### LIST OF TABLES

<table>
<thead>
<tr>
<th>Table No.</th>
<th>Title</th>
<th>Page No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table 1.1</td>
<td>Major Apple Producing Countries in the world</td>
<td>3</td>
</tr>
<tr>
<td>Table 3.1</td>
<td>District wise Population and Decadal Growth Rates of Jammu and Kashmir</td>
<td>56</td>
</tr>
<tr>
<td>Table 3.2</td>
<td>District wise Population Density and Sex ratio of Jammu and Kashmir</td>
<td>57</td>
</tr>
<tr>
<td>Table 3.3</td>
<td>District wise Literacy Population Rate of Jammu and Kashmir-2011</td>
<td>59</td>
</tr>
<tr>
<td>Table 3.4</td>
<td>Administrative Setup of District Baramulla</td>
<td>75</td>
</tr>
<tr>
<td>Table 3.5</td>
<td>Administrative Setup of District Budgam</td>
<td>77</td>
</tr>
<tr>
<td>Table 3.6</td>
<td>Administrative Setup of District Pulwama</td>
<td>80</td>
</tr>
<tr>
<td>Table 3.7</td>
<td>District wise Economic and Social Groups of Sample Farmers (in Percent)</td>
<td>81</td>
</tr>
<tr>
<td>Table 3.8</td>
<td>District wise Education of Respondents (in Percent)</td>
<td>82</td>
</tr>
<tr>
<td>Table 3.9</td>
<td>District wise Primary and Secondary Occupation of the Respondents (% Farmers)</td>
<td>83</td>
</tr>
<tr>
<td>Table 4.1</td>
<td>Annual Area, Production and Yield Growth Rates of Total Horticultural Crops in India(2001-02 to 2013-14)</td>
<td>87</td>
</tr>
<tr>
<td>Table 4.2</td>
<td>Value of Output of Horticulture crops with Percentage Share in Agriculture (at Constant Prices)</td>
<td>88</td>
</tr>
<tr>
<td>Table 4.3</td>
<td>Percentage Share of area and Production of Various Horticultural Crops in India to Total Horticulture; (2001-02 to 2013-14)</td>
<td>91</td>
</tr>
<tr>
<td>Table 4.4</td>
<td>Trend Growth Rate in Area, Production and Yield of Horticulture Crops of India</td>
<td>92</td>
</tr>
<tr>
<td>Table 4.5</td>
<td>State wise Area, Production and Yield Growth Rates of Fruit Crops</td>
<td>96</td>
</tr>
<tr>
<td>Table 4.6</td>
<td>All India Area, Production and Yield of Apple</td>
<td>98</td>
</tr>
<tr>
<td>Table 4.7</td>
<td>State wise Area, Production and Yield of Apple</td>
<td>100</td>
</tr>
<tr>
<td>Table 4.8</td>
<td></td>
<td>103</td>
</tr>
</tbody>
</table>
Trend Growth Rate in Area, Production and Yield of Horticulture Crops of Jammu and Kashmir

Table 4.9 Area and Production Share of Apple to Total Horticulture in Jammu and Kashmir 105

Table 4.10 District wise Yield of Apple in Jammu and Kashmir 115

Table 5.1 District wise Source of Saplings of the Respondents (% Farmers) 116

Table 5.2 Fertilizers Used in the Apple Cultivation (% Farmers) 117

Table 5.3 Pesticide Usage of Respondents (% Farmers) 117

Table 5.4 Spraying Frequency of Pesticides (% Farmers) 118

Table 5.5 Land Distribution and Production Practices of Apple Sample Farmers 119

Table 5.6 District wise Marketing Channels of Apple (% Farmers) 121

Table 5.7 District-wise Availability and Raw Materials Used by the Apple Growers (% Farmers) 122

Table 5.8 District wise Grading by apple Cultivators (% Farmers) 123

Table 5.9 Problem of Transportation Faced by Growers (% Farmers) 124

Table 5.10 Problem of Storage for Apple Growers in Jammu and Kashmir (% Farmers) 125

Table 5.11 Marketing and Exports Practices (% Farmers) 126

Table 5.12 Information Awareness of Apple Cultivators of Jammu and Kashmir (% Farmers) 127

Table 5.13 Impact of Apple Insurance and Natural Calamities (in Percent) 128

Table 6.1 Establishment Cost of Apple Cultivation (Rs/Ha) 133

Table 6.2 Annual Operational and Maintenance Costs of the Apple Cultivation (Rs/Ha) 135

Table 6.3 Cost of the Apple Cultivation Classified According to the Various Cost Components in Study Area (Rs/Ha) 136

Table 6.4 Cost of the Apple Cultivation Classified According to the Various Cost Components in Baramulla District (Rs/Ha) 137
Table 6.5  Cost of the Apple Cultivation Classified According to the Various Cost Components in Budgam District (Rs/Ha)  138
Table 6.6  Cost of the Apple Cultivation Classified According to the Various Cost Components in Pulwama District (Rs/Ha)  139
Table 6.7  Cost of the Apple Cultivation Classified According to the Various Cost Components in Shopian District (Rs/Ha)  140
Table 6.8  Returns from Apple Cultivation (Rs/Ha)  141
Table 6.9  Returns from the Apple Cultivation for the two Different categories of Farmers (Rs/Ha)  142
Table 6.10  District wise Returns on Apple Cultivation from the Two Different Categories of Farmers (Rs/Ha)  143
Table 6.11  Production Frontier Output and Technical Efficiency in the Study Area  146
Table 6.12  The Distribution of Technical Efficiency of Apple Growers in Study Area  146
Table 6.13  Production Frontier Output and Technical Efficiency of Baramulla District  148
Table 6.14  The Distribution of Technical Efficiency of Apple Growers in Baramulla  148
Table 6.15  Production Frontier Output and Technical Efficiency of Budgam District  150
Table 6.16  The Distribution of Technical Efficiency of Apple Growers in Budgam  150
Table 6.17  Production Frontier Output and Technical Efficiency of Pulwama District  152
Table 6.18  The Distribution of Technical Efficiency of Apple Growers in Pulwama District  152
Table 6.19  Production Frontier Output and Technical Efficiency of Shopian District  154
Table 6.20 The Distribution of Technical Efficiency of Apple Growers in Shopian District 154

Table 7.1 Export of Horticulture Produce from India 159

Table 7.2 Exports of Apple from India to World (1994 to 2015) 162

Table 7.3 Exports of Apples from India to Different Countries 164

Table 7.4 Exports of Fruits Outside Jammu and Kashmir (Fresh and Dry) 166

Table 7.5 Commodity wise Exports of Fresh and Dry Fruit of Jammu and Kashmir (in Lakh MT) 167

Table 7.6 Foreign Exchange Earned on Horticulture Produce of Jammu and Kashmir 168

Table 7.7 Auto Regressive Integrated Moving Average (ARIMA) 172

Table 7.8 Autocorrelations and Partial Autocorrelations 173

Table 7.9 Regression Statistics of ARIMA 173

Table 7.10 Regression Results of ARIMA 174

Table 7.11 Projections of India’s Apple Exports (US$) 175

Table 7.12 RCA and RSCA of Exports of Apple from India to World 179