

TABLE OF CONTENTS

Foreword	iii	Total Use of CAN in Sindh	25
Acknowledgements	iv	District-wise Use of Nitrogen in Sindh	26
Introduction	v	District-wise Use of Phosphorus in Sindh	27
Methodology	vi	District-wise Use of Potassium in Sindh	28
Summary and Way Forward	viii	Region-Wise Comparative Fertilizer Consumption in Sindh	29
SECTION 1 GENERAL MAPS		Yield Maps	
Districts of Sindh	3	Average Yield of Wheat in Sindh	30
Population of Sindh	4	Average Yield of Rice/Paddy in Sindh	31
District-wise Cultivated and Non-Cultivated Area of Sindh	5	Average Yield of Cotton in Sindh	32
Total Area Under Irrigation in Sindh	6	Average Yield of Sugarcane in Sindh	33
District-wise Soil Type/Parent Material in Sindh	7	Temporal Variation of Banana Yield in Sindh	34
Soil Fertility and Soil Health Management Practices in Sindh	8	Temporal Variation of Mango Yield in Sindh	35
Land Cover Map of Sindh	9	Yield of Wheat Under Different Scenarios of Fertilizer Use in Sindh	37
Soil and Water Testing Facilities in Sindh	10	Yield of Rice Under Different Scenarios of Fertilizer Use in Sindh	39
SECTION 2 RAPID FERTILIZER USE ASSESSMENT		Yield of Cotton Under Different Scenarios of Fertilizer Use in Sindh	41
Fertilizer Use and Crop Yield	13	Yield of Sugarcane Under Different Scenarios of Fertilizer Use in Sindh	43
Major Crops in Sindh	14	Soil Maps	
Fertilizer Use Maps		Major Soil Problems	45
Application of Urea to Wheat in Sindh	15	Soil and Water Testing Facilities Availed by Farmers	46
Application of Urea to Rice/Paddy in Sindh	16	SECTION 3 MAPPING NFDC FERTILIZER OFFTAKE DATA	
Application of Urea to Cotton in Sindh	17	Fertilizer Offtake Maps	
Application of Urea to Sugarcane in Sindh	18	Total Offtake of Urea in Sindh	49
Total Use of Urea in Sindh	19	Total Offtake of DAP in Sindh	50
Application of DAP to Wheat in Sindh	20	Total Offtake of CAN in Sindh	51
Application of DAP to Rice/Paddy in Sindh	21	District-wise Use of Nitrogen in Sindh	52
Application of DAP to Cotton in Sindh	22	District-wise Use of Phosphorus in Sindh	53
Application of DAP to Sugarcane in Sindh	23	District-wise Use of Potassium in Sindh	54
Total Use of DAP in Sindh	24	District-wise NPK Offtake in Sindh	55
		Region-wise Comparative NPK Fertilizer Offtake in Sindh	56

SECTION 4 SOIL FERTILITY STATUS MAPPING

District-wise Average pH	59
District-wise Average Electrical Conductivity (EC)	60
District-wise Average Organic Matter Content	61
District-wise Average Available Phosphorus	62
District-wise Average Extractable Potassium	63

DISTRICT PROFILES

Badin	67
Dadu	68
Ghotki	69
Hyderabad	70
Jacobabad	71
Jamshoro	72
Karachi	73
Kashmore	74
Khairpur	75
Larkana	76
Matiari	77
Mirpur Khas	78
Naushahro Feroze	79
Kambar Shahdadkot	80
Sanghar	81
Shaheed Benazirabad	82
Shikarpur	83
Sujawal	84
Sukkur	85
Tando Allah Yar	86
Tando Muhammad Khan	87
Tharparker	88
Thatta	89
Umer Kot	90
Key Messages	91

ANNEXURES

Annexure I: Questionnaire for Rapid Fertilizer Use Assessment	97
Annexure II: Number of Soil Samples from Different Districts Analyzed by Fauji Fertilizer Company Limited	98
Annexure III: District-wise Results of the Soil Samples Analyzed by Fauji Fertilizer Company Limited	99
Annexure IV: Criteria for Soil Nutrient Analysis	102
Annexure V: Addresses of Soil and Water Testing Facilities in Sindh	103
Annexure VI: Dominant Soil Series, Classification and Areas of their Occurrence	104