere		104
7				
7	Gar		and Medicinal Plant in Ancient Period	107
	7.1		nt and Medieval Period	107
		7.1.1	8	107
		7.1.2	List of trees in the Indian subcontinent	
			during Vedic and post-Vedic periods	109
		7.1.3	Mauryan Gardens	110
		7.1.4	Mughal Gardens	111
		7.1.5	Rajput Gardens	112
		7.1.6	British Gardens in India	113
		7.1.7	Medicinal Plants in Ayurveda	114
		7.1.8	Siddha Tradition	117
	7 2	7.1.9 Arbori	The relevance of our Heritage culture	117
	7.2			118
		7.2.1	Vriksha Ayurveda	118

AGRICULTURE HERITAGE

Tab	Table of Contents		xi
	7.4 7.5 7.6	7.2.2 Mughal Horticulture Orchards Vegetable Farming Floriculture Perfumes Processing and Value Addition 7.7.1 Methods of Processing 7.7.2 Value Addition in Fruits 7.7.3 Value Addition in Flowers 7.7.4 Value Addition in Vegetables References	<ul> <li>119</li> <li>120</li> <li>125</li> <li>130</li> <li>132</li> <li>133</li> <li>133</li> <li>134</li> </ul>
8	Catt	le and other Domestic Animals	136
	8.1 8.2 8.3 8.4 8.5 8.6 8.7	Management of Cattle Domestic Animals Domestication of Animals Dairy Production Systems Various Cattle Breeds 8.5.1 Indigenous Cattle Breeds for Dairy 8.5.2 Indigenous Draught Breed of Cattle Contribution of Livestock References	136 137 138 139 139 140 141 142
9	Desc	cription of Civilization	144
	9.1 9.2 9.3 9.4 9.5 9.6 9.7	Introduction Description of Civilization Soil as a Fundamental asset for Fruitful Yield Generation How did Kahsyaps Utilized Solid Wood? Farm Implements Seed Accumulation and Safeguarding References	144 145 146 147 147 148 148
10		t is the Relevance of Heritage with Present Agriculture?	149
		Introduction Agriculture Heritage Agriculture in India 10.3.1 History of Agriculture in India	149 150 151 153

Agriculture Heritage

	10.5 10.6 10.7 10.8 10.9	Horticu Sugar I Market 10.6.1 Agricul The De 10.8.1 10.8.2	ndustries of India ing of Indian agriculture Old Marketing Ways ture in the Present velopment of Agriculture Farming Revolution Plant Domestication I Animals or animal husbandry	156 158 159 160 161 161 162 162 163
11			iction and Protection Through Traditional Knowledge	167
	11.1	11.1.1 11.1.2 11.1.3 11.1.4 11.1.5 11.1.6 Crop Vo 11.2.1 11.2.2 11.2.3 11.2.4 11.2.5 11.2.6	tion of Shedding Boll of Cotton Growth Promoter Pruning Fumigation and Irrigation Control of Aphids Pest Control Insect Control oyage in the World Early Development Civilizations Middle Ages and Early Modern Arab Europe Columbian Exchange 20 <sup>th</sup> century	167 168 168 168 169 170 173 175 175 175 175 175 176 176 177
	11.3	Scope of	of Agriculture Employment	177 178 178 178 178 178 178 178 179 179

Tab	le of C	Contents	xiii
	11.4	<ul><li>11.3.9 Education on Drought and Management</li><li>11.3.10 Soil and Water Testing Laboratories</li><li>11.3.11 Education on Laws and Regulations</li><li>Reference</li></ul>	179 179 180 180
12	Clas	sification of Crop and Its Significance	185
		<ul> <li>What is the Crop?</li> <li>Significance of Crops in the Economy of India</li> <li>12.2.1 Crop Impact on National Wealth:</li> <li>12.2.2 Crop works an Important Role in Creating a Profession:</li> <li>12.2.3 Crops Perform Plan for Food toward</li> </ul>	185 187 187 187
		<ul> <li>12.2.3 Crops Perform Plan for Pool toward the day to day Growing People:</li> <li>12.2.4 Offering to Capital Structure:</li> <li>12.2.5 Supply of raw material to Agriculture-</li> </ul>	187 188
		based Enterprises: 12.2.6 The Business for Industrial Commodities: 12.2.7 Impact on External and Internal Sales and	188 188
	_	Economics: 12.2.8 Participation in Government Budget: 12.2.9 The Requirement for Labor Team: 12.2.10 Excellent Competitive Benefits: Classification of Crops 12.3.1 Food Crops 12.3.2 Cash Crops 12.3.3 Fiber Crops References	188 189 189 189 189 191 191 193 194
13		ortance of Agriculture and Available cultural Resources	196
	-	Agricultural Resources Agriculture setup in Different Countries 13.2.1 India 13.2.2 United States of America 13.2.3 China 13.2.4 Kenya Current Scenario	199 200 200 202 204 206 206
		References	207

AGRICULTURE HERITAGE

Agriculture	Heritage
-------------	----------

14 Agricultural Concerns and Future Prospects	210
<ul><li>14.1 Introduction</li><li>14.2 Agricultural Concerns</li><li>14.3 Vision for the Future</li><li>14.4 References</li></ul>	210 211 215 215
15 Abbreviations	217
Index	220

xiv