Environmental and Social Impact Assessment

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Uzbekistan: Samarkand 1 Solar PV and BESS Project

Appendixes – Part 6

Prepared by ACWA Power for the Asian Development Bank (ADB).

Figure 87 Sample plot 45 (39.56555° N, 66.71898° E), 70 km OTHL, Nurobod District of Samarkand Region, dry temporary stream, garbage dump and gravel extraction

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Annex B: Photo materials on species

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Annex C: Species check list

Table 1: Check list of flora

Species	Life form	Distribution	Habitat type	Abundance	IUCN status	UzRDB status	Native status
Equisetaceae							
1. Equisetum arvense	perennial	Transcontinental	Canals and drainage channels; Wetlands; Riparian scrub	F-R	LC	none	native
Marsileaceae							
2. Marsilea quadrifolia	perennial	Regional	Wetlands	A	LC	none	native
Alismataceae							
3. Alisma plantago-aquatica	perennial	Transcontinental	Canals and drainage channels; Wetlands	R	LC	none	native
Potamogetonaceae							
4. Potamogeton nodosus	perennial	Transcontinental	Canals and drainage channels; Wetlands	R	LC	none	native
5. Potamogeton perfoliatus	perennial	Transcontinental	Canals and drainage channels; Wetlands	F	LC	none	native
Amaryllidaceae							
6. Allium griffithianum	7. perennial	8. Regional	9. Dry grasslands	10. R	11. NE	12. none	13. native
Typhaceae							
14. Typha angustifolia	perennial	Transcontinental	Canals and drainage channels; Wetlands; Riparian scrub	F-O	LC	none	Native
15. Typha laxmannii	perennial	Regional	Canals and drainage channels; Wetlands; Riparian scrub	O	LC	none	native
Juncaceae							
16. Juncus inflexus	perennial	Transcontinental	Canals and drainage channels; Wetlands; Riparian scrub	R	LC	none	native
Cyperaceae							
17. Bolboschoenus glaucus	perennial	Transcontinental	Canals and drainage channels	R	LC	none	native
18. Bolboschoenus maritimus	perennial	Transcontinental	Canals and drainage channels; Wetlands	O-R	LC	none	native
19. Carex muricata	perennial	Regional	Canals and drainage channels; Wetlands	R	LC	none	alien
20. Carex pachystylis	perennial	Regional	Dry grasslands; Xerophytic shrublands; Fallow lands	A-O	LC	none	native
21. Carex physodes	perennial	Regional	Sandy desert	C	NE	none	native

22. Cyperus rotundus	perennial	Transcontinental	Canals and drainage channels; Wetlands; Riparian scrub	F-R	LC	none	native
23. Eleocharis quinqueflora	perennial	Transcontinental	Canals and drainage channels; Wetlands; Riparian scrub	O	LC	none	native
24. Schoenoplectus tabernaemontani	perennial	Transcontinental	Canals and drainage channels; Wetlands	R	LC	none	native
Poaceae							
25. Aegilops cylindrica	annual	Regional	Non-irrigated arable lands; Fallow lands; Woodland belts; Boundary-strips, roadsides; Dry grasslands	F-O	NE	none	native
26. Aegilops triuncialis	annual	Regional	all types except for Wetlands, Wet grasslands and Sandy desert	F-O	NE	none	native
27. Aeluropus littoralis	perennial	Regional	Canals and drainage channels; Wetlands; Riparian scrub	F-O	LC	none	native
28. Avena fatua	annual	Regional	Irrigated arable lands; Non-irrigated arable lands; Fallow lands	F-O	LC	none	alien
29. Bothriochloa ischaemum	perennial	Transcontinental	Canals and drainage channels; Dry grasslands	O	NE	none	native
30. Bromus danthoniae	annual	Regional	all types except for Wetlands, Wet grasslands and Sandy desert	O-R	NE	none	native
31. Bromus pumilio (Boissiera squarrosa)	annual	Regional	Non-irrigated arable lands; Fallow lands	O	NE	none	native
32. Bromus scoparius	annual	Regional	all types except for Wetlands, Wet grasslands and Sandy desert	F-O	NE	none	native
33. Bromus tectorum	annual	Transcontinental	all types except for Wetlands and Wet grasslands	F-O	NE	none	native
34. Calamagrostis pseudophragmites	perennial	Transcontinental	Canals and drainage channels; Wetlands; Riparian scrub	O	LC	none	native
35. Cynodon dactylon	perennial	Transcontinental	all types except for Sandy desert and Xerophytic shrublands	D-O	NE	none	alien
36. Dactylis glomerata	perennial	Transcontinental	Fruit gardens and vineyards; Canals and drainage channels	R	NE	none	native
37. Digitaria sanguinalis	annual	Transcontinental	Irrigated arable lands; Fruit gardens and vineyards; Canals and drainage channels	A-O	NE	none	native
38. Echinochloa crus-galli	annual	Transcontinental	Irrigated arable lands; Fruit gardens and vineyards; Canals and drainage channels	O-R	LC	none	alien

39. Elymus repens	perennial	Transcontinental	Irrigated arable lands; Fruit gardens and vineyards; Canals and drainage channels; Boundary-strips, roadsides	F-O	NE	none	native
40. Eremopyrum bonaepartis	annual	Regional	all xeric natural and modified habitats except for Xerophytic shrublands	O-R	NE	none	native
41. Eremopyrum distans	annual	Regional	Sandy desert	R	NE	none	native
42. Eremopyrum triticeum	annual	Regional	Canals and drainage channels; Boundary-strips, roadsides	O	NE	none	native
43. Hordeum marinum subsp. gussoneanum	annual	Regional	Canals and drainage channels; Boundary-strips, roadsides	F	LC	none	native
44. Hordeum murinum subsp. leporinum (Hordeum leporinum)	annual	Regional	all types	A-O	LC	none	native
45. Hordeum spontaneum	annual	Regional	Irrigated arable lands; Non-irrigated arable lands; Fallow lands; Boundary-strips, roadsides; Canals and drainage channels	F-O	LC	none	native
46. Hordeum vulgare	annual	Transcontinental	Irrigated arable lands; Non-irrigated arable lands; Fallow lands; Boundary-strips, roadsides	F-O	LC	none	agricultural crop
47. Imperata cylindrica	perennial	Transcontinental	Irrigated arable lands; Boundary-strips, roadsides; Canals and drainage channels	F	LC	none	alien
48. Paspalum distichum	perennial	Transcontinental	Irrigated arable lands; Canals and drainage channels; Wetlands; Riparian scrub	A-F	LC	none	alien
49. Phleum paniculatum	annual	Transcontinental	all types except for Sandy desert	O-R	NE	none	native
50. Phragmites australis	perennial	Regional	Canals and drainage channels; Wetlands; Riparian scrub	A-R	LC	none	native
51. Poa bulbosa	perennial	Transcontinental	all types except for Sandy desert	C-O	NE	none	native
52. Poa trivialis	perennial	Transcontinental	Woodland belts; Canals and drainage channels	O	NE	none	native
53. Polypogon monspeliensis	annual	Transcontinental	Canals and drainage channels; Wetlands	R	LC	none	native
54. Puccinellia distans	perennial	Transcontinental	Riparian scrub; Canals and drainage channels; Wetlands	O	NE	none	native
55. Sclerochloa dura	annual	Transcontinental	Boundary-strips, roadsides	O	NE	none	native
56. Setaria viridis	annual	Transcontinental	Canals and drainage channels; Wetlands; Riparian scrub	F-O	NE	none	
57. Sorghum halepense	perennial	Transcontinental	all mesic modified habitats	O	NE	none	alien

58. Taeniatherum caput-medusae	annual	Regional	all xeric natural and modified habitats except for Sandy desert	C-R	NE	none	native
59. Thinopyrum intermedium (Elytrigia trichophora)	perennial	Regional	Xerophytic shrublands; Fallow lands	A-O	LC	none	native
60. Tripidium ravennae (Erianthus ravennae)	perennial	Regional	Canals and drainage channels; Wetlands; Riparian scrub	O-R	LC	none	native
61. Triticum aestivum	annual	Transcontinental	Irrigated arable lands; Non-irrigated arable lands; Fallow lands; Boundary-strips, roadsides	D-O	NE	none	agricultural crop
62. Vulpia ciliata	annual	Regional	Riparian scrub	O	NE	none	native
Papaveraceae							
63. Papaver pavoninum	annual	Regional	all types except for Sandy desert and Xerophytic shrublands	O-R	NE	none	native
64. Roemeria refracta	annual	Regional	Non-irrigated arable lands; Fallow lands; Boundary-strips, roadsides	O	NE	none	native
Ranunculaceae							
65. Ceratocephala falcata	annual	Regional	Sandy desert	F	NE	none	native
66. Clematis orientalis	Perennial, liana	Regional	Canals and drainage channels; Wetlands; Riparian scrub	O-R	NE	none	native
67. Ranunculus pinnatisectus	perennial	Regional	Dry grasslands; Fallow lands	R	NE	none	native
68. Ranunculus sardous	annual	Regional	Canals and drainage channels	O	NE	none	alien
69. Ranunculus sewerzowii	perennial	Regional	Non-irrigated arable lands; Fallow lands	O	NE	none	native
Platanaceae							
70. Platanus orientalis	tree	Regional	Woodland belts; Boundary-strips, roadsides	O	DD	3	native, planted
Haloragaceae							
71. Myriophyllum spicatum	Perennial	Transcontinental	Canals and drainage channels; Wetlands	F	LC	none	native
72. Myriophyllum verticillatum	Perennial	Transcontinental	Canals and drainage channels; Wetlands	O	LC	none	native
Vitaceae							
73. Vitis vinifera	shrub, liana	Transcontinental	Fruit gardens and vineyards	D-A	LC	3	agricultural crop
Zygophyllaceae							
74. Tribulus terrestris	annual	Transcontinental	Boundary-strips, roadsides	O-R	LC	none	alien
75. Zygophyllum oxianum	perennial	Regional	all mesic natural and modified habitats	F-R	NE	none	native
Fabaceae							
76. Alhagi pseudalhagi	perennial	Regional	all types	A-R	NE	none	native

77. Arachis hypogaea	annual	Transcontinental	Irrigated arable lands	D	NE	none	agricultural crop
78. Astragalus alopecias	perennial	Regional	Dry grasslands; Fallow lands	R	NE	none	native
79. Astragalus bactrianus	subshrub	Regional	Dry grasslands; Xerophytic shrublands; Fallow lands	R	NE	none	native
80. Astragalus filicaulis	annual	Regional	Non-irrigated arable lands; Fallow lands; Dry grasslands	F-O	NE	none	native
81. Astragalus villosissimus	subshrub	Regional	Sandy desert	O	NE	none	native
82. Caragana halodendron (Halimodendron halodendron)	shrub	Regional	Canals and drainage channels; Wetlands; Riparian scrub	F-R	NE	none	native
83. Cullen drupaceum (Psoralea drupacea)	perennial	Regional	Dry grasslands; Fallow lands; Boundary-strips, roadsides; Woodland belts	F-R	NE	none	native
84. Gleditsia caspica	tree	Regional	Woodland belts; Boundary-strips, roadsides	O	EN	none	introduced ornamental tree, planted
85. Glycyrrhiza glabra	perennial	Regional	Canals and drainage channels; Wetlands; Riparian scrub	A-R	LC	none	native
86. Glycyrrhiza triphylla	perennial	Regional	Boundary-strips, roadsides	O	NE	none	native
87. Lotus krylovii	perennial	Regional	Canals and drainage channels; Wetlands; Riparian scrub	O-R	NE	none	native
88. Medicago monantha (Trigonella geminiflora)	annual	Regional	Non-irrigated arable lands; Fallow lands	O	NE	none	native
89. Medicago sativa	perennial	Transcontinental	all types of modified habitats	D-R	LC	none	agricultural crop
90. Melilotus albus	biennial	Transcontinental	Fruit gardens and vineyards; Canals and drainage channels	R	LC	none	native
91. Melilotus officinalis	perennial	Transcontinental	Fruit gardens and vineyards; Canals and drainage channels	R	LC	none	native
92. Sophora alopecuroides (Vexibia alopecuroides)	perennial	Regional	all mesic modified habitats; Wetlands; Riparian scrub	O-R	NE	none	native
93. Sophora pachycarpa (Vexibia pachycarpa)	perennial	Regional	all xeric natural and modified habitats except for Sandy desert	F-R	NE	none	native
94. Sphaerophysa salsula	perennial	Regional	Canals and drainage channels; Wetlands; Riparian scrub	O-R	LC	none	native

95. Trifolium fragiferum	perennial	Transcontinental	all mesic natural and modified habitats	C-O	NE	none	native
96. Trifolium repens	perennial	Transcontinental	all mesic natural and modified habitats	F-R	LC	none	native
Rosaceae							
97. Agrimonia eupatoria subsp. asiatica	annual, biennial	Regional	Canals and drainage channels; Wetlands	R	NE	none	native
98. Crataegus turkestanica	shrub	Regional	Woodland belts; Boundary-strips, roadsides; Riparian scrub	R	NE	none	native
99. Malus domestica	tree	Regional	Fruit gardens and vineyards; Woodland belts; Boundary-strips, roadsides	D-R	NE	none	introduced, planted
100. Prunus armeniaca (Armeniaca vulgaris)	tree	Regional	Fruit gardens and vineyards; Woodland belts; Boundary-strips, roadsides	O	DD	none	agricultural crop, native
101. Prunus bucharica (Amygdalus bucharica)	shrub	Regional	Woodland belts	R	VU	none	native
102. Prunus spinosissima (Amygdalus spinosissima)	shrub	Regional	Xerophytic shrublands	C	NE	none	native
103. Rosa canina	shrub	Regional	Canals and drainage channels; Wetlands; Riparian scrub; Woodland belts	R	LC	none	native
104. Rosa persica (Hulthemia persica)	subshrub	Regional	Non-irrigated arable lands; Fallow lands; Boundary-strips, roadsides	O	NE	none	native
105. Rubus caesius	shrub	Regional	Canals and drainage channels; Wetlands; Riparian scrub	O	LC	none	native
106. Rubus sanctus	shrub	Regional	Fruit gardens and vineyards; Canals and drainage channels	R	NE	none	alien, introduced
Elaeagnaceae							
107. Elaeagnus andustifolia	tree	Regional	Canals and drainage channels; Wetlands; Riparian scrub; Woodland belts	F-R	LC	none	native
108. Hippophae rhamnoides	shrub	Transcontinental	Riparian scrub	C	LC	none	native
Ulmaceae							
109. Ulmus pumila	tree	Regional	Woodland belts; Boundary-strips, roadsides	A-R	LC	none	native
Moraceae							
110. Morus alba	tree	Regional	Fruit gardens and vineyards; Woodland belts; Boundary-strips, roadsides	C-R	NE	none	Introduced, planted
Hypericaceae							

111. Hypericum perforatum	perennial	Transcontinental	Fruit gardens and vineyards; Canals and drainage channels	R	LC	none	native
112. Hypericum scabrum	perennial	Regional	Xerophytic shrublands	R	NE	none	native
Salicaceae							
113. Populus afghanica	tree	Regional	Woodland belts; Boundary-strips, roadsides	O-R	DD	none	native
114. Populus alba	tree	Regional	Woodland belts; Boundary-strips, roadsides	C-R	LC	none	native
115. Populus pruinosa	tree	Regional	Riparian scrub; Canals and drainage channels; Woodland belts	O	NT	none	native
116. Salix excelsa	tree	Regional	Canals and drainage channels; Wetlands; Riparian scrub; Woodland belts	O-R	LC	none	native
117. Salix wilhelmsiana	shrub	Regional	Canals and drainage channels; Wetlands; Riparian scrub	R	LC	none	native
Euphorbiaceae							
118. Andrachne telephioides	perennial	Regional	Non-irrigated arable lands; Fallow lands; Dry grasslands	R	NE	none	native
119. Chrozophora tinctoria	annual	Regional	Fallow lands; Boundary-strips, roadsides; Woodland belts; Dry grasslands	O-R	LC	none	native
120. Euphorbia chamaesyce	annual	Regional	all xeric natural and modified habitats except for Sandy desert	O-R	NE	none	native
Geraniaceae							
121. Erodium cicutarium	annual	Transcontinental	Dry grasslands; Xerophytic shrublands; Non-irrigated arable lands; Fallow lands	O-R	NE	none	native
Lythraceae							
122. Lythrum salicaria	perennial	Transcontinental	Canals and drainage channels; Wetlands	R	LC	none	native
Onagraceae							
123. Epilobium hirsutum	perennial	Transcontinental	all mesic natural and modified habitats	O-R	LC	none	native
Nitrariaceae							
124. Peganum harmala	perennial	Regional	Fallow lands; Boundary-strips, roadsides; Dry grasslands; Riparian scrub; Sandy desert	O-R	NE	none	native
Rutaceae							
125. Haplophyllum acutifolium	perennial	Regional	Dry grasslands; Xerophytic shrublands; Fallow lands	F-R	NE	none	native
126. Haplophyllum latifolium	perennial	Regional	Dry grasslands; Xerophytic shrublands; Fallow lands	O	NE	none	native

127. Haplophyllum versicolor	perennial	Regional	Dry grasslands; Fallow lands	O	NE	none	native
Simaroubaceae							
128. Ailanthus altissima	tree	Regional	Woodland belts; Boundary-strips, roadsides	O	NE	none	introduced ornamental tree
Malvaceae							
129. Abutilon theophrasti	annual	Transcontinental	Irrigated arable lands; Canals and drainage channels	R	NE	none	alien
130. Althaea armeniaca	perennial	Regional	Irrigated arable lands; Canals and drainage channels	R	NE	none	native
131. Gossypium hirsutum	Perennial (annual in culture)	Transcontinental	Irrigated arable lands	D	VU	none	agricultural crop
132. Malva neglecta	Annual, perennial	Transcontinental	all types of modified habitats; Riparian scrub	O	LC	none	alien
133. Malva sylvestris	biennial, perennial	Transcontinental	Riparian scrub	R	LC	none	alien
Thymelaceae							
134. Diarthron vesiculosum	annual	Regional	all xeric natural and modified habitats except for Sandy desert	F-R	NE	none	native
Resedaceae							
135. Reseda lutea	perennial	Transcontinental	Non-irrigated arable lands; Fallow lands	R	NE	none	alien
136. Reseda luteola	biennial	Transcontinental	Non-irrigated arable lands; Fallow lands	O	NE	none	alien
Capparaceae							
137. Capparis spinosa	perennial	Regional	all types except for Wetlands, Wet grasslands and Sandy desert	F-O	LC	none	native
Brassicaceae							
138. Alyssum desertorum	annual	Transcontinental	all types except for Wetlands and Sandy desert	F-O	NE	none	native
139. Capsella bursa-pastoris	annual	Transcontinental	all mesic natural and modified habitats	O	LC	none	alien
140. Descurainia sophia	annual	Transcontinental	Canals and drainage channels; Boundary-strips, roadsides; Riparian scrub	F	NE	none	native
141. Euclidium syriacum	annual	Regional	Non-irrigated arable lands; Fallow lands; Woodland belts; Boundary-strips, roadsides	O-R	NE	none	alien

142. Lepidium draba (Cardaria draba)	perennial	Transcontinental	all types of modified habitats; Riparian scrub; Wetlands	O-R	NE	none	native
143. Lepidium latifolium	perennial	Transcontinental	all types of modified habitats; Riparian scrub; Wetlands	O-R	LC	none	native
144. Meniocus linifolius	annual	Regional	Sandy desert	O	NE	none	native
145. Sisymbrium altissimum	annual	Transcontinental	all types of modified habitats; Riparian scrub	F-R	NE	none	alien
146. Sisymbrium loeselii	Annual, biennial	Transcontinental	Canals and drainage channels; Wetlands; Riparian scrub; Woodland belts	F-R	NE	none	native
147. Strigosella africana	annual	Regional	Dry grasslands; Fallow lands; Woodland belts; Boundary-strips, roadsides	R	NE	none	alien
Tamaricaceae							
148. Tamarix hispida	shrub	Regional	Canals and drainage channels; Wetlands; Riparian scrub	F	LC	none	native
149. Tamarix hohenackeri	shrub	Regional	Canals and drainage channels; Wetlands; Riparian scrub	O	NE	none	native
150. Tamarix ramosissima	shrub	Transcontinental	Canals and drainage channels; Wetlands; Riparian scrub	C-R	LC	none	native
Plumbaginaceae							
151. Limonium otolepis	perennial	Regional	Canals and drainage channels; Wetlands; Riparian scrub	C-R	NE	none	native
152. Psylliostachys suworowii	annual	Regional	Riparian scrub; Canals and drainage channels	O	NE	none	native
Polygonaceae							
153. Fallopia convolvulus (Polygonum convolvulus)	Annual, liana	Transcontinental	all mesic natural and modified habitats	F-R	NE	none	native
154. Persicaria hydropiper (Polygonum hydropiper)	annual	Transcontinental	Canals and drainage channels; Wetlands	O-R	LC	none	native
155. Persicaria lapathifolia (Polygonum lapathifolium)	annual	Transcontinental	Canals and drainage channels; Wetlands	F	LC	none	native
156. Persicaria maculosa	annual	Transcontinental	Canals and drainage channels; Wetlands	O	LC	none	native
157. Persicaria minor	annual	Transcontinental	Canals and drainage channels; Wetlands	F-R	NE	none	native
158. Polygonum argyrocoleon	annual	Regional	Canals and drainage channels; Wetlands; Riparian scrub	O	LC	none	native
159. Polygonum aviculare	Annual, perennial	Transcontinental	Fallow lands; Woodland belts; Boundary-strips, roadsides; Riparian scrub	O-R	NE	none	native

160. Rumex confertus	perennial	Regional	Canals and drainage channels	O-R	NE	none	native
161. Rumex conglomeratus	perennial	Transcontinental	Canals and drainage channels; Wetlands; Riparian scrub	O-R	LC	none	alien
Caryophyllaceae							
162. Acanthophyllum pungens	perennial	Regional	Dry grasslands; Xerophytic shrublands	R	NE	none	native
163. Arenaria leptoclados	annual	Regional	Dry grasslands; Xerophytic shrublands; Fallow lands	O	NE	none	native
164. Dianthus helenae	perennial	Endemic	Xerophytic shrublands	O	NE	none	native
165. Gypsophila vaccaria	annual	Transcontinental	Non-irrigated arable lands; Fallow lands	R	NE	none	alien
166. Minuartia meyeri	annual	Regional	Dry grasslands; Xerophytic shrublands; Fallow lands	O-R	NE	none	native
167. Silene conica	annual	Regional	Dry grasslands; Fallow lands	O	NE	none	native
Amaranthaceae							
168. Amaranthus retroflexus	annual	Transcontinental	Irrigated arable lands; Canals and drainage channels; Wetlands; Riparian scrub	O-R	NE	none	alien
169. Atriplex micrantha	annual	Transcontinental	Irrigated arable lands; Canals and drainage channels; Boundary-strips, roadsides	O-R	NE	none	native
170. Ceratocarpus arenarius	annual	Regional	all types except for Wetlands; Wet grasslands and Xerophytic shrublands	O-R	NE	none	native
171. Chenopodium album	annual	Transcontinental	all types of modified habitats	O-R	NE	none	native
172. Climacoptera sp.	annual	Regional	Canals and drainage channels; Boundary-strips, roadsides	F-O	NE	none	native
173. Halocharis hispida	annual	Regional	Dry grasslands; Fallow lands; Boundary-strips, roadsides; Canals and drainage channels	F-O	NE	none	native
174. Halostachys caspica	shrub	Regional	Canals and drainage channels; Wetlands	F	NE	none	native
175. Haloxylon persicum	shrub	Regional	Sandy desert	A	LC	none	native
176. Nanophyton saxatile	subshrub	Endemic	Xerophytic shrublands	R	NE	none	native
177. Salsola paulsenii	annual	Regional	Sandy desert	O	NE	none	native
178. Salsola tragus	annual	Transcontinental	Non-irrigated arable lands; Fallow lands	O	NE	none	native
179. Suaeda altissima	annual	Regional	Canals and drainage channels; Boundary-strips, roadsides	F-R	NE	none	native
Rubiaceae							
180. Galium humifusum (Asperula humifusa)	perennial	Regional	all types of modified habitats; Wet grasslands	O-R	NE	none	native

181. Galium karakulense	perennial	Regional	Canals and drainage channels; Wetlands	R	NE	none	native
182. Galium spurium	annual	Transcontinental	Riparian scrub; Canals and drainage channels; Woodland belts	O	NE	none	native
183. Galium tenuissimum	annual	Regional	Dry grasslands; Xerophytic shrublands; Fallow lands; Boundary-strips, roadsides	O	NE	none	native
Apocynaceae							
184. Cynanchum acutum subsp. sibiricum	Perennial, liana	Regional	all mesic natural and modified habitats	F-R	LC	none	native
185. Poacynum lancifolium (Trachomitum lancifolium)	perennial	Regional	Canals and drainage channels; Wetlands; Riparian scrub	O-R	NE	none	native
186. Poacynum scabrum (Trachomitum scabrum)	Perennial, liana	Regional	Canals and drainage channels; Wetlands; Riparian scrub	O-R	NE	none	native
Boraginaceae							
187. Echium biebersteinii	biennial	Regional	Non-irrigated arable lands; Fallow lands; Woodland belts; Boundary-strips, roadsides	O-R	NE	none	native
188. Heliotropium arguzioides	perennial	Regional	Sandy desert	O	NE	none	native
189. Heliotropium dasycarpum	perennial	Regional	Sandy desert	O	NE	none	native
190. Heliotropium ellipticum	annual	Regional	Fallow lands; Boundary-strips, roadsides; Canals and drainage channels; Riparian scrub; Dry grasslands	O-R	NE	none	native
191. Lindelofia macrostyla	perennial	Regional	Boundary-strips, roadsides	R	NE	none	native
192. Rochelia cardiosepala	annual	Regional	Dry grasslands; Xerophytic shrublands; Fallow lands	O	NE	none	native
193. Solenanthus turkestanicus	perennial	Regional	Dry grasslands	R	NE	none	native
194. Trichodesma incanum	perennial	Regional	Non-irrigated arable lands; Fallow lands; Boundary-strips, roadsides	O-R	NE	none	native
Convolvulaceae							
195. Calystegia sepium	Perennial, liana	Transcontinental	Canals and drainage channels; Wetlands; Riparian scrub	R	LC	none	native
196. Convolvulus arvensis	Perennial, liana	Transcontinental	all types except for Sandy desert and Xerophytic shrublands	F-R	NE	none	alien
197. Convolvulus divaricatus	subshrub	Regional	Sandy desert	R	NE	none	native
198. Convolvulus hamadae	subshrub	Regional	Sandy desert	R	NE	none	native

199. Convolvulus pseudocantabrica	perennial	Regional	Dry grasslands; Fallow lands	O-R	NE	none	native
200. Cressa cretica	perennial	Regional	Canals and drainage channels; Boundary-strips, roadsides	O	LC	none	native
Solanaceae							
201. Datura stramonium	annual	Transcontinental	Canals and drainage channels; Riparian scrub	R	NE	none	alien
202. Lycium dasystemum	shrub	Regional	Canals and drainage channels; Wetlands; Riparian scrub	O-R	NE	none	native
203. Solanum nigrum	annual	Transcontinental	Irrigated arable lands; Fruit gardens and vineyards; Canals and drainage channels	R	NE	none	alien
Oleaceae							
204. Fraxinus angustifolia subsp. syriaca	tree	Regional	Woodland belts; Boundary-strips, roadsides	O-R	LC	none	introduced ornamental tree
Plantaginaceae							
205. Plantago lanceolata	perennial	Transcontinental	all types except for Sandy desert	F-O	LC	none	native
206. Plantago major	perennial	Transcontinental	all mesic natural and modified habitats	F-O	LC	none	native
Scrophulariaceae							
207. Verbascum blattaria	biennial	Transcontinental	all mesic natural and modified habitats	O-R	NE	none	native
Verbenaceae							
208. Verbena officinalis	perennial	Regional	all types of modified habitats; Wetlands	O-R	LC	none	native
Lamiaceae							
209. Lycopus europaeus	perennial	Transcontinental	Canals and drainage channels; Wetlands; Riparian scrub	R	LC	none	native
210. Marrubium anisodon	perennial	Regional	Fruit gardens and vineyards; Woodland belts; Boundary-strips, roadsides; Fallow lands	O-R	NE	none	native
211. Mentha longifolia var. asiatica	perennial	Regional	Canals and drainage channels; Wetlands	F-R	LC	none	native
212. Phlomis nubilans	perennial	Endemic	Xerophytic shrublands	O	NE	3	native
213. Phlomis thapsoides	perennial	Regional	Dry grasslands; Fallow lands; Woodland belts; Boundary-strips, roadsides	F-R	NE	none	native
214. Phlomoides labiosa	perennial	Regional	Dry grasslands; Boundary-strips, roadsides	R	NE	none	native
215. Salvia macrosiphon	perennial	Regional	Dry grasslands; Fallow lands	R	NE	none	native
216. Salvia spinosa	perennial	Regional	Dry grasslands; Fallow lands	R	NE	none	native

217. Ziziphora clinopodioides	perennial	Regional	Xerophytic shrublands	O	NE	none	native
218. Ziziphora tenuior	annual	Regional	Dry grasslands; Xerophytic shrublands; Fallow lands	O-R	NE	none	native
Mazaceae							
219. Dodartia orientalis	perennial	Regional	Fallow lands; Canals and drainage channels; Boundary-strips, roadsides; Riparian scrub	O-R	NE	none	native
Orobanchaceae							
220. Parentucellia flaviflora	annual	Regional	Dry grasslands; Fallow lands; Boundary-strips, roadsides	O	NE	none	native
Asteraceae							
221. Achillea arabica (Achillea biebersteinii)	perennial	Regional	Non-irrigated arable lands; Fallow lands; Dry grasslands	F	NE	none	native
222. Achillea wilhelmsii (Achillea kermanica)	perennial	Regional	Non-irrigated arable lands; Fallow lands; Woodland belts; Boundary-strips, roadsides; Dry grasslands	O-R	NE	none	native
223. Artemisia annua	annual	Transcontinental	Irrigated arable lands; Canals and drainage channels; Boundary-strips, roadsides	O	NE	none	alien
224. Artemisia ferganensis	perennial	Regional	Irrigated arable lands; Canals and drainage channels; Boundary-strips, roadsides	F-O	NE	none	native
225. Artemisia scoparia	biennial	Transcontinental	Irrigated arable lands; Canals and drainage channels; Boundary-strips, roadsides	O	NE	none	native
226. Artemisia serotina	perennial	Regional	Boundary-strips, roadsides	F	NE	none	native
227. Artemisia sogdiana	subshrub	Regional	Dry grasslands; Xerophytic shrublands; Fallow lands	A-O	NE	none	native
228. Artemisia tournefortiana	annual	Regional	Irrigated arable lands; Canals and drainage channels; Wetlands; Riparian scrub	O-R	NE	none	native
229. Artemisia vulgaris	perennial	Transcontinental	Irrigated arable lands; Canals and drainage channels; Boundary-strips, roadsides	O	LC	none	native
230. Bidens frondosa	annual	Transcontinental	Canals and drainage channels	R	LC	none	alien
231. Carduus pycnocephalus	annual	Regional	all mesic natural and modified habitats	O-R	NE	none	native
232. Carthamus lanatus subsp. turkestanicus	annual	Regional	all types except for Sandy desert and Xerophytic shrublands	F-R	NE	none	native
233. Carthamus oxyacanthus	annual	Regional	all types of modified habitats; Dry grasslands	F-R	NE	none	native

234. Carthamus tinctorius	annual	Transcontinental	Non-irrigated arable lands; Fallow lands	A	NE	none	agricultural crop
235. Centaurea bruguieriana subsp. belangeriana (Centaurea belangeriana)	annual, biennial	Regional	all types of modified habitats; Dry grasslands	F-R	NE	none	native
236. Centaurea benedicta (Cnicus benedictus)	annual	Transcontinental	Non-irrigated arable lands; Fallow lands; Boundary-strips, roadsides	R	NE	none	alien
237. Centaurea depressa	annual	Regional	Irrigated arable lands; Non-irrigated arable lands; Fallow lands; Boundary-strips, roadsides	R	NE	none	native
238. Centaurea iberica	biennial	Transcontinental	all types except for Sandy desert and Xerophytic shrublands	F-R	NE	none	alien
239. Centaurea solstitialis	annual	Regional	Irrigated arable lands; Non-irrigated arable lands; Fallow lands; Boundary-strips, roadsides; Woodland belts	F-R	NE	none	alien
240. Centaurea virgata subsp. squarrosa	perennial	Regional	all xeric natural and modified habitats except for Sandy desert	F-R	NE	none	native
241. Chardinia orientalis	annual	Regional	all xeric natural and modified habitats except for Sandy desert	O-R	NE	none	native
242. Chondrilla juncea	perennial	Regional	Xerophytic shrublands; Fallow lands; Boundary-strips, roadsides; Woodland belts	O-R	NE	none	native
243. Cichorium intybus	perennial	Transcontinental	all mesic natural habitats; all modified habitats	F-R	LC	none	alien
244. Cirsium vulgare	biennial	Transcontinental	all mesic natural habitats; all modified habitats	C-R	NE	none	native
245. Cousinia hamadae	perennial	Regional	Sandy desert	R	NE	none	native
246. Cousinia microcarpa	biennial	Regional	all xeric natural and modified habitats except for Sandy desert	O-R	NE	none	native
247. Cousinia olgae	biennial	Regional	Fallow lands; Woodland belts; Boundary-strips, roadsides	O	NE	none	native
248. Cousinia radians	biennial	Regional	all xeric natural and modified habitats except for Sandy desert	F-R	NE	none	native
249. Cousinia resinosa	perennial	Regional	all xeric natural and modified habitats except for Sandy desert	O-R	NE	none	native
250. Erigeron canadensis	annual	Transcontinental	all mesic modified habitats	F-R	NE	none	alien
251. Erigeron sumatrensis	annual	Transcontinental	Canals and drainage channels	F-R	NE	none	alien
252. Garhadiolus papposus	annua	Regional	Fallow lands	O	NE	none	native

253. Handelia trichophylla	perennial	Regional	Dry grasslands; Xerophytic shrublands; Fallow lands	R	NE	none	native
254. Karelinia caspia	perennial	Regional	Canals and drainage channels; Wetlands; Riparian scrub	F-R	NE	none	native
255. Koelpinia linearis	annual	Regional	Non-irrigated arable lands; Fallow lands; Boundary-strips, roadsides; Dry grasslands; Sandy desert	O	NE	none	native
256. Lactuca serriola	annual, biennial	Transcontinental	all types of modified habitats; Riparian scrub; Wetlands	F-R	LC	none	native
257. Onopordum acanthium	biennial	Transcontinental	all types of modified habitats	O	NE	none	native
258. Onopordum leptolepis	biennial	Regional	all types of modified habitats	F-R	NE	none	native
259. Picnomon acarna	annual	Regional	Xerophytic shrublands; Fallow lands; Woodland belts; Boundary-strips, roadsides	O	NE	none	native
260. Pseudohandelia umbellifera	perennial	Regional	Non-irrigated arable lands; Fallow lands	R	NE	none	native
261. Rhaponticum repens (Acroptilon repens)	perennial	Transcontinental	all types of modified habitats; Riparian scrub	C-R	NE	none	native, quarantine weed
262. Sonchus oleraceus	annual	Transcontinental	Canals and drainage channels; Riparian scrub	R	NE	none	alien
263. Sonchus palustris	perennial	Regional	Canals and drainage channels; Wetlands; Riparian scrub	O-R	LC	none	native
264. Stizolophus balsamita	annual	Regional	Irrigated arable lands; Non-irrigated arable lands; Fallow lands; Woodland belts; Boundary-strips, roadsides	O-R	NE	none	native
265. Tripolium pannonicum	Annual, perennial	Transcontinental	Canals and drainage channels; Wetlands	R	NE	none	alien
266. Xanthium spinosum	annual	Transcontinental	all types of modified habitats; Wetlands; Riparian scrub	F-R	NE	none	alien
267. Xanthium strumarium	annual	Transcontinental	all mesic natural and modified habitats	F-R	NE	none	alien
268. Xeranthemum longepapposum	annual	Regional	all xeric natural and modified habitats except for Sandy desert	O	NE	none	native
Caprifoliaceae							
269. Dipsacus laciniatus	biennial	Regional	Riparian scrub	R	NE	none	native

270. Lomelosia songarica (Scabiosa songarica)	perennial	Regional	Xerophytic shrublands; Fallow lands	R	NE	none	native
Apiaceae							
271. Aphanopleura capillifolia	annual	Regional	Dry grasslands; Fallow lands	O	NE	none	native
272. Conium maculatum	annual, biennial	Transcontinental	Canals and drainage channels; Wetlands	O-R	NE	none	alien
273. Daucus carota	biennial	Transcontinental	Fruit gardens and vineyards; Canals and drainage channels; Boundary-strips, roadsides; Riparian scrub	O-R	LC	none	native
274. Echinophora sibthorpiana	biennial	Regional	Non-irrigated arable lands; Fallow lands; Woodland belts; Boundary-strips, roadsides	F-R	NE	none	native
275. Eremodaucus lehmannii	annual	Regional	Non-irrigated arable lands; Fallow lands; Woodland belts; Boundary-strips, roadsides	O-R	NE	none	native
276. Eryngium caeruleum	Biennial, perennial	Regional	all types of modified habitats	O-R	NE	none	native
277. Sium sisarum	perennial	Regional	Canals and drainage channels	R	LC	none	native
278. Torilis arvensis	annual	Transcontinental	Riparian scrub; Irrigated arable lands; Non-irrigated arable lands; Fallow lands; Boundary-strips, roadsides	O	NE	none	alien
279. Turgenia latifolia	annual	Regional	Non-irrigated arable lands; Fallow lands	O-R	NE	none	native

Annex D: Check list of sample plots

Table 2. Check list of sample plots

SP No.	Project site	Location	Date	Latitude, N	Longitude, E	Elevation, m.s.l.	Habitat type	Canopy cover, %	Number of species	IUCN	UzbRDB
1	SS Khalka	NE part of SS Khalka, Quyi Chirchiq District of Tashkent Region, about 2.5 km to the east of the village Mevazor	16.07.2023	41.01202	69.09104	325	modified (Arable lands with irrigated agricultural crops; Woodland belts; Boundary-strips, roadsides; Canals and drainage channels)	90-100	41	0	0
2	360 km OHTL	Quyi Chirchiq District of Tashkent Region, 3 km to the south of SS Khalka	16.07.2023	40.98328	69.07634	320	modified (Arable lands with irrigated agricultural crops; Woodland belts; Boundary-strips, roadsides; Canals and drainage channels)	80-90	49	0	0
3	360 km OHTL	Quyi Chirchiq District of Tashkent Region, between villages Dustobod and Qiz-Ona, 27 km to the south of SS Khalka	16.07.2023	40.84008	68.86496	266	modified (Arable lands with irrigated agricultural crops; Woodland belts; Boundary-strips, roadsides; Canals and drainage channels)	70-80	47	0	0
4	360 km OHTL	Quyi Chirchiq District of Tashkent Region, near the village Qiz-Ona, right bank of the river Syrdarya	16.07.2023	40.81907	68.82596	260	natural (Wetlands)	90-100	42	0	0
5	360 km OHTL	Syrdarya District of Syrdarya Region, left bank of Syrdarya River	16.07.2023	40.81739	68.82465	261	natural (Riparian scrub)	60-70	41	0	0

6	360 km OHTL	Syrdarya District of Syrdarya Region, along the road P-26, between villages Hikmatli and Syrdarya	16.07.2023	40.80202	68.79952	263	modified (Arable lands with irrigated agricultural crops; Woodland belts; Boundary-strips, roadsides; Canals and drainage channels)	90-100	43	0	0
7	360 km OHTL	Syrdarya District of Syrdarya Region, between villages Hikmatli and Qumovul, banks of drainage channel between cotton fields	16.07.2023	40.78989	68.75629	263	semi-natural (Wetlands)	80-90	41	0	0
8	360 km OHTL	Syrdarya District of Syrdarya Region, between the railway and highway M34, between towns Syrdarya and Bakht	16.07.2023	40.78442	68.68	266	modified (Arable lands with irrigated agricultural crops; Woodland belts; Boundary-strips, roadsides)	70-80	25	0	0
9	360 km OHTL	Mirzaabad District of Syrdarya Region	16.07.2023	40.5548	68.61285	263	modified (Boundary-strips, roadsides; Canals and drainage channels)	90-100	44	0	0
10	360 km OHTL	Mirzaabad District of Syrdarya Region, 3.6 km to the east of the village Sardoba	16.07.2023	40.52026	68.45822	266	modified (Boundary-strips, roadsides; Canals and drainage channels)	90-100	43	0	0
11	360 km OHTL	border of Dzhizak and Syrdarya Regions, 1 km to the west of the village Gulzor, between the drainage channel and highway M39	16.07.2023	40.447	68.24592	280	modified (Boundary-strips, roadsides; Canals and drainage channels)	80-90	34	0	0

12	360 km OHTL	Pakhtakor District of Dzhizak Region, between towns Pakthakor and Zafarabad	16.07.2023	40.33315	67.92044	300	modified (Woodland belts; Boundary-strips, roadsides; Canals and drainage channels)	90-100	50	0	0
13	360 km OHTL	Sharaf Rashidov District of Dzhizak Region, 1.5 km to the village Kuyovboshi, northern piedmonts of Nuratau Range	17.07.2023	40.16754	67.694	405	natural (Dry grassland)	20-30	22	0	0
14	360 km OHTL	Sharaf Rashidov District of Dzhizak Region, northern slope of Nuratau Range, 3 km to the south of the village Kuyovboshi	17.07.2023	40.1459	67.69066	710	natural (Xerophytic shrubland)	30-40	31	0	1
15	360 km OHTL	Sharaf Rashidov District of Dzhizak Region, crest of Nuratau Range, 3 km to the south of the village Kuyovboshi	17.07.2023	40.14371	67.69029	773	modified (Fallow lands)	80-90	53	0	0
16	360 km OHTL	Gallaral District of Dzhizak Region, surroundings of the village Chayanly, southern slope of Nuratau Range	17.07.2023	40.07431	67.59559	590	natural (Wet grassland)	80-90	20	0	0
17	360 km OHTL	Gallaral District of Dzhizak Region, southern slope of Nuratau Range, between town Gallaaral and village Karakchi	17.07.2023	40.06872	67.56588	600	modified (Arable lands with non-irrigated agricultural crops; Woodland belts)	40-50	61	0	0

18	360 km OHTL	Gallaral District of Dzhizak Region, near the railway, 3 km to the west of town Gallaaral	17.07.2023	40.02118	67.53507	590	modified (Woodland belts; Boundary-strips, roadsides)	20-30	64	0	0
19	360 km OHTL	Gallaral District of Dzhizak Region, intermountain Nurata valley, between town Gallaaral and village Moltop	17.07.2023	39.98759	67.5331	630	modified (Arable lands with non-irrigated agricultural crops)	70-80	45	0	0
20	360 km OHTL	border of Dzhizak and Samarkand Regions, eastern piedmonts of Khobduntau Range, the road to the village Ingichka	17.07.2023	39.9269	67.50502	808	modified (Woodland belts; Boundary-strips, roadsides)	0-10	36	0	0
21	360 km OHTL	Bulungur District of Samarkand Region, southern piedmonts of Khobduntau Range, 3 km to the north of the village Gatcha	17.07.2023	39.82803	67.26876	800	modified (Arable lands with non-irrigated agricultural crops)	20-30	46	0	0
22	360 km OHTL	Bulungur District of Samarkand Region, southern piedmonts of Khobduntau Range, 2.5 km to the north of the village Bat-Bat	17.07.2023	39.83778	67.21814	785	modified (Fallow lands)	20-30	32	0	0

23	360 km OHTL	Dzhambay District of Samarkand Region, southern piedmonts of Khobduntau Range, 3.5 km to the northeast of the village Qongirot	17.07.2023	39.85665	67.15567	775	semi-natural (Dry grassland)	15-20	45	0	0
24	360 km OHTL	Dzhambay District of Samarkand Region, between the village Dauchar and canal Payaryk	17.07.2023	39.87971	66.98251	645	modified (Arable lands with irrigated agricultural crops; Woodland belts; Boundary-strips, roadsides; Canals and drainage channels)	80-90	53	0	0
25	360 km OHTL	Payaryk District of Samarkand Region, near the village Bakalchak	17.07.2023	39.83927	66.9548	635	modified (Arable lands with irrigated agricultural crops; Woodland belts; Boundary-strips, roadsides; Canals and drainage channels)	70-80	44	0	0
26	360 km OHTL	Payaryk District of Samarkand Region, surroundings of the village Chumishli, right bank of the river Akdarya (right branch of the river Zeravshan)	17.07.2023	39.82998	66.88828	625	modified (Boundary-strips, roadsides; Canals and drainage channels)	90-100	58	0	0
27	360 km OHTL	Akdarya District of Samarkand Region, 1.5 km to the southwest of the village Khadzhi, right bank of the river Karadarya (left branch of the river Zeravshan)	17.07.2023	39.77631	66.7911	604	natural (Riparian scrub)	80-90	65	0	0

28	360 km OHTL	Pastdargom District of Samarkand Region, the right bank of canal Dargom	17.07.2023	39.75687	66.74248	600	modified (Arable lands with irrigated agricultural crops; Boundary-strips, roadsides; Canals and drainage channels)	40-50	62	0	0
29	360 km OHTL	Pastdargom District of Samarkand Region, ravine between canals Dargom and Durmansay	17.07.2023	39.77313	66.69923	605	modified (Woodland belts; Boundary-strips, roadsides; Canals and drainage channels)	90-100	83	0	0
30	360 km OHTL	Pastdargom District of Samarkand Region, between villages Khancharvak and Kayrogoch	29.07.2023	39.62176	66.582	660	modified (Arable lands with irrigated agricultural crops; Woodland belts; Boundary-strips, roadsides; Canals and drainage channels)	70-80	58	0	0
31	360 km OHTL	Pastdargom District of Samarkand Region, 5 km to the north of the village Sazagan	29.07.2023	39.59459	66.71014	718	modified (Boundary-strips, roadsides)	30-40	30	0	0
32	500 MW BESS	Nurabad District of Samarkand Region, 2.5 km to the north of the village Sazagan	29.07.2023	39.57447	66.7379	753	modified (Fallow lands)	0-10	19	0	0
33	100 MW PV	Nurabad District of Samarkand Region, 2.5 km to the north of the village Sazagan	29.07.2023	39.57559	66.74406	756	modified (Fallow lands)	20-30	24	0	0

34	100 MW PV	Nurabad District of Samarkand Region, 2 km to the northwest of the village Sazagan	29.07.2023	39.55423	66.69496	742	modified (Arable lands with non-irrigated agricultural crops)	40-50	36	0	0
35	100 MW PV	Nurabad District of Samarkand Region, 1.5 km to the west of the village Sazagan	29.07.2023	39.5462	66.69512	757	modified (Fallow lands)	50-60	47	0	0
36	100 MW PV	Nurabad District of Samarkand Region, 2.3 km to the west of the village Sazagan, Ettitepa Archeologic Heritage site	29.07.2023	39.55146	66.68727	743	semi-natural (Dry grassland)	15-20	54	0	0
37	100 MW PV	Nurabad District of Samarkand Region, 2.8 km to the west of the village Sazagan	29.07.2023	39.54724	66.68084	750	modified (Arable lands with non-irrigated agricultural crops)	50-60	43	0	0
38	100 MW PV	Nurabad District of Samarkand Region, 4 km to the west of the village Sazagan	29.07.2023	39.54687	66.67097	755	modified (Fallow lands)	40-50	67	0	0
39	400 MW PV	Nurabad District of Samarkand Region, 2.3 km to the northwest of the village Koshkuduk	29.07.2023	39.45894	65.9849	385	modified (Fallow lands)	0-10	9	0	0

40	400 MW PV	Nurabad District of Samarkand Region, 3.5 km to the west of the village Koshkuduk	29.07.2023	39.44893	65.96658	392	natural (Dry grassland)	10-15	14	0	0
41	400 MW PV	Nurabad District of Samarkand Region, 2.3 km to the west of the village Koshkuduk	29.07.2023	39.44314	65.97621	400	modified (Fallow lands)	0-10	12	0	0
42	500 MW PV	Nurabad District of Samarkand Region, 5.8 km to the southwest of the village Koshkuduk	29.07.2023	39.41943	65.94493	382	natural (Dry grassland)	10-15	11	0	0
43	500 MW PV	Nurabad District of Samarkand Region, 5 km to the west of the village Koshkuduk	29.07.2023	39.43202	65.94462	384	natural (Dry grassland)	15-20	11	0	0
44	Karakul BESS	Karakul District of Bukhara Region, surroundings of the town Karakul	17.06.2023	39.51688	63.87222	210	natural (sandy desert with psammophytic scrub) + modified (construction site)	20-30	19	0	0
45	70 km OTHL	Nurobod District of Samarkand Region	08.09.2023	39.5656	66.719	745	natural (Dry bed of temporary stream)	20-30	13	0	0
46	70 km OTHL	Nurobod District of Samarkand Region	08.09.2023	39.5615	66.7027	740	natural (Dry grassland) + modified (Arable lands with non-irrigated agricultural crops)	15-20	19	0	0
47	70 km OTHL	Pastdargom District of Samarkand Region, 5 km to the southeast of village Khancharvak	08.09.2023	39.5678	66.6516	725	modified (Vineyard; Boundary-strips, roadsides; Canals and drainage channels)	80-90	45	0	0

48	70 km OTHL	Pastdargom District of Samarkand Region, 3 km to the south of village Khancharvak	08.09.2023	39.5678	66.6134	710	modified (Arable lands with irrigated agricultural crops; Boundary-strips, roadsides; Canals and drainage channels)	70-80	45	0	0
49	70 km OTHL	Pastdargom District of Samarkand Region, 2 km to the south of village Khancharvak	08.09.2023	39.5607	66.5832	707	modified (Fruit garden; Boundary-strips, roadsides)	20-30	32	0	0
50	70 km OTHL	Nurobod District of Samarkand Region, 2.5 km to the northwest of the village Sarikul	08.09.2023	39.5218	66.4648	692	natural (Dry grassland)	Oct-15	10	0	0
51	70 km OTHL	Nurobod District of Samarkand Region, left bank of the canal Moskow	08.09.2023	39.5072	66.4024	600	natural (Dry grassland) + modified (Canal)	0-5	12	0	0
52	70 km OTHL	Nurobod District of Samarkand Region	08.09.2023	39.4927	66.3137	542	natural (Dry grassland)	Oct-15	13	0	0
53	70 km OTHL	Nurobod District of Samarkand Region	08.09.2023	39.4893	66.299	550	natural (Dry grassland)	Oct-15	6	0	0
54	70 km OTHL	Nurobod District of Samarkand Region, 1.5 km to the south of the village Koshkuduk	08.09.2023	39.4145	66.0103	416	natural (Dry grassland)	0-5	7	0	0
55	70 km OTHL	Nurobod District of Samarkand Region, 0.8 km to the southwest of the village Koshkuduk	08.09.2023	39.4229	65.9943	410	natural (Dry grassland)	0-10	7	0	0

Annex E: Check-list of plants for sample plots

Table 3: Check-list of plants recorded on sample plot 01 (41.01202° N, 69.09104° E), Quyi Chirchiq District of Tashkent Region, NE corner of SS Khalka, banks of canal and boundary-strip between the cotton fields

Species	**Life form**	**Height, cm**	**Abundance**		**Phenol. Stage**
			DACFOR	**Braun-Blanquet**	
Alhagi pseudalhagi	perennial	30-40	O	+	Flowering, fruiting
Amaranthus retroflexus	annual	20-25	R	+	Flowering, fruiting
Artemisia annua	annual	40-50	O	+	Flowering, fruiting
Avena fatua	annual	40-50	O	+	dried
Calystegia sepium	Perennial, liana	100-150	R	+	flowering
Centaurea iberica	biennial	20-30	O	+	Flowering, fruiting
Cichorium intybus	perennial	30-40	O	+	flowering
Cirsium vulgare	biennial	50-100	R	+	Flowering, fruiting
Cynanchum acutum ssp. sibiricum	Perennial, liana	100-150	O	+	flowering
Cynodon dactylon	perennial	15-20	C	1	Flowering, fruiting
Cyperus rotundus	perennial	25-30	R	+	Flowering, fruiting
Epilobium hirsutum	perennial	50-100	O	+	Flowering, fruiting
Equisetum arvense	perennial	40-50	F	+	vegetation
Fallopia convolvulus	Annual, liana	100-150	O	+	Flowering, fruiting
Galium karakulense	perennial	30-40	R	+	flowering
Glycyrrhiza glabra	perennial	100-150	C	2	Flowering, fruiting
Gossypium hirsutum	Perennial (annual in culture)	30-40	D	4	Vegetation, flowering
Hordeum murinum subsp. leporinum (Hordeum leporinum)	annual	25-35	F	1	Dried
Hordeum spontaneum	annual	50-100	F	1	dried
Imperata cylindrica	perennial	25-35	F	+	Flowering, fruiting
Lactuca serriola	annual, biennial	50-100	O	+	Flowering, fruiting
Lycopus europaeus	perennial	40-50	R	+	Flowering, fruiting
Lythrum salicaria	perennial	40-50	R	+	flowering
Medicago sativa	perennial	30-40	O	+	Flowering, fruiting
Mentha longifolia var. asiatica	perennial	50-100	O	+	flowering
Morus alba	tree	250-300	R	1	vegetation
Persicaria hydropiper	annual	50-70	O	+	Flowering, fruiting

Persicaria minor	annual	25-40	O	+	Flowering, fruiting
Phragmites australis	perennial	150-200	C	2	Flowering, fruiting
Plantago lanceolata	perennial	15-25	F	+	Flowering, fruiting
Plantago major	perennial	15-25	O	+	Flowering, fruiting
Poacynum lancifolium (Trachomitum lancifolium)	perennial	100-150	O	+	flowering
Polygonum argyrocoleon	annual	25-30	O	+	Flowering, fruiting
Potamogeton nodosus	Perennial, hydrophyte		R	+	Flowering, fruiting
Rhaponticum repens (Acroptilon repens)	perennial	40-50	F	1	Flowering, fruiting
Rumex confertus	perennial	70-100	O	+	Flowering, fruiting
Setaria viridis	annual	15-25	O	+	Flowering, fruiting
Typha angustifolia	perennial	150-180	O	+	fruiting
Typha laxmannii	perennial	100-150	O	+	fruiting
Xanthium spinosum	annual	25-30	O	+	Flowering, fruiting
Xanthium strumarium	annual	25-30	O	+	Flowering, fruiting

Table 4: Check-list of plants recorded on sample plot 02 (40.98328° N, 69.07634° E), Quyi Chirchiq District of Tashkent Region, 3 km to the south of SS Khalka, banks of canal, woodland belts, roadsides and boundary-strips between wheat fields

Species	**Life form**	**Height, cm**	**Abundance**		**Phenol. Stage**
			DACFOR	**Braun-Blanquet**	
Alhagi pseudalhagi	perennial	30-40	F	1	Flowering, fruiting
Alisma plantago-aquatica	perennial	30-40	R	+	Flowering, fruiting
Artemisia annua	annual	40-50	O	+	Flowering, fruiting
Avena fatua	annual	40-50	O	+	dried
Bolboschoenus glaucus	perennial	40-50	R	+	Flowering, fruiting
Bromus scoparius	annual	20-30	O	+	dried
Capparis spinosa	perennial	30-40	O	+	Flowering, fruiting
Centaurea iberica	biennial	20-30	F	1	Flowering, fruiting
Cichorium intybus	perennial	30-40	F	+	flowering
Cirsium vulgare	biennial	50-100	C	+	Flowering, fruiting
Clematis orientalis	Perennial, liana	100-150	R	+	Flowering, fruiting
Convolvulus arvensis	Perennial, liana	10-15	O	+	flowering

Cynanchum acutum ssp. sibiricum	Perennial, liana	100-150	R	+	flowering
Cynodon dactylon	perennial	15-20	F	1	Flowering, fruiting
Cyperus rotundus	perennial	25-30	R	+	Flowering, fruiting
Elaeagnus andustifolia	tree	250-300	R	1	fruiting
Elymus repens	perennial	30-40	O	+	fruiting
Epilobium hirsutum	perennial	50-100	O	+	Flowering, fruiting
Equisetum arvense	perennial	40-50	O	+	vegetation
Galium humifusum	perennial	25-30	O	+	Flowering, fruiting
Glycyrrhiza glabra	perennial	100-150	O	+	Flowering, fruiting
Hordeum murinum subsp. leporinum (Hordeum leporinum)	annual	25-35	F	1	dried
Karelinia caspia	perennial	70-100	O	+	fruiting
Lactuca serriola	annual, biennial	50-100	O	+	Flowering, fruiting
Lepidium latifolium	perennial	40-50	O	+	fruiting
Lycopus europaeus	perennial	40-50	R	+	Flowering, fruiting
Malus domestica	tree	250-300	R	1	fruiting
Medicago sativa	perennial	30-40	R	+	Flowering, fruiting
Mentha longifolia var. asiatica	perennial	50-100	O	+	flowering
Morus alba	tree	250-300	O	1	vegetation
Onopordum acanthium	biennial	100-120	O	+	flowering
Persicaria hydropiper	annual	50-70	R	+	Flowering, fruiting
Persicaria minor	annual	25-40	R	+	Flowering, fruiting
Phragmites australis	perennial	150-200	C	2	Flowering, fruiting
Plantago lanceolata	perennial	15-25	F	+	Flowering, fruiting
Plantago major	perennial	15-25	O	+	Flowering, fruiting
Polygonum argyrocoleon	annual	25-30	O	+	Flowering, fruiting
Populus afghanica	tree	6-7 m	O	2	vegetation
Potamogeton nodosus	Perennial, hydrophyte		R	+	Flowering, fruiting
Rhaponticum repens (Acroptilon repens)	perennial	40-50	O	+	Flowering, fruiting
Rumex confertus	perennial	70-100	R	+	Flowering, fruiting
Sisymbrium altissimum	annual	30-40	F	+	dried
Triticum aestivum	annual	30-40	O	+	dried
Typha angustifolia	perennial	150-180	O	+	fruiting
Typha laxmannii	perennial	100-150	O	+	fruiting
Ulmus pumila	tree	5-6 m	O	2	vegetation
Verbena officinalis	perennial	30-35	R	+	Flowering
Xanthium spinosum	annual	25-30	F	1	Flowering, fruiting

Xanthium strumarium	annual	25-30	R	+	Flowering, fruiting

Table 5: Check-list of plants recorded on sample plot 03 (40.84008° N, 68.86496° E), Quyi Chirchiq District of Tashkent Region, between villages Dustobod and Qiz-Ona, 27 km to the south of SS Khalka, banks of canal, woodland belts, roadsides and boundary-strips between wheat, cotton and peanut fields

Species	**Life form**	**Height, cm**	**Abundance**		**Phenol. Stage**
			DACFOR	**Braun-Blanquet**	
Alhagi pseudalhagi	perennial	30-40	F	1	Flowering, fruiting
Artemisia serotina	perennial	30-40	F	1	vegetation
Avena fatua	annual	40-50	O	+	dried
Bromus scoparius	annual	20-30	O	+	dried
Bromus tectorum	annual	15-20	O	+	dried
Capparis spinosa	perennial	30-40	O	+	Flowering, fruiting
Caragana halodendron	shrub	100-150	F	1	fruiting
Carthamus lanatus subsp. turkestanicus	annual	50-70	O	+	fruiting
Centaurea iberica	biennial	20-30	F	+	Flowering, fruiting
Cichorium intybus	perennial	30-40	R	+	flowering
Cirsium vulgare	biennial	50-100	R	+	Flowering, fruiting
Clematis orientalis	Perennial, liana	100-150	R	+	Flowering, fruiting
Conium maculatum	annual, biennial	100-150	R	+	Flowering, fruiting
Convolvulus arvensis	Perennial, liana	10-15	O	+	flowering
Cynanchum acutum ssp. sibiricum	Perennial, liana	100-150	R	+	flowering
Cynodon dactylon	perennial	15-20	C	2	Flowering, fruiting
Daucus carota	biennial	30-40	O	+	Flowering, fruiting
Elymus repens	perennial	30-40	F	+	fruiting
Fallopia convolvulus	Annual, liana	70-100	R	+	Flowering, fruiting
Galium humifusum	perennial	25-30	O	+	Flowering, fruiting
Glycyrrhiza glabra	perennial	100-150	O	+	Flowering, fruiting
Hordeum murinum subsp. leporinum (Hordeum leporinum)	annual	25-35	F	1	dried
Hordeum spontaneum	annual	50-100	F	1	dried
Karelinia caspia	perennial	50-70	R	+	fruiting
Lactuca serriola	annual, biennial	50-100	O	+	Flowering, fruiting
Lepidium latifolium	perennial	40-50	O	+	fruiting
Lotus krylovii	perennial	10-15	R	+	Flowering, fruiting
Medicago sativa	perennial	30-40	R	+	Flowering, fruiting

Mentha longifolia var. asiatica	perennial	50-100	O	+	flowering
Morus alba	tree	250-300	R	1	vegetation
Persicaria minor	annual	25-40	R	+	Flowering, fruiting
Phragmites australis	perennial	100-150	O	1	Flowering, fruiting
Plantago lanceolata	perennial	15-25	F	+	Flowering, fruiting
Plantago major	perennial	15-25	O	+	Flowering, fruiting
Poa bulbosa	perennial	20-25	F	+	dried
Poacynum lancifolium (Trachomitum lancifolium)	perennial	100-150	O	+	flowering
Populus afghanica	tree	6-7 m	O	2	vegetation
Rhaponticum repens (Acroptilon repens)	perennial	30-40	R	+	Flowering, fruiting
Salix excelsa	tree	5-6 m	R	1	vegetation
Sisymbrium altissimum	annual	30-40	F	+	dried
Sonchus palustris	perennial	50-70	R	+	Flowering, fruiting
Tripidium ravennae (Erianthus ravennae)	perennial	200-220	O	1	Flowering, fruiting
Typha angustifolia	perennial	100-150	O	1	fruiting
Ulmus pumila	tree	5-6 m	R	+	vegetation
Verbena officinalis	perennial	30-35	R	+	Flowering
Xanthium spinosum	annual	25-30	O	+	Flowering, fruiting
Xanthium strumarium	annual	25-30	R	+	Flowering, fruiting

Table 6: Check-list of plants recorded on sample plot 04 (40.81907° N, 68.82596° E), Quyi Chirchiq District of Tashkent Region, right bank of Syrdarya River near the village Qiz-Ona

Species	**Life form**	**Height, cm**	**Abundance**		**Phenol. Stage**
			DACFOR	**Braun-Blanquet**	
Alhagi pseudalhagi	perennial	30-40	C	2	Flowering, fruiting
Amaranthus retroflexus	annual	20-25	R	+	Flowering, fruiting
Artemisia tournefortiana	annual	50-70	O	+	Flowering, fruiting
Capparis spinosa	perennial	30-40	O	+	Flowering, fruiting
Capsella bursa-pastoris	annual	25-30	O	+	dried
Caragana halodendron	shrub	100-150	R	+	fruiting
Carthamus lanatus subsp. turkestanicus	annual	50-70	F	+	fruiting
Centaurea iberica	biennial	20-30	O	+	Flowering, fruiting
Chenopodium album	annual	50-70	O	+	Flowering, fruiting
Cichorium intybus	perennial	30-40	O	+	flowering
Cirsium vulgare	biennial	50-100	O	+	Flowering, fruiting

Cynanchum acutum ssp. sibiricum	Perennial, liana	100-150	R	+	flowering
Cynodon dactylon	perennial	15-20	F	1	Flowering, fruiting
Cyperus rotundus	perennial	25-30	R	+	Flowering, fruiting
Epilobium hirsutum	perennial	50-100	R	+	Flowering, fruiting
Equisetum arvense	perennial	30-40	O	+	vegetation
Fallopia convolvulus	Annual, liana	100-150	R	+	Flowering, fruiting
Glycyrrhiza glabra	perennial	50-70	R	+	Flowering, fruiting
Heliotropium ellipticum	annual	25-30	R	+	Flowering, fruiting
Hordeum murinum subsp. leporinum (Hordeum leporinum)	annual	25-35	F	1	dried
Hordeum spontaneum	annual	50-100	O	+	dried
Karelinia caspia	perennial	50-70	O	+	fruiting
Lactuca serriola	annual, biennial	50-100	O	+	Flowering, fruiting
Lycium dasystemum	shrub	50-100	O	1	Flowering, fruiting
Marsilea quadrifolia	Perennial, hydrophyte	10-15	A	2	vegetation
Mentha longifolia var. asiatica	perennial	50-100	O	+	flowering
Myriophyllum spicatum	Perennial, hydrophyte	10-15	F	1	Vegetation, flowering
Myriophyllum verticillatum	Perennial, hydrophyte	10-15	O	+	Vegetation, flowering
Paspalum distichum	perennial	15-25	A	3	flowering
Phragmites australis	perennial	70-100	O	1	Flowering, fruiting
Plantago lanceolata	perennial	15-25	F	1	Flowering, fruiting
Plantago major	perennial	15-25	F	1	Flowering, fruiting
Poacynum lancifolium (Trachomitum lancifolium)	perennial	100-150	O	+	flowering
Polygonum argyrocoleon	annual	25-30	O	+	Flowering, fruiting
Potamogeton perfoliatus	Perennial, hydrophyte		F	1	Flowering, fruiting
Rhaponticum repens (Acroptilon repens)	perennial	40-50	O	+	Flowering, fruiting
Setaria viridis	annual	15-25	F	+	Flowering, fruiting
Sonchus palustris	perennial	50-70	R	+	Flowering, fruiting
Tamarix ramosissima	shrub	150-180	O	1	flowering
Typha angustifolia	perennial	100-150	O	+	vegetation
Xanthium spinosum	annual	25-30	C	2	Flowering, fruiting
Xanthium strumarium	annual	25-30	F	1	Flowering, fruiting

Table 7: Check-list of plants recorded for riparian scrub on sample plot 05 (40.81739° N, 68.82465° E), Syrdarya District of Syrdarya Region, left bank of Syrdarya River

Species	**Life form**	**Height, cm**	**Abundance**		**Phenol. Stage**
			DACFOR	**Braun-Blanquet**	
Aegilops triuncialis	annual	20-30	O	+	dried
Alhagi pseudalhagi	perennial	30-40	F	1	Flowering, fruiting
Capparis spinosa	perennial	30-40	R	+	Flowering, fruiting
Caragana halodendron	shrub	100-150	O	+	fruiting
Carthamus lanatus subsp. turkestanicus	annual	50-70	O	+	fruiting
Centaurea iberica	biennial	20-30	F	1	Flowering, fruiting
Cichorium intybus	perennial	30-40	R	+	flowering
Cirsium vulgare	biennial	50-100	R	+	Flowering, fruiting
Convolvulus arvensis	Perennial, liana	10-15	O	+	flowering
Cynanchum acutum ssp. sibiricum	Perennial, liana	100-150	R	+	flowering
Cynodon dactylon	perennial	15-20	C	2	Flowering, fruiting
Dodartia orientalis	perennial	30-40	O	+	vegetation
Elaeagnus angustifolia	tree	250-300	O	1	vegetation
Equisetum arvense	perennial	30-40	R	+	vegetation
Fallopia convolvulus	Annual, liana	100-150	O	+	Flowering, fruiting
Glycyrrhiza glabra	perennial	50-70	O	+	Flowering, fruiting
Heliotropium ellipticum	annual	25-30	O	+	Flowering, fruiting
Hordeum murinum subsp. leporinum (Hordeum leporinum)	annual	25-35	F	1	dried
Hordeum spontaneum	annual	50-100	F	1	dried
Karelinia caspia	perennial	50-70	O	+	fruiting
Lactuca serriola	annual, biennial	50-100	O	+	Flowering, fruiting
Lycium dasystemum	shrub	50-100	O	1	Flowering, fruiting
Papaver pavoninum	annual	15-20	O	+	dried
Peganum harmala	perennial	25-35	R	+	fruiting
Phragmites australis	perennial	70-100	O	1	Flowering, fruiting
Plantago lanceolata	perennial	15-25	O	+	Flowering, fruiting
Plantago major	perennial	15-25	O	+	Flowering, fruiting
Poa bulbosa	perennial	25-30	O	+	dried
Poacynum lancifolium (Trachomitum lancifolium)	perennial	100-150	O	+	flowering
Polygonum aviculare	Annual, perennial	10-15	O	+	Flowering, fruiting
Populus pruinosa	tree	6-7 m	O	1	vegetation

Rhaponticum repens (Acroptilon repens)	perennial	40-50	O	+	Flowering, fruiting
Sisymbrium altissimum	annual	30-40	F	+	dried
Tamarix ramosissima	shrub	150-180	C	3	flowering
Torilis arvensis	annual	15-20	O	+	dried
Tribulus terrestris	annual	10-15	O	+	Flowering, fruiting
Tripidium ravennae (Erianthus ravennae)	perennial	200-220	R	+	Flowering, fruiting
Typha angustifolia	perennial	100-150	O	+	vegetation
Verbascum blattaria	biennial	30-40	R	+	Flowering, fruiting
Xanthium spinosum	annual	25-30	F	1	Flowering, fruiting
Xanthium strumarium	annual	25-30	O	+	Flowering, fruiting

Table 8: Check-list of plants recorded on sample plot 06 (40.80202° N, 68.79952° E), Syrdarya District of Syrdarya Region, banks of canal and roadsides between rice fields

Species	**Life form**	**Height, cm**	**Abundance**		**Phenol. Stage**
			DACFOR	**Braun-Blanquet**	
Alhagi pseudalhagi	perennial	30-40	O	+	Flowering, fruiting
Artemisia annua	annual	40-50	O	+	Flowering, fruiting
Avena fatua	annual	40-50	O	+	dried
Bolboschoenus maritimus	perennial	40-50	R	+	Flowering, fruiting
Bromus scoparius	annual	20-30	O	+	dried
Bromus tectorum	annual	15-20	O	+	dried
Capparis spinosa	perennial	30-40	R	+	Flowering, fruiting
Caragana halodendron	shrub	100-150	R	+	fruiting
Carex muricata	perennial	30-40	R	+	fruiting
Carthamus lanatus subsp. turkestanicus	annual	50-70	O	+	fruiting
Centaurea iberica	biennial	20-30	O	+	Flowering, fruiting
Cichorium intybus	perennial	30-40	O	+	flowering
Cirsium vulgare	biennial	50-100	O	+	Flowering, fruiting
Conium maculatum	annual, biennial	100-150	R	+	Flowering, fruiting
Convolvulus arvensis	Perennial, liana	10-15	O	+	flowering
Cynanchum acutum ssp. sibiricum	Perennial, liana	100-150	R	+	flowering
Cynodon dactylon	perennial	15-20	A	2	Flowering, fruiting
Dodartia orientalis	perennial	30-40	R	+	vegetation
Elaeagnus angustifolia	tree	200-250	O	1	vegetation
Galium humifusum	perennial	25-30	R	+	Flowering, fruiting

Glycyrrhiza glabra	perennial	100-150	F	1	Flowering, fruiting
Hordeum murinum subsp. leporinum (Hordeum leporinum)	annual	25-35	C	2	dried
Hordeum spontaneum	annual	50-100	O	+	dried
Karelinia caspia	perennial	50-70	O	+	fruiting
Lactuca serriola	annual, biennial	50-100	R	+	Flowering, fruiting
Lepidium draba	perennial	25-30	O	+	fruiting
Lepidium latifolium	perennial	40-50	R	+	fruiting
Mentha longifolia var. asiatica	perennial	50-100	R	+	flowering
Persicaria minor	annual	25-40	R	+	Flowering, fruiting
Phragmites australis	perennial	100-150	A	3	Flowering, fruiting
Plantago lanceolata	perennial	15-25	O	+	Flowering, fruiting
Plantago major	perennial	15-25	O	+	Flowering, fruiting
Poa bulbosa	perennial	20-25	F	+	dried
Rumex conglomeratus	perennial	50-70	R	+	fruiting
Sisymbrium altissimum	annual	30-40	O	+	dried
Sonchus palustris	perennial	50-70	R	+	Flowering, fruiting
Tamarix ramosissima	shrub	150-180	F	2	flowering
Typha angustifolia	perennial	100-150	O	1	fruiting
Verbascum blattaria	biennial	30-40	O	+	Flowering, fruiting
Verbena officinalis	perennial	30-35	R	+	Flowering
Xanthium spinosum	annual	25-30	O	+	Flowering, fruiting
Xanthium strumarium	annual	25-30	R	+	Flowering, fruiting
Zygophyllum oxianum	perennial	30-35	R	+	Flowering, fruiting

Table 9: Check-list of plants recorded on sample plot 07 (40.78989° N, 68.75629° E) for salt tree-Zygophyllum-camel thorn-grass community, Syrdarya District of Syrdarya Region, banks of drainage channel, between cotton fields

Species	**Life form**	**Height, cm**	**Abundance**		**Phenol. Stage**
			DACFOR	**Braun-Blanquet**	
Alhagi pseudalhagi	perennial	30-40	C	2	Flowering, fruiting
Artemisia annua	annual	40-50	O	+	Flowering, fruiting
Avena fatua	annual	40-50	R	+	dried
Bolboschoenus maritimus	perennial	40-50	O	+	Flowering, fruiting
Bromus scoparius	annual	20-30	F	+	dried
Bromus tectorum	annual	15-20	O	+	dried
Capparis spinosa	perennial	30-40	R	+	Flowering, fruiting
Caragana halodendron	shrub	100-150	F	1	fruiting

Carthamus lanatus subsp. turkestanicus	annual	50-70	O	+	fruiting
Centaurea iberica	biennial	20-30	O	+	Flowering, fruiting
Cichorium intybus	perennial	30-40	R	+	flowering
Cirsium vulgare	biennial	50-100	O	+	Flowering, fruiting
Convolvulus arvensis	Perennial, liana	10-15	O	+	flowering
Cynanchum acutum ssp. sibiricum	Perennial, liana	100-150	O	+	flowering
Cynodon dactylon	perennial	15-20	A	2	Flowering, fruiting
Dodartia orientalis	perennial	30-40	R	+	vegetation
Elaeagnus angustifolia	tree	200-250	O	1	vegetation
Glycyrrhiza glabra	perennial	100-150	F	1	Flowering, fruiting
Hordeum marinum subsp. gussoneanum	annual	20-25	F	+	dried
Hordeum murinum subsp. leporinum (Hordeum leporinum)	annual	25-35	F	1	dried
Karelinia caspia	perennial	50-70	O	+	fruiting
Lactuca serriola	annual, biennial	50-100	R	+	Flowering, fruiting
Lepidium draba	perennial	25-30	O	+	fruiting
Lepidium latifolium	perennial	40-50	O	+	fruiting
Melilotus officinalis	perennial	40-50	R	+	fruiting
Mentha longifolia var. asiatica	perennial	50-100	O	+	flowering
Morus alba	tree	250-300	R	1	vegetation
Persicaria minor	annual	25-40	R	+	Flowering, fruiting
Phragmites australis	perennial	150-200	A	3	Flowering, fruiting
Plantago lanceolata	perennial	15-25	F	+	Flowering, fruiting
Plantago major	perennial	15-25	O	+	Flowering, fruiting
Poa bulbosa	perennial	20-25	O	+	dried
Rumex conglomeratus	perennial	50-70	O	+	fruiting
Sisymbrium altissimum	annual	30-40	O	+	dried
Tamarix ramosissima	shrub	150-180	O	1	flowering
Trifolium repens	perennial	5-10	O	+	Flowering, fruiting
Tripidium ravennae (Erianthus ravennae)	perennial	200-220	R	+	Flowering, fruiting
Typha angustifolia	perennial	150-180	F	1	fruiting
Xanthium spinosum	annual	25-30	O	+	Flowering, fruiting
Xanthium strumarium	annual	25-30	R	+	Flowering, fruiting
Zygophyllum oxianum	perennial	30-35	F	1	Flowering, fruiting

Table 10: Check-list of plants recorded on sample plot 08 (40.78442° N, 68.68° E), Syrdarya District of Syrdarya Region, woodland belt and small irrigated alfa-alfa fields between the railway and highway M34, between towns Syrdarya and Bakht

Species	**Life form**	**Height, cm**	**Abundance**		**Phenol. Stage**
			DACFOR	**Braun-Blanquet**	
Alhagi pseudalhagi	perennial	30-40	O	+	Flowering, fruiting
Centaurea iberica	biennial	20-30	O	+	Flowering, fruiting
Cichorium intybus	perennial	30-40	O	+	flowering
Convolvulus arvensis	Perennial, liana	10-15	O	+	flowering
Cynodon dactylon	perennial	15-20	A	2	Flowering, fruiting
Fraxinus angustifolia subsp. syriaca	tree	3-6 m	O	1	vegetation
Hordeum murinum subsp. leporinum (Hordeum leporinum)	annual	25-35	A	3	fruiting
Lactuca serriola	annual, biennial	50-100	F	+	Flowering, fruiting
Medicago sativa	perennial	30-40	O	+	Flowering, fruiting
Phragmites australis	perennial	50-70	O	1	vegetation
Plantago lanceolata	perennial	15-25	O	+	Flowering, fruiting
Poa bulbosa	perennial	20-25	O	+	dried
Poacynum lancifolium (Trachomitum lancifolium)	perennial	70-100	R	+	flowering
Polygonum argyrocoleon	annual	25-30	O	+	Flowering, fruiting
Polygonum aviculare	Annual, perennial	10-15	O	+	Flowering, fruiting
Populus alba	tree	4-7 m	O	2	vegetation
Rhaponticum repens (Acroptilon repens)	perennial	40-50	R	+	Flowering, fruiting
Rumex conglomeratus	perennial	50-70	R	+	Flowering, fruiting
Salix excelsa	tree	2-3 m	R	+	vegetation
Setaria viridis	annual	15-25	O	+	Flowering, fruiting
Sorghum halepense	perennial	40-50	O	+	vegetation
Trifolium repens	perennial	5-10	O	+	Flowering, fruiting
Ulmus pumila	tree	7-8 m	O	2	vegetation
Xanthium spinosum	annual	25-30	R	+	Flowering, fruiting
Xanthium strumarium	annual	25-30	R	+	Flowering, fruiting

Table 11: Check-list of plants recorded on sample plot 09 (40.5548° N, 68.61285° E) Mirzaabad District of Syrdarya Region, drainage channel with camel thorn-reed-liquorice community, between irrigated wheat and cotton fields and highway

Species	**Life form**		**Abundance**	

		Height, cm	DACFOR	Braun-Blanquet	Phenol. Stage
Aegilops triuncialis	annual	20-30	O	+	dried
Aeluropus littoralis	perennial	15-20	O	+	fruiting
Alhagi pseudalhagi	perennial	30-40	A	2	Flowering, fruiting
Atriplex micrantha	annual	40-50	R	+	Flowering, fruiting
Avena fatua	annual	40-50	R	+	dried
Bolboschoenus maritimus	perennial	40-50	O	+	Flowering, fruiting
Bromus danthoniae	annual	12-15	O	+	dried
Bromus scoparius	annual	20-30	F	+	dried
Bromus tectorum	annual	15-20	F	+	dried
Carthamus lanatus subsp. turkestanicus	annual	50-70	O	+	fruiting
Centaurea iberica	biennial	20-30	O	+	Flowering, fruiting
Cirsium vulgare	biennial	50-100	R	+	Flowering, fruiting
Convolvulus arvensis	Perennial, liana	10-15	O	+	flowering
Cressa cretica	perennial	10-15	O	+	vegetation
Cynanchum acutum ssp. sibiricum	Perennial, liana	100-150	R	+	flowering
Cynodon dactylon	perennial	15-20	F	1	Flowering, fruiting
Descurainia sophia	annual	25-30	F	+	dried
Dodartia orientalis	perennial	30-40	R	+	vegetation
Eremopyrum triticeum	annual	12-15	O	+	dried
Glycyrrhiza glabra	perennial	100-150	A	3	Flowering, fruiting
Hordeum murinum subsp. leporinum (Hordeum leporinum)	annual	25-35	F	1	dried
Karelinia caspia	perennial	50-70	F	1	fruiting
Lactuca serriola	annual, biennial	50-100	O	+	Flowering, fruiting
Lepidium draba	perennial	25-30	O	+	fruiting
Lepidium latifolium	perennial	40-50	O	+	fruiting
Limonium otolepis	perennial	30-40	C	1	Flowering, fruiting
Morus alba	tree	250-300	R	1	vegetation
Phleum paniculatum	annual	15-20	O	+	dried
Phragmites australis	perennial	100-150	C	2	vegetation
Plantago lanceolata	perennial	15-25	O	+	Flowering, fruiting
Plantago major	perennial	15-25	R	+	Flowering, fruiting
Poa bulbosa	perennial	20-25	O	+	dried
Polypogon monspeliensis	annual	15-20	R	+	Flowering, fruiting
Psylliostachys suworowii	annual	15-25	O	+	dried
Puccinellia distans	perennial	30-40	O	+	fruiting
Rumex conglomeratus	perennial	50-70	R	+	fruiting
Sisymbrium altissimum	annual	30-40	O	+	dried

Sisymbrium loeselii	Annual, biennial	40-50	R	+	fruiting
Tamarix ramosissima	shrub	70-100	O	1	flowering
Tripidium ravennae (Erianthus ravennae)	perennial	200-220	R	+	Flowering, fruiting
Typha angustifolia	perennial	100-150	O	+	fruiting
Xanthium spinosum	annual	25-30	O	+	Flowering, fruiting
Xanthium strumarium	annual	25-30	R	+	Flowering, fruiting
Zygophyllum oxianum	perennial	30-35	O	+	Flowering, fruiting

Table 12: Check-list of plants recorded on sample plot 10 (40.52026° N, 68.45822° E) Mirzaabad District of Syrdarya Region, tamarisk-saltwort-camel thorn community on saline land, reeds along drainage channel and woodland belt, between highway and irrigated wheat fields

Species	**Life form**	**Height, cm**	**Abundance**		**Phenol. Stage**
			DACFOR	**Braun-Blanquet**	
Aeluropus littoralis	perennial	15-20	F	1	fruiting
Alhagi pseudalhagi	perennial	30-40	C	2	Flowering, fruiting
Atriplex micrantha	annual	40-50	O	+	Flowering, fruiting
Avena fatua	annual	40-50	O	+	dried
Bolboschoenus maritimus	perennial	40-50	O	+	Flowering, fruiting
Bromus scoparius	annual	20-30	F	+	Dried
Bromus tectorum	annual	15-20	F	+	Dried
Carduus pycnocephalus	annual	40-50	O	+	Flowering, fruiting
Centaurea iberica	biennial	20-30	O	+	Flowering, fruiting
Cirsium vulgare	biennial	50-100	R	+	Flowering, fruiting
Climacoptera sp.	annual	25-30	F	1	vegetation
Convolvulus arvensis	Perennial, liana	10-15	O	+	flowering
Cressa cretica	perennial	10-15	O	+	vegetation
Cynodon dactylon	perennial	15-20	A	1	Flowering, fruiting
Descurainia sophia	annual	25-30	F	+	dried
Eremopyrum triticeum	annual	12-15	O	+	dried
Fraxinus angustifolia subsp. syriaca	tree	4-6 m	R	1	fruiting
Galium spurium	annual	50-100	O	+	fruiting
Glycyrrhiza glabra	perennial	100-150	F	1	Flowering, fruiting
Halostachys caspica	shrub	100-150	F	1	Flowering
Hordeum murinum subsp. leporinum (Hordeum leporinum)	annual	30-40	A	1	dried
Hordeum spontaneum	annual	50-60	O	+	dried
Karelinia caspia	perennial	50-70	F	1	fruiting
Lactuca serriola	annual, biennial	50-100	O	+	Flowering, fruiting

Lepidium latifolium	perennial	40-50	O	+	fruiting
Limonium otolepis	perennial	30-40	F	1	Flowering, fruiting
Marrubium anisodon	perennial	30-40	R	+	Flowering, fruiting
Morus alba	tree	250-300	R	1	vegetation
Phleum paniculatum	annual	15-20	O	+	dried
Phragmites australis	perennial	100-150	C	2	vegetation
Plantago lanceolata	perennial	15-25	O	+	Flowering, fruiting
Poa bulbosa	perennial	20-25	O	+	dried
Psylliostachys suworowii	annual	15-25	O	+	dried
Rumex conglomeratus	perennial	50-70	R	+	fruiting
Sisymbrium altissimum	annual	30-40	F	+	dried
Stizolophus balsamita	annual	30-40	R	+	fruiting
Suaeda altissima	annual	50-100	F	1	flowering
Tamarix hispida	shrub	150-180	F	2	Vegetation
Tamarix hohenackeri	shrub	150-180	O	1	Flowering
Typha angustifolia	perennial	150-200	F	1	Fruiting
Ulmus pumila	tree	6-7 m	O	2	vegetation
Xanthium spinosum	annual	25-30	O	+	Flowering, fruiting
Zygophyllum oxianum	perennial	30-35	O	+	Flowering, fruiting

Table 13: Check-list of plants recorded on sample plot 11 (40.447° N, 68.24592° E), 360 km OTHL, border Dzhizak and Syrdarya Regions, tamarisk-saltwort-camel thorn community on saline land and reeds along drainage channel, between the highway M39 and irrigated cotton fields

Species	**Life form**	**Height, cm**	**Abundance**		**Phenol. Stage**
			DACFOR	**Braun-Blanquet**	
Aeluropus littoralis	perennial	15-20	F	1	fruiting
Alhagi pseudalhagi	perennial	40-50	A	3	Flowering, fruiting
Atriplex micrantha	annual	40-50	O	+	Flowering, fruiting
Bromus scoparius	annual	20-30	O	+	dried
Bromus tectorum	annual	15-20	O	+	dried
Carduus pycnocephalus	annual	40-50	O	+	Flowering, fruiting
Carthamus lanatus subsp. turkestanicus	annual	50-60	O	+	fruiting
Centaurea iberica	biennial	20-30	O	+	Flowering, fruiting
Cichorium intybus	perennial	30-40	O	+	flowering
Cirsium vulgare	biennial	50-100	R	+	Flowering, fruiting
Climacoptera sp.	annual	25-30	O	+	vegetation
Convolvulus arvensis	Perennial, liana	10-15	R	+	flowering
Cynodon dactylon	perennial	15-20	F	1	Flowering, fruiting

Glycyrrhiza glabra	perennial	100-150	O	+	Flowering, fruiting
Halocharis hispida	annual	20-25	O	+	vegetation
Hordeum murinum subsp. leporinum (Hordeum leporinum)	annual	30-40	F	1	dried
Karelinia caspia	perennial	50-70	F	1	fruiting
Lactuca serriola	annual, biennial	50-100	R	+	Flowering, fruiting
Limonium otolepis	perennial	30-40	R	+	Flowering, fruiting
Onopordum leptolepis	biennial	100-150	O	+	flowering
Phleum paniculatum	annual	12-15	O	+	dried
Phragmites australis	perennial	150-200	A	2	vegetation
Plantago lanceolata	perennial	15-25	O	+	Flowering, fruiting
Platanus orientalis	tree	7-10 m	O	2	vegetation
Poa bulbosa	perennial	20-25	O	+	dried
Populus alba	tree	7-10 m	O	2	vegetation
Sisymbrium altissimum	annual	30-40	R	+	dried
Suaeda altissima	annual	50-100	F	1	flowering
Tamarix hohenackeri	shrub	150-180	O	1	Fruiting
Tamarix ramosissima	shrub	150-180	R	1	Vegetation
Typha angustifolia	perennial	150-200	O	1	Fruiting
Ulmus pumila	tree	7-10 m	O	2	vegetation
Xanthium spinosum	annual	25-30	O	+	Flowering, fruiting
Zygophyllum oxianum	perennial	30-35	R	+	Flowering, fruiting

Table 14: Check-list of plants recorded on sample plot 12 (40.33315° N, 67.92044° E), 360 km OTHL, Pakhtakor District of Dzhizak Region, woodland belt and community of camel thorn, tamarisk and reeds along the canal, between road and irrigated cotton and wheat fields

Species	**Life form**	**Height, cm**	**Abundance**		**Phenol. Stage**
			DACFOR	**Braun-Blanquet**	
Abutilon theophrasti	annual	40-50	R	+	Flowering, fruiting
Aeluropus littoralis	perennial	15-20	O	+	fruiting
Alhagi pseudalhagi	perennial	40-50	A	3	Flowering, fruiting
Artemisia scoparia	biennial	40-50	O	+	flowering
Artemisia tournefortiana	annual	50-70	R	+	Flowering
Atriplex micrantha	annual	40-50	O	+	Flowering, fruiting
Bromus scoparius	annual	20-30	O	+	dried
Carduus pycnocephalus	annual	40-50	R	+	Flowering, fruiting
Carthamus lanatus subsp. turkestanicus	annual	50-60	R	+	fruiting
Centaurea iberica	biennial	20-30	O	+	Flowering, fruiting
Cichorium intybus	perennial	30-40	R	+	flowering
Cirsium vulgare	biennial	50-100	R	+	Flowering, fruiting

Climacoptera sp.	annual	25-30	O	+	vegetation
Convolvulus arvensis	Perennial, liana	10-15	R	+	flowering
Cynanchum acutum ssp. sibiricum	Perennial, liana	100-150	R	+	flowering
Cynodon dactylon	perennial	15-20	F	1	Flowering, fruiting
Elaeagnus andustifolia	tree	250-300	O	1	fruiting
Fraxinus angustifolia subsp. syriaca	tree	4-6 m	O	1	fruiting
Glycyrrhiza glabra	perennial	100-150	O	+	Flowering, fruiting
Halocharis hispida	annual	20-25	O	+	vegetation
Hordeum murinum subsp. leporinum (Hordeum leporinum)	annual	30-40	F	1	dried
Karelinia caspia	perennial	50-70	F	1	fruiting
Lactuca serriola	annual, biennial	50-100	R	+	Flowering, fruiting
Lepidium draba	perennial	25-30	O	+	fruiting
Lepidium latifolium	perennial	40-50	O	+	fruiting
Limonium otolepis	perennial	30-40	R	+	Flowering, fruiting
Mentha longifolia var. asiatica	perennial	50-100	O	+	Flowering, fruiting
Morus alba	tree	3-4 m	O	1	vegetation
Onopordum leptolepis	biennial	70-100	R	+	flowering
Persicaria hydropiper	annual	50-70	O	+	Flowering, fruiting
Persicaria minor	annual	25-40	O	+	Flowering, fruiting
Phleum paniculatum	annual	12-15	O	+	dried
Phragmites australis	perennial	150-200	A	2	vegetation
Plantago lanceolata	perennial	15-25	F	1	fruiting
Plantago major	perennial	10-15	F	1	fruiting
Poa bulbosa	perennial	20-25	O	+	dried
Polygonum aviculare	Annual, perennial	10-15	O	+	Flowering, fruiting
Populus alba	tree	7-10 m	O	2	vegetation
Salix excelsa	tree	7-10 m	O	2	vegetation
Schoenoplectus tabernaemontani	perennial	100-150	R	+	Flowering, fruiting
Sclerochloa dura	annual	5-10	O	+	Flowering, fruiting
Sisymbrium altissimum	annual	30-40	R	+	dried
Sphaerophysa salsula	perennial	30-40	O	+	fruiting
Suaeda altissima	annual	50-100	O	+	flowering
Tamarix hohenackeri	shrub	150-200	O	1	Fruiting
Tamarix ramosissima	shrub	150-200	O	1	Vegetation
Trifolium repens	perennial	5-10	O	+	Flowering, fruiting
Typha angustifolia	perennial	150-200	F	1	Fruiting
Ulmus pumila	tree	7-10 m	O	2	vegetation
Xanthium spinosum	annual	25-30	O	+	Flowering, fruiting

Table 15: Check-list of plants recorded for natural habitat (dry grasslands, caper-ephemeroid-sagebrush community) on sample plot 13 (40.16754° N, 67.694° E), 360 km OTHL, Sharaf Rashidov District of Dzhizak Region, 1.5 km to the west of the village Kuyovboshi, northern piedmonts of Nuratau Range

Species	**Life form**	**Height, cm**	**Abundance**		**Phenol. Stage**
			DACFOR	**Braun-Blanquet**	
Acanthophyllum pungens	perennial	25-30	R	+	fruiting
Alhagi pseudalhagi	perennial	25-30	R	+	Flowering, fruiting
Alyssum desertorum	annual	5-7	R	+	dried
Aphanopleura capillifolia	annual	10-15	O	+	dried
Artemisia sogdiana	subshrub	20-30	A	2	vegetation
Bromus danthoniae	annual	10-15	R	+	dried
Capparis spinosa	perennial	30-40	F	1	flowering
Carex pachystylis	perennial	7-10	A	1	dried
Carthamus oxyacanthus	annual	30-40	R	+	flowering
Centaurea belangeriana	annual, biennial	20-30	R	+	flowering
Ceratocarpus arenarius	annual	15-20	R	+	fruiting
Cousinia resinosa	perennial	30-40	R	+	Flowering, fruiting
Diarthron vesiculosum	annual	15-20	F	+	fruiting
Erodium cicutarium	annual	7-10	R	+	vegetation
Euphorbia chamaesyce	annual	5-7	O	+	Flowering, fruiting
Galium tenuissimum	annual	10-15	O	+	dried
Hordeum murinum subsp. leporinum (Hordeum leporinum)	annual	20-25	O	+	dried
Minuartia meyeri	annual	5-7	O	+	dried
Phlomis thapsoides	perennial	30-40	O	+	fruiting
Poa bulbosa	perennial	15-20	F	+	dried
Taeniatherum caput-medusae	annual	20-30	O	+	dried
Ziziphora tenuior	annual	5-7	O	+	dried

Table 16: Check-list of plants recorded on sample plot 14 (40.1459° N, 67.69066° E), 360 km OTHL, Sharaf Rashidov District of Dzhizak Region, northern slope of Nuratau Range, 3 km to the south of the village Kuyovboshi, xerophytic shrublands, sagebrush-forb-grass-spiny almond community

Species	**Life form**	**Height, cm**	**Abundance**		**Phenol. Stage**
			DACFOR	**Braun-Blanquet**	
Acanthophyllum pungens	perennial	25-30	R	+	fruiting
Aegilops triuncialis	annual	20-30	O	+	dried
Alhagi pseudalhagi	perennial	25-30	R	+	Flowering, fruiting
Alyssum desertorum	annual	5-7	O	+	dried
Arenaria leptoclados	annual	10-15	O	+	dried
Artemisia sogdiana	subshrub	20-30	C	1	vegetation
Astragalus bactrianus	subshrub	25-30	R	+	fruiting
Bromus danthoniae	annual	10-15	O	+	dried
Bromus tectorum	annual	15-20	O	+	dried
Capparis spinosa	perennial	30-40	R	+	flowering
Carex pachystylis	perennial	7-10	F	+	dried
Centaurea virgata subsp. squarrosa	perennial	30-40	O	+	flowering

Chondrilla juncea	perennial	30-40	R	+	Flowering, fruiting
Cousinia radians	biennial	30-40	O	+	Flowering, fruiting
Dianthus helenae	perennial	20-25	O	+	fruiting
Diarthron vesiculosum	annual	15-20	O	+	fruiting
Erodium cicutarium	annual	7-10	R	+	vegetation
Euphorbia chamaesyce	annual	5-7	R	+	Flowering, fruiting
Haplophyllum acutifolium	perennial	25-30	R	+	fruiting
Hypericum scabrum	perennial	20-25	R	+	fruiting
Minuartia meyeri	annual	5-7	R	+	dried
Nanophyton saxatile	subshrub	10-15	R	+	vegetation
Phleum paniculatum	annual	12-15	O	+	dried
Phlomis nubilans	perennial	25-30	O	+	Flowering, fruiting
Picnomon acarna	annual	25-30	O	+	Flowering, fruiting
Poa bulbosa	perennial	15-20	F	+	dried
Prunus (Amygdalus) spinosissima	shrub	100-150	C	2	fruiting
Taeniatherum caput-medusae	annual	20-30	F	+	dried
Thinopyrum intermedium (Elytrigia trichophora)	perennial	50-60	O	+	fruiting
Ziziphora clinopodioides	perennial	20-25	O	+	fruiting
Ziziphora tenuior	annual	5-7	R	+	dried

Table 17: Check-list of plants recorded on sample plot 15 (40.14371° N, 67.69029° E), 360 km OTHL, Sharaf Rashidov District of Dzhizak Region, crest of Nuratau Range, non-irrigated fallow land with secondary forb-grass community

Species	**Life form**	**Height, cm**	**Abundance**		**Phenol. Stage**
			DACFOR	**Braun-Blanquet**	
Achillea arabica (Achillea biebersteinii)	perennial	20-25	F	1	fruiting
Aegilops cylindrica	annual	20-30	O	+	dried
Aegilops triuncialis	annual	20-30	F	+	dried
Alhagi pseudalhagi	perennial	30-40	R	+	Flowering, fruiting
Alyssum desertorum	annual	5-7	F	+	dried
Arenaria leptoclados	annual	10-15	F	+	dried
Artemisia sogdiana	subshrub	30-40	O	1	vegetation
Astragalus filicaulis	annual	20-25	O	+	dried
Bromus danthoniae	annual	10-15	O	+	dried
Bromus scoparius	annual	20-25	F	+	dried
Bromus tectorum	annual	20-25	O	+	dried
Capparis spinosa	perennial	30-40	F	1	flowering
Carex pachystylis	perennial	7-10	A	1	dried
Carthamus oxyacanthus	annual	30-40	O	+	flowering
Carthamus lanatus subsp. turkestanicus	annual	40-50	O	+	fruiting
Centaurea belangeriana	annual, biennial	30-40	O	+	flowering
Centaurea virgata subsp. squarrosa	perennial	30-40	F	1	flowering
Chondrilla juncea	perennial	30-40	R	+	Flowering, fruiting

Convolvulus arvensis	Perennial, liana	15-20	O	+	Flowering, fruiting
Convolvulus pseudocantabrica	perennial	30-40	O	+	fruiting
Cousinia microcarpa	biennial	30-40	O	+	Flowering, fruiting
Cousinia radians	biennial	30-40	F	+	Flowering, fruiting
Cynodon dactylon	perennial	15-20	O	+	Flowering, fruiting
Dianthus helenae	perennial	20-25	O	+	fruiting
Diarthron vesiculosum	annual	15-20	O	+	fruiting
Echinophora sibthorpiana	biennial	25-30	F	1	flowering
Echium biebersteinii	biennial	30-40	R	+	fruiting
Eremodaucus lehmannii	annual	30-40	O	+	dried
Erodium cicutarium	annual	7-10	R	+	vegetation
Garhadiolus papposus	annua	15-20	O	+	dried
Handelia trichophylla	perennial	60-70	R	+	fruiting
Haplophyllum latifolium	perennial	30-40	O	+	fruiting
Haplophyllum acutifolium	perennial	30-40	F	1	fruiting
Hordeum spontaneum	annual	30-40	O	+	dried
Hordeum vulgare	annual	40-50	F	1	dried
Koelpinia linearis	annual	15-20	O	+	dried
Lomelosia songarica (Scabiosa songarica)	perennial	30-40	R	+	fruiting
Marrubium anisodon	perennial	30-40	R	+	Flowering, fruiting
Papaver pavoninum	annual	20-25	O	+	dried
Phleum paniculatum	annual	12-15	O	+	dried
Phlomis thapsoides	perennial	25-30	F	1	fruiting
Poa bulbosa	perennial	25-30	C	1	dried
Reseda lutea	perennial	30-40	R	+	fruiting
Rhaponticum repens (Acroptilon repens)	perennial	30-40	O	+	fruiting
Rochelia cardiosepala	annual	15-20	O	+	dried
Roemeria refracta	annual	20-25	O	+	dried
Salvia macrosiphon	perennial	30-40	R	+	fruiting
Sisymbrium altissimum	annual	30-40	F	1	dried
Stizolophus balsamita	annual	30-40	R	+	fruiting
Taeniatherum caput-medusae	annual	25-30	F	+	dried
Thinopyrum intermedium (Elytrigia trichophora)	perennial	60-70	A	2	fruiting
Triticum aestivum	annual	30-40	O	+	dried
Turgenia latifolia	annual	25-30	O	+	dried

Table 18: Check-list of plants recorded on sample plot 16 (40.07431° N, 67.59559° E), 360 km OTHL, Gallaral District of Dzhizak Region, surroundings of the village Chayanly, intensively grazed wet grassland in the valley of temporary stream on the southern slope of Nuratau Range

Species	**Life form**	**Height, cm**	**Abundance**		**Phenol. Stage**
			DACFOR	**Braun-Blanquet**	
Alhagi pseudalhagi	perennial	25-30	O	+	Flowering, fruiting
Carthamus lanatus subsp. turkestanicus	annual	30-40	O	+	fruiting

Centaurea iberica	biennial	20-30	C	2	flowering
Cichorium intybus	perennial	25-30	R	+	flowering
Convolvulus arvensis	Perennial, liana	10-15	O	+	Flowering, fruiting
Cousinia microcarpa	biennial	25-30	O	+	Flowering, fruiting
Cynodon dactylon	perennial	10-15	D	3	Flowering, fruiting
Diarthron vesiculosum	annual	15-20	O	+	fruiting
Erodium cicutarium	annual	7-10	O	+	vegetation
Euphorbia chamaesyce	annual	5-7	O	+	Flowering, fruiting
Galium humifusum	perennial	5-10	R	+	Flowering, fruiting
Hordeum murinum subsp. leporinum (Hordeum leporinum)	annual	20-25	O	+	dried
Onopordum leptolepis	biennial	40-50	R	+	flowering
Peganum harmala	perennial	25-30	O	+	fruiting
Phleum paniculatum	annual	12-15	R	+	dried
Picnomon acarna	annual	30-40	O	+	Flowering, fruiting
Plantago lanceolata	perennial	10-15	O	+	fruiting
Trifolium fragiferum	perennial	5-10	C	1	Flowering, fruiting
Trifolium repens	perennial	5-10	R	+	Flowering, fruiting
Xanthium spinosum	annual	25-30	F	1	Flowering, fruiting

Table 19: Check-list of plants recorded on sample plot 17 (40.06872° N, 67.56588° E), 360 km OTHL, Gallaral District of Dzhizak Region, woodland belt among non-irrigated safflower fields on the southern slope of Nuratau Range

Species	**Life form**	**Height, cm**	**Abundance**		**Phenol. Stage**
			DACFOR	**Braun-Blanquet**	
Achillea wilhelmsii (Achillea kermanica)	perennial	20-25	O	+	fruiting
Aegilops cylindrica	annual	25-30	F	+	dried
Aegilops triuncialis	annual	25-30	F	+	dried
Alhagi pseudalhagi	perennial	25-30	F	1	Flowering, fruiting
Astragalus filicaulis	annual	15-20	F	+	dried
Bromus danthoniae	annual	10-15	O	+	dried
Bromus scoparius	annual	15-20	O	+	dried
Bromus tectorum	annual	15-20	O	+	dried
Capparis spinosa	perennial	30-40	R	+	flowering
Carex pachystylis	perennial	7-10	O	+	dried
Carthamus oxyacanthus	annual	30-40	O	+	flowering
Carthamus tinctorius	annual	30-40	A	2	Flowering, fruiting
Carthamus lanatus subsp. turkestanicus	annual	50-60	F	1	fruiting
Centaurea belangeriana	annual, biennial	20-25	F	1	flowering
Centaurea iberica	biennial	30-40	F	1	flowering

Centaurea virgata subsp. squarrosa	perennial	30-40	O	+	flowering
Ceratocarpus arenarius	annual	20-25	R	+	fruiting
Chondrilla juncea	perennial	30-40	R	+	Flowering, fruiting
Chrozophora tinctoria	annual	20-25	O	+	fruiting
Cichorium intybus	perennial	30-40	R	+	Flowering, fruiting
Convolvulus arvensis	Perennial, liana	10-15	O	+	Flowering, fruiting
Convolvulus pseudocantabrica	perennial	30-40	O	+	fruiting
Cousinia microcarpa	biennial	25-30	O	+	Flowering, fruiting
Cousinia olgae	biennial	25-30	O	+	Flowering, fruiting
Cousinia radians	biennial	30-40	F	+	Flowering, fruiting
Cousinia resinosa	perennial	30-40	R	+	Flowering, fruiting
Cullen drupaceum (Psoralea drupacea)	perennial	40-50	R	+	Flowering, fruiting
Cynodon dactylon	perennial	10-15	D	3	Flowering, fruiting
Diarthron vesiculosum	annual	15-20	O	+	fruiting
Echinophora sibthorpiana	biennial	30-40	O	1	flowering
Echium biebersteinii	biennial	30-40	O	+	fruiting
Eremodaucus lehmannii	annual	30-40	O	+	dried
Erodium cicutarium	annual	7-10	O	+	vegetation
Euphorbia chamaesyce	annual	5-7	O	+	Flowering, fruiting
Fraxinus angustifolia subsp. syriaca	tree	4-5 m	R	1	fruiting
Galium humifusum	perennial	10-15	O	+	Flowering, fruiting
Galium spurium	annual	30-40	O	+	dried
Galium tenuissimum	annual	10-15	O	+	dried
Handelia trichophylla	perennial	40-50	R	+	fruiting
Haplophyllum acutifolium	perennial	30-40	O	+	fruiting
Hordeum murinum subsp. leporinum (Hordeum leporinum)	annual	25-30	F	1	dried
Hordeum vulgare	annual	30-40	O	+	dried
Marrubium anisodon	perennial	30-40	R	+	Flowering, fruiting
Onopordum leptolepis	biennial	50-60	R	+	Flowering, fruiting
Papaver pavoninum	annual	20-25	O	+	dried
Parentucellia flaviflora	annual	7-10	O	+	dried
Peganum harmala	perennial	25-30	O	+	fruiting
Phleum paniculatum	annual	15-20	O	+	dried
Phlomis thapsoides	perennial	30-40	R	+	fruiting
Picnomon acarna	annual	40-50	O	+	Flowering, fruiting
Plantago lanceolata	perennial	10-15	O	+	fruiting
Poa bulbosa	perennial	25-30	F	+	dried
Prunus bucharica (Amygdalus bucharica)	shrub	200-250	R	+	fruiting
Rhaponticum repens (Acroptilon repens)	perennial	30-40	C	1	Flowering, fruiting

Roemeria refracta	annual	20-25	O	+	dried
Sisymbrium altissimum	annual	30-40	O	+	dried
Stizolophus balsamita	annual	30-40	O	+	fruiting
Taeniatherum caput-medusae	annual	25-30	F	+	dried
Trichodesma incanum	perennial	25-30	O	+	Flowering, fruiting
Ulmus pumila	tree	5-7 m	C	3	vegetation
Xanthium spinosum	annual	25-30	O	+	Flowering, fruiting

Table 20: Check-list of plants recorded on sample plot 18 (40.02118° N, 67.53507° E), 360 km OTHL, Gallaral District of Dzhizak Region, forb-grass community and woodland belt along the railway, 3 km to the west of town Gallaaral

Species	**Life form**	**Height, cm**	**Abundance**		**Phenol. Stage**
			DACFOR	**Braun-Blanquet**	
Achillea wilhelmsii (Achillea kermanica)	perennial	20-25	O	+	fruiting
Aegilops cylindrica	annual	20-25	F	+	dried
Aegilops triuncialis	annual	20-25	F	+	dried
Alhagi pseudalhagi	perennial	30-40	C	2	Flowering, fruiting
Astragalus filicaulis	annual	10-15	O	+	dried
Bromus danthoniae	annual	10-15	O	+	dried
Bromus tectorum	annual	15-20	O	+	dried
Capparis spinosa	perennial	30-40	F	2	flowering
Caragana halodendron	shrub	100-150	O	1	fruiting
Carex pachystylis	perennial	7-10	O	+	dried
Carthamus oxyacanthus	annual	25-30	O	+	flowering
Carthamus lanatus subsp. turkestanicus	annual	30-40	O	+	fruiting
Centaurea belangeriana	annual, biennial	20-25	F	1	flowering
Centaurea iberica	biennial	30-40	F	1	flowering
Centaurea virgata subsp. squarrosa	perennial	30-40	O	+	flowering
Ceratocarpus arenarius	annual	15-20	O	+	fruiting
Chondrilla juncea	perennial	30-40	R	+	Flowering, fruiting
Chrozophora tinctoria	annual	20-25	O	+	fruiting
Convolvulus arvensis	Perennial, liana	10-15	O	+	Flowering, fruiting
Convolvulus pseudocantabrica	perennial	30-40	O	+	fruiting
Cousinia microcarpa	biennial	25-30	R	+	Flowering, fruiting
Cousinia radians	biennial	30-40	O	+	Flowering, fruiting
Cousinia resinosa	perennial	25-30	O	+	Flowering, fruiting
Cullen drupaceum (Psoralea drupacea)	perennial	40-50	O	+	Flowering, fruiting
Cynodon dactylon	perennial	10-15	O	+	Flowering, fruiting
Diarthron vesiculosum	annual	15-20	F	+	fruiting
Dodartia orientalis	perennial	30-40	R	+	vegetation
Echinophora sibthorpiana	biennial	30-40	R	+	flowering

Echium biebersteinii	biennial	30-40	R	+	fruiting
Eremodaucus lehmannii	annual	30-40	R	+	dried
Euclidium syriacum	annual	15-20	O	+	dried
Euphorbia chamaesyce	annual	5-7	O	+	Flowering, fruiting
Fraxinus angustifolia subsp. syriaca	tree	3-4 m	R	1	fruiting
Galium humifusum	perennial	10-15	O	+	Flowering, fruiting
Galium tenuissimum	annual	10-15	O	+	dried
Gleditsia caspica	tree	4-5 m	O	1	vegetation
Handelia trichophylla	perennial	40-50	R	+	fruiting
Haplophyllum acutifolium	perennial	30-40	R	+	fruiting
Hordeum murinum subsp. leporinum (Hordeum leporinum)	annual	25-30	C	1	dried
Hordeum spontaneum	annual	30-40	F	1	dried
Koelpinia linearis	annual	12-15	O	+	dried
Marrubium anisodon	perennial	30-40	R	+	Flowering, fruiting
Onopordum leptolepis	biennial	50-60	F	1	Flowering, fruiting
Papaver pavoninum	annual	15-20	O	+	dried
Parentucellia flaviflora	annual	7-10	O	+	dried
Peganum harmala	perennial	25-30	O	+	fruiting
Phleum paniculatum	annual	12-15	O	+	dried
Phlomis thapsoides	perennial	25-30	F	1	fruiting
Phlomoides labiosa	perennial	25-30	R	+	fruiting
Picnomon acarna	annual	30-40	O	+	Flowering, fruiting
Plantago lanceolata	perennial	10-15	O	+	fruiting
Poa bulbosa	perennial	20-25	F	+	dried
Prunus armeniaca (Armeniaca vulgaris)	tree	3-4 m	O	1	vegetation
Prunus bucharica (Amygdalus bucharica)	shrub	200-250	R	+	fruiting
Rhaponticum repens (Acroptilon repens)	perennial	30-40	O	+	Flowering, fruiting
Roemeria refracta	annual	15-20	O	+	dried
Sisymbrium altissimum	annual	25-30	F	+	dried
Sophora pachycarpa	perennial	30-40	O	+	Flowering, fruiting
Stizolophus balsamita	annual	30-40	R	+	fruiting
Strigosella africana	annual	15-20	R	+	dried
Taeniatherum caput-medusae	annual	20-25	F	+	dried
Trichodesma incanum	perennial	25-30	O	+	Flowering, fruiting
Ulmus pumila	tree	4-5 m	F	2	vegetation
Xanthium spinosum	annual	25-30	R	+	Flowering, fruiting

Table 21: Check-list of plants recorded on sample plot 19 (39.98759° N, 67.5331° E), 360 km OTHL, Gallaral District of Dzhizak Region, rainfed wheat fields and boundary-strips with weedy-grass vegetation

Species	**Life form**	**Height, cm**	**Abundance**		**Phenol. Stage**
			DACFOR	**Braun-Blanquet**	

Aegilops cylindrica	annual	25-30	F	+	dried
Aegilops triuncialis	annual	25-30	F	+	dried
Alhagi pseudalhagi	perennial	25-30	O	+	Flowering, fruiting
Astragalus filicaulis	annual	15-20	O	+	dried
Bromus danthoniae	annual	10-15	O	+	dried
Bromus scoparius	annual	15-20	O	+	dried
Capparis spinosa	perennial	30-40	R	+	flowering
Carthamus oxyacanthus	annual	30-40	R	+	flowering
Carthamus lanatus subsp. turkestanicus	annual	50-60	O	+	fruiting
Centaurea belangeriana	annual, biennial	20-25	O	+	flowering
Centaurea benedicta	annual	15-20	R	+	dried
Centaurea depressa	annual	25-30	R	+	dried
Centaurea iberica	biennial	30-40	O	+	flowering
Centaurea solstitialis	annual	30-40	O	+	flowering
Centaurea virgata subsp. squarrosa	perennial	30-40	R	+	flowering
Ceratocarpus arenarius	annual	20-25	R	+	fruiting
Chardinia orientalis	annual	15-20	R	+	dried
Cichorium intybus	perennial	30-40	R	+	Flowering, fruiting
Convolvulus arvensis	Perennial, liana	10-15	O	+	Flowering, fruiting
Cousinia radians	biennial	30-40	O	+	Flowering, fruiting
Cousinia resinosa	perennial	30-40	R	+	Flowering, fruiting
Cullen drupaceum (Psoralea drupacea)	perennial	30-40	R	+	Flowering, fruiting
Cynodon dactylon	perennial	10-15	O	+	Flowering, fruiting
Diarthron vesiculosum	annual	15-20	O	+	fruiting
Eremodaucus lehmannii	annual	30-40	O	+	dried
Handelia trichophylla	perennial	40-50	R	+	fruiting
Hordeum murinum subsp. leporinum (Hordeum leporinum)	annual	25-30	F	1	dried
Hordeum vulgare	annual	30-40	O	+	dried
Lactuca serriola	annual, biennial	50-100	O	+	Flowering, fruiting
Marrubium anisodon	perennial	30-40	R	+	Flowering, fruiting
Onopordum leptolepis	biennial	40-50	O	+	Flowering, fruiting
Papaver pavoninum	annual	20-25	O	+	dried
Phleum paniculatum	annual	15-20	O	+	dried
Picnomon acarna	annual	40-50	O	+	Flowering, fruiting
Plantago lanceolata	perennial	10-15	O	+	fruiting
Poa bulbosa	perennial	25-30	F	+	dried
Rhaponticum repens (Acroptilon repens)	perennial	30-40	O	+	Flowering, fruiting
Roemeria refracta	annual	20-25	O	+	dried
Sisymbrium altissimum	annual	30-40	O	+	dried
Sophora pachycarpa	perennial	30-40	O	+	Flowering, fruiting

Stizolophus balsamita	annual	30-40	R	+	fruiting
Taeniatherum caput-medusae	annual	25-30	R	+	dried
Trichodesma incanum	perennial	25-30	R	+	Flowering, fruiting
Triticum aestivum	annual	50-60	D	3	dried
Turgenia latifolia	annual	25-30	O	+	dried

Table 22: Check-list of plants recorded on sample plot 20 (39.9269° N, 67.50502° E), 360 km OTHL, border of Dzhizak and Samarkand Regions, eastern piedmonts of Khobduntau Range, woodland belt along the road to the village Ingichka

Species	**Life form**	**Height, cm**	**Abundance**		**Phenol. Stage**
			DACFOR	**Braun-Blanquet**	
Aegilops cylindrica	annual	20-25	O	+	dried
Aegilops triuncialis	annual	20-25	O	+	dried
Alhagi pseudalhagi	perennial	30-40	O	+	Flowering, fruiting
Avena fatua	annual	30-40	R	+	dried
Bromus tectorum	annual	15-20	O	+	dried
Capparis spinosa	perennial	30-40	R	+	flowering
Capsella bursa-pastoris	annual	20-25	O	+	dried
Carthamus lanatus subsp. turkestanicus	annual	30-40	O	+	fruiting
Centaurea belangeriana	annual, biennial	20-25	R	+	flowering
Centaurea iberica	biennial	20-25	O	+	flowering
Centaurea virgata subsp. squarrosa	perennial	30-40	R	+	flowering
Ceratocarpus arenarius	annual	15-20	R	+	fruiting
Chardinia orientalis	annual	15-20	R	+	dried
Chenopodium album	annual	30-40	R	+	Flowering, fruiting
Convolvulus arvensis	Perennial, liana	10-15	O	+	Flowering, fruiting
Cousinia radians	biennial	30-40	R	+	Flowering, fruiting
Cynodon dactylon	perennial	10-15	O	+	Flowering, fruiting
Diarthron vesiculosum	annual	15-20	O	+	fruiting
Echinophora sibthorpiana	biennial	30-40	R	+	flowering
Euclidium syriacum	annual	15-20	R	+	dried
Euphorbia chamaesyce	annual	5-7	O	+	Flowering, fruiting
Haplophyllum acutifolium	perennial	30-40	R	+	fruiting
Hordeum murinum subsp. leporinum (Hordeum leporinum)	annual	25-30	F	1	dried
Lepidium draba	perennial	20-25	R	+	dried
Onopordum leptolepis	biennial	30-40	R	+	Flowering, fruiting
Phleum paniculatum	annual	12-15	O	+	dried
Picnomon acarna	annual	30-40	O	+	Flowering, fruiting
Plantago lanceolata	perennial	10-15	O	+	fruiting
Poa bulbosa	perennial	20-25	C	1	dried

Prunus armeniaca (Armeniaca vulgaris)	tree	3-4 m	O	1	vegetation
Rhaponticum repens (Acroptilon repens)	perennial	30-40	O	+	Flowering, fruiting
Sisymbrium altissimum	annual	25-30	R	+	dried
Turgenia latifolia	annual	15-20	R	+	dried
Ulmus pumila	tree	7-8 m	A	3	vegetation
Xanthium spinosum	annual	20-25	R	+	Flowering, fruiting
Xeranthemum longepapposum	annual	15-20	O	+	dried

Table 23: Check-list of plants recorded on sample plot 21 (39.82803° N, 67.26876° E), 360 km OTHL, Bulungur District of Samarkand Region, southern piedmonts of Khobduntau Range, rainfed barley fields and fallow lands

Species	**Life form**	**Height, cm**	**Abundance**		**Phenol. Stage**
			DACFOR	**Braun-Blanquet**	
Aegilops cylindrica	annual	20-25	F	+	dried
Aegilops triuncialis	annual	20-25	F	+	dried
Alhagi pseudalhagi	perennial	25-30	R	+	Flowering, fruiting
Astragalus bactrianus	subshrub	20-25	R	+	fruiting
Astragalus alopecias	perennial	30-40	R	+	flowering
Avena fatua	annual	30-40	O	+	dried
Bromus scoparius	annual	15-20	O	+	dried
Bromus tectorum	annual	15-20	O	+	dried
Capparis spinosa	perennial	30-40	R	+	flowering
Carthamus oxyacanthus	annual	25-30	O	+	flowering
Carthamus lanatus subsp. turkestanicus	annual	30-40	O	+	fruiting
Centaurea belangeriana	annual, biennial	20-25	O	+	flowering
Centaurea iberica	biennial	20-25	O	+	flowering
Centaurea solstitialis	annual	30-40	R	+	flowering
Centaurea virgata subsp. squarrosa	perennial	30-40	O	+	flowering
Ceratocarpus arenarius	annual	15-20	O	+	fruiting
Cichorium intybus	perennial	30-40	O	+	Flowering, fruiting
Convolvulus arvensis	Perennial, liana	10-15	O	+	Flowering, fruiting
Convolvulus pseudocantabrica	perennial	30-40	R	+	fruiting
Cousinia radians	biennial	25-30	O	+	Flowering, fruiting
Cynodon dactylon	perennial	10-15	O	+	Flowering, fruiting
Diarthron vesiculosum	annual	15-20	O	+	fruiting
Dodartia orientalis	perennial	25-30	R	+	vegetation
Echinophora sibthorpiana	biennial	25-30	R	+	flowering
Eryngium caeruleum	Biennial, perennial	25-30	O	+	flowering
Euclidium syriacum	annual	15-20	R	+	dried
Euphorbia chamaesyce	annual	5-7	O	+	Flowering, fruiting
Haplophyllum acutifolium	perennial	30-40	R	+	fruiting
Haplophyllum versicolor	perennial	15-20	O	+	fruiting

Heliotropium ellipticum	annual	15-20	R	+	Flowering, fruiting
Hordeum murinum subsp. leporinum (Hordeum leporinum)	annual	25-30	O	+	dried
Hordeum vulgare	annual	40-50	A	3	dried
Onopordum leptolepis	biennial	30-40	R	+	Flowering, fruiting
Papaver pavoninum	annual	20-25	O	+	dried
Phleum paniculatum	annual	12-15	R	+	dried
Picnomon acarna	annual	30-40	O	+	Flowering, fruiting
Plantago lanceolata	perennial	10-15	O	+	fruiting
Poa bulbosa	perennial	20-25	C	1	dried
Rhaponticum repens (Acroptilon repens)	perennial	30-40	R	+	Flowering, fruiting
Roemeria refracta	annual	20-25	O	+	dried
Salvia spinosa	perennial	25-30	R	+	fruiting
Sisymbrium altissimum	annual	25-30	R	+	dried
Sophora pachycarpa	perennial	20-25	R	+	Flowering, fruiting
Stizolophus balsamita	annual	30-40	R	+	fruiting
Turgenia latifolia	annual	15-20	R	+	dried
Xanthium spinosum	annual	20-25	R	+	Flowering, fruiting

Table 24: Check-list of plants recorded on sample plot 22 (39.83778° N, 67.21814° E), 360 km OTHL, Bulungur District of Samarkand Region, southern piedmonts of Khobduntau Range, fallow land with camel thorn-caper-ephemeroid vegetation among apple gardens

Species	**Life form**	**Height, cm**	**Abundance**		**Phenol. Stage**
			DACFOR	**Braun-Blanquet**	
Aegilops triuncialis	annual	20-25	O	+	dried
Alhagi pseudalhagi	perennial	20-25	F	1	Flowering, fruiting
Astragalus filicaulis	annual	10-15	O	+	dried
Bromus danthoniae	annual	10-15	O	+	dried
Capparis spinosa	perennial	30-40	C	2	flowering
Carex pachystylis	perennial	7-10	F	1	dried
Carthamus oxyacanthus	annual	25-30	O	+	flowering
Carthamus lanatus subsp. turkestanicus	annual	30-40	O	+	fruiting
Centaurea belangeriana	annual, biennial	20-25	R	+	flowering
Centaurea iberica	biennial	20-25	O	+	flowering
Ceratocarpus arenarius	annual	15-20	R	+	fruiting
Convolvulus arvensis	Perennial, liana	10-15	O	+	Flowering, fruiting
Cousinia microcarpa	biennial	25-30	O	+	Flowering, fruiting
Cousinia radians	biennial	25-30	R	+	Flowering, fruiting
Cousinia resinosa	perennial	25-30	O	+	Flowering, fruiting

Cullen drupaceum (Psoralea drupacea)	perennial	30-40	R	+	Flowering, fruiting
Cynodon dactylon	perennial	10-15	C	1	Flowering, fruiting
Diarthron vesiculosum	annual	15-20	O	+	fruiting
Dodartia orientalis	perennial	30-40	R	+	vegetation
Eryngium caeruleum	Biennial, perennial	25-30	O	+	flowering
Euphorbia chamaesyce	annual	5-7	O	+	Flowering, fruiting
Haplophyllum acutifolium	perennial	25-30	R	+	fruiting
Hordeum murinum subsp. leporinum (Hordeum leporinum)	annual	25-30	O	+	dried
Koelpinia linearis	annual	12-15	O	+	dried
Onopordum leptolepis	biennial	30-40	F	1	Flowering, fruiting
Papaver pavoninum	annual	15-20	R	+	dried
Phleum paniculatum	annual	12-15	R	+	dried
Picnomon acarna	annual	30-40	O	+	Flowering, fruiting
Plantago lanceolata	perennial	10-15	O	+	fruiting
Poa bulbosa	perennial	20-25	F	+	dried
Sisymbrium altissimum	annual	25-30	O	+	dried
Sophora pachycarpa	perennial	20-25	R	+	Flowering, fruiting

Table 25: Check-list of plants recorded on sample plot 23 (39.85665° N, 67.15567° E), 360 km OTHL, Dzhambay District of Samarkand Region, southern piedmonts of Khobduntau Range, dry ravine with ruderal vegetation among apple gardens and fallow lands

Species	**Life form**	**Height, cm**	**Abundance**		**Phenol. Stage**
			DACFOR	**Braun-Blanquet**	
Achillea wilhelmsii (Achillea kermanica)	perennial	20-25	R	+	fruiting
Aegilops triuncialis	annual	20-25	F	+	dried
Alhagi pseudalhagi	perennial	30-40	F	1	Flowering, fruiting
Alyssum desertorum	annual	5-7	O	+	dried
Artemisia sogdiana	subshrub	25-30	O	1	vegetation
Astragalus bactrianus	subshrub	20-25	R	+	fruiting
Astragalus filicaulis	annual	10-15	O	+	dried
Avena fatua	annual	30-40	O	+	dried
Bromus danthoniae	annual	10-15	O	+	dried
Bromus scoparius	annual	15-20	O	+	dried
Bromus tectorum	annual	15-20	O	+	dried
Capparis spinosa	perennial	30-40	F	1	flowering
Carex pachystylis	perennial	7-10	O	+	dried
Carthamus oxyacanthus	annual	25-30	F	1	flowering
Carthamus lanatus subsp. turkestanicus	annual	30-40	O	+	fruiting
Centaurea belangeriana	annual, biennial	20-25	F	1	flowering
Centaurea iberica	biennial	30-40	F	1	flowering
Centaurea solstitialis	annual	20-25	F	1	flowering

Centaurea virgata subsp. squarrosa	perennial	30-40	O	+	flowering
Ceratocarpus arenarius	annual	15-20	O	+	fruiting
Chrozophora tinctoria	annual	20-25	R	+	fruiting
Convolvulus arvensis	Perennial, liana	10-15	O	+	Flowering, fruiting
Cousinia microcarpa	biennial	25-30	O	+	Flowering, fruiting
Cousinia radians	biennial	30-40	O	+	Flowering, fruiting
Cousinia resinosa	perennial	25-30	O	+	Flowering, fruiting
Cullen drupaceum (Psoralea drupacea)	perennial	40-50	F	1	Flowering, fruiting
Cynodon dactylon	perennial	10-15	F	1	Flowering, fruiting
Diarthron vesiculosum	annual	15-20	F	+	fruiting
Echium biebersteinii	biennial	30-40	O	+	fruiting
Eremopyrum bonaepartis	annual	7-10	R	+	dried
Eryngium caeruleum	Biennial, perennial	25-30	O	+	flowering
Euphorbia chamaesyce	annual	5-7	O	+	Flowering, fruiting
Hordeum murinum subsp. leporinum (Hordeum leporinum)	annual	25-30	F	1	dried
Marrubium anisodon	perennial	30-40	O	+	Flowering, fruiting
Onopordum leptolepis	biennial	50-60	O	1	Flowering, fruiting
Papaver pavoninum	annual	15-20	O	+	dried
Peganum harmala	perennial	25-30	R	+	fruiting
Phleum paniculatum	annual	12-15	O	+	dried
Picnomon acarna	annual	30-40	O	+	Flowering, fruiting
Plantago lanceolata	perennial	10-15	O	+	fruiting
Poa bulbosa	perennial	20-25	C	1	dried
Sisymbrium altissimum	annual	25-30	F	+	dried
Sophora pachycarpa	perennial	30-40	R	+	Flowering, fruiting
Trichodesma incanum	perennial	25-30	R	+	Flowering, fruiting
Xanthium spinosum	annual	25-30	R	+	Flowering, fruiting

Table 26: Check-list of plants recorded on sample plot 24 (39.87971° N, 66.98251° E), 360 km OTHL, Dzhambay District of Samarkand Region, small irrigated cotton, alfalfa and corn fields, vineyards and market gardens, between the village Dauchar and canal Payaryk

Species	**Life form**	**Height, cm**	**Abundance**		**Phenol. Stage**
			DACFOR	**Braun-Blanquet**	
Alhagi pseudalhagi	perennial	30-40	F	1	Flowering, fruiting
Artemisia ferganensis	perennial	30-40	F	1	vegetation
Artemisia tournefortiana	annual	70-100	O	+	Flowering, fruiting

Avena fatua	annual	40-50	F	+	dried
Bromus scoparius	annual	20-30	O	+	dried
Bromus tectorum	annual	15-20	O	+	dried
Capparis spinosa	perennial	30-40	O	+	Flowering, fruiting
Carthamus lanatus subsp. turkestanicus	annual	50-70	F	1	fruiting
Centaurea iberica	biennial	20-30	O	+	Flowering, fruiting
Centaurea solstitialis	annual	20-25	O	+	flowering
Chenopodium album	annual	50-70	O	+	Flowering, fruiting
Cichorium intybus	perennial	30-40	F	+	flowering
Cirsium vulgare	biennial	70-100	O	+	Flowering, fruiting
Clematis orientalis	Perennial, liana	100-150	R	+	Flowering, fruiting
Convolvulus arvensis	Perennial, liana	15-20	F	+	flowering
Cynanchum acutum ssp. sibiricum	Perennial, liana	100-150	R	+	flowering
Cynodon dactylon	perennial	15-20	F	1	Flowering, fruiting
Dactylis glomerata	perennial	40-50	R	+	fruiting
Daucus carota	biennial	30-40	O	+	Flowering, fruiting
Echinochloa crus-galli	annual	50-70	R	+	fruiting
Elymus repens	perennial	30-40	O	+	fruiting
Erigeron canadensis	annual	40-50	O	+	Flowering, fruiting
Eryngium caeruleum	Biennial, perennial	30-40	O	+	flowering
Fallopia convolvulus	Annual, liana	70-100	O	+	Flowering, fruiting
Galium humifusum	perennial	25-30	O	+	Flowering, fruiting
Glycyrrhiza glabra	perennial	100-150	F	2	Flowering, fruiting
Gossypium hirsutum	Perennial (annual in culture)	30-40	D	4	Vegetation, flowering
Hordeum murinum subsp. leporinum (Hordeum leporinum)	annual	25-30	F	1	dried
Lactuca serriola	annual, biennial	50-100	O	+	Flowering, fruiting
Lepidium draba	perennial	25-30	O	+	fruiting
Lepidium latifolium	perennial	40-50	O	+	fruiting
Lindelofia macrostyla	perennial	40-50	R	+	Flowering, fruiting
Marrubium anisodon	perennial	30-40	O	+	Flowering, fruiting
Medicago sativa	perennial	30-40	D	4	Flowering, fruiting
Mentha longifolia var. asiatica	perennial	50-100	O	+	flowering
Morus alba	tree	250-300	R	1	vegetation

Persicaria minor	annual	25-40	O	+	Flowering, fruiting
Phragmites australis	perennial	100-150	O	1	Flowering, fruiting
Picnomon acarna	annual	40-50	O	+	Flowering, fruiting
Plantago lanceolata	perennial	15-25	O	+	Flowering, fruiting
Plantago major	perennial	15-25	O	+	Flowering, fruiting
Poa bulbosa	perennial	25-30	O	+	dried
Polygonum aviculare	Annual, perennial	15-20	O	+	Flowering, fruiting
Populus afghanica	tree	4-5 m	O	2	vegetation
Rhaponticum repens (Acroptilon repens)	perennial	30-40	O	+	Flowering, fruiting
Setaria viridis	annual	20-25	O	+	Flowering, fruiting
Sisymbrium altissimum	annual	30-40	F	+	dried
Sonchus palustris	perennial	50-70	R	+	Flowering, fruiting
Sophora alopecuroides	perennial	30-40	O	+	fruiting
Typha angustifolia	perennial	100-150	F	1	fruiting
Verbena officinalis	perennial	30-40	O	+	Flowering
Xanthium spinosum	annual	25-30	O	+	Flowering, fruiting
Xanthium strumarium	annual	25-30	F	1	Flowering, fruiting

Table 27: Check-list of plants recorded on sample plot 25 (39.83927° N, 66.9548° E), 360 km OTHL, Payaryk District of Samarkand Region, irrigated cotton fields, boundary strips and woodland belts near the village Bakalchak

Species	**Life form**	**Height, cm**	**Abundance**		**Phenol. Stage**
			DACFOR	**Braun-Blanquet**	
Alhagi pseudalhagi	perennial	30-40	O	+	Flowering, fruiting
Althaea armeniaca	perennial	30-40	R	+	Flowering
Artemisia tournefortiana	annual	70-100	O	+	Flowering, fruiting
Artemisia vulgaris	perennial	50-70	O	+	vegetation
Calystegia sepium	Perennial, liana	100-150	R	+	flowering
Carthamus lanatus subsp. turkestanicus	annual	50-70	O	+	Flowering, fruiting
Centaurea iberica	biennial	20-30	O	+	Flowering, fruiting
Cichorium intybus	perennial	30-40	F	+	flowering
Cirsium vulgare	biennial	70-100	O	+	Flowering, fruiting
Convolvulus arvensis	Perennial, liana	15-20	F	+	flowering
Cynodon dactylon	perennial	15-20	C	2	Flowering, fruiting
Daucus carota	biennial	30-40	O	+	Flowering, fruiting

Echinochloa crus-galli	annual	50-70	R	+	fruiting
Elymus repens	perennial	30-40	O	+	fruiting
Fallopia convolvulus	Annual, liana	70-100	O	+	Flowering, fruiting
Galium humifusum	perennial	25-30	O	+	Flowering, fruiting
Glycyrrhiza glabra	perennial	100-150	F	1	Flowering, fruiting
Gossypium hirsutum	Perennial (annual in culture)	30-40	D	4	Vegetation, flowering
Hordeum murinum subsp. leporinum (Hordeum leporinum)	annual	30-40	O	+	dried
Lactuca serriola	annual, biennial	50-100	O	+	Flowering, fruiting
Lepidium draba	perennial	25-30	O	+	fruiting
Malva neglecta	Annual, perennial	10-15	O	+	Flowering
Medicago sativa	perennial	30-40	O	+	Flowering, fruiting
Mentha longifolia var. asiatica	perennial	50-100	F	1	flowering
Morus alba	tree	250-300	C	3	vegetation
Persicaria minor	annual	30-40	F	1	Flowering, fruiting
Phragmites australis	perennial	50-70	R	+	vegetation
Picnomon acarna	annual	40-50	O	+	Flowering, fruiting
Plantago lanceolata	perennial	15-25	F	1	Flowering, fruiting
Plantago major	perennial	15-25	F	1	Flowering, fruiting
Poa trivialis	perennial	30-40	O	+	fruiting
Polygonum aviculare	Annual, perennial	15-20	O	+	Flowering, fruiting
Populus alba	tree	5-7 m	C	3	vegetation
Rhaponticum repens (Acroptilon repens)	perennial	30-40	R	+	Flowering, fruiting
Rosa canina	shrub	150-170	R	1	fruiting
Setaria viridis	annual	15-25	O	+	Flowering, fruiting
Sisymbrium altissimum	annual	40-50	O	+	fruiting
Sisymbrium loeselii	Annual, biennial	40-50	O	+	Flowering, fruiting
Sium sisarum	perennial	30-40	R	+	Flowering, fruiting
Sophora alopecuroides	perennial	30-40	O	+	fruiting
Trifolium repens	perennial	10-15	O	+	Flowering, fruiting
Verbena officinalis	perennial	30-40	O	+	Flowering
Xanthium spinosum	annual	25-30	R	+	Flowering, fruiting
Xanthium strumarium	annual	25-30	O	+	Flowering, fruiting

Table 28: Check-list of plants recorded on sample plot 26 (39.82998° N, 66.88828° E), 360 km OTHL, Payaryk District of Samarkand Region, weedy vegetation on the floodplain terrace on the right bank of the river Akdarya (right branch of the river Zeravshan) among irrigated cotton and wheat fields, market gardens and woodland belts

Species	**Life form**	**Height, cm**	**Abundance**		**Phenol. Stage**
			DACFOR	**Braun-Blanquet**	
Alhagi pseudalhagi	perennial	40-50	C	2	Flowering, fruiting
Amaranthus retroflexus	annual	30-40	O	+	Flowering, fruiting
Artemisia ferganensis	perennial	30-40	O	+	vegetation
Artemisia tournefortiana	annual	70-100	O	+	Flowering, fruiting
Artemisia vulgaris	perennial	50-70	O	+	vegetation
Calystegia sepium	Perennial, liana	100-150	R	+	flowering
Carthamus lanatus subsp. turkestanicus	annual	50-70	F	1	Flowering, fruiting
Centaurea iberica	biennial	30-40	F	1	Flowering, fruiting
Centaurea solstitialis	annual	30-40	F	1	flowering
Chenopodium album	annual	50-70	O	+	Flowering, fruiting
Cichorium intybus	perennial	30-40	F	+	flowering
Cirsium vulgare	biennial	70-100	F	1	Flowering, fruiting
Clematis orientalis	Perennial, liana	100-150	O	+	Flowering, fruiting
Conium maculatum	annual, biennial	150-180	O	+	fruiting
Convolvulus arvensis	Perennial, liana	15-20	F	+	flowering
Crataegus turkestanica	shrub	250-300	R	1	fruiting
Cynodon dactylon	perennial	15-20	C	2	Flowering, fruiting
Cyperus rotundus	perennial	25-30	R	+	Flowering, fruiting
Datura stramonium	annual	70-100	R	+	Flowering, fruiting
Daucus carota	biennial	30-40	O	+	Flowering, fruiting
Echinochloa crus-galli	annual	50-70	O	+	fruiting
Elaeagnus andustifolia	tree	250-300	R	1	fruiting
Elymus repens	perennial	30-40	F	1	fruiting
Erigeron canadensis	annual	40-50	O	+	Flowering, fruiting
Eryngium caeruleum	Biennial, perennial	30-40	R	+	flowering
Fallopia convolvulus	Annual, liana	70-100	O	+	Flowering, fruiting
Galium humifusum	perennial	25-30	O	+	Flowering, fruiting
Galium spurium	annual	50-70	O	+	fruiting
Glycyrrhiza glabra	perennial	100-150	F	1	Flowering, fruiting
Gypsophila vaccaria	annual	30-40	R	+	dried

Handelia trichophylla	perennial	50-70	R	+	fruiting
Hordeum murinum subsp. leporinum (Hordeum leporinum)	annual	30-40	F	1	dried
Lactuca serriola	annual, biennial	50-100	F	+	Flowering, fruiting
Lepidium draba	perennial	25-30	O	+	fruiting
Malva neglecta	Annual, perennial	10-15	O	+	Flowering
Medicago sativa	perennial	30-40	O	+	Flowering, fruiting
Mentha longifolia var. asiatica	perennial	50-100	O	+	flowering
Morus alba	tree	250-300	O	1	vegetation
Paspalum distichum	perennial	15-25	F	1	flowering
Persicaria minor	annual	30-40	O	+	Flowering, fruiting
Picnomon acarna	annual	40-50	O	+	Flowering, fruiting
Plantago lanceolata	perennial	15-25	F	1	Flowering, fruiting
Plantago major	perennial	15-25	F	1	Flowering, fruiting
Poa bulbosa	perennial	25-30	F	+	dried
Polygonum aviculare	Annual, perennial	15-20	O	+	Flowering, fruiting
Rhaponticum repens (Acroptilon repens)	perennial	30-40	F	1	Flowering, fruiting
Setaria viridis	annual	15-25	O	+	Flowering, fruiting
Sisymbrium altissimum	annual	40-50	F	+	fruiting
Sisymbrium loeselii	Annual, biennial	40-50	F	+	Flowering, fruiting
Solanum nigrum	annual	25-30	R	+	Flowering, fruiting
Sophora alopecuroides	perennial	30-40	O	+	fruiting
Sorghum halepense	perennial	40-50	O	+	Flowering, fruiting
Trifolium fragiferum	perennial	10-12	O	+	Flowering, fruiting
Trifolium repens	perennial	10-15	O	+	Flowering, fruiting
Verbascum blattaria	biennial	30-40	R	+	Flowering, fruiting
Verbena officinalis	perennial	30-40	O	+	Flowering
Xanthium spinosum	annual	30-40	O	+	Flowering, fruiting
Xanthium strumarium	annual	30-40	F	1	Flowering, fruiting

Table 29: Check-list of plants recorded on sample plot 27 (39.77631° N, 66.7911° E), 360 km OTHL, Pastdargom District of Samarkand Region, riparian vegetation on the floodplain on the left bank of the river Karadarya (left branch of the river Zeravshan)

Species	**Life form**	**Height, cm**	**Abundance**		**Phenol. Stage**
			DACFOR	**Braun-Blanquet**	
Aeluropus littoralis	perennial	15-20	F	1	fruiting

Alhagi pseudalhagi	perennial	40-50	O	1	Flowering, fruiting
Amaranthus retroflexus	annual	25-30	R	+	Flowering, fruiting
Artemisia tournefortiana	annual	50-100	R	+	Flowering, fruiting
Calamagrostis pseudophragmites	perennial	40-50	O	+	fruiting
Capsella bursa-pastoris	annual	25-30	O	+	fruiting
Caragana halodendron	shrub	150-180	F	2	fruiting
Carthamus lanatus subsp. turkestanicus	annual	50-100	O	+	Flowering, fruiting
Centaurea iberica	biennial	20-30	R	+	Flowering, fruiting
Chenopodium album	annual	50-70	R	+	Flowering, fruiting
Cichorium intybus	perennial	30-40	O	+	flowering
Cirsium vulgare	biennial	50-100	F	+	Flowering, fruiting
Conium maculatum	annual, biennial	150-180	R	+	fruiting
Cynanchum acutum ssp. sibiricum	Perennial, liana	100-150	F	1	flowering
Cynodon dactylon	perennial	15-20	C	2	Flowering, fruiting
Cyperus rotundus	perennial	25-30	F	1	Flowering, fruiting
Datura stramonium	annual	70-100	R	+	Flowering, fruiting
Daucus carota	biennial	30-40	R	+	Flowering, fruiting
Descurainia sophia	annual	25-30	F	+	dried
Dipsacus laciniatus	biennial	100-150	R	+	Flowering, fruiting
Elaeagnus andustifolia	tree	300-400	F	2	fruiting
Eleocharis quinqueflora	perennial	25-30	O	+	fruiting
Epilobium hirsutum	perennial	50-100	O	+	Flowering, fruiting
Equisetum arvense	perennial	30-40	O	+	vegetation
Fallopia convolvulus	Annual, liana	100-150	F	+	Flowering, fruiting
Glycyrrhiza glabra	perennial	50-100	A	3	Flowering, fruiting
Heliotropium ellipticum	annual	25-30	R	+	Flowering, fruiting
Hippophae rhamnoides	shrub	200-300	C	3	fruiting
Hordeum murinum subsp. leporinum (Hordeum leporinum)	annual	25-35	O	+	dried
Karelinia caspia	perennial	50-100	F	1	Flowering, fruiting
Lactuca serriola	annual, biennial	50-100	O	+	Flowering, fruiting
Lepidium draba	perennial	25-30	O	+	fruiting
Lotus krylovii	perennial	15-20	O	+	Flowering, fruiting
Lycium dasystemum	shrub	100-150	R	+	Flowering, fruiting

Lycopus europaeus	perennial	40-50	R	+	Flowering, fruiting
Malva sylvestris	biennial, perennial	15-20	R	+	Flowering
Mentha longifolia var. asiatica	perennial	50-100	O	+	flowering
Paspalum distichum	perennial	15-25	A	3	flowering
Phragmites australis	perennial	70-100	O	1	Flowering, fruiting
Persicaria hydropiper	annual	50-70	O	+	Flowering, fruiting
Persicaria minor	annual	30-40	O	+	Flowering, fruiting
Plantago lanceolata	perennial	15-25	F	1	Flowering, fruiting
Plantago major	perennial	15-25	F	1	Flowering, fruiting
Poacynum scabrum (Trachomitum scabrum)	Perennial, liana	100-150	O	+	flowering
Polygonum argyrocoleon	annual	25-30	O	+	Flowering, fruiting
Polygonum aviculare	Annual, perennial	15-20	R	+	Flowering, fruiting
Puccinellia distans	perennial	30-40	O	+	fruiting
Rumex conglomeratus	perennial	50-70	R	+	fruiting
Rhaponticum repens (Acroptilon repens)	perennial	40-50	R	+	Flowering, fruiting
Rubus caesius	shrub	100-150	O	1	Flowering, fruiting
Salix wilhelmsiana	shrub	200-250	R	+	fruiting
Setaria viridis	annual	15-25	F	+	Flowering, fruiting
Sonchus oleraceus	annual	25-30	R	+	Flowering, fruiting
Sonchus palustris	perennial	70-100	O	+	Flowering, fruiting
Sophora alopecuroides	perennial	30-40	O	+	fruiting
Tamarix ramosissima	shrub	200-250	C	3	flowering
Tribulus terrestris	annual	20-30	R	+	Flowering, fruiting
Trifolium fragiferum	perennial	10-12	F	1	Flowering, fruiting
Trifolium repens	perennial	10-15	F	1	Flowering, fruiting
Tripidium ravennae (Erianthus ravennae)	perennial	200-220	O	1	Flowering, fruiting
Typha angustifolia	perennial	150-200	F	2	vegetation
Typha laxmannii	perennial	100-150	O	+	fruiting
Vulpia ciliata	annual	15-20	O	+	dried
Xanthium spinosum	annual	30-40	R	+	Flowering, fruiting
Xanthium strumarium	annual	30-40	R	+	Flowering, fruiting

Table 30: Check-list of plants recorded on sample plot 28 (39.75687° N, 66.74248° E), 360 km OTHL, Pastdargom District of Samarkand Region, forb-grass-camel thorn vegetation among vineyards on the terrace of the right bank of canal Dargom

Species	**Life form**	**Height, cm**	**Abundance**		**Phenol. Stage**
			DACFOR	**Braun-Blanquet**	
Achillea wilhelmsii (Achillea kermanica)	perennial	20-25	O	+	fruiting
Aegilops cylindrica	annual	25-30	F	+	dried
Aegilops triuncialis	annual	25-30	F	+	dried
Alhagi pseudalhagi	perennial	30-40	C	2	Flowering, fruiting
Alyssum desertorum	annual	5-7	O	+	dried
Artemisia sogdiana	subshrub	30-40	O	1	vegetation
Astragalus filicaulis	annual	10-15	O	+	dried
Avena fatua	annual	30-40	O	+	dried
Bromus danthoniae	annual	10-15	R	+	dried
Bromus scoparius	annual	15-20	O	+	dried
Bromus tectorum	annual	15-20	F	+	dried
Calamagrostis pseudophragmites	perennial	40-50	O	+	fruiting
Capparis spinosa	perennial	30-40	F	1	flowering
Caragana halodendron	shrub	100-150	O	1	fruiting
Carex pachystylis	perennial	7-10	O	+	dried
Carthamus oxyacanthus	annual	25-30	F	1	flowering
Carthamus lanatus subsp. turkestanicus	annual	30-40	O	+	fruiting
Centaurea belangeriana	annual, biennial	20-25	F	1	flowering
Centaurea benedicta	annual	20-25	R	+	dried
Centaurea iberica	biennial	30-40	F	1	flowering
Centaurea solstitialis	annual	20-25	O	+	flowering
Centaurea virgata subsp. squarrosa	perennial	30-40	O	+	flowering
Ceratocarpus arenarius	annual	15-20	R	+	fruiting
Chondrilla juncea	perennial	30-40	O	+	Flowering, fruiting
Chrozophora tinctoria	annual	20-25	R	+	fruiting
Convolvulus arvensis	Perennial, liana	10-15	O	+	Flowering, fruiting
Cousinia microcarpa	biennial	25-30	O	+	Flowering, fruiting
Cousinia radians	biennial	30-40	O	+	Flowering, fruiting
Cousinia resinosa	perennial	25-30	O	+	Flowering, fruiting
Cullen drupaceum (Psoralea drupacea)	perennial	40-50	R	+	Flowering, fruiting
Cynodon dactylon	perennial	10-15	F	1	Flowering, fruiting
Diarthron vesiculosum	annual	15-20	F	+	fruiting
Echium biebersteinii	biennial	30-40	R	+	fruiting
Elaeagnus andustifolia	tree	300-400	O	1	fruiting
Eremopyrum bonaepartis	annual	7-10	O	+	dried
Eryngium caeruleum	Biennial, perennial	30-40	O	+	flowering

Euphorbia chamaesyce	annual	5-7	O	+	Flowering, fruiting
Glycyrrhiza glabra	perennial	50-100	O	1	Flowering, fruiting
Hordeum murinum subsp. leporinum (Hordeum leporinum)	annual	25-30	F	1	dried
Hordeum vulgare	annual	30-40	O	+	dried
Malva neglecta	Annual, perennial	10-15	O	+	Flowering
Marrubium anisodon	perennial	30-40	R	+	Flowering, fruiting
Morus alba	tree	250-300	O	1	vegetation
Onopordum leptolepis	biennial	50-60	O	1	Flowering, fruiting
Papaver pavoninum	annual	15-20	O	+	dried
Peganum harmala	perennial	25-30	R	+	fruiting
Phleum paniculatum	annual	12-15	O	+	dried
Picnomon acarna	annual	30-40	O	+	Flowering, fruiting
Plantago lanceolata	perennial	10-15	O	+	fruiting
Poa bulbosa	perennial	20-25	F	+	dried
Ranunculus pinnatisectus	perennial	12-15	R	+	dried
Rhaponticum repens (Acroptilon repens)	perennial	30-40	O	+	Flowering, fruiting
Rubus sanctus	shrub	150-180	R	1	Flowering, fruiting
Silene conica	annual	12-15	O	+	dried
Sisymbrium altissimum	annual	30-40	O	+	dried
Sophora pachycarpa	perennial	30-40	O	+	Flowering, fruiting
Sphaerophysa salsula	perennial	30-40	R	+	fruiting
Tamarix ramosissima	shrub	100-200	O	1	flowering
Trichodesma incanum	perennial	25-30	R	+	Flowering, fruiting
Tripidium ravennae (Erianthus ravennae)	perennial	180-200	R	+	Flowering, fruiting
Ulmus pumila	tree	3-5 m	O	1	vegetation
Vitis vinifera	shrub, liana	100-180	A	3	vegetation
Xanthium spinosum	annual	25-30	O	+	Flowering, fruiting

Table 31: Check-list of plants recorded on sample plot 29 (39.77313° N, 66.69923° E), 360 km OTHL, Pastdargom District of Samarkand Region, wetlands and clayey slopes of ravine between canals Dargom and Durmansay

Species	**Life form**	**Height, cm**	**Abundance**		**Phenol. Stage**
			DACFOR	**Braun-Blanquet**	
Aegilops cylindrica	annual	25-30	O	+	dried
Aegilops triuncialis	annual	25-30	O	+	dried
Agrimonia eupatoria subsp. asiatica	annual, biennial	30-40	R	+	Flowering, fruiting
Ailanthus altissima	tree	6-7 m	O	2	vegetation
Alhagi pseudalhagi	perennial	30-40	A	3	Flowering, fruiting
Alyssum desertorum	annual	5-7	O	+	dried

Artemisia sogdiana	subshrub	30-40	O	1	vegetation
Artemisia tournefortiana	annual	50-100	R	+	Flowering, fruiting
Astragalus filicaulis	annual	15-20	F	+	dried
Avena fatua	annual	30-40	O	+	dried
Bromus danthoniae	annual	10-15	R	+	dried
Bromus scoparius	annual	15-20	O	+	dried
Bromus tectorum	annual	15-20	F	+	dried
Capparis spinosa	perennial	30-40	F	1	flowering
Caragana halodendron	shrub	100-150	R	+	fruiting
Carex pachystylis	perennial	7-10	O	+	dried
Carthamus oxyacanthus	annual	30-40	F	1	flowering
Carthamus lanatus subsp. turkestanicus	annual	40-50	O	+	fruiting
Centaurea belangeriana	annual, biennial	25-30	F	1	flowering
Centaurea iberica	biennial	30-40	F	1	flowering
Centaurea solstitialis	annual	20-25	O	+	flowering
Centaurea virgata subsp. squarrosa	perennial	30-40	O	+	flowering
Ceratocarpus arenarius	annual	15-20	R	+	fruiting
Chondrilla juncea	perennial	30-40	O	+	Flowering, fruiting
Chrozophora tinctoria	annual	20-25	R	+	fruiting
Clematis orientalis	Perennial, liana	100-150	R	+	Flowering, fruiting
Conium maculatum	annual, biennial	100-150	R	+	Flowering, fruiting
Convolvulus arvensis	Perennial, liana	10-15	O	+	Flowering, fruiting
Cousinia microcarpa	biennial	25-30	O	+	Flowering, fruiting
Cousinia radians	biennial	30-40	O	+	Flowering, fruiting
Cousinia resinosa	perennial	25-30	O	+	Flowering, fruiting
Cullen drupaceum (Psoralea drupacea)	perennial	40-50	R	+	Flowering, fruiting
Cynanchum acutum ssp. sibiricum	Perennial, liana	100-150	O	+	flowering
Cynodon dactylon	perennial	10-15	F	1	Flowering, fruiting
Diarthron vesiculosum	annual	15-20	F	+	fruiting
Echium biebersteinii	biennial	30-40	R	+	fruiting
Eremodaucus lehmannii	annual	30-40	O	+	dried
Eryngium caeruleum	Biennial, perennial	30-40	O	+	flowering
Euphorbia chamaesyce	annual	5-7	O	+	Flowering, fruiting
Galium humifusum	perennial	25-30	O	+	Flowering, fruiting
Glycyrrhiza glabra	perennial	50-100	O	1	Flowering, fruiting
Halocharis hispida	annual	20-25	F	1	vegetation
Hordeum murinum subsp. leporinum (Hordeum leporinum)	annual	25-30	A	2	dried
Hordeum spontaneum	annual	50-100	O	+	dried

Lactuca serriola	annual, biennial	50-70	O	+	Flowering, fruiting
Lepidium draba	perennial	25-30	O	+	fruiting
Lycopus europaeus	perennial	40-50	R	+	Flowering, fruiting
Malva neglecta	Annual, perennial	10-15	O	+	Flowering
Marrubium anisodon	perennial	30-40	O	+	Flowering, fruiting
Medicago sativa	perennial	30-40	O	+	Flowering, fruiting
Mentha longifolia var. asiatica	perennial	50-100	O	+	flowering
Morus alba	tree	250-300	O	1	vegetation
Onopordum leptolepis	biennial	70-100	O	1	Flowering, fruiting
Papaver pavoninum	annual	15-20	O	+	dried
Paspalum distichum	perennial	15-25	F	1	flowering
Peganum harmala	perennial	25-30	R	+	fruiting
Persicaria maculosa	annual	20-25	O	+	Flowering, fruiting
Phleum paniculatum	annual	12-15	O	+	dried
Picnomon acarna	annual	30-40	O	+	Flowering, fruiting
Plantago lanceolata	perennial	10-15	O	+	fruiting
Plantago major	perennial	15-25	F	1	Flowering, fruiting
Poa bulbosa	perennial	20-25	F	+	dried
Poacynum scabrum (Trachomitum scabrum)	Perennial, liana	100-150	R	+	flowering
Populus afghanica	tree	6-7 m	O	2	vegetation
Populus alba	tree	6-7 m	O	2	vegetation
Ranunculus sardous	annual	15-25	O	+	Flowering, fruiting
Rhaponticum repens (Acroptilon repens)	perennial	30-40	F	1	Flowering, fruiting
Rubus caesius	shrub	100-150	O	1	Flowering, fruiting
Setaria viridis	annual	15-25	F	+	Flowering, fruiting
Silene conica	annual	12-15	O	+	dried
Sisymbrium altissimum	annual	30-40	O	+	dried
Solenanthus turkestanicus	perennial	15-20	R	+	fruiting
Sonchus oleraceus	annual	25-30	R	+	Flowering, fruiting
Sophora alopecuroides	perennial	30-40	O	+	fruiting
Sophora pachycarpa	perennial	30-40	F	1	Flowering, fruiting
Trichodesma incanum	perennial	25-30	R	+	Flowering, fruiting
Trifolium fragiferum	perennial	10-12	F	1	Flowering, fruiting
Trifolium repens	perennial	10-15	F	1	Flowering, fruiting
Typha angustifolia	perennial	100-150	O	+	vegetation
Verbascum blattaria	biennial	30-40	O	+	Flowering, fruiting

Verbena officinalis	perennial	30-40	O	+	Flowering
Xanthium spinosum	annual	25-30	O	+	Flowering, fruiting
Xanthium strumarium	annual	30-40	R	+	Flowering, fruiting

Table 32: Check-list of plants recorded on sample plot 30 (39.62176° N, 66.582° E), 360 km OTHL, Pastdargom District of Samarkand Region, irrigated arable lands between villages Khancharvak and Kayrogoch

Species	**Life form**	**Height, cm**	**Abundance**		**Phenol. Stage**
			DACFOR	**Braun-Blanquet**	
Alhagi pseudalhagi	perennial	30-40	C	2	Flowering, fruiting
Artemisia tournefortiana	annual	50-100	R	+	Flowering, fruiting
Avena fatua	annual	30-40	O	+	dried
Bidens frondosa	annual	20-30	R	+	flowering
Bolboschoenus maritimus	perennial	40-50	O	+	Flowering, fruiting
Bromus scoparius	annual	15-20	O	+	dried
Bromus tectorum	annual	15-20	F	+	dried
Capparis spinosa	perennial	30-40	O	+	flowering
Carthamus oxyacanthus	annual	30-40	O	+	flowering
Carthamus lanatus subsp. turkestanicus	annual	50-70	O	+	fruiting
Centaurea belangeriana	annual, biennial	25-30	R	+	flowering
Centaurea iberica	biennial	30-40	F	1	flowering
Cichorium intybus	perennial	30-40	O	+	flowering
Convolvulus arvensis	Perennial, liana	10-15	O	+	Flowering, fruiting
Cousinia microcarpa	biennial	25-30	O	+	Flowering, fruiting
Cynodon dactylon	perennial	10-15	C	2	Flowering, fruiting
Diarthron vesiculosum	annual	15-20	R	+	fruiting
Echium biebersteinii	biennial	30-40	R	+	fruiting
Echinochloa crus-galli	annual	50-70	R	+	fruiting
Elymus repens	perennial	30-40	O	+	fruiting
Epilobium hirsutum	perennial	50-100	O	+	Flowering, fruiting
Erigeron sumatrensis	annual	50-100	O	+	Flowering, fruiting
Eryngium caeruleum	Biennial, perennial	30-40	O	+	flowering
Glycyrrhiza glabra	perennial	50-100	O	1	Flowering, fruiting
Hordeum murinum subsp. leporinum (Hordeum leporinum)	annual	25-30	F	1	dried
Juncus inflexus	perennial	40-50	R	+	fruiting
Lactuca serriola	annual, biennial	50-70	O	+	Flowering, fruiting
Lepidium draba	perennial	25-30	O	+	fruiting

Malva neglecta	Annual, perennial	10-15	O	+	Flowering
Marrubium anisodon	perennial	30-40	O	+	Flowering, fruiting
Melilotus albus	biennial	30-40	R	+	Flowering, fruiting
Mentha longifolia var. asiatica	perennial	50-100	O	+	flowering
Morus alba	tree	250-300	O	1	vegetation
Onopordum leptolepis	biennial	70-100	O	1	Flowering, fruiting
Paspalum distichum	perennial	15-25	F	1	flowering
Persicaria lapathifolia	annual	50-70	F	1	Flowering, fruiting
Persicaria minor	annual	25-40	O	+	Flowering, fruiting
Phleum paniculatum	annual	12-15	O	+	dried
Picnomon acarna	annual	30-40	O	+	Flowering, fruiting
Plantago lanceolata	perennial	10-15	O	+	fruiting
Plantago major	perennial	15-25	O	+	Flowering, fruiting
Poa bulbosa	perennial	20-25	F	+	dried
Poacynum scabrum (Trachomitum scabrum)	Perennial, liana	100-150	R	+	flowering
Populus afghanica	tree	6-7 m	R	1	vegetation
Populus alba	tree	6-7 m	R	1	vegetation
Rhaponticum repens (Acroptilon repens)	perennial	30-40	O	+	Flowering, fruiting
Setaria viridis	annual	15-25	F	+	Flowering, fruiting
Sisymbrium altissimum	annual	30-40	O	+	dried
Sophora alopecuroides	perennial	30-40	R	+	fruiting
Trifolium fragiferum	perennial	10-12	F	1	Flowering, fruiting
Trifolium repens	perennial	10-15	F	1	Flowering, fruiting
Tripolium pannonicum	Annual, perennial	30-40	R	+	Flowering, fruiting
Typha angustifolia	perennial	100-150	F	1	vegetation
Typha laxmannii	perennial	100-150	O	+	fruiting
Verbascum blattaria	biennial	30-40	O	+	Flowering, fruiting
Verbena officinalis	perennial	30-40	O	+	Flowering
Xanthium spinosum	annual	25-30	O	+	Flowering, fruiting
Xanthium strumarium	annual	30-40	R	+	Flowering, fruiting

Table 33: Check-list of plants recorded on sample plot 31 (39.59459° N, 66.71014° E), 360 km OTHL, Pastdargom District of Samarkand Region, apple garden and camel thorn-grass community on boundary-strips

Species	**Life form**	**Height, cm**	**Abundance**		**Phenol. Stage**
			DACFOR	**Braun-Blanquet**	

Alhagi pseudalhagi	perennial	30-40	C	2	Flowering, fruiting
Avena fatua	annual	30-40	R	+	dried
Bromus scoparius	annual	15-20	O	+	dried
Bromus tectorum	annual	15-20	F	+	dried
Capparis spinosa	perennial	30-40	O	+	flowering
Carthamus oxyacanthus	annual	30-40	O	+	flowering
Carthamus lanatus subsp. turkestanicus	annual	30-40	R	+	fruiting
Centaurea belangeriana	annual, biennial	25-30	R	+	flowering
Centaurea iberica	biennial	30-40	F	1	flowering
Cichorium intybus	perennial	30-40	O	+	flowering
Convolvulus arvensis	Perennial, liana	10-15	O	+	Flowering, fruiting
Cousinia microcarpa	biennial	25-30	O	+	Flowering, fruiting
Cynodon dactylon	perennial	10-15	C	2	Flowering, fruiting
Diarthron vesiculosum	annual	15-20	R	+	fruiting
Echium biebersteinii	biennial	30-40	R	+	fruiting
Glycyrrhiza triphylla	perennial	40-50	O	+	fruiting
Hordeum murinum subsp. leporinum (Hordeum leporinum)	annual	25-30	F	1	dried
Lactuca serriola	annual, biennial	50-70	O	+	Flowering, fruiting
Malus domestica	tree	200-250	D	4	fruiting
Malva neglecta	Annual, perennial	10-15	O	+	Flowering
Marrubium anisodon	perennial	30-40	O	+	Flowering, fruiting
Onopordum leptolepis	biennial	70-100	O	1	Flowering, fruiting
Phleum paniculatum	annual	12-15	O	+	dried
Picnomon acarna	annual	30-40	O	+	Flowering, fruiting
Plantago lanceolata	perennial	10-15	O	+	fruiting
Poa bulbosa	perennial	20-25	F	+	dried
Rhaponticum repens (Acroptilon repens)	perennial	30-40	O	+	Flowering, fruiting
Sisymbrium altissimum	annual	30-40	O	+	dried
Sophora pachycarpa	perennial	25-30	R	+	fruiting
Xanthium spinosum	annual	25-30	O	+	Flowering, fruiting

Table 34: Check-list of plants recorded on sample plot 32 (39.57447° N, 66.7379° E), 500 MW Nurabad BESS, Nurabad District of Samarkand Region, fallow land

Species	**Life form**	**Height, cm**	**Abundance**		**Phenol. Stage**
			DACFOR	**Braun-Blanquet**	
Alhagi pseudalhagi	perennial	20-30	R	+	Flowering, fruiting
Alyssum desertorum	annual	5-7	O	+	dried

Andrachne telephioides	perennial	5-10	R	+	fruiting
Arenaria leptoclados	annual	10-15	O	+	dried
Carex pachystylis	perennial	7-10	O	+	dried
Carthamus oxyacanthus	annual	15-20	R	+	flowering
Centaurea belangeriana	annual, biennial	15-20	R	+	flowering
Centaurea iberica	biennial	15-20	R	+	flowering
Ceratocarpus arenarius	annual	10-15	R	+	fruiting
Cousinia resinosa	perennial	20-30	R	+	Flowering, fruiting
Cynodon dactylon	perennial	10-15	O	+	Flowering, fruiting
Diarthron vesiculosum	annual	15-20	R	+	fruiting
Euphorbia chamaesyce	annual	5-7	O	+	Flowering, fruiting
Minuartia meyeri	annual	5-7	R	+	dried
Peganum harmala	perennial	20-25	R	+	fruiting
Phleum paniculatum	annual	12-15	R	+	dried
Poa bulbosa	perennial	5-7	C	+	dried
Salsola tragus	annual	10-15	O	+	vegetation
Ziziphora tenuior	annual	5-7	O	+	dried

Table 35: Check-list of plants recorded on sample plot 33 (39.57559° N, 66.74406° E), Nurabad substation, Nurabad District of Samarkand Region, fallow land

Species	**Life form**	**Height, cm**	**Abundance**		**Phenol. Stage**
			DACFOR	**Braun-Blanquet**	
Alhagi pseudalhagi	perennial	20-30	C	2	Flowering, fruiting
Alyssum desertorum	annual	5-7	O	+	dried
Aphanopleura capillifolia	annual	10-15	O	+	dried
Arenaria leptoclados	annual	10-15	O	+	dried
Carex pachystylis	perennial	7-10	O	+	dried
Capparis spinosa	perennial	20-30	R	+	Flowering, fruiting
Carthamus oxyacanthus	annual	15-20	R	+	flowering
Centaurea belangeriana	annual, biennial	15-20	R	+	flowering
Centaurea iberica	biennial	15-20	R	+	flowering
Ceratocarpus arenarius	annual	15-20	R	+	fruiting
Cousinia resinosa	perennial	20-30	R	+	Flowering, fruiting
Cynodon dactylon	perennial	10-15	O	+	Flowering, fruiting
Diarthron vesiculosum	annual	15-20	R	+	fruiting
Euphorbia chamaesyce	annual	5-7	O	+	Flowering, fruiting
Heliotropium ellipticum	annual	10-15	R	+	Flowering, fruiting
Hordeum murinum subsp. leporinum (Hordeum leporinum)	annual	15-20	O	+	dried
Medicago monantha (Trigonella geminiflora)	annual	5-7	O	+	dried
Minuartia meyeri	annual	5-7	R	+	dried

Peganum harmala	perennial	20-30	O	+	fruiting
Phleum paniculatum	annual	12-15	R	+	dried
Plantago lanceolata	perennial	5-10	O	+	Flowering, fruiting
Poa bulbosa	perennial	20-25	C	+	dried
Salsola tragus	annual	10-15	O	+	vegetation
Ziziphora tenuior	annual	5-7	O	+	dried

Table 36: Check-list of plants recorded on sample plot 34 (39.55423° N, 66.69496° E), 100MW PV site surroundings, Nurabad District of Samarkand Region, rainfed crops

Species	**Life form**	**Height, cm**	**Abundance**		**Phenol. Stage**
			DACFOR	**Braun-Blanquet**	
Achillea arabica (Achillea biebersteinii)	perennial	20-30	R	+	fruiting
Aegilops cylindrica	annual	20-30	F	+	dried
Aegilops triuncialis	annual	20-30	F	+	dried
Alhagi pseudalhagi	perennial	20-30	O	+	Flowering, fruiting
Alyssum desertorum	annual	5-7	O	+	dried
Arenaria leptoclados	annual	10-15	O	+	dried
Astragalus filicaulis	annual	10-15	O	+	dried
Avena fatua	annual	40-50	O	+	dried
Bromus danthoniae	annual	10-15	O	+	dried
Bromus tectorum	annual	20-25	O	+	dried
Carthamus oxyacanthus	annual	20-30	R	+	flowering
Centaurea belangeriana	annual, biennial	20-30	R	+	flowering
Centaurea iberica	biennial	20-30	R	+	flowering
Convolvulus arvensis	Perennial, liana	15-20	O	+	Flowering, fruiting
Cousinia microcarpa	biennial	20-30	R	+	Flowering, fruiting
Cousinia resinosa	perennial	20-30	R	+	Flowering, fruiting
Cynodon dactylon	perennial	15-20	O	+	Flowering, fruiting
Diarthron vesiculosum	annual	15-20	O	+	fruiting
Eremodaucus lehmannii	annual	30-40	R	+	dried
Erodium cicutarium	annual	7-10	R	+	vegetation
Heliotropium ellipticum	annual	15-20	R	+	Flowering, fruiting
Hordeum murinum subsp. leporinum (Hordeum leporinum)	annual	20-30	O	+	dried
Hordeum spontaneum	annual	30-40	F	+	dried
Koelpinia linearis	annual	15-20	O	+	dried
Malva neglecta	Annual, perennial	5-10	R	+	Flowering
Medicago monantha (Trigonella geminiflora)	annual	5-7	O	+	dried
Papaver pavoninum	annual	20-25	O	+	dried
Phleum paniculatum	annual	12-15	O	+	dried
Plantago lanceolata	perennial	5-10	O	+	Flowering, fruiting

Poa bulbosa	perennial	20-30	F	+	dried
Roemeria refracta	annual	15-20	O	+	dried
Sisymbrium altissimum	annual	30-40	O	+	dried
Sophora pachycarpa	perennial	20-30	O	+	fruiting
Stizolophus balsamita	annual	30-40	R	+	fruiting
Triticum aestivum	annual	40-50	D	4	dried
Turgenia latifolia	annual	25-30	O	+	dried

Table 37: Check-list of plants recorded on sample plot 35 (39.5462° N, 66.69512° E), 360 km OHTL, Nurabad District of Samarkand Region, fallow land

Species	**Life form**	**Height, cm**	**Abundance**		**Phenol. Stage**
			DACFOR	**Braun-Blanquet**	
Achillea arabica (Achillea biebersteinii)	perennial	20-30	F	1	fruiting
Aegilops cylindrica	annual	20-30	F	+	dried
Aegilops triuncialis	annual	20-30	F	+	dried
Alhagi pseudalhagi	perennial	20-30	O	+	Flowering, fruiting
Alyssum desertorum	annual	5-7	O	+	dried
Andrachne telephioides	perennial	5-10	R	+	fruiting
Arenaria leptoclados	annual	10-15	O	+	dried
Astragalus filicaulis	annual	10-15	O	+	dried
Avena fatua	annual	40-50	O	+	dried
Bromus danthoniae	annual	10-15	O	+	dried
Bromus pumilio	annual	7-10	O	+	dried
Bromus scoparius	annual	20-25	O	+	dried
Bromus tectorum	annual	20-25	O	+	dried
Capparis spinosa	perennial	30-40	C	2	flowering
Carthamus oxyacanthus	annual	20-30	O	+	flowering
Centaurea belangeriana	annual, biennial	20-30	O	+	flowering
Centaurea iberica	biennial	20-30	R	+	flowering
Centaurea virgata subsp. squarrosa	perennial	30-40	R	+	flowering
Convolvulus arvensis	Perennial, liana	15-20	O	+	Flowering, fruiting
Cousinia microcarpa	biennial	20-30	O	+	Flowering, fruiting
Cousinia radians	biennial	30-40	R	+	Flowering, fruiting
Cousinia resinosa	perennial	20-30	O	+	Flowering, fruiting
Cynodon dactylon	perennial	15-20	O	+	Flowering, fruiting
Diarthron vesiculosum	annual	15-20	O	+	fruiting
Echinophora sibthorpiana	biennial	20-30	R	+	flowering
Echium biebersteinii	biennial	30-40	R	+	fruiting
Haplophyllum acutifolium	perennial	20-30	R	+	fruiting
Haplophyllum versicolor	perennial	15-20	O	+	fruiting
Heliotropium ellipticum	annual	25-30	R	+	Flowering, fruiting
Hordeum murinum subsp. leporinum (Hordeum leporinum)	annual	20-30	O	+	dried
Koelpinia linearis	annual	15-20	O	+	dried

Malva neglecta	Annual, perennial	10-15	O	+	Flowering
Medicago monantha (Trigonella geminiflora)	annual	5-7	O	+	dried
Papaver pavoninum	annual	20-25	O	+	dried
Phleum paniculatum	annual	12-15	O	+	dried
Plantago lanceolata	perennial	5-10	O	+	Flowering, fruiting
Poa bulbosa	perennial	25-30	C	1	dried
Phlomis thapsoides	perennial	30-40	O	+	fruiting
Ranunculus sewerzowii	perennial	12-15	O	+	dried
Roemeria refracta	annual	15-20	O	+	dried
Silene conica	annual	12-15	O	+	dried
Sisymbrium altissimum	annual	30-40	O	+	dried
Sophora pachycarpa	perennial	20-30	F	1	fruiting
Taeniatherum caput-medusae	annual	20-30	F	1	dried
Triticum aestivum	annual	30-40	O	+	dried
Turgenia latifolia	annual	25-30	O	+	dried
Ziziphora tenuior	annual	5-7	O	+	dried

Table 38: Check-list of plants recorded on sample plot 36 (39.55146° N, 66.68727° E), Nurabad District of Samarkand Region, Ettitepa Archeologic Heritage site, dry grassland

Species	**Life form**	**Height, cm**	**Abundance**		**Phenol. Stage**
			DACFOR	**Braun-Blanquet**	
Achillea arabica (Achillea biebersteinii)	perennial	20-30	O	+	fruiting
Aegilops cylindrica	annual	20-30	O	+	dried
Aegilops triuncialis	annual	20-30	O	+	dried
Alhagi pseudalhagi	perennial	20-30	F	1	Flowering, fruiting
Alyssum desertorum	annual	5-7	O	+	dried
Andrachne telephioides	perennial	5-10	R	+	fruiting
Arenaria leptoclados	annual	10-15	O	+	dried
Astragalus filicaulis	annual	10-15	O	+	dried
Avena fatua	annual	40-50	O	+	dried
Bromus danthoniae	annual	10-15	O	+	dried
Bromus pumilio	annual	7-10	O	+	dried
Bromus scoparius	annual	20-25	O	+	dried
Bromus tectorum	annual	20-25	F	+	dried
Capparis spinosa	perennial	30-40	F	2	flowering
Carthamus oxyacanthus	annual	20-30	F	1	flowering
Carthamus lanatus subsp. turkestanicus	annual	40-50	O	+	fruiting
Centaurea belangeriana	annual, biennial	20-30	F	1	flowering
Centaurea iberica	biennial	20-30	F	1	flowering
Centaurea solstitialis	annual	20-30	O	+	flowering
Centaurea virgata subsp. squarrosa	perennial	30-40	O	+	flowering
Convolvulus arvensis	Perennial, liana	15-20	O	+	Flowering, fruiting
Cousinia microcarpa	biennial	20-30	O	+	Flowering, fruiting

Cousinia radians	biennial	30-40	R	+	Flowering, fruiting
Cousinia resinosa	perennial	20-30	F	1	Flowering, fruiting
Cynodon dactylon	perennial	15-20	O	+	Flowering, fruiting
Diarthron vesiculosum	annual	15-20	O	+	fruiting
Echinophora sibthorpiana	biennial	20-30	R	+	flowering
Echium biebersteinii	biennial	30-40	R	+	fruiting
Eremodaucus lehmannii	annual	30-40	O	+	dried
Haplophyllum acutifolium	perennial	20-30	R	+	fruiting
Haplophyllum versicolor	perennial	15-20	R	+	fruiting
Heliotropium ellipticum	annual	25-30	R	+	Flowering, fruiting
Hordeum murinum subsp. leporinum (Hordeum leporinum)	annual	30-40	A	2	dried
Koelpinia linearis	annual	15-20	O	+	dried
Malva neglecta	Annual, perennial	10-15	O	+	Flowering
Papaver pavoninum	annual	20-25	O	+	dried
Peganum harmala	perennial	20-30	R	+	fruiting
Phleum paniculatum	annual	12-15	O	+	dried
Poa bulbosa	perennial	25-30	A	1	dried
Phlomis thapsoides	perennial	30-40	F	1	fruiting
Plantago lanceolata	perennial	5-10	O	+	Flowering, fruiting
Rhaponticum repens (Acroptilon repens)	perennial	30-40	R	+	fruiting
Roemeria refracta	annual	15-20	O	+	dried
Salsola tragus	annual	10-15	R	+	vegetation
Sisymbrium altissimum	annual	30-40	F	+	dried
Sophora pachycarpa	perennial	20-30	O	+	fruiting
Stizolophus balsamita	annual	30-40	R	+	fruiting
Strigosella africana	annual	10-15	R	+	dried
Taeniatherum caput-medusae	annual	20-30	F	1	dried
Trichodesma incanum	perennial	15-20	R	+	Flowering, fruiting
Triticum aestivum	annual	30-40	R	+	dried
Turgenia latifolia	annual	15-20	R	+	dried
Xanthium spinosum	annual	20-30	O	+	Flowering, fruiting
Ziziphora tenuior	annual	5-7	R	+	dried

Table 39: Check-list of plants recorded on sample plot 37 (39.54724° N, 66.68084° E), Sazagan-1 PV site, Nurabad District of Samarkand Region, rainfed crops

Species	**Life form**	**Height, cm**	**Abundance**		**Phenol. Stage**
			DACFOR	**Braun-Blanquet**	
Achillea arabica (Achillea biebersteinii)	perennial	20-30	O	+	fruiting
Aegilops cylindrica	annual	20-30	F	+	dried
Aegilops triuncialis	annual	20-30	F	+	dried
Alhagi pseudalhagi	perennial	20-30	O	+	Flowering, fruiting

Alyssum desertorum	annual	5-7	O	+	dried
Arenaria leptoclados	annual	10-15	O	+	dried
Astragalus filicaulis	annual	10-15	O	+	dried
Avena fatua	annual	40-50	O	+	dried
Bromus danthoniae	annual	10-15	O	+	dried
Bromus pumilio	annual	7-10	O	+	dried
Bromus scoparius	annual	20-25	O	+	dried
Bromus tectorum	annual	20-25	O	+	dried
Carthamus oxyacanthus	annual	20-30	R	+	flowering
Centaurea belangeriana	annual, biennial	20-30	R	+	flowering
Centaurea iberica	biennial	20-30	R	+	flowering
Convolvulus arvensis	Perennial, liana	15-20	O	+	Flowering, fruiting
Cousinia microcarpa	biennial	20-30	R	+	Flowering, fruiting
Cousinia radians	biennial	30-40	R	+	Flowering, fruiting
Cousinia resinosa	perennial	20-30	R	+	Flowering, fruiting
Cynodon dactylon	perennial	15-20	O	+	Flowering, fruiting
Diarthron vesiculosum	annual	15-20	O	+	fruiting
Echinophora sibthorpiana	biennial	20-30	R	+	flowering
Eremodaucus lehmannii	annual	30-40	R	+	dried
Erodium cicutarium	annual	7-10	R	+	vegetation
Gypsophila vaccaria	annual	30-40	R	+	dried
Heliotropium ellipticum	annual	15-20	R	+	Flowering, fruiting
Hordeum murinum subsp. leporinum (Hordeum leporinum)	annual	20-30	O	+	dried
Hordeum spontaneum	annual	30-40	F	+	dried
Koelpinia linearis	annual	15-20	O	+	dried
Malva neglecta	Annual, perennial	5-10	R	+	Flowering
Medicago monantha (Trigonella geminiflora)	annual	5-7	O	+	dried
Papaver pavoninum	annual	20-25	O	+	dried
Phleum paniculatum	annual	12-15	O	+	dried
Plantago lanceolata	perennial	5-10	O	+	Flowering, fruiting
Poa bulbosa	perennial	20-30	F	+	dried
Reseda luteola	perennial	30-40	R	+	fruiting
Rhaponticum repens (Acroptilon repens)	perennial	30-40	R	+	fruiting
Roemeria refracta	annual	15-20	O	+	dried
Sisymbrium altissimum	annual	30-40	O	+	dried
Sophora pachycarpa	perennial	20-30	O	+	fruiting
Stizolophus balsamita	annual	30-40	R	+	fruiting
Triticum aestivum	annual	40-50	D	4	dried
Turgenia latifolia	annual	25-30	O	+	dried

Table 40: Check-list of plants recorded on sample plot 38 (39.54687° N, 66.67097° E), Sazagan-1 PV site, Nurabad District of Samarkand Region, fallow land with secondary forb-grass vegetation

Species	**Life form**	**Height, cm**	**Abundance**		**Phenol. Stage**
			DACFOR	**Braun-Blanquet**	
Achillea arabica (Achillea biebersteinii)	perennial	20-30	O	+	fruiting
Aegilops cylindrica	annual	20-30	O	+	dried
Aegilops triuncialis	annual	20-30	O	+	dried
Alhagi pseudalhagi	perennial	20-30	F	1	Flowering, fruiting
Alyssum desertorum	annual	5-7	O	+	dried
Arenaria leptoclados	annual	10-15	O	+	dried
Astragalus filicaulis	annual	10-15	O	+	dried
Avena fatua	annual	40-50	O	+	dried
Bromus danthoniae	annual	10-15	O	+	dried
Bromus pumilio	annual	7-10	O	+	dried
Bromus scoparius	annual	20-25	O	+	dried
Bromus tectorum	annual	20-25	F	+	dried
Capparis spinosa	perennial	30-40	R	+	flowering
Carthamus oxyacanthus	annual	20-30	O	+	flowering
Carthamus lanatus subsp. turkestanicus	annual	40-50	R	+	fruiting
Centaurea belangeriana	annual, biennial	20-30	F	1	flowering
Centaurea iberica	biennial	20-30	F	1	flowering
Centaurea solstitialis	annual	20-30	O	+	flowering
Centaurea virgata subsp. squarrosa	perennial	30-40	O	+	flowering
Ceratocarpus arenarius	annual	15-20	O	+	fruiting
Cichorium intybus	perennial	30-40	O	+	fruiting
Convolvulus arvensis	Perennial, liana	15-20	O	+	Flowering, fruiting
Convolvulus pseudocantabrica	perennial	30-40	O	+	fruiting
Cousinia microcarpa	biennial	20-30	O	+	Flowering, fruiting
Cousinia radians	biennial	30-40	O	+	Flowering, fruiting
Cousinia resinosa	perennial	20-30	F	1	Flowering, fruiting
Cynodon dactylon	perennial	15-20	O	+	Flowering, fruiting
Diarthron vesiculosum	annual	15-20	O	+	fruiting
Echinophora sibthorpiana	biennial	20-30	O	+	flowering
Echium biebersteinii	biennial	30-40	O	+	fruiting
Eremodaucus lehmannii	annual	30-40	O	+	dried
Gypsophila vaccaria	annual	30-40	R	+	dried
Handelia trichophylla	perennial	50-70	R	+	fruiting
Haplophyllum acutifolium	perennial	30-40	O	+	fruiting
Haplophyllum versicolor	perennial	15-20	O	+	fruiting
Heliotropium ellipticum	annual	20-30	R	+	Flowering, fruiting
Hordeum murinum subsp. leporinum (Hordeum leporinum)	annual	30-40	C	1	dried

Hordeum spontaneum	annual	30-40	R	+	dried
Koelpinia linearis	annual	15-20	O	+	dried
Malva neglecta	Annual, perennial	10-15	O	+	Flowering
Medicago monantha (Trigonella geminiflora)	annual	5-7	O	+	dried
Onopordum leptolepis	biennial	50-70	O	+	Flowering, fruiting
Papaver pavoninum	annual	20-25	O	+	dried
Peganum harmala	perennial	20-30	R	+	fruiting
Phleum paniculatum	annual	12-15	O	+	dried
Phlomis thapsoides	perennial	30-40	F	1	fruiting
Picnomon acarna	annual	30-40	O	+	Flowering, fruiting
Plantago lanceolata	perennial	5-10	O	+	Flowering, fruiting
Poa bulbosa	perennial	25-30	A	1	dried
Pseudohandelia umbellifera	perennial	40-50	R	+	fruiting
Ranunculus sewerzowii	perennial	12-15	O	+	dried
Reseda luteola	perennial	30-40	O	+	fruiting
Rhaponticum repens (Acroptilon repens)	perennial	30-40	O	+	fruiting
Roemeria refracta	annual	15-20	O	+	dried
Rosa persica (Hulthemia persica)	subshrub	30-40	O	+	fruiting
Silene conica	annual	12-15	O	+	dried
Sisymbrium altissimum	annual	30-40	F	+	dried
Sophora pachycarpa	perennial	20-30	O	+	fruiting
Stizolophus balsamita	annual	30-40	O	+	fruiting
Strigosella africana	annual	15-20	R	+	dried
Taeniatherum caput-medusae	annual	20-30	A	1	dried
Trichodesma incanum	perennial	25-30	O	+	Flowering, fruiting
Triticum aestivum	annual	30-40	R	+	dried
Turgenia latifolia	annual	25-30	O	+	dried
Verbena officinalis	perennial	30-40	O	+	Flowering
Xanthium spinosum	annual	30-40	O	+	Flowering, fruiting
Ziziphora tenuior	annual	5-7	O	+	dried

Table 41: Check-list of plants recorded on sample plot 39 (39.45894° N, 65.9849° E), northeastern part of 400 MW PV site, Nurabad District of Samarkand Region, fallow land, camel thorn-ephemeroid vegetation

Species	**Life form**	**Height, cm**	**Abundance**		**Phenol. Stage**
			DACFOR	**Braun-Blanquet**	
Alhagi pseudalhagi	perennial	15-20	C	1	Flowering, fruiting
Alyssum desertorum	annual	5-7	R	+	dried
Carex pachystylis	perennial	7-10	F	+	dried
Ceratocarpus arenarius	annual	10-15	R	+	fruiting
Cousinia resinosa	perennial	15-20	R	+	Flowering, fruiting
Euphorbia chamaesyce	annual	5-7	R	+	Flowering, fruiting

Hordeum murinum subsp. leporinum (Hordeum leporinum)	annual	15-20	O	+	dried
Peganum harmala	perennial	20-30	O	+	fruiting
Poa bulbosa	perennial	20-25	C	+	dried

Table 42: Check-list of plants recorded on sample plot 40 (39.44893° N, 65.96658° E), western part of 400 MW PV site, Nurabad District of Samarkand Region, clayey piedmont plain with native camel thorn-ephemeroid vegetation

Species	**Life form**	**Height, cm**	**Abundance**		**Phenol. Stage**
			DACFOR	**Braun-Blanquet**	
Alhagi pseudalhagi	perennial	20-25	A	2	Flowering, fruiting
Alyssum desertorum	annual	5-7	R	+	dried
Carex pachystylis	perennial	7-10	A	1	dried
Ceratocarpus arenarius	annual	15-20	R	+	fruiting
Cousinia resinosa	perennial	15-20	O	+	Flowering, fruiting
Diarthron vesiculosum	annual	10-15	R	+	fruiting
Euphorbia chamaesyce	annual	5-7	R	+	Flowering, fruiting
Heliotropium ellipticum	annual	10-15	R	+	Flowering, fruiting
Hordeum murinum subsp. leporinum (Hordeum leporinum)	annual	15-20	O	+	dried
Medicago monantha (Trigonella geminiflora)	annual	5-7	R	+	dried
Minuartia meyeri	annual	5-7	R	+	dried
Peganum harmala	perennial	20-30	R	+	fruiting
Plantago lanceolata	perennial	5-10	R	+	Flowering, fruiting
Poa bulbosa	perennial	10-15	F	+	dried

Table 43: Check-list of plants recorded on sample plot 41 (39.44314° N, 65.97621° E), central part of 400 MW PV site, Nurabad District of Samarkand Region, fallow land with camel thorn-ephemeroid vegetation

Species	**Life form**	**Height, cm**	**Abundance**		**Phenol. Stage**
			DACFOR	**Braun-Blanquet**	
Alhagi pseudalhagi	perennial	20-25	F	1	Flowering, fruiting
Alyssum desertorum	annual	5-7	R	+	dried
Carex pachystylis	perennial	7-10	O	+	dried
Ceratocarpus arenarius	annual	10-15	O	+	fruiting
Cousinia resinosa	perennial	15-20	R	+	Flowering, fruiting
Diarthron vesiculosum	annual	12-15	O	+	fruiting
Euphorbia chamaesyce	annual	5-7	R	+	Flowering, fruiting
Heliotropium ellipticum	annual	10-15	R	+	Flowering, fruiting
Hordeum murinum subsp. leporinum (Hordeum leporinum)	annual	15-20	O	+	dried
Medicago monantha (Trigonella geminiflora)	annual	5-7	R	+	dried

Peganum harmala	perennial	20-30	R	+	fruiting
Poa bulbosa	perennial	20-25	A	+	dried

Table 44: Check-list of plants recorded on sample plot 42 (39.41943° N, 65.94493° E), northern part of 500 MW PV site, Nurabad District of Samarkand Region, clayey piedmont plain with native camel thorn-ephemeroid vegetation

Species	**Life form**	**Height, cm**	**Abundance**		**Phenol. Stage**
			DACFOR	**Braun-Blanquet**	
Alhagi pseudalhagi	perennial	15-20	A	2	Flowering, fruiting
Alyssum desertorum	annual	5-7	R	+	dried
Carex pachystylis	perennial	7-10	A	1	dried
Ceratocarpus arenarius	annual	15-20	R	+	fruiting
Cousinia resinosa	perennial	15-20	O	+	Flowering, fruiting
Diarthron vesiculosum	annual	10-15	R	+	fruiting
Euphorbia chamaesyce	annual	5-7	R	+	Flowering, fruiting
Heliotropium ellipticum	annual	10-15	R	+	Flowering, fruiting
Hordeum murinum subsp. leporinum (Hordeum leporinum)	annual	15-20	O	+	dried
Peganum harmala	perennial	20-30	O	+	fruiting
Poa bulbosa	perennial	10-15	F	+	dried

Table 45: Check-list of plants recorded on sample plot 43 (39.43202° N, 65.94462° E), central part of 500 MW PV site, Nurabad District of Samarkand Region, clayey piedmont plain with native camel thorn-ephemeroid vegetation

Species	**Life form**	**Height, cm**	**Abundance**		**Phenol. Stage**
			DACFOR	**Braun-Blanquet**	
Alhagi pseudalhagi	perennial	20-25	A	2	Flowering, fruiting
Alyssum desertorum	annual	5-7	O	+	dried
Carex pachystylis	perennial	7-10	D	1	dried
Ceratocarpus arenarius	annual	10-15	R	+	fruiting
Cousinia resinosa	perennial	15-20	O	+	Flowering, fruiting
Diarthron vesiculosum	annual	10-15	R	+	fruiting
Euphorbia chamaesyce	annual	5-7	R	+	Flowering, fruiting
Hordeum murinum subsp. leporinum (Hordeum leporinum)	annual	15-20	O	+	dried
Minuartia meyeri	annual	5-7	R	+	dried
Peganum harmala	perennial	20-30	R	+	fruiting
Poa bulbosa	perennial	10-15	F	+	dried

Table 46: Check-list of plants recorded on sample plot 44 (39.51688° N, 63.87222° E), Karakul BESS site, Karakul District of Bukhara Region, shallow wavy fixed sands with disturbed desert sedge-Astragalus-Convolvulus-white saxaul community at the edge of garbage dump

Species	**Life form**		**Abundance**	

		Height, cm	DACFOR	Braun-Blanquet	Phenol. Stage
Alhagi pseudalhagi	perennial	20-30	O	+	Flowering, fruiting
Astragalus villosissimus	dwarf shrub	30–40	O	1	fruiting
Bromus tectorum	annual	12-15	O	+	dried
Carex physodes	perennial	10-15	C	1	dried
Ceratocarpus arenarius	annual	15-20	R	+	fruiting
Ceratocephala falcata	annual	5–7	F	+	dried
Convolvulus divaricatus	subshrub	30-40	F	1	Flowering, fruiting
Convolvulus hamadae	subshrub	30-40	R	+	Flowering, fruiting
Cousinia hamadae	perennial	20-30	R	+	fruiting
Eremopyrum bonaepartis	annual	12-15	R	+	dried
Eremopyrum distans	annual	12-15	R	+	dried
Haloxylon persicum	shrub	100-150	A	2	vegetation
Heliotropium arguzioides	perennial	10-15	O	+	Flowering
Heliotropium dasycarpum	perennial	10-15	O	+	Flowering
Hordeum murinum subsp. leporinum (Hordeum leporinum)	annual	15-20	O	+	dried
Koelpinia linearis	annual	12-15	R	+	dried
Meniocus linifolius	annual	5–7	O	+	dried
Peganum harmala	perennial	20-30	O	+	fruiting
Salsola paulsenii	annual	20-30	O	+	Flowering

Table 47. Check-list of plants recorded on sample plot 45 (39.56555° N, 66.71898° E), 70 km OTHL, Nurobod District of Samarkand Region, bank of dry temporary stream, ephemeroid-forb-camel thorn community

Species	Life form	Height, cm	Abundance		Phenol. Stage
			DACFOR	Braun-Blanquet	
Alhagi pseudalhagi	perennial	40-50	A	2	fruiting
Alyssum desertorum	annual	5-7	O	+	dried
Bromus tectorum	annual	12-15	O	+	dried
Capparis spinosa	perennial	30-40	O	+	fruiting
Carex pachystylis	perennial	7-10	O	+	dried
Carthamus oxyacanthus	annual	20-25	R	+	flowering
Centaurea belangeriana	annual, biennial	20-25	O	+	flowering
Ceratocarpus arenarius	annual	10-15	O	+	fruiting
Cousinia resinosa	perennial	20-30	O	+	fruiting
Dianthus tetralepis	perennial	20-25	R	+	fruiting
Glycyrrhiza triphylla	perennial	40-50	F	1	fruiting
Minuartia meyeri	annual	5-7	R	+	dried
Poa bulbosa	perennial	15-20	O	+	dried

Table 48. Check-list of plants recorded on sample plot 46 (39.56149° N, 66.702735° E), 70 km OTHL, Nurobod District of Samarkand Region, dry foothills, camel thorn-ephemeroid community among rainfed fields

Species	Life form	Height, cm	Abundance		Phenol. Stage
			DACFOR	Braun-Blanquet	
Alhagi pseudalhagi	perennial	25-30	F	1	fruiting
Allium griffithianum	perennial	10-15	R	+	dried

Alyssum desertorum	annual	5-7	R	+	dried
Bromus tectorum	annual	12-15	O	+	dried
Capparis spinosa	perennial	30-40	R	+	fruiting
Carex pachystylis	perennial	7-10	A	1	dried
Carthamus oxyacanthus	annual	20-25	R	+	flowering
Carthamus lanatus subsp. turkestanicus	annual	25-30	O	+	fruiting
Centaurea belangeriana	annual, biennial	20-25	R	+	flowering
Ceratocarpus arenarius	annual	10-15	F	1	fruiting
Cousinia resinosa	perennial	20-30	R	+	fruiting
Diarthron vesiculosum	annual	10-15	O	+	fruiting
Eremodaucus lehmannii	annual	25-30	R	+	dried
Papaver pavoninum	annual	12-15	R	+	dried
Phlomis thapsoides	perennial	20-25	R	+	vegetation
Poa bulbosa	perennial	15-20	F	+	dried
Sisymbrium altissimum	annual	25-30	R	+	dried
Sophora pachycarpa	perennial	20-25	O	+	fruiting
Stipa hohenackeriana	perennial	25-30	R	+	fruiting

Table 49. Check-list of plants recorded on sample plot 47 (39.5678° N, 66.65157° E), 360 km OTHL, Pastdargom District of Samarkand Region, a vineyard 5 km to the southeast of village Khancharvak

Species	**Life form**	**Height, cm**	**Abundance**		**Phenol. Stage**
			DACFOR	**Braun-Blanquet**	
Alhagi pseudalhagi	perennial	30-40	O	1	fruiting
Artemisia tournefortiana	annual	50-100	R	+	Flowering, fruiting
Avena fatua	annual	30-40	O	+	dried
Bromus tectorum	annual	15-20	O	+	dried
Capparis spinosa	perennial	30-40	O	+	flowering
Carthamus oxyacanthus	annual	30-40	O	+	flowering
Carthamus lanatus subsp. turkestanicus	annual	50-70	O	+	fruiting
Centaurea belangeriana	annual, biennial	25-30	R	+	fruiting
Centaurea iberica	biennial	30-40	O	+	fruiting
Centaurea solstitialis	annual	20-30	O	+	fruiting
Centaurea virgata subsp. squarrosa	perennial	30-40	O	+	fruiting
Cichorium intybus	perennial	30-40	F	+	Flowering, fruiting
Cirsium vulgare	biennial	50-70	O	+	fruiting
Convolvulus arvensis	Perennial, liana	10-15	F	+	Flowering, fruiting
Cullen drupaceum (Psoralea drupacea)	perennial	40-50	R	+	fruiting
Cynodon dactylon	perennial	10-15	C	2	fruiting
Diarthron vesiculosum	annual	15-20	O	+	fruiting
Digitaria sanguinalis	annual	20-25	C	2	fruiting
Echium biebersteinii	biennial	30-40	R	+	fruiting
Echinochloa crus-galli	annual	50-70	R	+	fruiting
Epilobium hirsutum	perennial	50-100	O	+	Flowering, fruiting

Erigeron canadensis	annual	40-50	F	1	Flowering, fruiting
Erigeron sumatrensis	annual	50-70	F	1	Flowering, fruiting
Hordeum murinum subsp. leporinum (Hordeum leporinum)	annual	25-30	F	1	dried
Hypericum perforatum	perennial	30-40	R	+	Flowering, fruiting
Lactuca serriola	annual, biennial	50-70	O	+	Flowering, fruiting
Mentha longifolia var. asiatica	perennial	50-100	O	+	flowering
Onopordum leptolepis	biennial	70-100	F	1	Flowering, fruiting
Persicaria minor	annual	25-40	R	+	Flowering, fruiting
Picnomon acarna	annual	30-40	R	+	Flowering, fruiting
Plantago lanceolata	perennial	10-15	A	1	fruiting
Plantago major	perennial	15-25	F	1	Flowering, fruiting
Poa bulbosa	perennial	20-25	F	+	dried
Rhaponticum repens (Acroptilon repens)	perennial	30-40	O	+	Flowering, fruiting
Rosa persica (Hulthemia persica)	subshrub	30-40	A	2	fruiting
Setaria viridis	annual	15-25	O	+	Flowering, fruiting
Sisymbrium altissimum	annual	30-40	F	+	dried
Sophora pachycarpa	perennial	30-40	F	1	fruiting
Sorghum halepense	perennial	40-50	O	+	fruiting
Taeniatherum caput-medusae	annual	20-30	F	+	dried
Trifolium repens	perennial	10-15	O	+	Flowering, fruiting
Verbena officinalis	perennial	30-40	O	+	Flowering
Vitis vinifera	shrub	100-150	A	3	fruiting
Xanthium spinosum	annual	25-30	O	+	Flowering, fruiting
Xanthium strumarium	annual	30-40	F	2	Flowering, fruiting

Table 50. Check-list of plants recorded on sample plot 48 (39.567825° N, 66.613356° E), 360 km OTHL, Pastdargom District of Samarkand Region, irrigated cotton and peanut fields 3 km to the south of village Khancharvak

Species	**Life form**	**Height, cm**	**Abundance**		**Phenol. Stage**
			DACFOR	**Braun-Blanquet**	
Achillea wilhelmsii (Achillea kermanica)	perennial	20-25	O	+	fruiting
Alhagi pseudalhagi	perennial	30-40	F	1	fruiting
Artemisia tournefortiana	annual	50-100	R	+	Flowering, fruiting
Avena fatua	annual	30-40	O	+	dried
Bromus tectorum	annual	15-20	O	+	dried
Capparis spinosa	perennial	30-40	R	+	flowering
Carthamus oxyacanthus	annual	30-40	R	+	flowering

Carthamus lanatus subsp. turkestanicus	annual	50-70	R	+	fruiting
Centaurea iberica	biennial	30-40	R	+	fruiting
Centaurea solstitialis	annual	20-30	O	+	fruiting
Chenopodium album	annual	30-40	O	+	Flowering, fruiting
Cichorium intybus	perennial	30-40	O	+	Flowering, fruiting
Convolvulus arvensis	Perennial, liana	10-15	O	+	Flowering, fruiting
Cullen drupaceum (Psoralea drupacea)	perennial	40-50	R	+	fruiting
Cynodon dactylon	perennial	10-15	F	1	fruiting
Datura stramonium	annual	70-100	O	1	Flowering, fruiting
Digitaria sanguinalis	annual	20-25	F	1	fruiting
Echium biebersteinii	biennial	30-40	R	+	fruiting
Echinochloa crus-galli	annual	50-70	R	+	fruiting
Echinophora sibthorpiana	biennial	20-30	O	+	fruiting
Epilobium hirsutum	perennial	50-100	O	+	Flowering, fruiting
Erigeron canadensis	annual	40-50	R	+	Flowering, fruiting
Erigeron sumatrensis	annual	50-70	R	+	Flowering, fruiting
Gossypium hirsutum	Perennial (annual in culture)	40-50	D	4	fruiting
Haplophyllum versicolor	perennial	15-20	R	+	fruiting
Hordeum murinum subsp. leporinum (Hordeum leporinum)	annual	25-30	F	1	dried
Lactuca serriola	annual, biennial	40-50	O	+	Flowering, fruiting
Medicago sativa	perennial	25-30	O	+	Flowering, fruiting
Mentha longifolia var. asiatica	perennial	40-50	O	+	flowering
Onopordum leptolepis	biennial	40-50	R	+	Flowering, fruiting
Persicaria minor	annual	20-30	R	+	Flowering, fruiting
Picnomon acarna	annual	30-40	R	+	Flowering, fruiting
Plantago lanceolata	perennial	10-15	F	1	fruiting
Plantago major	perennial	10-15	O	+	Flowering, fruiting
Poa bulbosa	perennial	20-25	F	+	dried
Polygonum aviculare	Annual, perennial	10-15	O	+	Flowering, fruiting
Rhaponticum repens (Acroptilon repens)	perennial	30-40	O	+	Flowering, fruiting
Rosa persica (Hulthemia persica)	subshrub	30-40	F	1	fruiting
Setaria viridis	annual	15-25	O	+	Flowering, fruiting
Sisymbrium altissimum	annual	30-40	O	+	dried
Solanum nigrum	annual	25-30	R	+	Flowering, fruiting

Sorghum halepense	perennial	40-50	O	+	fruiting
Trifolium repens	perennial	10-15	O	+	Flowering, fruiting
Xanthium spinosum	annual	25-30	R	+	Flowering, fruiting
Xanthium strumarium	annual	25-30	O	1	Flowering, fruiting

Table 51. Check-list of plants recorded on sample plot 49 (39.56072° N, 66.58319° E), 360 km OTHL, Pastdargom District of Samarkand Region, apple garden and boundary-strip 2 km to the south of village Khancharvak

Species	**Life form**	**Height, cm**	**Abundance**		**Phenol. Stage**
			DACFOR	**Braun-Blanquet**	
Alhagi pseudalhagi	perennial	30-40	C	1	fruiting
Bromus tectorum	annual	15-20	O	+	dried
Capparis spinosa	perennial	30-40	F	1	flowering
Carthamus oxyacanthus	annual	30-40	R	+	flowering
Carthamus lanatus subsp. turkestanicus	annual	50-70	O	+	fruiting
Centaurea belangeriana	annual, biennial	25-30	R	+	fruiting
Centaurea iberica	biennial	30-40	R	+	fruiting
Centaurea solstitialis	annual	20-30	O	+	fruiting
Centaurea virgata subsp. squarrosa	perennial	30-40	O	+	fruiting
Cichorium intybus	perennial	30-40	O	+	Flowering, fruiting
Convolvulus arvensis	Perennial, liana	10-15	F	+	Flowering, fruiting
Cullen drupaceum (Psoralea drupacea)	perennial	40-50	R	+	fruiting
Cynodon dactylon	perennial	10-15	C	2	fruiting
Diarthron vesiculosum	annual	15-20	O	+	fruiting
Echium biebersteinii	biennial	30-40	R	+	fruiting
Erigeron canadensis	annual	40-50	R	+	Flowering, fruiting
Gleditsia caspica	tree	4-5 m	R	1	vegetation
Heliotropium ellipticum	annual	15-20	R	+	Flowering, fruiting
Hordeum spontaneum	annual	40-50	O	+	dried
Hordeum murinum subsp. leporinum (Hordeum leporinum)	annual	25-30	F	1	dried
Lactuca serriola	annual, biennial	50-70	R	+	Flowering, fruiting
Malus domestica	tree	200-250	D	4	fruiting
Onopordum leptolepis	biennial	70-100	O	1	Flowering, fruiting
Picnomon acarna	annual	30-40	R	+	Flowering, fruiting
Plantago lanceolata	perennial	10-15	O	+	fruiting
Poa bulbosa	perennial	20-25	A	2	dried
Rhaponticum repens (Acroptilon repens)	perennial	30-40	O	+	Flowering, fruiting
Rosa persica (Hulthemia persica)	subshrub	30-40	F	1	fruiting
Sisymbrium altissimum	annual	30-40	O	+	dried

Sophora pachycarpa	perennial	30-40	R	+	fruiting
Ulmus pumila	tree	2-3 m	F	2	vegetation
Xanthium spinosum	annual	25-30	R	+	Flowering, fruiting

Table 52. Check-list of plants recorded on sample plot 50 (39.52184° N, 66.464766° E), 70 km OTHL, Nurobod District of Samarkand Region, 2.5 km to the northwest of the village Sarikul, dry foothills among rainfed fields, camel thorn-ephemeroid community

Species	**Life form**	**Height, cm**	**Abundance**		**Phenol. Stage**
			DACFOR	**Braun-Blanquet**	
Alhagi pseudalhagi	perennial	25-30	F	1	fruiting
Andrachne telephioides	perennial	5-10	R	+	fruiting
Bromus danthoniae	annual	12-15	O	+	dried
Carex pachystylis	perennial	7-10	A	1	dried
Cousinia resinosa	perennial	20-30	O	+	dried
Cynodon dactylon	perennial	10-15	O	+	fruiting
Diarthron vesiculosum	annual	10-15	O	+	fruiting
Hordeum murinum subsp. leporinum (Hordeum leporinum)	annual	25-30	O	+	dried
Papaver pavoninum	annual	12-15	R	+	dried
Poa bulbosa	perennial	15-20	F	+	dried

Table 53. Check-list of plants recorded on sample plot 51 (39.507245° N, 66.40238° E), 70 km OTHL, Nurobod District of Samarkand Region, strongly degraded dry foothills near the canal Moskow

Species	**Life form**	**Height, cm**	**Abundance**		**Phenol. Stage**
			DACFOR	**Braun-Blanquet**	
Alhagi pseudalhagi	perennial	25-30	O	1	fruiting
Andrachne telephioides	perennial	5-10	R	+	fruiting
Bothriochloa ischaemum	perennial	30-40	O	+	fruiting
Calamagrostis pseudophragmites	perennial	30-40	O	+	fruiting
Carex pachystylis	perennial	7-10	C	1	dried
Centaurea solstitialis	annual	20-30	O	+	fruiting
Convolvulus arvensis	Perennial, liana	10-15	R	+	Flowering, fruiting
Cousinia resinosa	perennial	15-20	R	+	dried
Cynodon dactylon	perennial	10-15	F	1	fruiting
Diarthron vesiculosum	annual	10-15	O	+	fruiting
Hordeum murinum subsp. leporinum (Hordeum leporinum)	annual	25-30	O	+	dried
Poa bulbosa	perennial	15-20	O	+	dried

Table 54. Check-list of plants recorded on sample plot 52 (39.49269° N, 66.31366° E), 70 km OTHL, Nurobod District of Samarkand Region, dry foothills among rainfed fields, ephemeroid community

Species	**Life form**	**Height, cm**	**Abundance**		**Phenol. Stage**
			DACFOR	**Braun-Blanquet**	
Alhagi pseudalhagi	perennial	20-25	O	+	fruiting
Andrachne telephioides	perennial	5-10	R	+	fruiting
Bromus danthoniae	annual	12-15	R	+	dried

Carex pachystylis	perennial	7-10	A	1	dried
Centaurea belangeriana	annual, biennial	20-25	R	+	Flowering, fruiting
Ceratocarpus arenarius	annual	10-15	R	+	fruiting
Cousinia resinosa	perennial	20-30	R	+	Flowering, fruiting
Diarthron vesiculosum	annual	10-15	O	+	fruiting
Hordeum murinum subsp. leporinum (Hordeum leporinum)	annual	25-30	R	+	dried
Papaver pavoninum	annual	12-15	R	+	dried
Poa bulbosa	perennial	15-20	F	+	dried
Rosa persica (Hulthemia persica)	subshrub	30-40	R	+	fruiting
Taeniatherum caput-medusae	annual	15-20	O	+	dried

Table 55. Check-list of plants recorded on sample plot 53 (39.489311° N, 66.299027° E), 70 km OTHL, Nurobod District of Samarkand Region, dry foothills, camel thorn-ephemeroid community

Species	**Life form**	**Height, cm**	**Abundance**		**Phenol. Stage**
			DACFOR	**Braun-Blanquet**	
Alhagi pseudalhagi	perennial	25-30	F	1	fruiting
Carex pachystylis	perennial	7-10	A	1	dried
Cousinia resinosa	perennial	20-30	F	1	fruiting
Diarthron vesiculosum	annual	10-15	O	+	fruiting
Hordeum murinum subsp. leporinum (Hordeum leporinum)	annual	25-30	R	+	dried
Poa bulbosa	perennial	15-20	F	+	dried

Table 56. Check-list of plants recorded on sample plot 54 (39.4145° N, 66.010276° E), 70 km OTHL, Nurobod District of Samarkand Region, 1.5 km to the south of the village Koshkuduk, piedmont plain, strongly overgrazed camel thorn-ephemeroid community

Species	**Life form**	**Height, cm**	**Abundance**		**Phenol. Stage**
			DACFOR	**Braun-Blanquet**	
Alhagi pseudalhagi	perennial	15-20	F	+	fruiting
Carex pachystylis	perennial	7-10	F	+	dried
Ceratocarpus arenarius	annual	10-15	R	+	fruiting
Cousinia resinosa	perennial	15-20	R	+	dried
Hordeum murinum subsp. leporinum (Hordeum leporinum)	annual	15-20	R	+	dried
Peganum harmala	perennial	20-25	R	+	fruiting
Poa bulbosa	perennial	12-15	O	+	dried

Table 57. Check-list of plants recorded on sample plot 55 (39.42285° N, 65.99433° E), 70 km OTHL, Nurobod District of Samarkand Region, 0.8 km to the southwest of the village Koshkuduk, piedmont plain, camel thorn-ephemeroid community

Species	**Life form**	**Height, cm**	**Abundance**		**Phenol. Stage**
			DACFOR	**Braun-Blanquet**	
Alhagi pseudalhagi	perennial	15-20	F	1	fruiting
Carex pachystylis	perennial	7-10	A	1	dried
Ceratocarpus arenarius	annual	10-15	R	+	fruiting

Cousinia resinosa	perennial	20-30	R	+	dried
Hordeum murinum subsp. leporinum (Hordeum leporinum)	annual	25-30	R	+	dried
Peganum harmala	perennial	20-25	R	+	fruiting
Poa bulbosa	perennial	12-15	O	+	dried

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Mammal survey report

Environmental and Social Impact Assessment (ESIA) for the development of a solar power project in Samarkand Region, Uzbekistan

Juru

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1. Introduction

In accordance with the Resolutions of the President of the Republic of Uzbekistan No. PP-207 dated July 4, 2023, "On measures for the implementation of the investment project 'Construction of a 500 MW Solar Photovoltaic Power Station, a 334 MW Electric Energy Storage System, and a Substation to support its operation in the Nurabad District of the Samarkand Region — Sazagan Solar 1'," and No. PP-208 dated July 4, 2023, "On measures for the implementation of the investment project 'Construction of a 500 MW Solar Photovoltaic Power Station, a 334 MW Electric Energy Storage System, and a Substation to support its operation in the Nurabad District of the Samarkand Region — Sazagan Solar 2'," investment agreements were signed on April 19, 2023, between the Ministry of Investments, Industry, and Trade of the Republic of Uzbekistan, the company "ACWA Power Company" (Investor), and the companies "ACWA Power Sazagan Solar 1" and "ACWA Power Sazagan Solar 2" (hereinafter referred to as the "Project Companies") (Figure 1).

Under the aforementioned investment agreements, the Project Companies are implementing the projects "Sazagan Solar 1" and "Sazagan Solar 2," within which three solar photovoltaic power stations with a total capacity of 1000 MW and a substation with a capacity of 500/220 kV will be constructed in the Nurabad District of the Samarkand Region. Additionally, two energy storage systems will be built — one in the Nurabad District of the Samarkand Region and another in the Karakul District of the Bukhara Region. Furthermore, two parallel overhead power transmission lines with a voltage of 220 kV and a length of 70 km will be constructed to connect the main project facilities. 360 km overhead transmission line will also connect stations located in Samarkand region with the Khalka substation, located in Tashkent region.

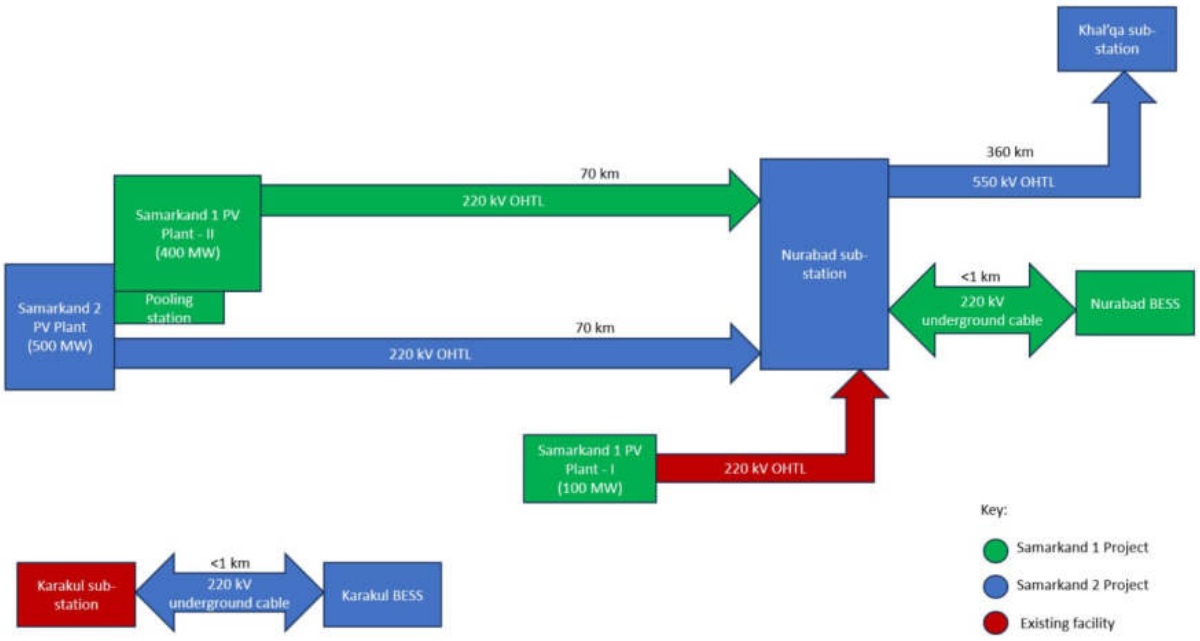

Figure 1: The scheme of project sites

The report presents data and materials from both field and desktop terrestrial mammal surveys, which include phototrapping. However, it's important to note that bat surveys are scheduled for 2024 and are not included in the current report.

2. Study Area Description

The research zone encompasses sections of Quyi Chirchiq District in the Tashkent Region, as well as Syrdarya, Mirzaabad, Akaltyn, and Sardoba Districts in the Syrdarya Region. It also includes Dustlik, Pakhtakor, Sharaf-Rashidov, and Gallaaral Districts in the Dzhizak (Jizzakh) Region, along with Bulungur, Jomboy, Payariq, Akdarya, Pastdargom, and Nurabad Districts in the Samarkand Region, as well as Karakul District in the Bukhara Region.

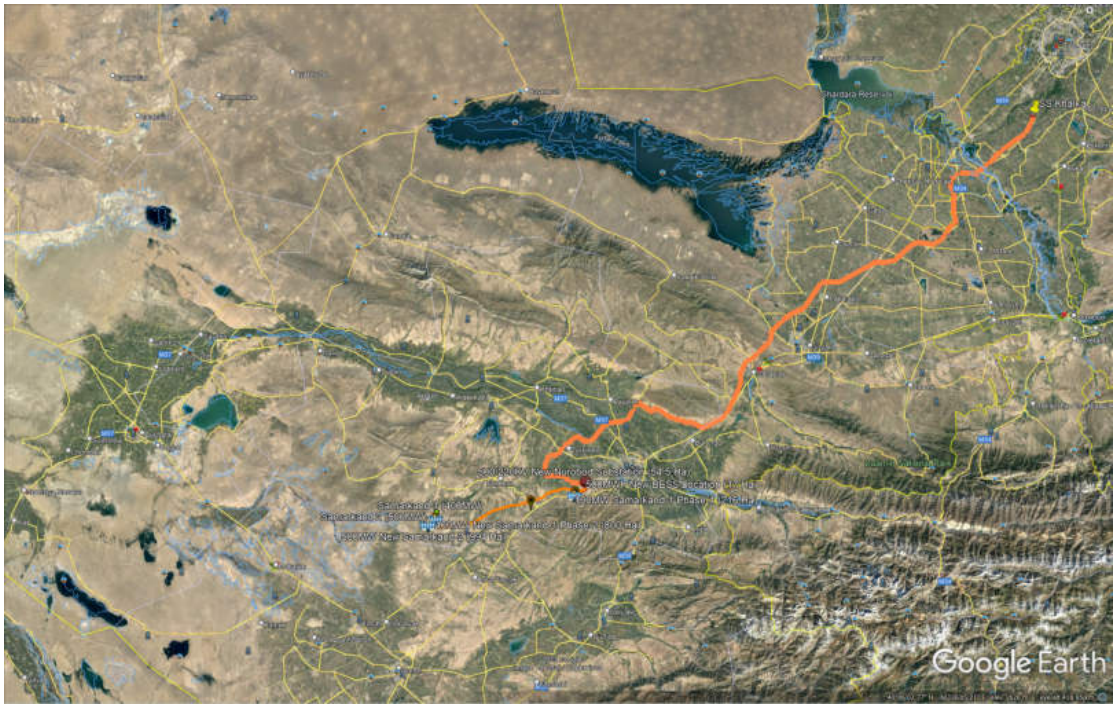

Figure 2: UZB-ACWA-Samarkand Solar 1 and Solar 2 & OHTL ESIA Project area

Project consists of the following parts:

1) Khalka substation and 360 km 550 kV OHTL
2) Nurabad substation and access road 5320 m
3) Nurabad BESS
4) Solar 100 MW PV plant and access road 70 m
5) Solar 400 MW PV plant, pooling station and access road 696 m
6) Solar 500 MW PV plant
7) Karakul BESS and access road
8) 70km OHTL (Nurabad SS – Pooling station)
9) LILO 11 km and LILO 19 km

100 MW PV plant and access road 70 m

The studied area is situated in the northern foothills of the Zarafshan Range, within the Nurabad District of the Samarkand Region in the Republic of Uzbekistan. This region is intersected from south to north by two significant dry riverbeds, Aksay and Sazagansay, which typically dry up during the summer months. The foothill plain characterizes a semi-arid, gently undulating terrain where plant species commonly found in both desert and steppe environments thrive.

The habitat presented on the site belongs mainly to the fallow lands and arable lands, which used for grazing.

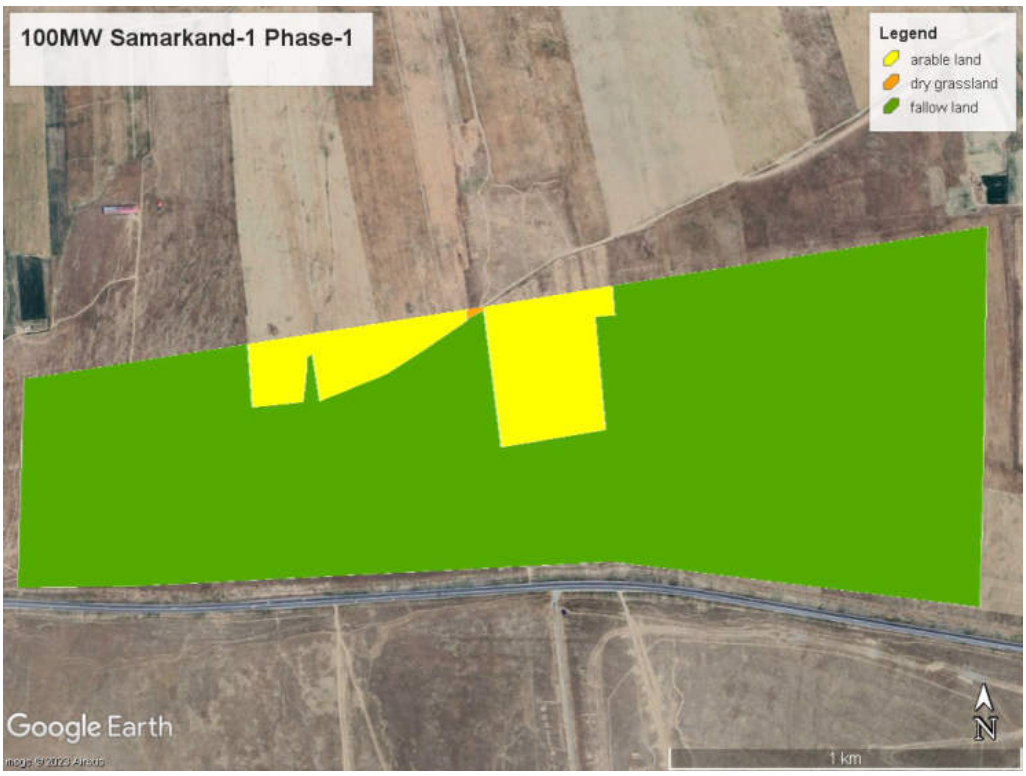

Figure 3: Habitat types — 100 MW Samarkand 1

Nurabad substation and access road 5320 m

The studied area is situated in the northern foothills of the Zarafshan Range, within the Nurabad District of the Samarkand Region in the Republic of Uzbekistan. This region is intersected from south to north by two significant dry riverbeds, Aksay and Sazagansay, which typically dry up during the summer months. The foothill plain characterizes a semi-arid, gently undulating terrain where plant species commonly found in both desert and steppe environments thrive.

The habitat presented on the site belongs mainly to the fallow lands, which used for grazing.

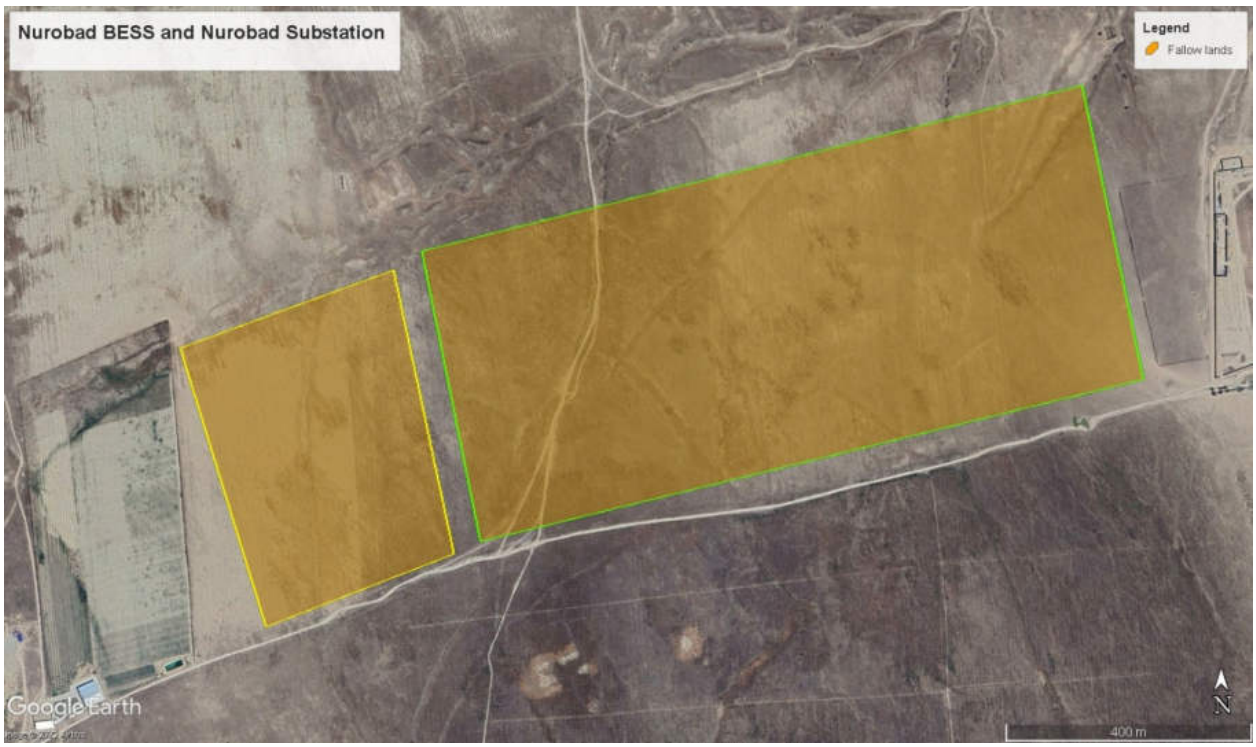

Figure 4: Habitat types — Nurabad BESS (left polygon) and Nurabad Substation (right polygon)

Nurabad BESS

The studied area is situated in the northern foothills of the Zarafshan Range, within the Nurabad District of the Samarkand Region in the Republic of Uzbekistan. This region is intersected from south to north by two significant dry riverbeds, Aksay and Sazagansay, which typically dry up during the summer months. The foothill plain characterizes a semi-arid, gently undulating terrain where plant species commonly found in both desert and steppe environments thrive.

The habitat presented on the site belongs mainly to the fallow lands (Figure 4), which used for grazing.

Solar 400 MW PV plant, pooling station and access road 696 m

The project area is located in the Karnabchul Steppe. The Karnabchul Steppe is a submontane plain of the Zarafshan Range. It extends southward from the Zirabulak and Ziyadin Mountains to the northern edge of the Shorsay salt marsh. To the east, it borders the Ulus landscape, to the southwest, it is bounded by the Karaiz upland, and to the west, by the Tudakul reservoir. Karnabchul receives surface water runoff from the Zirabulak Mountains, and in some places, the steppe is interspersed with shallow depressions and channels of temporary watercourses. The flat surface is interspersed with salt pans and depressions devoid of vegetation, such as the Shorsay salt marsh. The vegetation cover of Karnabchul is mainly composed of Artemisia ephemeral formations. Ephemeral (ephemeroid) pastures are associated with areas of submontane semideserts.

The habitat of the Solar 400 MW PV project area is characterized by fallow lands and partially dry grassland:

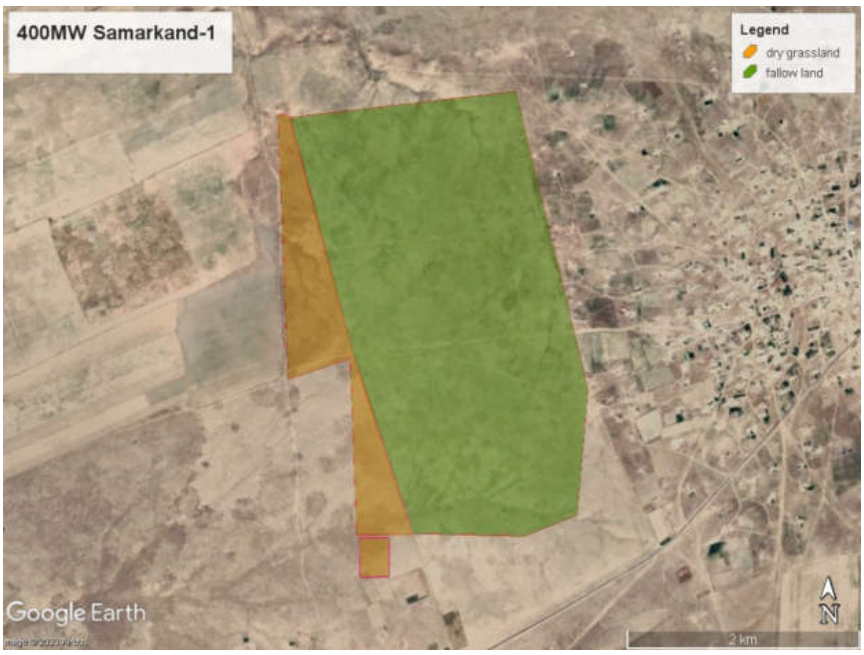

Figure 5: Habitat types — 400 MW Samarkand -1

Solar 500 MW PV plant

The project area is located in the Karnabchul Steppe.

The Karnabchul Steppe is a submontane plain of the Zarafshan Range. It extends southward from the Zirabulak and Ziyadin Mountains to the northern edge of the Shorsay salt marsh. To the east, it borders the Ulus landscape, to the southwest, it is bounded by the Karaiz upland, and to the west, by the Tudakul reservoir.

Karnabchul receives surface water runoff from the Zirabulak Mountains, and in some places, the steppe is interspersed with shallow depressions and channels of temporary watercourses. The flat surface is interspersed with salt pans and depressions devoid of vegetation, such as the Shorsay salt marsh. The vegetation cover of Karnabchul is mainly composed of Artemisia ephemeral formations. Ephemeral (ephemeroid) pastures are associated with areas of submontane semideserts.

The habitat of the Solar 500 MW PV project area is characterized by fallow lands and dry grasslands:

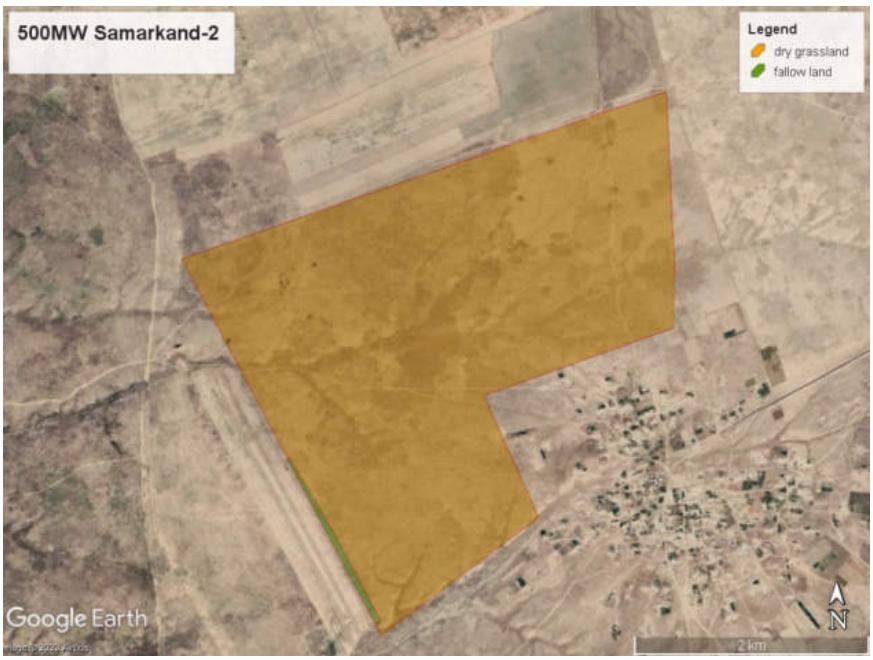

Figure 6: Habitat types - 500 MW Samarkand 2

Khalka substation and 360 km 550 kV OHTL

Figure 7: Khalka substation and 360 km 550 kV OHTL

360 km long overhead transmission line (OHTL) section begins in the Tashkent region, then traverses the Syrdarya and Jizzakh regions before reaching the Sazagan substation in the Samarkand region. Almost the entire length of the OHTL is situated on agricultural landscape with irrigation canal

systems. Only a few areas, bordering the foothills of Nuratau and Gobduntau, consist of natural lands and intersect with water bodies such as the Syrdarya, Karakadrya and Akdarya rivers.

Mammal fauna along the entire section of OHTL with the exception of the site in the Jizzakh region, where the line crosses the southern ends of Nuratau and the site in the Samarkand region, where the line passes through the foothills of Gobduntau, is represented typical views of the urbanized and cultivated landscape of flat Uzbekistan. In zoogeographical terms, the territory belongs to the Turanian Plain (Kostin, 1961). The main species are insectivores (Long-eared Hedgehog, Lesser Shrew) and rodents (Yellow Ground Squirrel, Bucharian Vole, Tien Shan Vole, House Mouse, Tamarisk Gerbil, Gray Hamster, Zaisan Mole Vole), which feed on such species of predatory mammals as Foxes and Steppe Cats. If there are water sources and places of shelter, the Golden Jackal is included in the complex of predatory mammals. Due to the highly transformed landscape, encounters of rare species such as Marbled Polecat, Steppe Polecat and Corsac Fox are not considered possible by us, even at the foothills of mountain ranges. Only within the Jizzakh region was a Brandt's Hedgehog observed at points. It is noteworthy that Zaisan Mole Vole was recorded only on a small number of transects - 11 out of 25, which is 44.0% for the first section. This indicates a strong transformation of natural lands, since this species avoids plowed areas.

Figure 8: Agriculture landscape in Tashkent region

Figure 9: Irrigation canal in Syrdarya region

Figure 10: Foothills of Nuratau mountain in Jizzak region

Figure 11: Karadarya river in Samarkand region

70 km OHTL (Pooling station – Nurabad SS)

Figure 12: 70 km OHTL (Pooling station – Nurabad SS)

This OHTL site is located on the rugged terrain of the Karnabchul steppe within the Samarkand region. The territory is represented by natural (areas), although transformed by anthropogenic impact lands.