CONTENT

		Page
List	of Tables	ix
	of Figures	X
	eword	xi
Pref	face	xiii
Dedication		xvii
1.	The Importance of Wheat and Its Principal Characteristics	1
	Wheat in the World's diet	1
	Production and Yields of wheat	3
	How environments affect wheat yields	3
	Types of wheat	9
	Protein content of wheat	11
	Wheat preferences	13
2.	The Modern Wheat Plant and the New Technology	15
	Traditional wheats	16
	Japanese dwarfs	18
	Characteristics of semi-dwarf wheats	20 22
	New agronomic practices Disease control	23
	The social impact of modern wheats	26
3.	Mexico : A Pioneer	29
٥.	The postwar wheat situation	29
	The research program	30
	Private support for agricultural research	39
	Training scientists	39
	Benefits of wheat research	40
	Mexico's future wheat imports	42
4.	India and Pakistan: The Asian Leaders	43
	India's wheat program	43
	Pakistan's wheat experience	49
	Supporting services for agriculture	50
	Controversies	52
	Second-generation problems	54
	Some conclusions about India and Pakistan	56
5.	Turkey: A Dryland Success	59
	Turkey's wheat environments	59
	A revolution in three stages	61
	Overview of the revolution	65
	Some issues in the wheat revolution	66
	Looking ahead	67
6.	Bangladesh, China, Brazil, and Argentina	69
	Bangladesh : A Newcomer to Wheat	69
	Modern varieties	70
	Factor of success	71
	China: Largest Wheat Grower in the Thire World	74

	Distribution and types of wheat	74
	Wheat diseases	74
	Factors in China's wheat expansion	75
	And the future?	78
	Brazil: A Program with Extreme Soil and Disease Problems	79
	Acid soils	79
	Septoria and scab	81
	A cost/benefit question	81
	Argentina : A Major Exporter	82
7.	Elements of an Effective National Wheat Program	83
	Joining a wheat network	83
	Identifying wheat-growing zones	85
	Problem-oriented research with a team approach	86
	Plant quarantine service	91
	Availability of inputs	92
	Agricultural extension	97
	Economic policies	100
	Dealing with an oversupply of wheat	103
	Farmers' service organizations	106
	Psychological factors	106
	The dynamic program leader	107
8.	Postharvest Wheat Handling	109
	Harvesting and threshing	109
	Cleaning	111
	Drying	111
	Marketing	112
	Handling and transporting	112
	Storage	113
	Milling and grading	116
	Commercial bakeries	117
	Composite flour	118
	Wheat for feed and industrial use	118
9.	Promising Wheat Research for the Future	119
	Yield Dependability	119
	Resistance to Rusts	122
	Other weapons against rusts	122
	Resistance to other fungus diseases Tolerance to environmental stress	124 126
	Narrowing the Yield Gap	127
	Supplying nutrients	128
	Weed control	130
	Insecticides and fungicides	132
	Timely production practices	132
	On-Farm Research	133
	Raising the Yield Potential	135
	Crossing spring wheats with winter wheats	135
	Longer heads, more spikelets, more fertile florets	137
	Durum wheat research	138
	Triticale: A Wide cross	139
	Other wide crosses	139

10.	Prospects for Wheat in the 1980s and 1990s	141
	World population growth	141
	Land pressure	143
	Fertilizer production outlook	144
	Outlook for wheat in international trade	146
	Can wheat maintain its share in the developing world's diet?	148
Appendix: Where to Get Wheat Assistance		151
Glos	155	
Annotated Bibliography		160
Inde	170	