



PICTORIAL GUIDE TO NON WOOD FOREST PRODUCTS OF BHUTAN

Social Forestry and Extension Division
Department of Forests and Park Services
Thimphu.

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2022



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Pictorial guide to Non-wood Forest Products of Bhutan

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FOREWORD

Bhutan is rich in biodiversity including the Non-wood Forest Products (NWFPs). The NWFPs play an important role in the daily lives and overall well-being of the Bhutanese community especially among the rural farming communities. NWFPs are the major source of off-farm income, food, medicinal and aromatic products, fodder, fiber and as construction materials.

The NWFP resource of Bhutan is rich and are an important element in the daily household activity in Bhutan. The rural farmers dwelling adjacent to the town areas depend on the renewable natural resource produces. One of such is the NWFPs, that provide them with food, fruits and nuts; essential oils and herbal medicines, honey, direct products (like fibre and fodder), religiously used products (like incense), and many other materials that are used daily. The use of NWFPs in the recent years has been increased and some are becoming highly commercialized cash value natural products. Because of its potentiality for commercialization, many of the NWFP species are overharvested from the wild, leaving them vulnerable in its sustainability, although some of the species are managed accordingly.

I am happy that the team from the Social Forestry & Extension Division and Ugyen Wangchuck Institute for Conservation and Environmental Research under the Department of Forest and Park Services has taken up the task of documenting the NWFPs found in Bhutan, which would particularly help in the identification of the plants. The documentation will complement the already excellent work being carried out by various Institutes, and also build a database of the available NWFPs in the country within the Ministry for future use and reference.



(Thirley Namgyel)

SECRETARY
MoAF

PREFACE

The role of non-wood forest products in Bhutan has evolved over the years from subsistence to commercialization; from small scale, domestic use to items of trade and export. A good number of enterprises have risen in the recent times, which utilize NWFPs in one form or another and have found markets internally as well as through export. Products such as essential oils, herbal teas, soaps, to name a few, are of NWFP origin, manufactured within Bhutan and entering competitive markets around the world. Rural communities have also had their capacities developed to apply basic processing techniques to their harvests to reap better returns than previously possible.

There are reports and publications on NWFPs in Bhutan, but no database exists that describes basic ecology. It is one of the reasons why the used NWFP species is poorly managed and becoming sporadic year by year comparatively at times. To manage and utilize NWFP species sustainably, their prime ecological knowledge must be known by the relevant stakeholders so that the valuable plant species is managed scientifically and in a more sustainable way. Thus, this pictorial publication is the first of its kind that describes the basic ecology of the NWFP species found and used culturally and socio-economically in Bhutan. The information assembled in this book will be useful to the relevant stakeholders who are familiar with using NWFP species or particularly to the NWFP resource managers & policy makers.

Last but not the least, the DoFPS would like to thank the Bhutan Trust Fund for Environmental Conservation & Asian Forest Cooperation Organization (AFoCO) for the financial support to conduct the NWFP field survey throughout the country. Appreciation also goes to all our field forestry officials, farmers, and traders who have contributed by providing information and local knowledge on the NWFPs.



(Lobzang Dorji)

DIRECTOR
DoFPS

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Profound gratitude goes to the Director, Department of Forests and Park Services (DoFPS) in recognizing the importance and the need for developing a pictorial guide to the NWFPs in the country. Likewise, our sincere gratefulness goes to Mr. K. J. Temphele, Chief Forestry Officer- SFED for his support and guidance. Appreciation also goes to Mr. Ngawang Gyeltshen, taxonomist from the Nature Conservation Division- DoFPS for providing the technical insights with regard to the taxonomic aspects. His inputs have immensely helped and made easy to compile and tabulate the collected raw data from the field.

The authors would also like to thank the Specialist, Head of the Institute, Mr. Sacha Dorji and Dr. Kaka Tshering, Head of Centre of Forest Science and Technology at UWICER for imparting their unwavering encouragement in the field of study and to come up with this pictorial book.

This book is based on the numbers of years of field experiences acquired. It has also depicted many individual's research work, published journal and country reports and it would not have been possible without the support of many individuals and relevant offices. Thus, the authors are highly indebted to those who have been involved directly or indirectly to bring this NWFP pictorial book in its form.

Many thanks and appreciations are due to all the field forestry officers and other personnel (including randomly selected village people who participated in the household interview survey) for having provided invaluable assistance and co-operation in course of the field study. The names of such officers and personnel are enclosed in this book as annexure.

Table of Contents

Foreword.....	iii
Preface.....	iv
Acknowledgements.....	v
Acronyms and other local terms	xxi
Background.....	xxiv
Methods and materials.....	xxiv
Findings.....	xxv
Flowering Plants.....	1
1 Family: Acanthaceae.....	1
1.1 Scientific name: <i>Justicia adhatoda</i> L.....	1
1.2 Scientific name: <i>Phlogacanthus thyrsiformis</i> (Roxb. ex Hardw.) Mabb.....	2
1.3 Scientific name: <i>Strobilanthes cusia</i> (Nees) Kuntze.....	3
2 Family: Achariaceae	4
2.1 Scientific name: <i>Gynocardia odorata</i> R.Br.....	4
3 Family: Acoraceae.....	5
3.1 Scientific name: <i>Acorus calamus</i> L.....	5
4 Family: Actinidiaceae.....	6
4.1 Scientific name: <i>Actinidia callosa</i> Lindl.....	6
5 Family: Adoxaceae.....	7
5.1 Scientific name: <i>Sambucus adnata</i> Wall.....	7
6 Family: Altingiaceae.....	8
6.1 Scientific name: <i>Liquidambar excelsa</i> (Noronha) Oken.....	8
7 Family: Amaranthaceae.....	9
7.1 Scientific name: <i>Achyranthes bidentata</i> Blume.....	9
8 Family: Amaryllidaceae.....	10
8.1 Scientific name: <i>Allium hookeri</i> Thwaites.....	10
8.2 Scientific name: <i>Allium wallichii</i> Kunth.....	11
9 Family: Anacardiaceae.....	12
9.1 Scientific name: <i>Choerospondias axillaris</i> (Roxb.) B.L.Burt & A.W.Hill.....	12
9.2 Scientific name: <i>Mangifera sylvatica</i> Roxb.....	13
9.3 Scientific name: <i>Rhus chinensis</i> Mill.....	14
9.4 Scientific name: <i>Spondias pinnata</i> (L.fil.) Kurz1.....	15
10 Family: Apiaceae.....	16
10.1 Scientific name: <i>Eryngium foetidum</i> L.....	16
10.2 Scientific name: <i>Ligusticopsis wallichiana</i> (DC.) Pimenov & Kljuykov.....	17
10.3 Scientific name: <i>Pleurospermum amabile</i> Craib & W.W. Smith.....	18
10.4 Scientific name: <i>Selinum vaginatum</i> C.B. Clarke.....	19

10.5 Scientific name: <i>Tetrataenium nepalense</i> (D.Don) Manden.....	20
11 Family: Apocynaceae.....	21
11.1 Scientific name: <i>Beaumontia grandiflora</i> Wall.....	21
11.2 Scientific name: <i>Plumeria rubra</i> L.....	22
11.3 Scientific name: <i>Rauvolfia serpentine</i> (L.) Benth. ex Kurz.....	23
11.4 Scientific name: <i>Tabernaemontana divaricata</i> (L.) R.Br. ex Roem. & Schult.....	24
12 Family: Araceae.....	25
12.1 Scientific name: <i>Amorphophallus paeoniifolius</i> (Dennst.) Nicolson.....	25
12.2 Scientific name: <i>Colocasia esculenta</i> (L.) Schott.....	26
12.3 Scientific name: <i>Remusatia vivipara</i> (Roxb.) Schott.....	27
13 Family: Araliaceae.....	28
13.1 Scientific name: <i>Macropanax dispermus</i> (Blume) Kuntze.....	28
13.2 Scientific name: <i>Panax pseudoginseng</i> Wall.....	29
14 Family: Arecaceae.....	30
14.1 Scientific name: <i>Calamus acanthospathus</i> Griff.....	30
14.2 Scientific name: <i>Calamus erectus</i> Roxb.....	31
14.3 Scientific name: <i>Calamus flagellum</i> Griff.....	32
14.4 Scientific name: <i>Calamus latifolius</i> Roxb.....	33
14.5 Scientific name: <i>Calamus leptospadix</i> Griff.....	35
14.6 Scientific name: <i>Calamus tenuis</i> Roxb.....	35
14.7 Scientific name: <i>Caryota urens</i> L.....	36
14.8 Scientific name: <i>Daemonorops jenkinsiana</i> (Griff.) Mart.....	37
14.9 Scientific name: <i>Phoenix acaulis</i> Roxb.....	38
14.10 Scientific name: <i>Plectocomia himalayana</i> Griff.....	39
14.11 Scientific name: <i>Wallichia disticha</i> T.Anderson.....	40
14.12 Scientific name: <i>Wallichia oblongifolia</i> Griff.....	41
15 Family: Aristolochiaceae.....	42
15.1 Scientific name: <i>Isotrema griffithii</i> (Hook.fil. & Thomson ex Duchartre) C.E.C. Fich.....	42
16 Family: Asparagaceae.....	43
16.1 Scientific name: <i>Asparagus racemosus</i> Willd.....	43
16.2 Scientific name: <i>Polygonatum verticillatum</i> (L.) All.....	44
16.3 Scientific name: <i>Tupistra nutans</i> Wall. ex Lindl.....	45
17 Family: Asteraceae.....	46
17.1 Scientific name: <i>Artemisia dubia</i> Wall. ex Besser.....	46
17.2 Scientific name: <i>Artemisia moorcroftiana</i> Wall. ex DC.....	47
17.3 Scientific name: <i>Artemisia myriantha</i> Wall. ex Bess.....	48
17.4 Scientific name: <i>Artemisia verlotiorum</i> Lamotte.....	49

17.5 Scientific name: <i>Aucklandia lappa</i> DC.....	50
17.6 Scientific name: <i>Inula grandiflora</i> Willd.....	51
17.7 Scientific name: <i>Inula racemosa</i> Hook.f.....	52
17.8 Scientific name: <i>Ligularia amplexicaulis</i> (Wall.) DC.....	53
17.9 Scientific name: <i>Saussurea obvallata</i> (DC.) Sch.Bip.....	53
17.10 Scientific name: <i>Tanacetum nubigenum</i> Wall. ex DC.....	54
17.11 Scientific name: <i>Taraxacum eriopodum</i> (D.Don) DC.....	55
17.12 Scientific name: <i>Tibetiodes stracheyi</i> (Hook.fil.) Nesom.....	56
18 Family: Berberidaceae.....	57
18.1 Scientific name: <i>Berberis aristata</i> DC.....	57
18.2 Scientific name: <i>Berberis asiatica</i> Roxb. ex DC.....	58
18.3 Scientific name: <i>Podophyllum hexandrum</i> Royle.....	59
19 Family: Betulaceae.....	60
19.1 Scientific name: <i>Betula alnoides</i> Buch.-Ham. ex D. Don.....	60
20 Family: Bignoniaceae.....	61
20.1 Scientific name: <i>Oroxylum indicum</i> (L.) Kurz.....	61
21 Family: Boraginaceae.....	62
21.1 Scientific name: <i>Onosma hookeri</i> Clarke.....	62
22 Family: Brassicaceae.....	63
22.1 Scientific name: <i>Nasturtium officinale</i> W.T.Aiton.....	63
22.2 Scientific name: <i>Thlaspi arvense</i> L.....	64
23 Family: Burseraceae.....	65
23.1 Scientific name: <i>Canarium strictum</i> Roxb.....	65
24 Family: Campanulaceae.....	66
24.1 Scientific name: <i>Codonopsis convolvulacea</i> Kurz.....	66
24.1 Scientific name: <i>Cynanthus lobatus</i> Wall. ex Benth.....	67
25 Family: Capparaceae.....	68
25.1 Scientific name: <i>Crateva religiosa</i> G.Forst.....	68
26 Family: Caprifoliaceae.....	69
26.1 Scientific name: <i>Acanthocalyx nepalensis</i> subsp. <i>nepalensis</i> (D.Don) M.J.Cannon.....	69
26.2 Scientific name: <i>Pterocephalus hookeri</i> (C.B. Clarke) Diels.....	70
27 Family: Cervantesiaceae.....	71
27.1 Scientific name: <i>Pyrularia edulis</i> A.DC.....	71
28 Family: Clusiaceae.....	72
28.1 Scientific name: <i>Garcinia xanthochymus</i> Hook.f. ex T.Anderson.....	72
29 Family: Combretaceae.....	73
29.1 Scientific name: <i>Terminalia bellirica</i> (Gaertn.) Roxb.....	73
29.2 Scientific name: <i>Terminalia chebula</i> Retz.....	74

30 Family: Convolvulaceae.....	75
30.1 Scientific name: <i>Poranopsis paniculata</i> (Roxb.) Roberty.....	75
31 Family: Costaceae.....	76
31.1 Scientific name: <i>Costus lacerus</i> Gagnep.....	76
32 Family: Crassulaceae.....	77
32.1 Scientific name: <i>Rhodiola crenulata</i> (Hook.fil. & Thomson) H. Ohba.....	77
33 Family: Cucurbitaceae.....	78
33.1 Scientific name: <i>Diplocyclos palmatus</i> (L.) C.Jeffrey.....	78
33.2 Scientific name: <i>Herpetospermum pedunculatum</i> (Seringe) Clarke.....	79
33.3 Scientific name: <i>Hodgsonia macrocarpa</i> (Blume) Cogn.....	80
33.4 Scientific name: <i>Luffa aegyptiaca</i> Mill.....	81
33.5 Scientific name: <i>Momordica charantia</i> L.....	82
33.6 Scientific name: <i>Momordica dioica</i> Roxb. ex Willd.....	83
33.7 Scientific name: <i>Trichosanthes lepiniana</i> (Naudin) Cogn.....	84
34 Family: Cupressaceae.....	85
34.1 Scientific name: <i>Cupressus corneyana</i> Knight & Perry ex Carrière.....	85
34.2 Scientific name: <i>Juniperus indica</i> Bertol.....	86
34.3 Scientific name: <i>Juniperus recurva</i> Buch.-Ham. ex D.Don.....	87
34.4 Scientific name: <i>Juniperus squamata</i> Buch.-Ham. ex D.Don.....	88
35 Family: Dioscoreaceae.....	89
35.1 Scientific name: <i>Dioscorea belophylla</i> (Prain) Voigt ex Haines.....	89
35.2 Scientific name: <i>Dioscorea bulbifera</i> L.....	90
35.3 Scientific name: <i>Dioscorea hispida</i> Dennst.....	91
35.4 Scientific name: <i>Dioscorea hispida</i> Dennst.....	92
36 Family: Dipterocarpaceae.....	93
36.1 Scientific name: <i>Shorea robusta</i> C.F.Gaertn.....	93
37 Family: Droseraceae.....	94
37.1 Scientific name: <i>Drosera peltata</i> Thunb.....	94
38 Family: Elaeagnaceae.....	95
38.1 Scientific name: <i>Hippophae salicifolia</i> D. Don.....	95
39 Family: Ericaceae.....	96
39.1 Scientific name: <i>Cassiope fastigiata</i> (Wall.) D.Don.....	96
39.2 Scientific name: <i>Gaultheria fragrantissima</i> Wall.....	97
39.3 Scientific name: <i>Rhododendron anthopogon</i> D.Don.....	98
39.4 Scientific name: <i>Rhododendron arboreum</i> Sm.....	99
39.5 Scientific name: <i>Rhododendron ciliatum</i> Hook. f.	100
39.6 Scientific name: <i>Rhododendron glaucophyllum</i> Rehder.....	101
39.7 Scientific name: <i>Rhododendron lepidotum</i> Wall.....	102

39.8 Scientific name: <i>Rhododendron setosum</i> D. Don.....	103
40 Family: Euphorbiaceae.....	104
40.1 Scientific name: <i>Euphorbia griffithii</i> Hook.f.....	104
40.2 Scientific name: <i>Euphorbia royleana</i> Bioss.....	105
40.3 Scientific name: <i>Jatropha curcas</i> L.....	106
40.4 Scientific name: <i>Ricinus communis</i> L.....	107
41 Family: Fabaceae.....	108
41.1 Scientific name: <i>Acacia catechu</i> (L.f.) Willd.....	108
41.2 Scientific name: <i>Bauhinia purpurea</i> L.....	109
41.3 Scientific name: <i>Bauhinia variegata</i> L.....	110
41.4 Scientific name: <i>Butea buteiformis</i> (Voigt) Grierson.....	111
41.5 Scientific name: <i>Cassia fistula</i> L.....	112
41.6 Scientific name: <i>Entada rheedii</i> Spreng.....	113
41.7 Scientific name: <i>Erythrina arborescens</i> Roxb.....	114
41.8 Scientific name: <i>Mimosa pudica</i> L.....	115
41.9 Scientific name: <i>Mucuna macrocarpa</i> Wall.....	116
41.10 Scientific name: <i>Spatholobus parviflorus</i> (Roxb. ex G.Don) Kuntze.....	117
42 Family: Fagaceae.....	118
42.1 Scientific name: <i>Castanopsis hystrix</i> Hook. f. & Thomson ex A. DC.....	118
42.2 Scientific name: <i>Castanopsis indica</i> (Roxb. ex Lindl.) A.DC.....	119
42.3 Scientific name: <i>Castanopsis tribuloides</i> (Sm.) A.DC.....	120
42.4 Scientific name: <i>Quercus griffithii</i> Hook.f. & Thomson ex Miq.....	121
43 Family: Gentianaceae.....	122
43.1 Scientific name: <i>Gentiana algida</i> Pallas.....	122
43.2 Scientific name: <i>Gentiana robusta</i> King ex Hook.f.....	123
43.3 Scientific name: <i>Gentiana urnula</i> H. Sm.....	124
43.4 Scientific name: <i>Halenia elliptica</i> D. Don	125
43.5 Scientific name: <i>Jaeschkea oligosperma</i> (Griseb.) Knobl.....	126
43.6 Scientific name: <i>Swertia angustifolia</i> Buch.-Ham. ex D.Don.....	127
43.7 Scientific name: <i>Swertia chirayita</i> (Roxb.) H.Karst.....	128
44 Family: Geraniaceae.....	129
44.1 Scientific name: <i>Geranium lambertii</i> Sweet.....	129
44.2 Scientific name: <i>Geranium refractum</i> Edgew. & Hook.f.....	130
45 Family: Hydrangeaceae.....	131
45.1 Scientific name: <i>Hydrangea febrifuga</i> (Lour.) Y.De Smet & Granados.....	131
46 Family: Hypericaceae.....	132
46.1 Scientific name: <i>Hypericum hookerianum</i> Wight & Arn.....	132
47 Family: Juglandaceae.....	133

47.1 Scientific name: <i>Juglans regia</i> L.....	133
48 Family: Lamiaceae.....	134
48.1 Scientific name: <i>Callicarpa vestita</i> Wall. ex C.B.Clarke.....	134
48.2 Scientific name: <i>Dracocephalum tanguticum</i> Maxim.....	135
48.3 Scientific name: <i>Gmelina arborea</i> Roxb. ex Sm.....	136
48.4 Scientific name: <i>Mentha spicata</i> L.....	137
48.5 Scientific name: <i>Pogostemon amaranthoides</i> Benth.....	138
48.6 Scientific name: <i>Salvia castanea</i> Diels.....	139
48.7 Scientific name: <i>Vitex negundo</i> L.....	139
49 Family: Lauraceae.....	140
49.1 Scientific name: <i>Cassytha filiformis</i> L.....	140
49.2 Scientific name: <i>Cinnamomum glaucescens</i> (Buch.-Ham. ex Nees) Hand.-Mazz... 141	
49.3 Scientific name: <i>Cinnamomum tamala</i> (Buch.-Ham.) T.Nees & C.H.Eberm.....	142
49.4 Scientific name: <i>Cinnamomum verum</i> J.Pres.....	143
49.5 Scientific name: <i>Litsea cubeba</i> (Lour.) Pers.....	144
49.6 Scientific name: <i>Machilus edulis</i> King ex Hook.fil.....	145
49.7 Scientific name: <i>Machilus macranthus</i> Nees.....	146
49.8 Scientific name: <i>Parasassafra confertiflora</i> (Meisn.) D.G.Long.....	147
50 Family: Liliaceae.....	148
50.1 Scientific name: <i>Fritillaria delavayi</i> Franch.....	148
50.2 Scientific name: <i>Lilium nanum</i> Klotzsch.....	149
51 Family: Malvaceae.....	150
51.1 Scientific name: <i>Bombax ceiba</i> L.....	150
51.2 Scientific name: <i>Firmiana colorata</i> (Roxb.) R.Br.....	151
51.3 Scientific name: <i>Malva sylvestris</i> L.....	152
51.4 Scientific name: <i>Sida acuta</i> Burm.fil.....	153
51.5 Scientific name: <i>Sterculia villosa</i> Roxb.....	154
52 Family: Marantaceae.....	155
52.1 Scientific name: <i>Phrynium pubinerve</i> Blume.....	155
53 Family: Melanthiaceae.....	156
53.1 Scientific name: <i>Paris polyphylla</i> Sm.....	156
54 Family: Meliaceae.....	157
54.1 Scientific name: <i>Heynea trijuga</i> Roxb.....	157
54.2 Scientific name: <i>Toona ciliata</i> M. Roem.....	158
55 Family: Menispermaceae.....	159
55.1 Scientific name: <i>Stephania glabra</i> (Roxb.) Miers.....	159
55.2 Scientific name: <i>Stephania glandulifera</i> Miers.....	160
55.3 Scientific name: <i>Tinospora cordifolia</i> (Willdenow) Hook.f.&Thomson.....	161

56 Family: Moraceae.....	162
56.1 Scientific name: <i>Artocarpus lacucha</i> Buch.-Ham. ex D. Don.....	162
56.2 Scientific name: <i>Ficus auriculata</i> Lour.....	163
56.3 Scientific name: <i>Ficus lacor</i> Buch.-Ham.....	164
56.4 Scientific name: <i>Ficus pubigera</i> (Wall. ex Miq.) Miq.....	165
56.5 Scientific name: <i>Ficus racemosa</i> L.....	166
56.6 Scientific name: <i>Ficus semicordata</i> Buch.-Ham. ex Sm.....	167
56.7 Scientific name: <i>Ficus subincisa</i> Buch.-Ham. ex Sm.....	168
56.8 Scientific name: <i>Morus australis</i> Poir.....	179
57 Family: Musaceae.....	170
57.1 Scientific name: <i>Musa balbisiana</i> Colla.....	170
57.2 Scientific name: <i>Musa griersonii</i> Noltie.....	171
57.3 Scientific name: <i>Musa sikkimensis</i> Kurz.....	172
58 Family: Myricaceae.....	173
58.1 Scientific name: <i>Myrica esculenta</i> Buch.-Ham. ex D. Don.....	173
59 Family: Myristicaceae.....	174
59.1 Scientific name: <i>Knema tenuinervia</i> W.J. de Wilde.....	174
60 Family: Myrtaceae.....	175
60.1 Scientific name: <i>Syzygium cumini</i> (L.) Skeels.....	175
60.2 Scientific name: <i>Syzygium nervosum</i> DC.....	176
61 Family: Orchidaceae.....	177
61.1 Scientific name: <i>Cymbidium erythraeum</i> Lindl.....	177
61.2 Scientific name: <i>Cymbidium hookerianum</i> Rchb.f.....	178
61.3 Scientific name: <i>Cymbidium iridioides</i> D. Don.....	179
61.4 Scientific name: <i>Dactylorhiza hatagirea</i> (D. Don) Soo.....	180
61.5 Scientific name: <i>Pholidota recurva</i> Lindl.....	181
62 Family: Orobanchaceae.....	182
62.1 Scientific name: <i>Pedicularis longiflora</i> Rudolph var. <i>tubiformis</i> (Klotzsch) P.C. Tsoung.....	182
62.2 Scientific name: <i>Pedicularis megalantha</i> D. Don.....	183
62.3 Scientific name: <i>Pedicularis siphonantha</i> D. Don.....	184
63 Family: Papaveraceae.....	185
63.1 Scientific name: <i>Corydalis crispa</i> Prain.....	185
63.2 Scientific name: <i>Hypecoum leptocarpum</i> Hook. f. & Thoms.....	186
63.3 Scientific name: <i>Meconopsis discigera</i> Prain.....	187
63.4 Scientific name: <i>Meconopsis horridula</i> Hook. f. & Thomson.....	188
63.5 Scientific name: <i>Meconopsis horridula</i> Hook. f. & Thomson.....	189
63.6 Scientific name: <i>Meconopsis simplicifolia</i> (D. Don) Walpers.....	190

64 Family: Parnassiaceae.....	191
64.1 Scientific name: <i>Parnassia nubicola</i> Wall.....	191
65 Family: Phyllanthaceae.....	192
65.1 Scientific name: <i>Antidesma acidum</i> Retz.....	192
65.2 Scientific name: <i>Baccaurea ramiflora</i> Lour.....	193
65.3 Scientific name: <i>Bischofia javanica</i> Blume.....	194
65.4 Scientific name: <i>Phyllanthus emblica</i> L.....	195
66 Family: Phytolaccaceae.....	196
66.1 Scientific name: <i>Phytolacca acinosa</i> Roxb.....	196
67 Family: Pinaceae.....	197
67.1 Scientific name: <i>Abies densa</i> Griff.....	197
67.2 Scientific name: <i>Pinus roxburghii</i> Sarg.....	198
68 Family: Piperaceae.....	199
68.1 Scientific name: <i>Piper betleoides</i> C.DC.....	199
68.2 Scientific name: <i>Piper hamiltonii</i> C. DC.....	200
68.3 Scientific name: <i>Piper longum</i> L.....	201
68.4 Scientific name: <i>Piper mullesua</i> Buch.- Ham. ex D.Don.....	202
68.5 Scientific name: <i>Piper pedicellatum</i> C.DC.....	203
68.6 Scientific name: <i>Piper peepuloides</i> Roxb.....	204
69 Family: Plantaginaceae.....	205
69.1 Scientific name: <i>Neopicrorhiza scrophulariiflora</i> (Pennell) D.Y.Hong.....	205
69.2 Scientific name: <i>Plantago depressa</i> Willd.....	206
70 Family: Poaceae.....	207
70.1 Scientific name: <i>Ampelocalamus patellaris</i> (Gamble) Stapleton.....	207
70.2 Scientific name: <i>Bambusa alamii</i> Stapleton.....	208
70.3 Scientific name: <i>Bambusa balcooa</i> Roxb.....	209
70.4 Scientific name: <i>Bambusa bambos</i> (L.) Voss.....	210
70.5 Scientific name: <i>Bambusa clavata</i> Stapleton.....	211
70.6 Scientific name: <i>Bambusa nepalensis</i> Stapleton.....	212
70.7 Scientific name: <i>Bambusa nutans</i> Wall. ex Munro subsp. <i>cupulata</i> Stapleton.....	213
70.8 Scientific name: <i>Bambusa pallida</i> Munro.....	214
70.9 Scientific name: <i>Bambusa tulda</i> Roxb.....	215
70.10 Scientific name: <i>Borinda grossa</i> (T.P.Yi) Stapleton.....	216
70.11 Scientific name: <i>Cephalostachyum capitatum</i> Munro.....	217
70.12 Scientific name: <i>Cephalostachyum latifolium</i> Munro.....	218
70.13 Scientific name: <i>Chimonobambusa callosa</i> (Munro) Nakai.....	219
70.14 Scientific name: <i>Dendrocalamus hamiltonii</i> Munro var. <i>hamiltonii</i>	220
70.15 Scientific name: <i>Dendrocalamus hookeri</i> Munro.....	221

70.16 Scientific name: <i>Dendrocalamus sikkimensis</i> Gamble ex Oliv.....	222
70.17 Scientific name: <i>Drepanostachyum annulatum</i> Stapleton.....	223
70.18 Scientific name: <i>Drepanostachyum intermedium</i> (Munro) Keng f.....	224
70.19 Scientific name: <i>Drepanostachyum khasianum</i> (Munro) Keng f.....	225
70.20 Scientific name: <i>Himalayacalamus falconeri</i> (Hook.f. ex Munro) Keng f.....	226
70.21 Scientific name: <i>Himalayacalamus hookerianus</i> (Munro) Stapleton.....	227
70.22 Scientific name: <i>Melocanna baccifera</i> (Roxb.) Kurz.....	228
70.23 Scientific name: <i>Neomicrocalamus andropogonifolius</i> (Griff) Stapleton.....	229
70.24 Scientific name: <i>Pseudostachyum polymorphum</i> Munro.....	230
70.25 Scientific name: <i>Sarocalamus racemosus</i> (Munro) Stapleton.....	231
70.26 Scientific name: <i>Thamnocalamus spathiflorus</i> (Trin.) Munro.....	232
70.27 Scientific name: <i>Yushania hirsuta</i> (Munro) R B Majumdar.....	233
70.28 Scientific name: <i>Yushania maling</i> (Gamble) R.B.Majumdar & Karthik.....	234
70.29 Scientific name: <i>Cymbopogon bhutanicus</i> Noltie.....	235
70.30 Scientific name: <i>Imperata cylindrica</i> (L.) P.Beauv.....	236
70.31 Scientific name: <i>Thysanolaena latifolia</i> (Roxb. ex Hornem.) Honda.....	237
71 Family: Polygonaceae.....	238
71.1 Scientific name: <i>Bistorta macrophylla</i> (D. Don) Sojak.....	238
71.2 Scientific name: <i>Rheum acuminatum</i> Hook.fil. & Thomson.....	239
71.3 Scientific name: <i>Rheum australe</i> D. Don.....	240
71.4 Scientific name: <i>Rheum nobile</i> Hook.f. & Thomson.....	241
71.5 Scientific name: <i>Rumex nepalensis</i> Spreng.....	242
72 Family: Primulaceae.....	243
72.1 Scientific name: <i>Primula sikkimensis</i> Hook.....	243
73 Family: Ranunculaceae.....	244
73.1 Scientific name: <i>Aconitum ferox</i> Wall. ex Ser.....	244
73.2 Scientific name: <i>Aconitum laciniatum</i> (Bruhl) Stapf.....	245
73.3 Scientific name: <i>Aconitum orochryseum</i> Stapf.....	246
73.4 Scientific name: <i>Actaea spicata</i> L.....	247
73.5 Scientific name: <i>Anemone rivularis</i> Buch.-Ham.....	248
73.6 Scientific name: <i>Delphinium glaciale</i> Hook. f. & Thomson.....	249
73.7 Scientific name: <i>Delphinium muscosum</i> Exell & Hillc.....	250
73.8 Scientific name: <i>Thalictrum chelidonii</i> DC.....	251
73.9 Scientific name: <i>Thalictrum foliolosum</i> DC.....	252
20374 Family: Rhamnaceae.....	252
74.1 Scientific name: <i>Ziziphus mauritiana</i> Lam.....	253
75 Family: Rosaceae.....	254
75.1 Scientific name: <i>Docynia indica</i> (Wall.) Decne.....	254
75.2 Scientific name: <i>Fragaria nubicola</i> Lindl. ex Lacaíta.....	255

75.3 Scientific name: <i>Potentilla arbuscula</i> D. Don, Prodr.....	256
75.4 Scientific name: <i>Prunus napaulensis</i> (Ser. Ex DC.) Steud.....	257
75.5 Scientific name: <i>Pyrus pashia</i> Buch.-Ham. ex D.Don.....	258
75.6 Scientific name: <i>Rosa macrophylla</i> Lindley.....	259
75.7 Scientific name: <i>Rosa sericea</i> Lindley.....	260
75.8 Scientific name: <i>Rubus biflorus</i> Buch.-Ham. ex Sm.....	261
75.9 Scientific name: <i>Rubus ellipticus</i> Sm.....	262
75.10 Scientific name: <i>Rubus lineatus</i> Reinw. ex Blume.....	263
76 Family: Rubiaceae.....	264
76.1 Scientific name: <i>Catunaregam longispina</i> (Link) Tirveng.....	264
76.2 Scientific name: <i>Coffea benghalensis</i> B.Heyne ex Schult.....	265
76.3 Scientific name: <i>Galium aparine</i> L.....	266
76.4 Scientific name: <i>Mussaenda roxburghii</i> Hook.f.....	267
76.5 Scientific name: <i>Paederia foetida</i> L.....	268
76.6 Scientific name: <i>Rubia cordifolia</i> L.....	269
76.7 Scientific name: <i>Rubia sikkimensis</i> Kurz.....	270
76.8 Scientific name: <i>Uncaria scandens</i> (Sm.) Hutch.....	271
76.9 Scientific name: <i>Wendlandia puberula</i> DC.....	272
77 Family: Rutaceae.....	273
77.1 Scientific name: <i>Citrus medica</i> L.....	273
77.2 Scientific name: <i>Murraya koenigii</i> (L.) Spreng.....	274
77.3 Scientific name: <i>Zanthoxylum acanthopodium</i> DC.....	275
77.4 Scientific name: <i>Zanthoxylum armatum</i> DC.....	276
77.5 Scientific name: <i>Zanthoxylum bungeanum</i> Max.....	277
77.6 Scientific name: <i>Zanthoxylum rhetsa</i> (Roxb.) DC.....	278
78 Family: Santalaceae.....	279
78.1 Scientific name: <i>Osyris lanceolata</i> Hochst. & Steud.....	279
79 Family: Sapindaceae.....	280
79.1 Scientific name: <i>Acer campbellii</i> Hook.f. & Thomson ex Hiern.....	280
79.2 Scientific name: <i>Sapindus mukorossi</i> Gaertn.....	281
80 Family: Sapotaceae.....	282
80.1 Scientific name: <i>Diploknema butyracea</i> (Roxb.) H.J.Lam.....	282
81 Family: Saxifragaceae.....	283
81.1 Scientific name: <i>Astilbe rivularis</i> Buch.-Ham. ex D.Don.....	283
81.2 Scientific name: <i>Bergenia ciliata</i> (Haw.) Sternb.....	284
81.3 Scientific name: <i>Chrysosplenium nudicaule</i> Bunge.....	285
82 Family: Schisandraceae.....	286
82.1 Scientific name: <i>Illicium griffithii</i> Hook. fil. & Thomson.....	286

83 Family: Scrophulariaceae.....	287
83.1 Scientific name: <i>Buddleja asiatica</i> Lour.....	287
83.2 Scientific name: <i>Verbascum thapsus</i> L.....	288
84 Family: Solanaceae.....	289
84.1 Scientific name: <i>Datura metel</i> L.....	289
84.2 Scientific name: <i>Datura stramonium</i> L.....	290
85 Family: Symplocaceae.....	291
85.1 Scientific name: <i>Symplocos paniculata</i> Miq.....	291
85.2 Scientific name: <i>Symplocos ramosissima</i> Wall.....	292
85.3 Scientific name: <i>Symplocos theifolia</i> D. Don.....	293
86 Family: Tamaricaceae.....	294
86.1 Scientific name: <i>Myricaria rosea</i> W.W. Smith.....	294
87 Family: Taxaceae.....	295
87.1 Scientific name: <i>Taxus wallichiana</i> Zucc.....	295
88 Family: Theaceae.....	296
88.1 Scientific name: <i>Camellia oleifera</i> Abel.....	296
89 Family: Thymelaeaceae.....	297
89.1 Scientific name: <i>Aquilaria malaccensis</i> Lam.....	297
89.2 Scientific name: <i>Daphne bholua</i> Buch.-Ham. ex D. Don.....	298
89.3 Scientific name: <i>Daphne papyracea</i> Wall. ex Steud.....	299
89.4 Scientific name: <i>Daphne sureil</i> W.W. Smith & Cave.....	300
89.5 Scientific name: <i>Edgeworthia gardneri</i> Meisn.....	301
90 Family: Urticaceae.....	302
90.1 Scientific name: <i>Dendrocnide sinuata</i> (Blume) Chew.....	302
90.2 Scientific name: <i>Elatostema lineolatum</i> Wight.....	303
90.3 Scientific name: <i>Girardinia diversifolia</i> (Link) Friis.....	304
90.4 Scientific name: <i>Laportea bulbifera</i> (Siebold & Zucc.) Wedd.....	305
90.5 Scientific name: <i>Pouzolzia hirta</i> (Blume) Hasskarl.....	306
90.6 Scientific name: <i>Pouzolzia rugulosa</i> (Wedd.) Acharya & Kravtsova.....	307
90.7 Scientific name: <i>Pouzolzia sanguinea</i> (Blume) Merr.....	308
90.8 Scientific name: <i>Urtica ardens</i> Link.....	309
91 Family: Valerianaceae.....	310
91.1 Scientific name: <i>Nardostachys jatamansi</i> (D. Don) DC.....	310
92 Family: Zingiberaceae.....	311
92.1 Scientific name: <i>Kaempferia rotunda</i> L.....	311
92.2 Scientific name: <i>Roscoea capitata</i> Sm.....	312
92.3 Scientific name: <i>Alpinia nigra</i> (Gaertn.) Burt.....	313
Fungi (Mushrooms) and Algae.....	314

93 Family: Amanitaceae.....	314
93.1 Scientific name: <i>Amanita cf. caesarea</i> (Scop.: Fr.) Pers.....	314
94 Family: Auriculariaceae.....	315
94.1 Scientific name: <i>Auricularia auricular-judae</i> (Bull.) Quel.....	315
94.2 Scientific name: <i>Exidia</i> spp.....	316
95 Family: Boletaceae.....	317
95.1 Scientific name: <i>Boletus cf. edulis</i> Bull.: Fr.....	317
96 Family: Bondarzewiaceae.....	318
96.1 Scientific name: <i>Bondarzewia cf. monticola</i> (Quel.) Sing.....	318
97 Family: Cantharellaceae.....	319
97.1 Scientific name: <i>Cantharellus cibarius</i> Fr.....	319
98 Family: Cortinariaceae.....	320
98.1 Scientific name: <i>Cortinarius caperatus</i> (Pers.) Fr.....	320
98.2 Scientific name: <i>Cortinarius emodensis</i> Berk.....	321
99 Family: Fomitopsidaceae.....	322
99.1 Scientific name: <i>Laetiporus cf. cincinnatus</i> (Morgan) Burdsall, Banik, & Volk.....	322
100 Family: Gomphaceae.....	323
100.1 Scientific name: <i>Ramaria asiatica</i> (R.H. Petersen & M. Zang) R.H. Petersen.....	323
100.2 Scientific name: <i>Ramaria botrytis</i> (Pers.) Bourdot.....	324
101 Family: Grifolaceae.....	325
101.1 Scientific name: <i>Grisola frondosa</i> (Dicks.) Gray.....	225
102 Family: Hericiaceae.....	326
102.1 Scientific name: <i>Hericium cf. erinaceus</i> (Bull.: Fr.) Pers.....	326
103 Family: Hydneaceae.....	327
103.1 Scientific name: <i>Hydnum repandum</i> L.....	327
104 Family: Hygrophoraceae.....	328
104.1 Scientific name: <i>Hygrophorus cf. russula</i> (Schaeff. Ex Fr.).....	328
105 Family: Lyophyllaceae.....	329
105.1 Scientific name: <i>Lyophyllum aggregatum</i> (Schaeff.: Fr.) Kühner.....	329
105.2 Scientific name: <i>Lyophyllum shimeji</i> (Kawam.) Hongo.....	330
105.3 Scientific name: <i>Termitomyces eurhizus</i> (Berk.) R. Heim.....	331
105.4 Scientific name: <i>Termitomyces heimii</i> Natarajan.....	332
105.5 Scientific name: <i>Termitomyces microcarpus</i> (Berk. & Broome) R. Heim.....	333
106 Family: Morchellaceae.....	334
106.1 Scientific name: <i>Morchella esculenta</i> (L.) Pers.....	334
107 Family: Ophiocordycipitaceae.....	335
107.1 Scientific name: <i>Ophiocordyceps sinensis</i> (Berk.) G.H.Sung, J.M.Sung, Hywel-Jones & Spatafora.....	335

108 Family: Pleurotaceae.....	336
108.1 Scientific name: <i>Pleurotus citrinopileatus</i> Singer.....	336
108.2 Scientific name: <i>Pleurotus ostreatus</i> (Jacq.) P.Kumm.....	337
109 Family: Polyporaceae.....	338
109.1 Scientific name: <i>Lentinus squarrosulus</i> Mont. Singer.....	338
110 Family: Russulaceae.....	339
110.1 Scientific name: <i>Lactarius cf. deliciosus</i> (L.: Fr.) S F Grey.....	339
110.2 Scientific name: <i>Russula delica</i> Fr.....	340
111 Family: Schizophyllaceae.....	341
111.1 Scientific name: <i>Schizophyllum commune</i> Fr.....	341
112 Family: Sparassidaceae.....	342
112.1 Scientific name: <i>Sparassis crispa</i> (Wulf.) ex Fr.....	342
113 Family: Strophariaceae.....	343
113.1 Scientific name: <i>Hypholoma capnoides</i> (Fr.) P.Kumm.....	343
114 Family: Suillaceae.....	344
114.1 Scientific name: <i>Suillus pictus</i> (Peck) A. H. Sm. & Thiers.....	344
115 Family: Tricholomataceae.....	345
115.1 Scientific name: <i>Tricholoma matsutake</i> (S.Ito & Imai) Singer.....	345
116 Family: Ulvaceae.....	346
116.1 Scientific name: <i>Ulva</i> spp.....	346
Ferns and Fern-Allies.....	347
117 Family: Aspleniaceae.....	347
117.1 Scientific name: <i>Deparia boryana</i> (Willd.) M.Kato.....	347
117.2 Scientific name: <i>Diplaziopsis javanica</i> (Blume) C.Chr.....	348
118 Family: Athyriaceae.....	349
118.1 Scientific name: <i>Diplazium esculentum</i> (Retz.) Sw.....	349
118.2 Scientific name: <i>Diplazium himalayense</i> (Ching) Panigrahi.....	350
118.3 Scientific name: <i>Diplazium maximum</i> (D.Don) C.Chr.....	351
119 Family: Dennstaedtiaceae.....	352
119.1 Scientific name: <i>Microlepia caudigera</i> Moore.....	352
120 Family: Icmadophilaceae.....	353
120.1 Scientific name: <i>Thamnolia vermicularis</i> (Sw.) Schaer.....	353
121 Family: Loranthaceae.....	354
121.1 Scientific name: <i>Taxillus kaempferi</i> (DC.) Danser.....	354
122 Family: Marattiaceae.....	355
122.1 Scientific name: <i>Angiopteris helferiana</i> C.Presl.....	355
123 Family: Nephrolepidaceae.....	356
123.1 Scientific name: <i>Nephrolepis cordifolia</i> (L.) C. Presl.....	356

124 Family: Polypodiaceae.....	357
124.1 Scientific name: <i>Lepisorus contortus</i> (H. Christ) Ching.....	357
125 Family: Selaginellaceae.....	358
125.1 Scientific name: <i>Selaginella pulvinata</i> (Hook. & Grev.) Maxim.....	358
126 Family: Viscaceae.....	359
126.1 Scientific name: <i>Viscum articulatum</i> Burm. f.....	359
Insects.....	360
127 Family: Apidae.....	360
127.1 Scientific name: <i>Apis laboriosa</i> Smith.....	360
127.2 Scientific name: <i>Lepidotrigona arcifera</i> Cockere.....	361
128 Family: Kerriidae.....	362
128.1 Scientific name: <i>Kerria lacca</i> (Kerr, 1782).....	362
Mineral.....	363
129 Group: Exudate.....	363
129.1 Common name: <i>Asphaltum punjabinum</i> , Black Bitumen, Mineral Pitch, or Mineral Wax.....	368
Bibliographies.....	364
Index List of Non Wood Forest Products.....	387
Scale of Availability Status.....	394
Annexure.....	395
Annex: Numbers of officials/people interacted during the field survey.....	395

Acronyms and other local terms

General

BT FEC	Bhutan Trust Fund for Environmental Conservation
CFO	Chief Forestry Officer
DoFPS	Department of Forests and Park Services
Dy.	Deputy
FO	Forest Officer
FR	Forest Ranger, Forester
masl	Metre above sea level
MoAF	Ministry of Agriculture and Forests
MSP	Menjong Sorig Pharmaceutical
NWFP	Non-wood Forest Product (s)
PFO	Principal Forestry Officer
SFED	Social Forestry and Extension Division
Sr.	Senior
UWICER	Ugyen Wangchuck Institute for Conservation and Environmental Research

Local terms

Chipeon	Village Head of the Local Government
Dzongkhag	District
Gup	Block Administration Head of the Local Government
Mangmi	Community Head of the Local Government
Tshogpa	Witness of the Local Government

Vernacular names

B	Bumthapkha
Cb	Chhukha Bongo locals
Cbg	Chhukha Bango & Gengu locals
Cbgg	Chhukha Bango, Geling & Gengu locals
Ccb	Chhukha Chapcha & Bjabchho locals
Cg	Chhukha Ganglakha locals
Cm	Chhukha Metakha locals
Cpz	Chhukha Phasuma Zamsha locals
D	Dzongkha
G	Gasa locals
H	Haa locals
K	Khengkha
Kp	Khengkha Panbang
Ku	Kurtoepkha
L	Lhotshamkha
Ll	Lhuentse locals
Lla	Lhuentse Lagay locals
Ly	Laya locals
M	Traditional Medical Term
Mo	Mongar dialect
Mt	Mongar Tshakaling locals
N	Nepali
Pl	Pemagatshel locals
Plp	Punakha locals
Pn	Pemagatshel Norbugang locals
Rt	Religious text script
S	Shar chopkha

Sk	Sarpang Kheng locals
Sl	Samdrupjongkhar local
Sre	Samdrupjongkhar Rekhey locals
T	Trongsa locals
Tm	Trongsa monpakha
Tn	Trongsa Namthar locals
Ts	Tsirang locals
Ty	Trashiyangtse locals
Wg	Wangduephodrang Gogona locals
Wl	Wangduephodrang locals

Background

Non-wood Forest Products (NWFP) is one of the crucial natural resources that supplements with food, vegetable, medicine and other domesticable multipurpose plants to the rural livelihood. Currently attaining food security is a priority national goal during COVID-19 pandemic and likewise globally. It is definite that there is a shrink of household earning leading to an increased dependence on NWFP for subsistence. This trend will decline in overharvesting of natural resources if COVID-19 pandemic prolongs. Therefore, in order to avoid unfavourable consequences, it is appropriate to understand the overall status of NWFP species that are available and are used by the people throughout the country. Prior knowledge on NWFP situation will assuredly facilitate in designing strategy for sustainable planning and management and if applicable the domestication of the socio-economically valuable and viable species.

More than a decade ago Forest Resources Management Division (erstwhile Forest Resources Development Division) and Social Forestry & Extension Division has documented NWFP in report form for 11 Dzongkhags (which includes Chhukha, Dagana, Gasa, Haa, Paro, Punakha, Samtse, Sarpang, Thimphu, Tsirang and Wangduephodrang). It is an apt time that this NWFP data report is updated and conducted similar type of documentation for the left-out Dzongkhags (namely Bumthang, Lhuentse, Mongar, Pemagatshel, Samdrupjongkhar, Trashigang, Trashiyangtse, Trongsa and Zhemgang).

The objectives of this NWFP documentation are to:

1. Find out number of NWFP species used / are using district-wise covering entire country
2. Describe briefly the species ecology with its uses (local or regional, species uses includes economy, social, culture, religion and healing aspects).

Hence, it is imperative to have maximum data available of such natural resources so as to sketch out the depleting risk of local wild food resources. It provides opportunity to develop sustainable management planning and do execution of its reservoir and to have unbreakable supply chain of subsistence food items of the NWFP based.

Methods and materials

Questionnaire survey: Few open-ended questions were asked to the randomly selected people irrespective of gender. The participants selected were older than eighteen years and expected as they know some plants and its usages that are found in their localities. The open-ended questions were used to find out varieties of wild plants utilized as NWFP, its abundance, habitat, general uses and possible markets if available.

Focus Group discussion: In each Dzongkhag, 1 to 2 hours of discussion conducted in groups. The group was comprised of forestry officials (viz. CFO of the Territorial Forest Division, Forest Rangers and other staff of the particular place (s)) working in that particular

areas, chairperson and secretaries of the NWFP Farmers Group, local healer or shamanists, a representative from the local government (Anyone including Gup, tshogpa, mangmis or even chipeon). The questions asked were thoroughly discussed in order to capture knowledge on uses of species which includes economy, social, culture, religion and healing aspects.

The questionnaire survey and focus group discussion had been conducted by visiting Dzongkhags and its respective distribution sites (including NWFP Farmers Group) where the economic NWFPs are found. The visit was included all the functioning NWFP Farmers Group of the country-wide. Telephone conversation and exchange of emails were employed as the other methods of data collection. In addition open question was asked to traders and middle persons who dealt marketing aspects of all available NWFP species. The existing relevant reports were comprehensively reviewed and referred as secondary source of information.

An inclusive field programme activity included snapping photograph of the species from the niche habitat. Even the pictures taken by field colleagues were collected with due copyright and also visited Google portals.

Data interpretation: After the completion of the field activities, data were compiled in tabulation format using MS Word. The method of tabulation for data was done or arranged the family employing the Engler and Prantl's system of classification. Thereafter using those systematic compiled data, written and developed a pictorial NWFP guide book.

Findings

The survey has found out 128 families and 265 genera including the enumeration of all NWFP useful flowering plants, fungi (mushrooms) and algae, ferns & fern allies, insects and mineral. The species used from all these different groups accounted to 368 in numbers. Therefore those accounted numbers are the Non Wood Forest Products species which has been utilizing and managing by different sections of people of our country. It is observed that multi-sector stakeholders are involved to derive the holistic benefits from those found-out NWFPs.

Thus, it is hope that this pictorial guide book would help to relevant stakeholders, especially to natural resource managers and policy-maker to bring promising and economic potential NWFPs under the regime of the sustainable management planning, development and for the socio-economic utilization. Further it is expected that numbers of NWFP community groups of the country improve their livelihood through NWFPs product development and earning through sale of those products in the available markets. Thereby demonstrating, NWFP sector could provide employment opportunity to some unemployed population of the country.

FLOWERING PLANTS

1 Family: Acanthaceae



1.1 Scientific name:	<i>Justicia adhatoda</i> (L.)
Vernacular name:	Bashakha/Bashakha Karp (D), Asuro/Kalo basak (L), Khagtsherma/Khagteermu/Khatserim (S), Khagshala meto/Khasali (K), Khashaling (T)
Habitat:	Humid river banks, gravelly dry slopes, disturbed sites, nearby the settlement.
Altitude range:	From 150 to 1,700 masl.
Plant part collected:	Flowers and leaves.
Uses:	Flowers are consumed as vegetable. It is seen selling in the available local vegetable market and roadside vegetable stalls. People believe, taking as vegetable relief body-pain, fever, and stomach-pain. Leaves are used as fodder. Flowers are ornamental; it is seen in some places as hedge plants. MSP collects flowers from Trongsa to use as one of the ingredients in traditional medicine.
Time of collection:	Flowers from January to April and leaves as and when needed.
Distribution and availability status:	It is found in Chhukha, Dagana, Mongar, Lhuentse, Pemagatshel, Punakha, Samdrupjongkhar, Samtse, Sarpang, Trongsa, Tsirang, Wangduephodrang and Zhemgang Dzongkhags (Districts). It is quite common in all the below mentioned districts except in Samtse where it is limited.



1.2 Scientific name:	<i>Phlogacanthus thyrsiformis</i> (Roxb. ex Hardw.) Mabb.
Vernacular name:	Rato tsuwa / Sanu chuwa / Jungali tsuwa / Titey tshuwa (L), Bashakha Marp (Cpz)
Habitat:	Secondary succession of the subtropical forests / moist deciduous forests, nearby streams and gullies, sandy gravelly slopes.
Altitude range:	From 150 to 1,200 masl.
Plant part collected:	Flowers.
Uses:	Red flowers are eaten as vegetable. It is also preserved by sun- dry to consume during lean vegetable season. Leaves are used as fodder.
Time of collection:	January to February.
Distribution and availability status:	Moderate to limited in Chhukha, Samtse and Sarpang districts.



1.3 Scientific name:	<i>Strobilanthes cusia</i> (Nees) Kuntze
Vernacular name:	Ran (D), Shang-ja (K), Yangsawa (S)
Habitat:	Warm broadleaved forests, moist or dampy sites, hilly slopes.
Altitude range:	From 200 to 2,000 masl.
Plant part collected:	Entire aerial parts.
Uses:	To make blue dye for the traditional handicraft clothes.
Time of collection:	Whenever required.
Distribution and availability status:	Limited in the wild areas of Sarpang, Trashigang, Trongsa and Zhemgang. However, it is seen in the home-garden cultivated by the people.

2 Family: Achariaceae



2.1 Scientific name:	<i>Gynocardia odorata</i> (R.Br.)
Vernacular name:	Gantay (L), Dorkhoshing (S), Bukshay (Cpz).
Habitat:	Tropical and subtropical evergreen moist forests, foothill plain forests, gravelly slope areas.
Altitude range:	From 250 to 1,200 masl.
Plant part collected:	Seed, bark or fruit.
Uses:	Seed used to extract medicinal oil. This oil cures various skin diseases. Oil can use as vegetable oil if done double refined. Bark and fruit pulp is used to poison the fish.
Time of collection:	Seed from December onwards. Bark whenever necessary.
Distribution and availability status:	Samdrupjongkhar, Samtse, Sarpang Tsirang and Zhemgang. It is moderate to limited.

3 Family: Acoraceae



3.1 Scientific name:	<i>Acorus calamus</i> (L.)
Vernacular name:	Chudala / Chudar / Chuta rekey (D), Bojo (L), Bar-tsi (S), Shuda (Lla / Ll), and Shudag nagpo (M), Shuthagla / Chushenderma (T)
Habitat:	Marshy places, often cultivated within homestead.
Altitude range:	From ca.600 to 2,800 masl.
Plant part collected:	Rhizome.
Uses:	Paste applies to cuts and wounds, scabies & ring-worm. It is taken a small piece to stop diarrhoea, relief food poison or indigestion. Steam inhalation relief sinusitis, cold – cough and sore throat. People even said it is used in maintaining the high blood pressure. Even MSP use it as one of the ingredients in the formulation of traditional medicine.
Time of collection:	October to March. MSP collects from November – December from Trongsa.
Distribution and availability status:	Chhukha, Dagana, Gasa, Lhuentse, Mongar, Paro, Punakha, Samdrupjongkhar, Samtse, Sarpang, Thimphu, Trashigang, Trongsa, Tsirang, Wangduephodrang. Moderate and limited in Samtse.

4 Family: Actinidiaceae



4.1 Scientific name:	<i>Actinidia callosa</i> (Lindl.)
Vernacular name:	Thekiphal, teekiphal, tekiphal (L)
Habitat:	Montane forests, cool broadleaved forests, shrubberies, thickets, forests edges, valley slopes, alongsides creeks and streams, moist sites.
Altitude range:	From 400 to 2,400 masl.
Plant part collected:	Fruits.
Uses: Edible.	It is a wild kiwi. It has potential to process into jam, jelly, juice or wine.
Time of collection:	From November onwards.
Distribution and availability status:	Found in Sarpang and Tsirang districts. It is moderate.

5 Family: Adoxaceae



5.1 Scientific name:	<i>Sambucus adnata</i> (Wall.)
Vernacular name:	Yu-gu-shing (D, M),
Habitat:	Understory shrub of forests, clearings of mixed broadleaved forest and blue-pine forest, and bare hill slopes.
Altitude range:	From ca. 1,200 to 3,900 masl.
Plant part collected:	Aerial parts.
Uses:	Use as ingredient in traditional medicine by MSP and collects from Bumthang.
Time of collection:	September to October
Distribution and availability status:	Bumthang, Chhukha, Haa, Lhuentse, Punakha, Paro, Thimphu and Wangduephodrang. Quite common in those mentioned districts. So it is plenty.

6 Family: Altingiaceae



6.1 Scientific name:	<i>Liquidambar excelsa</i> (Noronha) Oken.
Vernacular name:	Seti / Seti phal (L)
Habitat:	Warm broadleaved forests, tropical montane evergreen broadleaved forests.
Altitude range:	From 900 to 1,800 masl.
Plant part collected:	Fruit and resin.
Uses:	Fruit edible and resin used as local incense. Usually Sarpang people collects bark and used as incense.
Time of collection:	Fruit from July onwards, resin whenever finds deposits over the bark.
Distribution and availability status:	Mongar, Samdrupjongkhar, Sarpang, Trashigang and Trongsa. Found moderate

7 Family: Amaranthaceae



7.1 Scientific name:	<i>Achyranthes bidentata</i> (Blume)
Vernacular name:	Datiwan / apamarga (L)
Habitat:	Subtropical and broadleaved forests' edges, stream sides and the shrubberies, shady damp sites.
Altitude range:	From 300 to 3,000 masl.
Plant part collected:	Small branches, young twigs and roots.
Uses:	Small branch use as tooth-brush, twig infusion used as mouth wash to get relief from tooth-pain, also at times of suffering from fever and pneumonia. Root decoction cure throat-soar. Use religiously in Hindu Puja. Especially lhotshamp people use this plant.
Time of collection:	Whenever is needed.
Distribution and availability status:	Chhukha, Punakha, Samtse and Sarpang. Availability is moderate.

8 Family: Amaryllidaceae



8.1 Scientific name:	<i>Allium hookeri</i> (Thwaites)
Vernacular name:	Rum (D), Dung-du-nya / Dugdunge (L)
Habitat:	Marshy / moist places, leas, forests or forest edges.
Altitude range:	From 1400 to 4200 masl
Plant part collected:	Aerial parts.
Uses:	Leaves used for seasoning curries. It can be seen selling in the available markets and roadside vegetable stalls. People used as substitution to onion. Often it is cultivated within homestead.
Time of collection:	As and when required.
Distribution and availability status:	Dagana, Punakha, Samtse, Thimphu. In wild it is plenty.

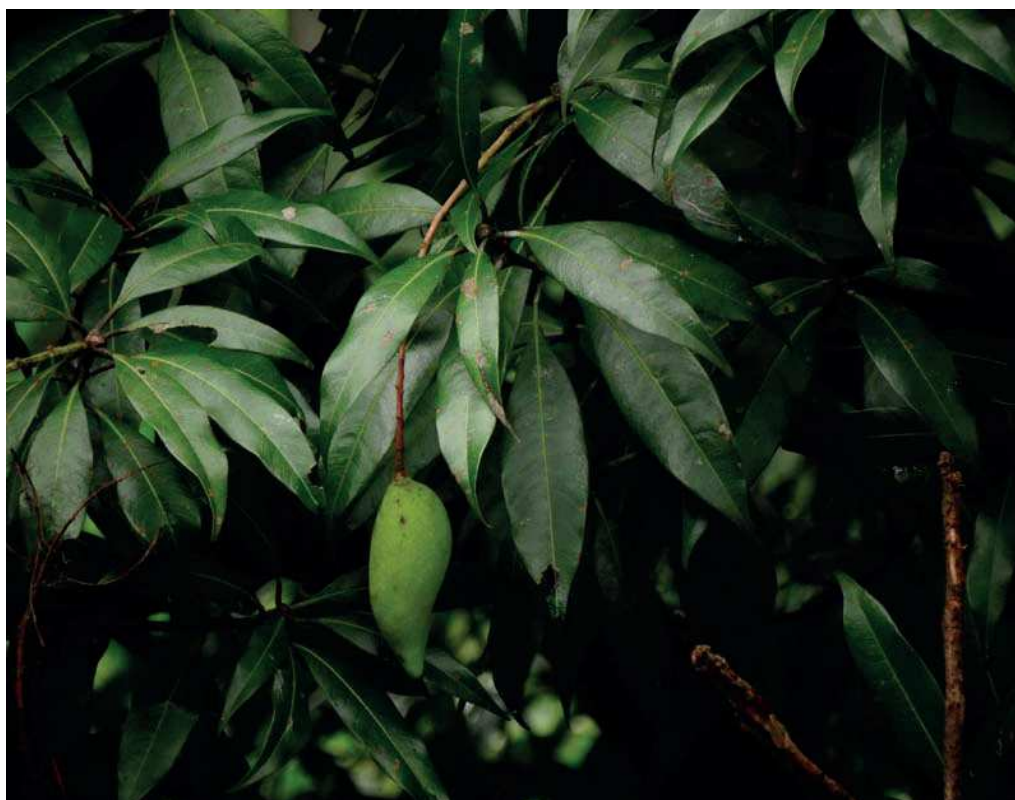


8.2 Scientific name:	<i>Allium wallichii</i> (Kunth)
Vernacular name:	La-gop / Lagok (D), Ban pyaz (L)
Habitat:	Forest clearing, forest edges, open moist cliff-ledges and fairly rocky hillsides, among scrub and shrubberies, wet and shady sites, leas, alongside stream / river.
Altitude	range: From 2,300 to 4,800 masl.
Plant part collected:	Entire plant.
Uses:	Used as vegetable. People believe it has some medicinal value to relief headache. MSP also use it as one of the ingredients in the formulation of traditional medicine.
Time of collection:	Aerial parts in summer, bulb from October to November. MSP collects it from Trashigang during July-August. Phobjip collects this as vegetable especially in summer season.
Distribution and availability status:	Chhukha, Paro, Thimphu, Trashigang, Wangduephodrang. It is quite rare.

9 Family: Anacardiaceae



9.1 Scientific name:	<i>Choerospondias axillaris</i> (Roxb.) B.L.Burt & A.W.Hill
Vernacular name:	Charashing (D), Labsi / Lapsi (L), Phrumchungsay / Throongchung (S), Achoela (Ts), Kurmulung (T), Ruthmula clumchin (K)
Habitat:	Subtropical and temperate forests.
Altitude range:	From 500 to 1,900 masl.
Plant part collected:	Fruits and leaves.
Uses:	Ripened fruits eat freshly or eaten by making chutney. Unripe fruit used to make preserved pickle. Fruit also used to cure boil. Sometimes leaves are collected as fodder for livestock especially as feeds to goats.
Time of collection:	Fruit – November to December, leaves as and when necessary.
Distribution and availability status:	Found in Chhukha, Dagana, Mongar, Sarpang, Trongsa, Tsirang, and Zhemgang. Found moderate



9.2 Scientific name:	<i>Mangifera sylvatica</i> (Roxb.)
Vernacular name:	Aam-tsukuli (D), Jungali / Tsuchey amp (L), Zhutali (K), Amsey (S), Abras (M)
Habitat:	Evergreen broadleaved forests, warm broadleaved forests, hillsides forests, near water bodies (natural ponds and lakes).
Altitude range:	From 200 to 1,400 masl.
Plant part collected:	Fruits and leaves.
Uses:	Ripened fruit edible has sweet-sour taste; fresh unripe fruit is blanched and processed into preserved pickle. Leaves used religiously as well as fodder. Blue dye can be extracted from its young leaves. MSP also uses its seeds in formulation of traditional medicine.
Time of collection:	Fruit – April to June, leaves whenever requires.
Distribution and availability status:	Sporadically available in Chhukha, Dagana, Mongar, Samdrupjong-khar, Samtse, Sarpang, Trashiyangtse, Trongsa, Tsirang, and Wangduephodrang. Sometimes people cultivate within their homestead lands.



9.3 Scientific name:	<i>Rhus chinensis</i> (Mill.)
Vernacular name:	Datick (M), Bhakimlo (L), Pok Pokpa Shing / Roptang Shing (S), Brampa (K)
Habitat:	Forests slope, shrubberies, along the roadsides.
Altitude range:	From ca. 900 to 2700 masl.
Plant part collected:	Fruit, root and leaves.
Uses:	Fruits are boiled and make into vinegar (called as “Chuk”). One or two spoons of “chuk” are taken to stop diarrhoea / dysentery. “Chuk” is very useful to cure running nose of sheep and goat, to livestock at times of diarrhoea and when suffers from indigestion. Fruits are also used as mordant while dyeing cloth. MSP uses fruit while formulating traditional medicine. Root is chewed like betel-nut. Sometimes leaves are used as fodder.
Time of collection:	Fruit from November to March. Root and leaves whenever needed. MSP collects fruit MSP from Trongsa in October – November.
Distribution and availability status:	Chhukha, Dagana, Lhuentse, Mongar, Pemagatshel, Punakha, Samdrupjongkhar, Samtse, Sarpang, Trashigang, Trashiyangtse, Trongsa, Tsirang, Wangduephodrang, Zhemgang. It is available plenty from wild along roadsides



9.4 Scientific name:	<i>Spondias pinnata</i> (L.fil.) Kurz
Vernacular name:	Amaru / Amara (L), Ambar / Bochong shing (S)
Habitat:	Warm broadleaved forests, Sal and Teak growing areas, dry slope places.
Altitude range:	From 150 to 1,200 masl.
Plant part collected:	Flower and fruit.
Uses:	Flower used as vegetable, fruit edible and processed locally into preserved pickle. People believe fruit can used medicinally to cure pneumonia, tonsillitis and ulcer.
Time of collection:	Flower – April to May, Fruit – October onwards.
Distribution and availability status:	Found in Dagana, Mongar, Lhuentse, Samdrupjongkhar, Samtse, Sarpang, Tsirang, and Zhemgang. It is quite plenty.

10 Family: Apiaceae



10.1 Scientific name:	<i>Eryngium foetidum</i> (L.)
Vernacular name:	Jungali dhaneya / bhotey / karay / ghora dhaneya (L)
Habitat:	Foothill forest, along sides of the creeks and streams, dry or moist areas, either sides of the road, abandoned lands, near to cultivated lands.
Altitude range:	From 150 to 1,500 masl.
Plant part collected:	Entire or aerial parts
Uses:	As spice or eat like salad. Has similar taste as that of coriander. Sometimes it is seen selling in the local vegetable market.
Time of collection:	All the year round.
Distribution and availability status:	It is found in Chhukha, Dagana, Punakha, Samdrupjongkhar, Samtse, Sarpang, and Tsirang. Availability is moderate. People used to cultivate within their homestead



10.2 Scientific name:	<i>Ligusticopsis wallichiana</i> (DC.) Pimenov & Kljuykov
Vernacular name:	Dungtshu Katshu (D), Rabe / Tsed (M)
Habitat:	Open fields or slopes, pastureland track, shrub or scrub land, rocky hillsides, forest clearings.
Altitude range:	From 2,300 to 4,800 masl.
Plant part collected:	Root
Uses:	For medicinal purposes. People collect it from Thimphu region.
Time of collection:	July to September.
Distribution and availability status:	Moderately available in Gasa and Thimphu districts.



10.3 Scientific name:	<i>Pleurospermum amabile</i> (Craib & W. W. Smith)
Vernacular name:	Tsed, Rtsad, Tsey (M)
Habitat:	Rocky or boulder slopes, screes and exposed alpine leas.
Altitude range:	From ca.3,900 to 4,700 masl.
Plant part collected:	Aerial parts.
Uses:	Use as ingredient in traditional medicine by MSP.
Time of collection:	August to September
Distribution and availability status:	Bumthang and Thimphu. It is rare.



10.4 Scientific name:	<i>Selinum vaginatum</i> (C.B.Clarke)
Vernacular name:	Tongkuen Nagpo (M)
Habitat:	Temperate to alpine zones, inclined damp grasslands, meadows, shrubberies, sometimes in drier sites.
Altitude range:	From ca.2,950 to 3,850 masl.
Plant part collected:	Roots.
Uses:	Use as ingredient in traditional medicine by MSP.
Time of collection:	October to November
Distribution and availability status:	Thimphu and Wangduephodrang. It is moderate in its availability.



10.5 Scientific name:	<i>Tetrataenium nepalense</i> (D.Don) Manden.
Vernacular name:	Trunag / Tunak (M), Chimphing (L)
Habitat:	Well drained areas like roadsides, cliff edges and rocky slopes, grazing sites, grassy slopes, moist grassland, temperate broadleaved forests, forest floor or scrub of pine and fir forest.
Altitude range:	From 1,700 to 4,000 masl.
Plant part collected:	Seed.
Uses:	Take as tea to relief severe fever, body-joints pain, stomach-pain, giddiness, diarrhoea and vomiting. People also make as powder or paste pickle and consume it. People said seeds are best to relief cattle's swollen belly due to gas formation. It is also known that MSP used as one of the ingredients in traditional medicine.
Time of collection:	August to November.
Distribution and availability status:	Bumthang, Chhukha, Haa, Dagana, Gasa, Paro, Samtse (Rare as only few areas lies within that altitude range), Sarpang, Thimphu, Tsirang, Trashigang, Wangduephodrang. Moderate in other those mentioned districts.

11 Family: Apocynaceae



11.1 Scientific name:	<i>Beaumontia grandiflora</i> (Wall.)
Vernacular name:	Dug mo nyung (M), Gangla (T), Gothaley phul (L)
Habitat:	Subtropical plain areas, warm broadleaved forests, mounting on trees, over rocks, edges and shrubs, mostly in open sites, along banks.
Altitude range:	From 250 to 1,500 masl.
Plant part collected:	Seeds.
Uses:	Use as ingredient in traditional medicine by MSP. Mostly collects from Trongsa.
Time of collection:	October to November.
Distribution and availability status:	Found in Samtse, Sarpang, Trongsa and Wangduephodrang. Availability is moderate.



11.2 Scientific name:	<i>Plumeria rubra</i> (L.)
Vernacular name:	Tsuwa / chuwa or Thulo tsuwa / chuwa (L)
Habitat:	Tropical to subtropical forests, loamy or sandy places, open plains.
Altitude range:	From 150 to 800 masl.
Plant part collected:	Flower.
Uses:	People believe it has medicinal value to cure malarial fever, body-pain and piles. It is beautiful with sweet fragrance owing to which few people cultivate within their homestead as ornamental flowering tree.
Time of collection:	June to November.
Distribution and availability status:	Found in Chhukha, Dagana, Samtse, Sarpang and Tsirang. It is quite rare.



11.3 Scientific name:	<i>Rauvolfia serpentine</i> (L.) Benth. ex Kurz
Vernacular name:	Kulane / ban kulane (L)
Habitat:	Foothills forest margin, amidst of Sal and Teak stands, roadside scrubs, among constructional bamboo growing areas.
Altitude range:	From 150 to 900 masl.
Plant part collected:	Root along with its bark.
Uses:	Extract from root or root bark is taken orally to cure malarial fever. Also it is taken as remedy for “Nash-copod” i.e. food poison.
Time of collection:	Whenever necessary. But it's best to collect during dry season.
Distribution and availability status:	It is found in Dagana, Samtse, Sarpang and Samdrupjongkhar. Limited in its niche places. It is seen few individual farmers cultivate within the farmland for home-use.



11.4 Scientific name:	<i>Tabernaemontana divaricata</i> (L.) R.Br. ex Roem. & Schult.
Vernacular name:	Baramashay phul (L)
Habitat:	Foothill forests, thick evergreen forests, sal teak or bambox forests, thin stands forests, small montane trees and shrubs, along river or stream sides.
Altitude range:	From 150 to 1,600 masl.
Plant part collected:	Leaves or entire plant.
Uses:	People believe leaves have medicinal value to cure diabetes. Entire plant is ornamental. Sometimes people use to plant within their home garden for its beauty.
Time of collection:	Whenever necessary.
Distribution and availability status:	Grown in Chhukha, Dagana, Samdrupjongkhar, Samtse, Sarpang, Tsirang, Wangduephodrang and Zhemgang. It is plenty.

12 Family: Araceae



12.1 Scientific name:	<i>Amorphophallus paeoniifolius</i> (Dennst.) Nicolson
Vernacular name:	Gurbo / Gurbu (L), Dochu gurum (Cpz)
Habitat:	Secondary or shrub forests, moist deciduous forests, grassland valleys, wet shady places, among bamboos and <i>Bombax ceiba</i> stands.
Altitude range:	From ca.150 to 800 masl.
Plant part collected:	Tender or young entire aerial parts, also entire matured plants.
Uses:	Tender or young entire aerial parts cooked and eat as vegetable with staple-foods. Some farmers collect, make sun-dry and keep for lean vegetable season. During its season it is seen in the available vegetable market selling as green vegetable. Some people collect entire part and used as feed to pig.
Time of collection:	From mid-April until end of August.
Distribution and availability status:	Grown in Chhukha, Samdrupjongkhar, Samtse, Sarpang, Tsirang and Zhemgang. Availability is moderate.



12.2 Scientific name:	<i>Colocasia esculenta</i> (L.) Schott
Vernacular name:	Maanay (L)
Habitat:	Secondary forests, moist forests, dampy areas within riparian, along either sides of the creeks, streams and rivers, spring sources, even within canals, disturbed places, roadsides, wet fields, edges of ponds and lakes or fresh water running sites, cultivated agricultural fields.
Altitude range:	From 150 to 1,500 masl.
Plant part collected:	Young leaf / bud along with petiole / stem, entire plant along with corm.
Uses:	Young leaf / bud along with petiole / stem cooked and eat as vegetable. Entire plant along with corm cooked and fed to livestock especially to pigs.
Time of collection:	For vegetable: From April until end of September. For animal feed: Throughout the year round.
Distribution and availability status:	It is found throughout southern regions of the country even it is grown within the mentioned altitude range. It is quite common.



12.3 Scientific name:	<i>Remusatia vivipara</i> (Roxb.) Schott
Vernacular name:	Jaluka / Jaluki / Jaluko (L)
Habitat:	Semi-evergreen and moist deciduous forests, wet and dampy places, sandy-gravel areas, open riverine places, hilly-slope edges, besides creek; stream and river.
Altitude range:	From ca.250 to 1,400 masl.
Plant part collected:	Young leaves with stem.
Uses:	Utilize as wild green vegetable. It can be seen selling in the available vegetable market.
Time of collection:	From March to September.
Distribution and availability status:	It is grown in Chhukha, Dagana, Samdrupjongkhar, Samtse, Sarpang and Tsirang. Availability is moderate.

13 Family: Araliaceae



13.1 Scientific name:	<i>Macropanax dispermus</i> (Blume) Kuntze
Vernacular name:	Chindey (L), Gu-shing (S)
Habitat:	Evergreen montane forests, mixed broadleaved forest, scrubby hilly slopes.
Altitude range:	From 300 to 2,000 masl.
Plant part collected:	Young leaves and buds, leaves.
Uses:	Young leaves and buds are used as green vegetable. Also processed into preserved pickle and consume. Leaves are used as livestock fodder.
Time of collection:	Young leaves and buds from April to June, leaves whenever required.
Distribution and availability status:	It is found in Chhukha, Dagana, Samtse and Tsirang. Availability is moderate.



13.2 Scientific name:	<i>Panax pseudoginseng</i> (Wall.)
Vernacular name:	Drahingee-ra-za / maru go-nay / Daa-zu (M)
Habitat:	Mixed coniferous forests, forests & shrubberies, shady and wet sites, alongside of the creeks.
Altitude range:	From 1,500 to 4,300 masl.
Plant part collected:	Rootstock.
Uses:	Used as one of the ingredients in traditional medicine by MSP.
Time of collection:	September to October.
Distribution and availability status:	It is found in Gasa, Haa, Paro, Thimphu and Wangduephodrang districts. Availability is moderate.

14 Family: Arecaceae



14.1 Scientific name:	<i>Calamus acanthospathus</i> (Griff.)
Vernacular name:	Tshimtsha (D), Gauribet (L), Minji (S), Krath (K), Moo (Tm)
Habitat:	Moist, damp and dense evergreen broadleaved forests, steep and rocky sites.
Altitude range:	From ca.900 to 1,900 masl.
Plant part collected:	Young shoot, matured cane stem, ripened fruit.
Uses:	Young shoot use as vegetable. Matured cane stem for making different handicraft items, cane furniture and household stuff. Ripened fruit is taken or chew as betel-nut.
Time of collection:	<ol style="list-style-type: none"> 1. Young shoot: From May to August (During these months gets maximum of the consumable part). In rest of the month also people collect but in these month the consumable part is very little. People sell in the available market or in vegetable stall at the road-side. 2. Matured cane stem: During winter season. 3. Ripened fruit: From mid-March to mid-April.
Distribution and availability status:	It is found in Chhukha, Dagana, Lhuentse, Mongar, Pemagatshel, Punakha, Samdrupjongkhar, Samtse, Sarpang Trongsa, Tsirang, Wangduephodrang and Zhemgang. However, its population is declining and observed limited in its niche habitat.



14.2 Scientific name:	<i>Calamus erectus</i> (Roxb.)
Vernacular name:	Phegkray, pekri, phekri, phekori (L), Kheershing (S), Bher (K)
Habitat:	Mixed deciduous forest of the tropical and sub-tropical regions, usually on steep and drier slopes (not less than 20%) of the foothill areas, crevices of the rocky cliffs.
Altitude range:	From ca.300 to 1,400 masl.
Plant part collected:	Stem, entire leaves, fruits.
Uses:	Stem used to make furniture and other household items. Leaves used for roofing small huts, cowshed or livestock shed. Midribs are used to make hard broom. Fruits are chewed as betel nut.
Time of collection:	Stem and midribs usually in winter. Fruits collection time is from December to March.
Distribution and availability status:	It is found in Chhukha, Dagana, Samdrupjongkhar, Samtse, Sarpang, Trongsa, Tsirang, Wangduephodrang and Zhemgang districts. But then it is declining in in-situ may be because of socio-economic development activities. Thus availability is sporadic.



14.3 Scientific name:	<i>Calamus flagellum</i> (Griff.)
Vernacular name:	Soka / Tangtangma (K), Phegkray bet (L)
Habitat:	Evergreen or montane forest of the tropical and sub-tropical regions, usually on steep and drier slopes of the foothill areas, crevices of the rocky cliffs.
Altitude range:	From ca. 150 to 1,350 masl.
Plant part collected:	Stem, entire leaves, fruits.
Uses:	Stem used to make average quality furniture and other household items. Fine split cane stem is used for buckling. Leaves used for roofing small huts, cowshed or livestock shed. Midribs are used to make hard broom. Fruits are chewed as betel nut.
Time of collection:	Stem and midribs usually in winter. Fruits collection time is from April to May.
Distribution and availability status:	It is found in Samtse, Sarpang and Zhemgang districts. However it is becoming rare in niche may be because of socio-economic development activities. Thus availability is sporadic



14.4 Scientific name:	<i>Calamus latifolius</i> (Roxb.)
Vernacular name:	Dey-tsha / Muu (D), Balsey bet / Putle bet / Dhang-ray / Dangri/ Dangray bet/ Mau bet/ Aulay bet/ Lauri / Lauray bet (L), Khran (K), Drey (S), Humpela (Tm)
Habitat:	Damp land adjacent to rivers and streams, semi-evergreen to evergreen forest sites, steep and damp slope in low light conditions.
Altitude range:	From ca. 250 to 1,900 masl.
Plant part collected:	Matured stem.
Uses:	Used to make handicraft items and furniture.
Time of collection:	Usually during winter months.
Distribution and availability status:	It is found in Chhukha, Dagana, Mongar, Samtse, Sarpang, Trongsa, Tsirang, Wangduephodrang, and Zhemgang. It is becoming rare or moderate.



14.5 Scientific name:	<i>Calamus leptospadix</i> (Griff.)
Vernacular name:	Titipi / Tangtangma (K)
Habitat:	Foothill evergreen forests, moist riverine and valleys, thickets places.
Altitude range:	From ca. 150 to 900 masl.
Plant part collected:	Matured stem.
Uses:	Used to make average quality handicraft items and furniture.
Time of collection:	Usually during winter months.
Distribution and availability status:	It is found in Samtse, Sarpang and Zhemgang. It is becoming rare or moderate.



14.6 Scientific name:	<i>Calamus tenuis</i> (Roxb.)
Vernacular name:	Zeechum-tsha (D), Kukhrey / Kukhurey / Pani bet (L), Krab (Ks)
Habitat:	Marshy or swampy places with thick vegetation cover, stony sides of rivers and streams, flooded sites, lowland evergreen forest.
Altitude range:	From ca.350 to 650 masl.
Plant part collected:	Matured stem.
Uses:	Weaving household handicraft items and making furniture. Split of this cane make good quality rope for tying.
Time of collection:	Usually during dry season.
Distribution and availability status:	It is found in Chhukha, Dagana, Samtse, Sarpang and Tsirang but it is rare these days.



14.7 Scientific name:	<i>Caryota urens</i> (L.)
Vernacular name:	Rangbhang (L) / Thakchung shing (S).
Habitat:	Moist sub-tropical and tropical forests, foothill and sub-montane forests, limestone sites, open along river or stream sides.
Altitude range:	From 350 to 1,500 masl.
Plant part collected:	Matured trunk, tender shoot, entire leaf, and matured fruit.
Uses:	Split of matured trunk used to make “Thakchung” which is used as tool to weave clothes. Some people from southwest use tender shoot as vegetable and leaf as shed roofing materials. Matured fruits are collected and chew like betel-nut. It can be used as ornamental plant within homestead.
Time of collection:	Matured trunk usually collects in winter season. For others do not have particular season. It is seen fruiting from May – July.
Distribution and availability status:	It is grown in Chukha, Samdrupjongkhar, Samtse, Sarpang and Zhemgang. But these days it is becoming very rare.



14.8 Scientific name:	<i>Daemonorops jenkinsiana</i> (Griff.) Mart.
Vernacular name:	Hung-tsha (D), Dudia / dut / lauri bet (L)
Habitat:	Alongside water-courses, often disturbed places, mixed plains of evergreen forest.
Altitude range:	Upto 1,200 masl.
Plant part collected:	Stem.
Uses:	It is a soft cane used for making household handicraft items. Fruit is edible like betel-nut.
Time of collection:	Usually in winter season. Fruit: From March to December.
Distribution and availability status:	It is grown in Chhukha, Samtse, Sarpang and Trongsa. But these days it is becoming too rare to find in its niche places.



14.9 Scientific name:	<i>Phoenix acaulis</i> (Roxb.)
Vernacular name:	Dagsha (D / Wl / Sk) Thakal (L), Thaagm / Phigzem (K), Lari / Larishabu (S), Pyrala (Sk)
Habitat:	Warm broadleaved forest, Chir Pine forest, dry scrub or grassy land, gravelly incline sites.
Altitude range:	From 350 to 1,800 masl. Plant part collected: Entire plant, fruits and leaves.
Uses:	It is used as decorative plant. Fruits chew as betel-nut have astringent taste. Leaves are used as roofing material for cowshed or any other small shed. Mid-rib can use to make hard broom. Also leaves are good fodders for horse.
Time of collection:	Fruits – April to June, Leaves – whenever required.
Distribution and availability status:	It is grown in Chhukha, Dagana, Lhuentse, Mongar, Samdrupjongkhar, Samtse, Sarpang, Tsirang, Wangduephodrang and Zhemgang. However it is Sporadic.



14.10 Scientific name:	<i>Plectocomia himalayana</i> (Griff.)
Vernacular name:	Pa-tsha (D), Phegkray, Tokri, Tara, Damley, Dhoray bet (L), Raycha (K), Tama-dapchu (G / Wl), Rey / Phashi (S), Ray (Tm)
Habitat:	Dense moist forests, gullies, rocky slope of +>40%, in the sites of sandy-loam with high vegetative matters, damp areas.
Altitude range:	From 1,500 to 2,500 masl.
Plant part collected:	Young shoot, and stem.
Uses:	Young shoot cooked and eat as vegetable. Selling of young shoot can be seen in the available vegetable market. Matured stem used to make rope for tying, its splits for weaving basket (Zem or zim in Dzongkha) and few handicraft items but it is not that much durable.
Time of collection:	<ol style="list-style-type: none"> 1. Young shoot: From May to August (During these months gets maximum of the consumable part). In rest of the month also people collects but in these month the consumable part is very little. People sell in the available market or in vegetable stall at the road-side. People used to earn good sum of money by selling the shoots. 2. Matured cane stem: During winter season.
Distribution and availability status:	It is found in Chhukha, Dagana, Gasa, Lhuentse, Mongar, Pemagatshel, Punakha, Samdrupjongkhar, Samtse, Sarpang, Trongsa, Tsirang, Wangduephodrang and Zhemgang. Resource is plenty.



14.11 Scientific name:	<i>Wallichia disticha</i> (T.Anderson)
Vernacular name:	Lai (L), Seytsam /Saitsham / Saitsee (S)
Habitat:	Foothills humid forests, frequently on steep and rocky slopes.
Altitude range:	From 500 to 1,700 masl.
Plant part collected:	Young leaves, mid-rib.
Uses:	Young leaves used as fodder especially to horses and mid-rib to make hard-broom.
Time of collection:	Leaves as and when necessary.
Distribution and availability status:	Found in Chhukha, Samdrupjongkhar, Samtse, Mongar and Zhemgang. It is sparsely available



14.12 Scientific name:	<i>Wallichia oblongifolia</i> (Griff)
Vernacular name:	Thag-ra / thag-ray (L), Dungrungpa bakpa (Kp = Pangbang - Kheng), Dungreytsa / Patara / Namthame (K / S).
Habitat:	Humid thick forests particularly in shady wet rocky places, on steep slopes, cliff edges.
Altitude range:	From 200 to 1,600 masl.
Plant part collected:	Leaves and mid-ribs.
Uses:	Leaves are used as excellent fodder for cattle and horses. Mid-rib used to make hair-comb (called Thagro) and hard broom.
Time of collection:	Leaves as and when required. Collect mid-rib in winter season.
Distribution and availability status:	Chhukha, Dagana, Pemagatshel, Samdrupjonkhar, Samtse, Sarpang and Zhemgang. Resource availability is moderate.

15 Family: Aristolochiaceae



15.1 Scientific name:	<i>Isotrema griffithii</i> (Hook.fil. & Thomson ex Duchartre) C.E.C. Fisch.
Vernacular name:	Baleka (M)
Habitat:	Cool broad-leaved forests, Evergreen and Fir forests, sometimes in cultivated lands.
Altitude range:	From 1,800 to 2,950 masl.
Plant part collected:	Stem or climber.
Uses:	As one of the ingredients in traditional medicine.
Time of collection:	MSP collects it from Trongsa in November – December.
Distribution and availability status:	Found in Chhukha, Mongar, Punakha, Trashigang and Trongsa. Resource availability is moderate.

16 Family: Asparagaceae



16.1 Scientific name:	<i>Aspacagus racemosus</i> .-Ham. ex D.Don
Vernacular name:	Ngyna khagchu (D), Ban kurilo / Satawari (L), Nga Khagchung (K), Nyi-shing (M)
Habitat:	Warm or dry broadleaved forests, chir-pine forests, shrubberies, dry open slopes or places, among boulders and shrubs.
Altitude range:	From 850 to 3,000 masl.
Plant part collected:	Young shoot and rootstock.
Uses:	Young shoot is cooked as vegetable and eat. But most of the farmers sell in available vegetable market. Farmers said rootstock is medicine for acidity and it's useful to mothers as it promotes lactation and appetite.
Time of collection:	Young shoot from: April to June. MSP collects root from Trongsa in October – November.
Distribution and availability status:	Dagana, Lhuentse, Mongar, Paro, Samtse, Trashigang, Trashiyangtse, Trongsa, Tsirang and Wangduephodrang. Resource availability is moderate. However in Samtse it is sporadic and rare as there is minimum growing belt of this species



16.2 Scientific name:	<i>Polygonatum verticillatum</i> (L.) All.
Vernacular name:	Goen (D), Ra Ngye (M)
Habitat:	Temperate forests, alpine areas, shrubberies, leas and open slopes.
Altitude range:	From 2,400 to 4,700 masl.
Plant part collected:	Roots.
Uses:	As one of the ingredients in traditional medicine.
Time of collection:	MSP collects from the month of June to August.
Distribution and availability status:	Found in Thimphu and Paro. Resource availability is limited.



16.3 Scientific name:	<i>Tupistra nutans</i> (Wall. ex Lindl.)
Vernacular name:	Wangpem / Wangpem meto (D, K), Nakima (L), Thur-mum / Thormom / Tholu-mum / Wangpemo / Wangpeymo (S), Thormangyu / Wangpai mo (K), Thacheum meto (Cpz)
Habitat:	Scattered in mixed evergreen broadleaved forest, edge of the creek, cliff, or a rocky gentle slope especially towards SE and SW aspects, well drainage places having sandy-loam soil with rich humus.
Altitude range:	From 850 to 2,400 masl.
Plant part collected:	Inflorescence, fruit, seed, root and leaf.
Uses:	Inflorescence eats as vegetable. People said eating as vegetable reduces blood pressure, diabetic level and relief gout. Small piece of raw root is taken as betel nut to reduce diabetic level. Fruit is edible. Seed used to relief sinusitis. Seed powder is boiled and drink to relief stomach-pain. Rootstocks are used to cure jaundice and malaria. Leaf cut and use as fodder. Entire plant with flowers / inflorescence is ornamental.
Time of collection:	Inflorescence from mid-September till end of October. Fruit and seed collect in July. Root and leaf is whenever required.
Distribution and availability status:	Grows in Chhukha, Dagana, Lhuentse, Mongar, Pemagatshel, Punakha, Samdrupjongkhar, Samtse, Sarpang and Zhemgang. Resource availability is moderate in its niche.

17 Family: Asteraceae



17.1 Scientific name:	<i>Artemisia dubia</i> (Wall. ex Besser)
Vernacular name:	Khempa (D), Titey-pati (L)
Habitat:	Open disturbed areas, thin stands forests, along the banks of river and stream.
Altitude range:	From ca.2,000 to 2,450 masl.
Plant part collected:	Entire aerial parts.
Uses:	Leaves decoction used for curing headache, cough and cold, blood clotting. The dried immature leaves and flowers are used for expulsion of worms (like thread & round worms) from the stomach. Also the whole plant is useful in fever, dropsy and as a stimulant. Entire plant either dry or raw used as instance incense. People even used in farmland as green manure.
Time of collection:	Whenever required.
Distribution and availability status:	Commonly available in Paro, Thimphu and Wangduephodrang. Resource is plenty



17.2 Scientific name:	<i>Artemisia moorcroftiana</i> (Wall. ex DC.)
Vernacular name:	Khempa (D)
Habitat:	Alongside grassy edges, stony soils, amidst boulders and shrubs, open rocky hillsides.
Altitude range:	From ca.2,500 to 3,900 masl.
Plant part collected:	Flowers, tender leaves, or entire plant.
Uses:	Tender leaves and flowers are used for expulsion of worms from the stomach. Entire plant either raw or dry used as incense.
Time of collection:	Flowers – August to October, tender leaves – April to June end, entire plant – as and when necessary.
Distribution and availability status:	Gasa and Haa districts. Resource availability is moderate.



17.3 Scientific name:	<i>Artemisia myriantha</i> (Wall. ex Bess.)
Vernacular name:	Khempa (D), Titey-pati (L), Mayreng-ma (S)
Habitat:	Dense forests, open slopes and along roadsides, within cultivated lands, even in shrublands.
Altitude range:	From ca.1,000 to 2,800 masl.
Plant part collected:	Entire aerial parts.
Uses:	Entire aerial parts used in herbal stone bath. Bathing in that way believes to relax from general body-pain. The dried immature leaves and flowers are used for expulsion of worms from the stomach. Entire part also used as incense religiously.
Time of collection:	As and when necessary.
Distribution and availability status:	Found in Punakha and lower places of Wangduephodrang districts. Resource is plenty.



17.4 Scientific name:	<i>Artemisia verlotiorum</i> (Lamotte)
Vernacular name:	Khempa (D), Titey-pati (L)
Habitat:	Open shrub-lands, moist side of the hill, along sides of the road, abandoned / waste places.
Altitude range:	From 600 to 2,000 masl.
Plant part collected:	Immature leaves, inflorescences or entire plant.
Uses:	The dried immature leaves and inflorescences are used for expulsion of worms from the stomach. Farmers say it's useful in fevers. Entire plant either dry or raw can use as instance incense religiously. Whole plant feed to goat or sheep as fodder.
Time of collection:	Inflorescences from September to November and other parts as and when necessary.
Distribution and availability status:	Grows in Chhukha, Dagana, Samtse (Moderate), Sarpang and Tsirang. Resource is plenty as it grown as unwanted weeds.



17.5 Scientific name:	<i>Aucklandia lappa</i> (DC.)
Vernacular name:	Ruta shing (D), Ruta (M)
Habitat:	Cool temperate forests, moist slope and cultivated areas.
Growth range:	From 2,500 to 3,960 masl.
Plant part collected:	Root.
Uses:	People uses directly as incense collecting from the wild. Incense factory used as one of the raw materials of the processed incense. Also use by MSP as one of the ingredients in traditional medicine.
Time of collection:	MSP collects from January to February whereas dwellers collect whenever required.
Distribution and availability status:	During survey it is found only in Haa and resource was quite plenty.



17.6 Scientific name:	<i>Inula grandiflora</i> (Willd.)
Vernacular name:	Mingchen serpo (D / M)
Habitat:	Temperate to alpine zones, open verdant slope areas, shrubberies.
Altitude range:	From ca.2,000 to 3,500 masl.
Plant part collected:	Flowers.
Uses:	Uses for medicinal purposes. Most likely it is use by MSP as one of the ingredients in traditional medicine.
Time of collection:	Towards end of June to September.
Distribution and availability status:	Found Haa, Paro and Thimphu and resource is moderate.



17.7 Scientific name:	<i>Inula racemosa</i> (Hook.f.)
Vernacular name:	Manu (D)
Habitat:	Cultivated land margins of temperate and alpine zones.
Altitude range:	From 2,000 to 3,700 masl
Plant part collected:	Root
Uses:	As one of the ingredients in traditional medicine by MSP. Also it is use as one of the raw materials for incense by the incense making factory.
Time of collection:	January to February
Distribution and availability status:	Found in Bumthang and the resource is rare.



17.8 Scientific name:	<i>Ligularia amplexicaulis</i> (Wall.) DC.
Vernacular name:	Shelempha / Rishog (D), Dola (S), Ankhe phul (L)
Habitat:	Stoniness forest, moist leas, open shrub-land and marshy ground, damp and rocky slopes.
Altitude range:	From 2,700 to 4,400 masl.
Plant part collected:	Root.
Uses:	As ingredient in traditional medicine by MSP.
Time of collection:	MSP collect from Bumthang in the month of September - October.
Distribution and availability status:	Bumthang, Haa, Paro, Thimphu and Trashigang. Its availability is moderate.



17.9 Scientific name:	<i>Saussurea obvallata</i> (DC.) Sch.Bip.
Vernacular name:	Zadug nakpo (M)
Habitat:	Alpine leas and grassy slopes, stony slopes, shrubberies sites, along the banks of streams and rivers.
Altitude range:	From 3,000 to 4,800 masl.
Plant part collected:	Leaves, twigs, flowers & seeds.
Uses:	As ingredient in traditional medicine by MSP.
Time of collection:	July to November. Thimphu highlanders collect it.
Distribution and availability status:	Thimphu and Trongsa. Availability is moderate.



17.10 Scientific name:	<i>Tanacetum nubigenum</i> (Wall. ex DC.)
Vernacular name:	Sangchu-karm / Sangzey-karchu (D), Khenkar (M), Khengkar (Ku)
Habitat:	Stony slopes, open hillsides and scree, boulder or sandy ground, alongside of the stream or river.
Altitude range:	From 2,200 – 4,800 masl.
Plant part collected:	Aerial parts
Uses:	As ingredient in traditional medicine by MSP. Also it is one of the raw materials of incense.
Time of collection:	August to September.
Distribution and availability status:	Found in Bumthang, Chhukha, Gasa, Haa, Lhuentse and Thimphu. Availability is plenty.



17.11 Scientific name:	<i>Taraxacum eriopodum</i> (D.Don) DC.
Vernacular name:	Khur mang (D)
Habitat:	Mountain pasturelands, along the paths, grassy bank slopes.
Altitude range:	From 2,000 to 4,500 masl.
Plant part collected:	Entire plant.
Uses:	As ingredient in traditional medicine by MSP. Whole plant also use as incense and medicine to cure skin disease by the local people.
Time of collection:	July to August.
Distribution and availability status:	Found in Bumthang, Haa, Paro and Thimphu. It abundancy is plenty.



17.12 Scientific name:	<i>Tibetiodes stracheyi</i> (Hook.fil.) Nesom.
Vernacular name:	Chu-de-ba (M)
Habitat:	Alpine leas, moraine heaps, rocky sites, open slopes and scree.
Altitude range:	From 2,900 to ca.4,750 masl.
Plant part collected:	Entire plant.
Uses:	MSP use it as one of the ingredients while formulating traditional medicine.
Time of collection:	July to August. MSP collects it from Haa.
Distribution and availability status:	Bumthang, Haa, Paro and Thimphu. Resource availability is moderate.

18 Family: Berberidaceae



18.1 Scientific name:	<i>Berberis aristata</i> (DC).
Vernacular name:	Kheybi tsang / Kepaitsang (D), Ban chutro (L)
Habitat:	Shrubberies, quite steeply rocky slopes, open hillside areas, along river sides.
Altitude range:	From ca. 1,800 to 3,500 masl.
Plant part collected:	Ripen fruits, bark, roots and leaves.
Uses:	Ripened fruit edible. Young children and cow boys enjoy eating ripened fruits. Bark and root used medicinally. People believe it helps in jaundice, ulcer, and stomach disorder and in fever. Some people use leaves while performing religious puja.
Time of collection: Fruits:	August to November; Bark, roots and leaves whenever required.
Distribution and availability status:	Found in places of Dagana, Gasa, Haa, Lhuentse, Mongar, Paro, Thimphu and Wangduephodrang. Resources availability is quite plenty.



18.2 Scientific name:	<i>Berberis asiatica</i> (Roxb. ex DC.)
Vernacular name:	Kepaitsang (D), Chutro (L), Kerpa (T)
Habitat:	Dry valleys and hills, rocky slopes, open shrubland, landslide places, edge of the cultivated land.
Altitude range:	From 1,200 to 2,500 masl.
Plant part collected:	Stem, root and yellow heart-wood.
Uses:	People believe roots have medicinal value. Roots and stems also used to extract yellow dye. MSP collects yellow heart-wood from Trongsa in the months of February – March.
Time of collection:	September to February.
Distribution and availability status:	Found in Chhukha, Punakha, Samtse (Limited) and Trongsa districts. It is plenty.



18.3 Scientific name:	<i>Podophyllum hexandrum</i> (Royle)
Vernacular name:	Yoelmo-se (D), Laghu patra (L)
Habitat:	Forest clearing places, sheltered floor of broadleaved forest, mixed broadleaved coniferous forests, damp stoniness slopes or cool opened shady slopes.
Altitude range:	From ca.2,400 to 4,500 masl
Plant part collected:	Fruit.
Uses:	As ingredient in traditional medicine by MSP.
Time of collection:	August to September.
Distribution and availability status:	Found in Bumthang, Haa and Thimphu. Resource is limited.

19 Family: Betulaceae



19.1 Scientific name:	<i>Betula alnoides</i> (Buch.-Ham. ex D. Don)
Vernacular name:	Tab / Tapchu / Paynap (D), Saur (L)
Habitat:	Warm and cool broadleaved forests, ravines, stream-sides.
Altitude range:	From 800 to 2,700 masl.
Plant part collected:	Bark and exudes, leaves.
Uses:	Take as tea to relief cold & cough. Exudes are used as incense and leaves fodder. Bark used by MSP to formulate traditional medicine.
Time of collection:	Mostly in dry season. MSP collects bark from Trongsa in November – December.
Distribution and availability status:	It is plenty in Chhukha, Samtse, Trongsa, Tsirang and Trashiyangtse.

20 Family: Bignoniaceae



20.1 Scientific name:	<i>Oroxylum indicum</i> (L.) Kurz
Vernacular name:	Tsampa / Tsampaka meto (D), Totola (L), Namkalingshing (S)
Habitat:	Moist places in forests, ravine and sometimes in shrub-land.
Altitude range:	From 300 to 1, 200 masl.
Plant part collected:	Flower, bark, wing-seeds.
Uses:	<p>Flowers as vegetable, people said bark has medicinal value. They are helpful in piles, diabetes, pneumonia & fever. Ash of bark and pod cover heals cut. Leaves are used as fodder. Wing-seed like white flower used religiously.</p> <p>During its season flowers and wing-seed pods can be seen selling in the available markets.</p>
Time of collection:	Flowers from June to ca. 2 nd week of August, wing-seed mostly in winter, and bark anytime of the years.
Distribution and availability status:	It is found in Chhukha, Dagana, Mongar, Pemagatshel, Samdrupjongkhar, Samtse, Sarpang, Trashigang, Tsirang, Wangduephodrang and Zhemgang districts. But, its population is very thin and scattered.

21 Family: Boraginaceae



21.1 Scientific name:	<i>Onosma hookeri</i> (Clarke)
Vernacular name:	Mukchi (D), Drimook (M), Mugtsi / muktsi (S), Chundiling (Ku), Mutshi (Lla), Maharangi (L)
Habitat:	Steep open grassy hillsides, stony slopes, scree, river side.
Altitude range:	From 2,850 to 5,800 masl.
Plant part collected:	Rootstock, root-bark.
Uses:	As ingredient in traditional medicine by MSP. Root tuber is the source of red dye; also it is of medicinal value for asthma, pneumonia & hypertension. Local folk used it for religious purposes.
Time of collection:	September to October.
Distribution and availability status:	Resource availability is limited in Bumthang, Gasa, Lhuentse, Thimphu and Wangduephodrang districts.

22 Family: Brassicaceae



22.1 Scientific name:	<i>Nasturtium officinale</i> (W.T.Aiton)
Vernacular name:	Simrayo (L)
Habitat:	Along the edges of the stream, canal, marshy lands, usually grows in fresh slow running water, shallow water, and small waterways.
Altitude range:	From ca.350 to 2,400 masl.
Plant part collected:	Aerial parts.
Uses:	Used for green vegetable or salad. It is seen selling in the available vegetable market or even by the roadside vegetable stall. It is an additional off-farm income source for the people. People said it is also useful medicinally to cure tuberculosis by mixing with some other plant as ingredient.
Time of collection:	Anytime of the year. But profuse green leafy vegetable is harvested from May to November.
Distribution and availability status:	Found plenty from Chhukha, Dagana, Pemagatshel, Samtse (Moderate), Sarpang, Thimphu and Tsirang.



22.2 Scientific name:	<i>Thlaspi arvense</i> (L.)
Vernacular name:	Drega / Deyga (D / M)
Habitat:	Dryland, cultivated fields, roadsides, open leas.
Altitude range:	From 1,800 to 4,500 masl.
Plant part collected:	Aerial parts
Uses:	Use as ingredient in traditional medicine by MSP.
Time of collection:	July to August.
Distribution and availability status:	It is plenty in Bumthang district.

23 Family: Burseraceae



23.1 Scientific name:	<i>Canarium strictum</i> (Roxb).
Vernacular name:	Poikar (M), Gokuldhup (L), Poikar Shing (S)
Habitat:	Subtropical semi-evergreen forests, tropical moist evergreen and moist mixed deciduous forests.
Altitude range:	From 480 to 1,600 masl.
Plant part collected:	Fruit, resinous exude.
Uses:	Fruit eaten like betel nut. Children are mostly fond of eating this fruit as it coats dark purple colour over the tongue. Also extract deep violet dye from fruit. Resinous exude used as incense religiously and spritually. People have belief that burning incense of this gum would drive out the evil spirit. Even this exudes said to be used by MSP as one of the ingredients in formulating traditional medicine. However, MSP personnel said, MSP gets it from India.
Time of collection:	Fruit- December to January, Resinous exude- November to April.
Distribution and availability status:	Its population is quite rare although found in Dagana, Mongar, Pemagatshel, Samdrupjongkhar, Samtse, Sarpang and Wangduephodrang districts.

24 Family: Campanulaceae



24.1 Scientific name:	<i>Codonopsis convolvulacea</i> (Kurz)
Vernacular name:	Nyne-wa-ngong-po (M)
Habitat:	Cultivated fields, open fields, amidst of bamboo and shrubs, shrubberies.
Altitude range:	From 2,200 to 4,200 masl.
Plant part collected:	Entire.
Uses:	One of the ingredients of traditional medicine.
Time of collection:	July and August. MSP collects from Haa district.
Distribution and availability status:	Moderately available in Bumthang, Haa and Thimphu districts.



24.1 Scientific name:	<i>Cynanthus lobatus</i> (Wall. ex Benth.)
Vernacular name:	Chunglay meto karmo / Ngonpo (D)
Habitat:	Alpine leas, shrublands, open fields and slopes, hillsides, either side of the streams, admist of gravel and sand, dampy grassy grounds.
Altitude range:	From 3,200 to 4,700 masl.
Plant part collected:	Entire or leaves. Both flower types (blue and white flowers) of plant are collected.
Uses:	As one of the ingredients in traditional medicine.
Time of collection:	April - August. MSP collects from Thimphu district.
Distribution and availability status:	Moderately available in Bumthang, Haa, Paro, Thimphu, Trashigang and Trongsa districts.

25 Family: Capparaceae



25.1 Scientific name:	<i>Crateva religiosa</i> (G.Forst).
Vernacular name:	Shipley kanay (L), Lado shing (S)
Habitat:	Primary forests, subtropical and warm broadleaved forests, along creeks, streams or rivers / river valleys, wet marshy places.
Altitude range:	From 150 to 700 masl.
Plant part collected:	Young leaves and buds.
Uses:	Cooked and eat like any other vegetable. It is best substitute to sag (Spinach). Some people collect and ferment it to make "Gundruk" (Fermented spinach / sag). Fermented is sun dried and preserved it to use during lean vegetable season.
Time of collection:	March to June.
Distribution and availability status:	Moderately grown in Dagana, Samdrupjongkhar, Samtse, Sarpang and Trongsa districts.

26 Family: Caprifoliaceae



26.1 Scientific name:	<i>Acanthocalyx nepalensis subsp. nepalensis</i> (D.Don) M.J.Cannon
Vernacular name:	Chang Tsherloma Towa (D / M)
Habitat:	Temperate or alpine zones, damp or marshy grassyfields, clearing areas, dry sites or and edges of the open field, hillsides.
Altitude range:	From 2,500 to 4,500 masl.
Plant part collected:	Entire plant.
Uses:	As one of the ingredients in traditional medicine.
Time of collection:	October. It is collected by highlanders of the Thimphu districts.
Distribution and availability status:	Moderately available in Bumthang, Thimphu and Trongsa districts.



26.2 Scientific name:	<i>Pterocephalus hookeri</i> (C.B. Clarke) Diels
Vernacular name:	Pangtse-dobo (D), Lugtsedowo (M)
Habitat:	Leas, open grassy slopes or amidst of shrub.
Altitude range:	From 3,000 to 4,800 masl.
Plant part collected:	Aerial parts.
Uses:	As ingredient in traditional medicine by MSP.
Time of collection:	August to September. MSP collect it from Bumthang.
Distribution and availability status:	Plenty in Thimphu and Bumthang districts.

27 Family: Cervantesiaceae



27.1 Scientific name:	<i>Pyrularia edulis</i> (A.DC.)
Vernacular name:	Amphi / Omphi (L)
Habitat:	Warm broadleaved forest, open forested sites.
Altitude range:	From 900 to 2,100 masl.
Plant part collected:	Seeds.
Uses:	Extracted for edible oil. Oil is also used medicinally to cure itching feet during summer season. People apply its oil to bulls' back-neck to cure or avoid cracks. Oil can be used as fuel to lamp or old seed itself is used to make light.
Time of collection:	September to November.
Distribution and availability status:	Sporadically found in Dagana, Samtse and Sarpang.

28 Family: Clusiaceae



28.1 Scientific name:	<i>Garcinia xanthochymus</i> (Hook.f. ex T.Anderson)
Vernacular name:	Chunyel (L)
Habitat:	Humid subtropical forests, open forests, valleys or over the foothill areas, nearby streams and rivers.
Altitude range:	From 250 to 1,000 masl.
Plant part collected:	Bark, fruit for seeds.
Uses:	Bark used to make strong rope. Extract yellow dye from bark. Seldom eat fruit. Seeds are used to extract oil and use medicinally to treat dysentery and diarrhoea.
Time of collection:	Bark whenever necessary but usually it is best in winter months. Matured fruit: From January to March.
Distribution and availability status:	Rarely found in Samtse and Sarpang districts. It is seen few individual cultivated within the farmland.

29 Family: Combretaceae



29.1 Scientific name:	<i>Terminalia bellirica</i> (Gaertn.) Roxb.
Vernacular name:	Baru / Baroo (D, S, M), Bar-ra (L)
Habitat:	Deciduous forest in dry places, sometimes in evergreen forest, within Sal and Teak growing areas, foothill slopes.
Altitude range:	From 200 to ca. 1,400 masl.
Plant part collected:	Fruit-nut.
Uses:	Nut of the fruit is eaten at times of diarrhoea, indigestion and pneumonia. Some women use in process of making local liquor to increase its potency. MSP used as one of the ingredients while formulating traditional medicine.
Time of collection:	December onwards. MSP collects fruit from Trongsa during the month of November – December.
Distribution and availability status:	Scattered stand found in Dagana, Pemagatshel, Punakha, Samdrupjongkhar, Samtse, Sarpang, Trashiyangtse, Trongsa, Wangduephodrang and Zhemgang. Single tree bears plenty of fruits.



29.2 Scientific name:	<i>Terminalia chebula</i> (Retz.)
Vernacular name:	Aru / Aroo (D, S, M); Har-ra (L), Ahrula (K)
Habitat:	Subtropical forests, foothill plain areas, dry slopes, ravine or just alongside banks of the rivers and streams.
Altitude range:	From 250 to 1,900 masl.
Plant part collected:	Matured fruits.
Uses:	Fruits are sun-dried or oven dried and preserved to use as medicinal purposes. Dried or fresh chew and eat to control cold and acute cough. It is also medicine for dysentery, headache, painful menstruation, indigestion, jaundice, constipation, pneumonia and piles. Fruit can be used to extract bluish dye. Fruits are also used by MSP as one of the ingredients while formulating traditional medicine.
Time of collection:	November to January.
Distribution and availability status:	Sporadic tree stand is found in Chhukha, Dagana, Mongar, Punakha, Samdrupjongkhar, Samtse, Sarpang, Trashiyangtse, Trongsa, Tsirang, Wangduephodrang and Zhemgang districts. However plenty of fruits available even from a single tree.

30 Family: Convolvulaceae



30.1 Scientific name:	<i>Poranopsis paniculata</i> (Roxb.) Roberty
Vernacular name:	Sikari-lahara (L)
Habitat:	Dry or moist forests, brushes, scrub, open plains, stony hillsides, periphery of the cultivated land and around the settlement areas.
Altitude range:	From 350 to 2,000 masl.
Plant part collected:	Entire climber.
Uses:	Paste applies over fracture or sprain, wounds, cuts. People said drinking tea out of climber relief body-pain but it's not good for productive women as it sterilizes.
Time of collection:	Whenever required.
Distribution and availability status:	Resource availability is limited in Chhukha, Dagana, Samtse, Sarpang and Tsirang districts.

31 Family: Costaceae



31.1 Scientific name:	<i>Costus lacerus</i> (Gagnep.)
Vernacular name:	Bet lauri (L)
Habitat:	Shady, moist, steep sites at outskirts of sub-tropical forests, verge of the cardamom plantation, often people cultivate one or two within homestead areas.
Altitude range:	From ca.300 to 1,700 masl.
Plant part collected:	Stem, root.
Uses:	Stem useful in jaundice, UTI (burning urination), stomachache, body-pain. People believe eating raw root help in gastritis. Root also use in sinusitis. Stem juice is used to cure ear-pain and wound.
Time of collection:	Whenever required.
Distribution and availability status:	It is moderately available in Dagana, Chhukha, Samtse, Sarpang and Tsirang districts.

32 Family: Crassulaceae



32.1 Scientific name:	<i>Rhodiola crenulata</i> (Hook.fil. & Thomson) H. Ohba
Vernacular name:	Tro-Lo-Marpo (D)
Habitat:	Rocky mountain sites, cliffs, screes.
Altitude range:	From 4,500 to 4,880 masl.
Plant part collected:	Root.
Uses:	As ingredient in traditional medicine by MSP.
Time of collection:	September to October.
Distribution and availability status:	Rarely available in Bumthang, Gasa and Thimphu districts.

33 Family: Cucurbitaceae



33.1 Scientific name:	<i>Diplocyclos palmatus</i> (L.) C.Jeffrey
Vernacular name:	Ban / Gol Kakra / Kakray (L)
Habitat:	Deciduous foothill forests, marshy vegetation areas, bushy plains, besides river banks or riverine.
Altitude range:	From 150 to 1,900 masl.
Plant part collected:	Fruit.
Uses:	Eat raw as any other fruit. Some people believe it has medicinal value.
Time of collection:	From December to April.
Distribution and availability status:	Moderately available in Dagana, Lhuentse, Samdrupjongkhar, Samtse, Sarpang, Trashigang, Tashiyangtse and Tsirang districts.



33.2 Scientific name:	<i>Herpetospermum pedunculatum</i> (Seringe) Clarke
Vernacular name:	Ser-mey-dru (M), Kurkurey kakra / Ban karelaa (L)
Habitat:	Climber within shrubs.
Altitude range:	From 1,500 to 3,600 masl.
Plant part collected:	Seed.
Uses:	As ingredient in traditional medicine by MSP.
Time of collection:	October to November. MSP collects it from Bumthang.
Distribution and availability status:	Available plenty in Bumthang, Punakha, Thimphu, Trongsa and Wangduephodrang districts.



33.3 Scientific name:	<i>Hodgsonia macrocarpa</i> (Blume) Cogn.
Vernacular name:	Gheeu-phal (L), Tersha (S)
Habitat:	Mixed broadleaved forest of the foothill regions, damp or dry areas, riverine, primary and disturbed forests, forest edges, open land cliff and roadsides.
Altitude range:	From 150 to 1,000 masl.
Plant part collected:	Fruit and seed.
Uses:	Fruit edible as tasty as butter. Seed roasted and grounded to make powder pickle. Sometimes seeds are used to extract edible oil.
Time of collection:	From October till December.
Distribution and availability status:	Moderately found in Samdrupjongkhar, Samtse (Limited), Sarpang and Tsirang.



33.4 Scientific name:	<i>Luffa aegyptiaca</i> (Mill.)
Vernacular name:	Ka-bed (M), Jungali Ghiraula (L)
Habitat:	Tropical and sub-tropical forests plains. However, these days most people grow within their home-garden in the plain areas.
Altitude range:	From 150 to 1,000 masl.
Plant part collected:	Seed and spongy jute formed out of fruit.
Uses:	Seed used as one of ingredients in traditional medicine by MSP. Spongy jute used to rub skin at times of bathing. Sometimes spongy jute is seen selling in the available market.
Time of collection:	Both seed and spongy jute is collected from January until March. MSP collects seed from Trongsa.
Distribution and availability status:	Plenty available in Chhukha, Dagana, Samdrupjongkhar, Samtse, Sarpang, Tsirang and Trongsa



33.5 Scientific name:	<i>Momordica charantia</i> (L).
Vernacular name:	Jungali titey karayla (L), Kairu (S), Khagtang (T)
Habitat:	Foothill forests, thicket plains, shrublands.
Altitude range:	From 150 to 1,000 masl.
Plant part collected:	Young tendril with leaves, fruit.
Uses:	Both used as green vegetable. Eat by cooking, frying or fresh as salad or by pickling. It is seen fruit selling in the available vegetable market.
Time of collection:	Young tendril with leaves from June until December and fruit from July to December.
Distribution and availability status:	Moderately available in Samdrupjonkhar, Samtse, Sarpang and Tsirang districts



33.6 Scientific name:	<i>Momordica dioica</i> (Roxb. ex Willd.)
Vernacular name:	Khagsi / Jungali karayla (L), Bumburu (Cpz)
Habitat:	Foothill forests, amongst shrubs and berries, gravelly or stony hill slopes.
Altitude range:	From 150 to 1,000 masl.
Plant part collected:	Young tendril with leaves, fruit or spiny gourd.
Uses:	Both used as green vegetable. Eat by cooking, frying. It is seen both items selling in the available vegetable market.
Time of collection:	Young tendril with leaves from April until July and fruit from July to December.
Distribution and availability status:	Moderate in Chhukha and limited in the wild of Samtse and Sarpang Dzongkhags. Some individuals cultivate within the farmland.



33.7 Scientific name:	<i>Trichosanthes lepiniana</i> (Naudin) Cogn.
Vernacular name:	Indraynee / Indrenee (L), Wangpem meto (Cpz)
Habitat:	Warm broadleaved forest, gullies in plain area forests, degraded slope areas.
Altitude range:	From 800 to 2,100 masl.
Plant part collected:	Seed from ripened fruits, young tendril, root.
Uses:	Matured seed edible like nut, used to make powder pickle as spices and also extract edible oil. Seeds are crushed then boil and take as soup. Young tendrils eat as vegetable. Root decoction is used to cure jaundice and also to improve appetite.
Time of collection:	Seed from August to November, young tendril from March to May, and root as and when required.
Distribution and availability status:	Moderately available in Chhukha, Dagana, Lhuentse, Mongar, Punakha Pemagatshel, Samdrupjonkhar, Samtse (Limited), Sarpang, Trashigang and Zhemgang districts.

34 Family: Cupressaceae



34.1 Scientific name:	<i>Cupressus corneyana</i> (Knight & Perry ex Carrière)
Vernacular name:	Tshenden / Tshendey (D), Dhupi (L)
Habitat:	Moist forests, cool broadleaved forests, steep rocky places, limestone areas, sometimes in drier places.
Altitude range:	From 1,800 to 3,300 masl.
Plant part collected:	Leaves and heartwood chips.
Uses:	Burn as incense religiously. Resin from heartwood chips applies over skin diseases (like rashes, scabies) to cure.
Time of collection:	As and when necessary.
Distribution and availability status:	Moderately available in Bumthang, Gasa, Haa, Lhuentse, Paro, Punakha, Thimphu and Wangduephodrang.



34.2 Scientific name:	<i>Juniperus indica</i> (Bertol.)
Vernacular name:	Shugpa / la-shug / shug-tsher (M), Dhupi (L), Moshoe (Ku)
Habitat:	Montane shrub heath with Rhododendron & other species, wet Fir Forest, sometimes in open rocky alpine slopes within dry sites, dry sites towards southern aspect.
Altitude range:	From 2,600 to 5,200 masl.
Plant part collected:	Leaves and fruits.
Uses:	MSP use them as one of the ingredients while formulating traditional medicine. Incense industry also used to make incense stick.
Time of collection:	July to August.
Distribution and availability status:	Moderately available in Gasa, Lhuentse, Thimphu and Wangduephodrang districts.



34.3 Scientific name:	<i>Juniperus recurva</i> (Buch.-Ham. ex D.Don)
Vernacular name:	Shup / Shuk-pa (D), Shupo shing (S / T), Dhupi / Bhairung Dhupi (L)
Habitat:	Damp Fir forests, montane shrub moorland with Rhododendron and others.
Altitude range:	From ca.2,900 to 4,600 masl.
Plant part collected:	Entire parts.
Uses:	Used to make incense by mixing with other specified raw materials. The leaves and twigs are also burn at times of any religious event.
Time of collection:	As and when needed.
Distribution and availability status:	Moderately available in Bumthang, Chhukha, Gasa, Thimphu, Trashigang and Wangduephodrang districts.



34.4 Scientific name:	<i>Juniperus squamata</i> (Buch.-Ham. ex D.Don)
Vernacular name:	Shup shing / Shugpa - sherken (M), Shukpoo (Ku)
Habitat:	Sub-alpine and alpine zones, montane dwarf shrub heath, open dry slopes.
Altitude range:	From 3,000 to 4,700 masl.
Plant part collected:	Leaves or entire parts.
Uses:	MSP uses leaves as one of the ingredients while formulating traditional medicine. Entire parts are one of the raw materials of incense making used by the incense factory.
Time of collection:	As and when necessary.
Distribution and availability status:	Moderately available in Gasa, Lhuentse, Paro, Thimphu and Wangduephodrang

35 Family: Dioscoreaceae



35.1 Scientific name:	<i>Dioscorea belophylla</i> (Prain) Voigt ex Haines
Vernacular name:	Kayte / Tshema keywa (D), Ban tarul (L), Rekey / Ato Kewa (Cbgg), Borang joktang (S), Ronkey / Daichela key (K), Kha-tye keywa (G)
Habitat:	Subtropical forests scrub, forest margin, dry gentle slope sites.
Altitude range:	From 200 to 1,900 masl.
Plant part collected:	Leaves and tuber.
Uses:	Tuber (wild potato) is cooked / boiled and eat. It is very tasty. People use to sell tuber in the available market. It is even seen selling by the roadside vegetable stall. People earn good income by its sale. Seldom leaves are used to prepare local tealeaf.
Time of collection:	Tuber from January to March. Leaves: Whenever required.
Distribution and availability status:	It is found plenty in Chhukha, Dagana, Gasa, Lhuentse, Mongar, Samdrupjongkhar, Samtse, Samdrupjonkhar, Sarpang, Trashigang, Trashiyangtse, Trongsa, Tsirang, Wangduephodrang and Zhemgang.



35.2 Scientific name:	<i>Dioscorea bulbifera</i> (L.)
Vernacular name:	Geetha (L)
Habitat:	Moist deciduous, broadleaved and mesic forests, thickets and disturbed areas, forest breaches, forest boundary, abandoned forest areas, either sides of the road.
Altitude range:	From 150 to 1,800 masl.
Plant part collected:	Young tendril with leaves, fruit and tuber.
Uses:	Young tendril with leaves cook and eat as vegetable. It has palatable bitter taste. Fruit and tuber boiled with ash, wash thoroughly with water and eat at times of food scarcity. Sometimes tuber and fruit also used to distil homemade liquor.
Time of collection:	Young tendril with leaves from March – September. Fruit and tuber: From September – April.
Distribution and availability status:	Available plenty in Lhuentse, Mongar, Pemagatshel, Samtse, Sarpang, Tsirang and Zhemgang. However, it is seen growing throughout southern belt of the country.



35.3 Scientific name:	<i>Dioscorea hispida</i> (Dennst.)
Vernacular name:	Bharlang (L)
Habitat:	Natural warm broadleaved forest, semi-evergreen forests.
Altitude range:	From 150 to 1,900 masl.
Plant part collected:	Fruits and tubers.
Uses:	Fruit and tuber boiled with ash, wash thoroughly with water and eat at times of food scarcity. Before boiling, it is kept submerged in fresh running water for about a week to rinse out its toxicity.
Time of collection:	From September to April
Distribution and availability status:	Moderately available in Pemagatshel, Samtse, Sarpang and Zhemgang districts.



Man carrying tubers of *D. pentaphylla*

35.4 Scientific name:	<i>Dioscorea pentaphylla</i> (L)
Vernacular name:	Chaka / Sutee-kewa / Tshakey kewa / Apsukewa (D), Bhyagur/ Bhaegur (L), Fantang / Phantang (S), Jukpang key (K)
Habitat:	Subtropical forests scrub, forest margin, dry gentle slope sites.
Altitude range:	From 200 to 1,800 masl.
Plant part collected:	Tuber.
Uses:	It is wild edible yam. It is cooked and eats. Tubers can also be cooked as vegetable. People believe tubers can relief wounds in throat of both human and cattle.
Time of collection:	December to April.
Distribution and availability status:	Found plenty in Chhukha, Dagana, Mongar, Samdrupjongkhar, Samtse, Sarpang, Tsirang, Wangduephodrang and Zhemgang.

36 Family: Dipterocarpaceae



36.1 Scientific name:	<i>Shorea robusta</i> (C.F.Gaertn.)
Vernacular name:	Payka / Pe-kar (D), Sal / Sakhuwa / Sal-dhup (L)
Habitat:	Moist deciduous forests, hilly slopes, foothill plains, lime deposit areas.
Altitude range:	From 150 to 1,700 masl
Plant part collected:	Leaves and resin.
Uses:	Leaves are used to make quality plate of various sizes which is used in various purposes and ceremonies. Resin used as incense and people say it is also used medicinally.
Time of collection:	Leaves any season of the year. Resin mostly in winter months.
Distribution and availability status:	The resource is moderate in Chhukha, Dagana, Samdrupjongkhar, Samtse and Sarpang districts.

37 Family: Droseraceae



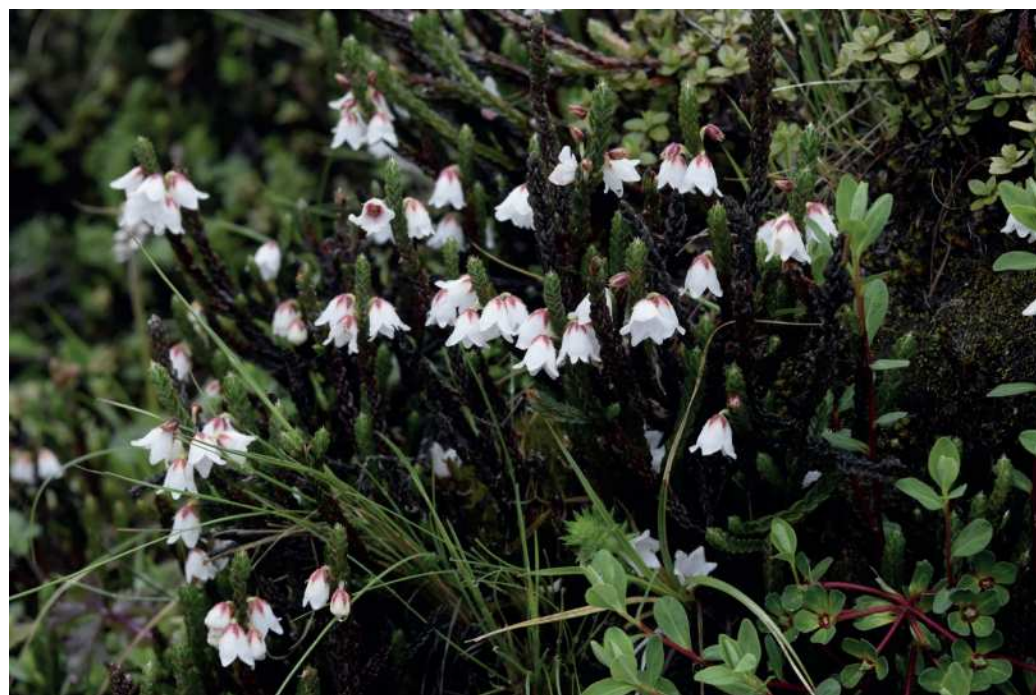
37.1 Scientific name:	<i>Drosera peltata</i> (Thunb)
Vernacular name:	Tag Ngu (D)
Habitat:	Grassy edges, marshy & wet leas, roadside cuttings, and in regenerating forest areas.
Altitude range:	From 1,500 to 4,290 masl.
Plant part collected:	Aerial parts.
Uses:	Use as ingredient in traditional medicine by MSP.
Time of collection:	August to September. MSP collects from Bumthang areas.
Distribution and availability status:	It is found plenty in Bumthang, Chhukha, Punakha, Thimphu, Trashigang and Trongsa districts.

38 Family: Elaeagnaceae



38.1 Scientific name:	<i>Hippophae salicifolia</i> (D. Don)
Vernacular name:	Tare / Tari Caum (D), Tarbu (M)
Habitat:	Sub-alpine shrub, sunny slope areas, along the river bank, dry sandy places.
Altitude range:	From 2,100 to 3,600 masl.
Plant part collected:	Ripened fruit.
Uses:	Small cottage industry processed into syrup, jam & other products. Also use as ingredient in traditional medicine by MSP.
Time of collection:	Mid October to November.
Distribution and availability status:	Plenty in Bumthang. Limited resources found in Haa, Paro and Thimphu districts.

39 Family: Ericaceae



39.1 Scientific name:	<i>Cassiope fastigiata</i> (Wall.) D.Don
Vernacular name:	Khandu Auta (Ku), Falu (L)
Habitat:	Leas, alpine thickets, damp areas, shrubland, rocky places.
Altitude range:	From 2,800 to 5,000 masl.
Plant part collected:	Leaves.
Uses:	Use as one of the raw materials for making incense. Farmer group in Lhuentse make incense.
Time of collection:	August to September.
Distribution and availability status:	Moderately available in Bumthang, Lhuentse, Thimphu and Trongsa districts.



39.2 Scientific name:	<i>Gaultheria fragrantissima</i> (Wall.)
Vernacular name:	Chamze Kam (D), Shakchomashing (S), Dhasingare / Patpatey (L)
Habitat:	Dry slopes forests and shrubberies, evergreen mixed forests or forest edges, sunny s thicket slopes, rocky hill sites.
Altitude range:	From ca. 1,000 to 2,700 masl.
Plant part collected:	Leaves and twigs.
Uses:	Medicinal purposes. Has potential to distill essential oil that can fetch good money in the available markets.
Time of collection:	Whenever required. But best would be from July until November.
Distribution and availability status:	Moderately available in Chhukha, Lhuentse, Mongar, Punakha, Samdrupjongkhar, Sarpang, Thimphu, Trashigang, Trongsa and Wangduephodrang districts.



39.3 Scientific name:	<i>Rhododendron anthopogon</i> (D.Don)
Vernacular name:	Balu karmo (D), Dali metog (D / M), Sunpaati (L)
Vernacular name:	Dali metog (D, M), Sunpaati (L)
Habitat:	Open hillsides, scrubland, meadows, rocky slopes, damp northern aspects
Altitude range:	From 3,300 to 5,100 masl.
Plant part collected:	Flowers, leaves & twigs.
Uses:	Flowers used as ingredient in traditional medicine by MSP. Leaves and twigs used as one of the raw materials to make incense by incense factory.
Time of collection:	Flower – From May to June, leaves and twigs from October to November.
Distribution and availability status:	It is plenty in Bumthang, Gasa, Haa, Lhuentse, Paro, Thimphu, Trashigang and Wangduephodrang districts.



39.4 Scientific name:	<i>Rhododendron arboreum</i> (Sm).
Vernacular name:	Eto Metog / Aeto meto (D), Gurass / Laligurass (L), Zhu-dang Metog / Yedang Metog (S)
Habitat:	Evergreen oak and blue pine forests, shrubberies.
Altitude range:	From 1,200 to 3,600 masl.
Plant part collected:	Flowers.
Uses:	Eating flowers relief throat-pain, stops diarrhoea, dysentery also during pneumonia. People even believe eating flowers helps to epilepsy patient. It is eaten to detox food poison too. Some people make pickle and take with meals. It is ornamental and also offers to alter religiously.
Time of collection:	February to May.
Distribution and availability status:	Moderately available in Chhukha, Dagana, Gasa, Lhuentse, Mongar, Paro, Samtse (Limited), Sarpang, Trashigang, Tsirang and Wangduephodrang districts.



39.5 Scientific name:	<i>Rhododendron ciliatum</i> (Hook. f.)
Vernacular name:	Baloo / Balue (D / S)
Habitat:	Marshy places at tree-line or in open stunted scrub.
Altitude range:	From 2,700 to 3,500 masl.
Plant part collected:	Aerial parts
Uses:	Use by incense factory as one of the raw materials in incense making.
Time of collection:	October to November.
Distribution and availability status:	Found plenty in Bumthang, Haa, Gasa, Paro, Punakha (Limited), Thimphu and Wangduephodrang districts.



39.6 Scientific name:	<i>Rhododendron glaucophyllum</i> (Rehder)
Vernacular name:	Tagma shing (D)
Habitat:	Fir forest.
Altitude range:	From 2,750 to 3,650 masl.
Plant part collected:	Leaves
Uses:	For medicinal purposes.
Time of collection:	July to September. Collect and manage by farmers group of Thimphu district.
Distribution and availability status:	Found limited in Thimphu and Wangduephodrang districts.



39.7 Scientific name:	<i>Rhododendron lepidotum</i> (Wall.)
Vernacular name:	Balu nakpo (D), Dali metog (M) Bhalay sunpaati (L)
Habitat:	Forests with bushes of Clematis, Potentilla & other species. Also it grows in stony scrub, grassy slopes and heaths.
Altitude range:	From 2,300 to 4,700 masl.
Plant part collected:	Flowers, leaves & twigs.
Uses:	Flowers are used as one of the ingredients in traditional medicine by MSP. Leaves and twigs are used by incense factory as one of the raw materials for making incense.
Time of collection:	Flowers – end of May to July. Leaves and twigs whenever necessary or in fall season.
Distribution and availability status:	Found moderately in Bumthang, Gasa, Haa, Lhuentse, Mongar, Punakha, Thimphu, Trashigang Trashiyangtse and Trongsa districts.



39.8 Scientific name:	<i>Rhododendron setosum</i> (D. Don)
Vernacular name:	Sulu (D / S)
Habitat:	Open highland slopes, open scrub and rhododendron thicket valleys.
Altitude range:	From 2,700 to 5,600 masl.
Plant part collected:	Aerial parts
Uses:	As one of the raw materials by incense factory. MSP also use as one of the ingredients in traditional medicine.
Time of collection:	October to November
Distribution and availability status:	Grow plenty in Bumthang, Gasa, Haa, Lhuentse, Paro, Thimphu, Trashigang and Wangduephodrang districts.

40 Family: Euphorbiaceae



40.1 Scientific name:	<i>Euphorbia griffithii</i> (Hook.f.)
Vernacular name:	Dhurji (D), Durjit (M)
Habitat:	In clearing of mixed coniferous broadleaved forest and in midst of scrub.
Altitude range:	From 2,300 to 3,500 masl.
Plant part collected:	Root's bark
Uses:	As ingredient in traditional medicine by MSP.
Time of collection:	August to September. MSP collects raw materials from Bumthang.
Distribution and availability status:	Available plenty in Bumthang, Paro and Thimphu districts.



40.2 Scientific name:	<i>Euphorbia royleana</i> (Bioss.)
Vernacular name:	Lushing (T), Nimthomozoo (S)
Habitat:	Subtropical areas, rainshadow valleys and rocky slopes, dry cliffs, sometimes within Chirpine forest.
Altitude range:	From 350 to 2,100 masl.
Plant part collected:	Aerial parts
Uses:	As ingredient in traditional medicine by MSP.
Time of collection:	January to February. MSP collects it from Trongsa.
Distribution and availability status:	Found plenty in Dagana, Mongar, Punakha, Samtse, Trashigang, Trongsa, Tsirang, Wangduephodrang and Zhemgang districts.



40.3 Scientific name:	<i>Jatropha curcas</i> (L.)
Vernacular name:	Sanu Kadam / Sajiwan (L), Nera Khar Shing (S), Jashing (T)
Habitat:	Tropical and sub-tropical regions, degraded dry and stony areas, open abandoned places, gravelly wasted lands, along road sides and close-by settlement areas.
Altitude range:	From 300 to ca.1,700 masl.
Plant part collected:	Entire plant or fruit / seed.
Uses:	As a hedge plant, live fencing, plant as boundary line, children enjoy playing by blowing bubbles using its juice. If injure the plant it oozes rubbery - water juice. Seed used in lamp as fuel. Fruit uses by MSP as one of the ingredients in formulating traditional medicine.
Time of collection:	Collect and plant usually in spring or rainy season. MSP collects it from Trongsa during October – December.
Distribution and availability status:	Moderately available in Chhukha, Dagana, Punakha, Samtse Sarpang, Trashigang, Trashiyangtse, Trongsa, Wangduephodrang and Zhemgang districts.



40.4 Scientific name:	<i>Ricinus communis</i> (L.)
Vernacular name:	Matri-shing / Matti-shing (D), Denrog (M), Arandi (L), Chamling shing (S), Emala (T)
Habitat:	Along sides of the road, river or stream, usually rubbish or waste grounds / sites, wastelands, degraded / disturbed areas, farmland.
Altitude range:	From 150 to 2,000 masl.
Plant part collected:	Seed.
Uses:	Extract oil to use as fuel for lamps and altar lamps. MSP also uses as one of the ingredients in traditional medicine.
Time of collection:	December onwards. MSP collects from Trongsa area.
Distribution and availability status:	Moderately available in Dagana, Lhuentse, Mongar, Pemagatshel, Punakha, Samtse, Samdrupjonkhar, Sarpang, Trashigang, Trongsa, Tsirang, Wangduephodrang and Zhemgang districts.

41 Family: Fabaceae



41.1 Scientific name:	<i>Acacia catechu</i> (L.f.) Willd.
Vernacular name:	Toeja (D), Khair (L)
Habitat:	Dry deciduous subtropical forests, river banks.
Altitude range:	From 150 to 1,200 masl.
Plant part collected:	Root / heart-wood.
Uses:	Heart wood chip used to prepare tea. Also extract red dye. Decoction from heartwood is good to relief inner body pain. However the collected materials are sold to ex-country (Mostly in India) by the persons who get permission to work on it. The extract (katha/cutch) is also use by MSP as one of ingredients in the formulation of traditional medicine.
Time of collection:	Mostly in dry season.
Distribution and availability status:	Moderately available in Chhukha, Samdrupjongkhar, Samtse and Sarpang districts.



41.2 Scientific name:	<i>Bauhinia purpurea</i> (L.)
Vernacular name:	Zibzibshing (D), Taa-ki (L), Pegpeyposhing (S), Tingka lakchu (Ts)
Habitat:	Tropical to subtropical zones, evergreen lowland rainforests, mountain forests, grassylands, scrublands, dry deciduous and marshy forests, degraded sites, secondary forest, and cultivated dry land, and along roadsides.
Altitude range:	From 250 to 1,600 masl.
Plant part collected:	Young leaves, flowers and foliage.
Uses:	Young leaves and flowers cooked and eat as vegetable curry. Fresh flower is medicine for diarrhoea, fever & digestion. Foliage used as fodder. Flower is ornamental.
Time of collection:	Young leaves and flower: October to November. Foliage: Whenever required.
Distribution and availability status:	Available plenty in Chhukha, Dagana, Samtse, Samdrupjongkhar, Sarpang, Tsirang and Wangduephodrang districts.



41.3 Scientific name:	<i>Bauhinia variegata</i> (L.)
Vernacular name:	Ruchashing (D), Koiralo (L), Balingshing (S)
Habitat:	Dry mixed or moist deciduous forests of tropical to subtropical regions, natural dense bushes, disturbed sites, along roadsides, cultivated dry lands.
Altitude range:	From 600 to 1,800 masl.
Plant part collected:	Flowers, leaves and bark.
Uses:	Flowers used as vegetable. Bark, leaves and flowers are used medicinally. Flowers are ornamental and sometimes farmers plant in their home stead aesthetically.
Time of collection:	Flowers from January to May.
Distribution and availability status:	Moderately found in Chhukha, Dagana, Mongar, Samdrupjongkhar, Samtse (Limited), Sarpang, Tsirang and Zhemgang districts.



41.4 Scientific name:	<i>Butea buteiformis</i> (Voigt) Grierson
Vernacular name:	Marutshey (M), Phrogpa laga (S)
Habitat:	Dry valley slopes, dry open hillsides, open grasslands.
Altitude range:	From 1,200 to 2,000 masl.
Plant part collected:	Seeds.
Uses:	As ingredients in traditional medicine by MSP.
Time of collection:	October-November. MSP collects it from Trongsa.
Distribution and availability status:	Moderately available in Lhuentse, Mongar, Trashigang, Trashiyangtse and Trongsa districts.



41.5 Scientific name:	<i>Cassia fistula</i> (L.)
Vernacular name:	Chakajum shing (D), Rajbrikshay (L), Donka sey / Donko shing / Dhongkalashing (S), Donga (M)
Habitat:	Dry deciduous forest, open forests, grassland, moist subtropical forests, scrub or dry hillsides.
Altitude range:	From 150 to 1,300 masl.
Plant part collected:	Seed.
Uses:	Seed uses to cure diarrhoea and “Neranjaan” i.e. difficulty in urination or blockage of urine. It is also used in traditional medicine institute. Sometimes people cultivate it as an ornamental tree.
Time of collection:	March and April.
Distribution and availability status:	Found in limited in Chhukha, Dagana and Samtse whereas moderate in Trashigang and Trashiyangtse districts.



41.6 Scientific name:	<i>Entada rheedii</i> (Spreng.)
Vernacular name:	Pang-ra / Pangro (L), Kolokpa / Kolakpa (S), Meyyangkali / Yanggalichewa (T), Yangkali / Khangkha (K)
Habitat:	Tropical to subtropical regions usually in old-growth or secondary forests, thickets and riverine forests, degraded forest sites, swamp areas, along sides of the watercourses, creeks or streams.
Altitude range:	From ca.450 to 1,000 masl.
Plant part collected:	Matured beans, young tendril, and entire climber with leaves.
Uses:	Pod including nut paste is applied to cure mumps. Nut is used as soap to get rid-off of dandruff and lies. Some people eat nut / inner meat of the seed after boiling and throwing boiled water five to seven times. Mostly the entire collected beans / seeds are sold in the available market. It is also known that MSP use this as one of the ingredients in the formulation of the traditional medicine. Sometimes entire climber is used as rope. Its young tendril is collected and used as vegetable. Entire climber with leaves used as fodder for cattle in summer.
Time of collection:	Matured bean: December to March. Young tendril: April to July, entire climber for fodder mostly in summer season. MSP collects pod-nut from Trongsa in November – January.
Distribution and availability status:	Found plenty in Chhukha Mongar Trashigang and moderate in Pemagatshel, Samdrupjongkhar, Samtse, Sarpang, Trongsa, Tsirang and Zhemgang districts.



41.7 Scientific name:	<i>Erythrina arborescens</i> (Roxb.)
Vernacular name:	Chassee (D), Phaledo (L), Kharshing (S), Khem shok sho (T)
Habitat:	Fairly stony slopes, hillsides, mountain valleys.
Altitude range:	From ca.400 to 2,400 masl.
Plant part collected:	Seed.
Uses:	Used as ingredient in traditional medicine by MSP. However, MSP used to collect it from Trongsa. Red flowers are ornamental and seldom people used to plant as live fence.
Time of collection:	October to November. MSP collects it from Trongsa.
Distribution and availability status:	Plenty in Chhukha, Dagana, Gasa, Lhuentse, Mongar, Punakha, Samtse, Trashigang, Trongsa, Tsirang, Wangduephodrang and Zhemgang districts.



41.8 Scientific name:	<i>Mimosa pudica</i> (L.)
Vernacular name:	Buhari jhar / Bohari jhar / Buhari kara (L)
Habitat:	Foothills regions in cultivated lands and orchards, abandoned places, grassland-plains, moist plain areas, roadsides.
Altitude range:	From 150 to 550 masl.
Plant part collected:	Roots and leaves.
Uses:	Roots are used to cure “Neranja” i.e. difficulty in urination or blockage of urine. Leaves can use as green tea. Tea out of it has good taste with palatable aroma.
Time of collection:	Whenever necessary.
Distribution and availability status:	It is unwanted weeds found plenty throughout the southern regions.



41.9 Scientific name:	<i>Mucuna macrocarpa</i> (Wall).
Vernacular name:	Baldengra (L), Praiyangkali / Yangalichungwa (T), Pra-yangkaling (K)
Habitat:	Subtropical forests, evergreen or deciduous montane forests, riverine places, open hilly shrubs, sandy dry areas.
Altitude range:	From 300 to 1,500 masl.
Plant part collected:	Entire climber, pod.
Uses:	Entire climber used in tying or fastening purposes. Pod-nut used to substitute soap. MSP use pod-nut as one of the ingredients in traditional medicine.
Time of collection:	Climber whenever necessary, pod from December to March. MSP collects pod-nut from Trongsa within December – February.
Distribution and availability:	Moderately found in Chhukha, Dagana, Sarpang, Trongsa, Zhemgang and limited in Samtse districts respectively.



41.10 Scientific name:	<i>Spatholobus parviflorus</i> (Roxb. ex G.Don) Kuntze
Vernacular name:	Debray Lahara (L)
Habitat:	Mixed deciduous and dry evergreen forests, hilly slopes, reverine, forest clearings, secondary forest and undergrowths.
Altitude range:	From 150 to 2,000 masl.
Plant part collected:	Leaves or entire aerial parts, climber itself.
Uses:	Entire used as fodder. Juice extract from the climber helps to heal cuts and also cure pneumonia. Paste of entire parts is used in treating fracture.
Time of collection:	Whenever required. It is a potential climber to extract edible oil from its seeds. Seeds can be collected from January onwards but best will be when it is fully matured.
Distribution and availability status:	Moderately available in Samtse and Sarpang districts.

42 Family: Fagaceae



42.1 Scientific name:	<i>Castanopsis hystrix</i> (Hook. f. & Thomson ex A. DC.)
Vernacular name:	Sokeyshing (D), Patleykatus (L), Tshatshe /Tshaishing/ Tsheshing (S)
Habitat:	Subtropical evergreen broad-leaved forests, mixed with oak forests, gentle inclined places.
Altitude range:	From 1,600 to 2,400 masl.
Plant part collected:	Nuts.
Uses:	Eaten as any other nuts either roasted or just fresh. It is seen people selling in the available local market during its season. It is one of the off-farm income sources for some of the farmers.
Time of collection:	From September until November
Distribution and availability status:	Plenty available in the following districts Chhukha, Pemagatshel, Punakha, Samdrupjongkhar, Samtse, Trashigang, Trashiyangtse, Trongsa, Tsirang, Wangduephodrang and Zhemgang.



42.2 Scientific name:	<i>Castanopsis indica</i> (Roxb. ex Lindl.) A.DC.
Vernacular name:	Labskey (D), Dhalney / Karay katus (L)
Habitat:	Broadleaved evergreen forests, primary or secondary growth forests, subtropical forests.
Altitude range:	From 350 to 1,500 masl.
Plant part collected:	Nut and leaves.
Uses:	Nut eaten as raw or roasted. Leaves used as animal fodder
Time of collection:	Nut from December to January. Leaves: Whenever required.
Distribution and availability status:	Moderately available in Samdrupjongkhar, Samtse, Sarpang and Tsirang districts



42.3 Scientific name:	<i>Castanopsis tribuloides</i> (Sm.) A.DC.
Vernacular name:	Thonsokey (D), Musuray katus (L), Tongpa shing (T)
Habitat:	Moist evergreen broadleaved forests, warm broadleaved forests.
Altitude range:	From 1,200 to 2,300 masl.
Plant part collected:	Nut, young leaves along with buds, leaves.
Uses:	Nut edible. Fresh seed eat like nut or the seed roasted and eat. Sometimes it can be seen selling in available market. Young leaves along with buds are processed into local tealeaf. Also leaves are collected as fodder for cattle.
Time of collection:	Nuts – November to December, young leaves and buds – March to April, leaves for fodder any season of the year.
Distribution and availability status:	Moderately available in Chhukha, Dagana, Punakha, Samtse, Sarpang, Tsirang and Zhemgang districts.



42.4 Scientific name:	<i>Quercus griffithii</i> (Hook.f. & Thomson ex Miq.)
Vernacular name:	Si-Si (D), Kasru (L), Pe Seng (Tn), Beynang Shing (S)
Habitat:	Mixed broadleaved forests, drier hill slopes, sometimes within blue pine forest.
Altitude range:	From 1,300 to 2,800 masl
Plant part collected:	Acorn / seed.
Uses:	Medicinal value. MSP used as one of the ingredients in the formulation of the traditional medicine.
Time of collection:	November and December. MSP collect it from Trongsa area.
Distribution and availability status:	Moderately found in Haa, Trashigang, Trashiyangtse, Trongsa, Tsirang, Wangduephodrang and Zhemgang districts.

43 Family: Gentianaceae



43.1 Scientific name:	<i>Gentiana algida</i> (Pallas)
Vernacular name:	Pang-geon meto / Pang-geon ngon po (D), Pangen meto (S)
Habitat:	Drier side of the meadows, scree and damp grassy slopes too.
Altitude range:	From 4,000 to 5,600 masl
Plant part collected:	Flower.
Uses:	As ingredient in traditional medicine by MSP.
Time of collection:	October to November.
Distribution and availability status:	It is rare though it is grown in Bumthang, Gasa, Thimphu and Trashigang districts



43.2 Scientific name:	<i>Gentiana robusta</i> (King ex Hook.f.)
Vernacular name:	Kichu (D), Kyiche karmo (M)
Habitat:	Open grassland slopes, moist places in shrubberies, leas and along stream banks
Altitude range:	From 3,200 to 5,200 masl.
Plant part collected:	Flower.
Uses:	As ingredient in traditional medicine by MSP.
Time of collection:	July to August.
Distribution and availability:	It is rarely found in Bumthang and Thimphu districts.



43.3 Scientific name:	<i>Gentiana urnula</i> (H. Sm.)
Vernacular name:	Gangchu (D), Gangachhung (M)
Habitat:	Scree, rocky or gravelly slopes.
Altitude range:	From 3,900 to 5,700 masl
Plant part collected:	Entire plant
Uses:	As ingredient in traditional medicine by MSP.
Time of collection:	August to September.
Distribution and availability status:	Extremely rare in Bumthang and Thimphu districts.



43.4 Scientific name:	<i>Halenia elliptica</i> (D. Don)
Vernacular name:	Chaktig (M)
Habitat:	Open hillsides, bottom of the cliff, forest clearing areas, outskirts of forest, rocky places, alongside of the stream, damp places & open slopes, includes moist lea areas.
Altitude range:	From ca.1,830 to 4,800 masl
Plant part collected:	Aerial parts
Uses:	As ingredient in traditional medicine by MSP.
Time of collection:	July to August.
Distribution and availability status:	Found plenty Bumthang and Thimphu districts.



43.5 Scientific name:	<i>Jaeschkea oligosperma</i> (Griseb.) Knobl.
Vernacular name:	Chagtik (M)
Habitat:	Alpine regions, open grassy ground.
Altitude range:	From 3,000 to 4,000 masl.
Plant part collected:	Entire plant.
Uses:	As ingredient in traditional medicine by MSP.
Time of collection:	July to October.
Distribution and availability status:	Found limited in Thimphu district.



43.6 Scientific name:	<i>Swertia angustifolia</i> (Buch.-Ham. ex D.Don)
Vernacular name:	Bhaley chiraito (L), Khalu / Tikta (S)
Habitat:	Open grassland, either side of the meadows, shrublands, open hill slopes, rocky sites, along sides of the stream, cultivated lands.
Altitude range:	From 1,000 to 2,200 masl.
Plant part collected:	Entire plant.
Uses:	General medicinal purposes. Drink like green-tea.
Time of collection:	After November.
Distribution and availability status:	Moderately found in Samtse and Trashigang districts.



43.7 Scientific name:	<i>Swertia chirayita</i> (Roxb.) H.Karst.
Vernacular name:	Chiraito (L), Khalu (S)
Habitat:	Moist forests, rangelands and surrounding of the cultivated lands, usually North and Northwest facing slopes.
Altitude range:	From 1,200 to 3,000 masl.
Plant part collected:	Entire plant.
Uses:	Boil and drink as tea to ease from common fever or malarial fever, cold, cough & high blood pressure.
Time of collection:	November to January.
Distribution and availability status:	Quite plenty in Dagana, Pemagatshel, Samdrupjongkhar, Sarpang, Trashigang and Tsirang and limited in Chhukha district.

44 Family: Geraniaceae



44.1 Scientific name:	<i>Geranium lambertii</i> (Sweet)
Vernacular name:	Ligadur / Gadur (M)
Habitat:	Forest clearings, alpine scrub.
Altitude range:	From 2,300 to 4,200 masl
Plant part collected:	Root.
Uses:	As ingredient in traditional medicine by MSP.
Time of collection:	October to November.
Distribution and availability status:	Moderately available in Bumthang, Paro, Thimphu and Trongsa districts.



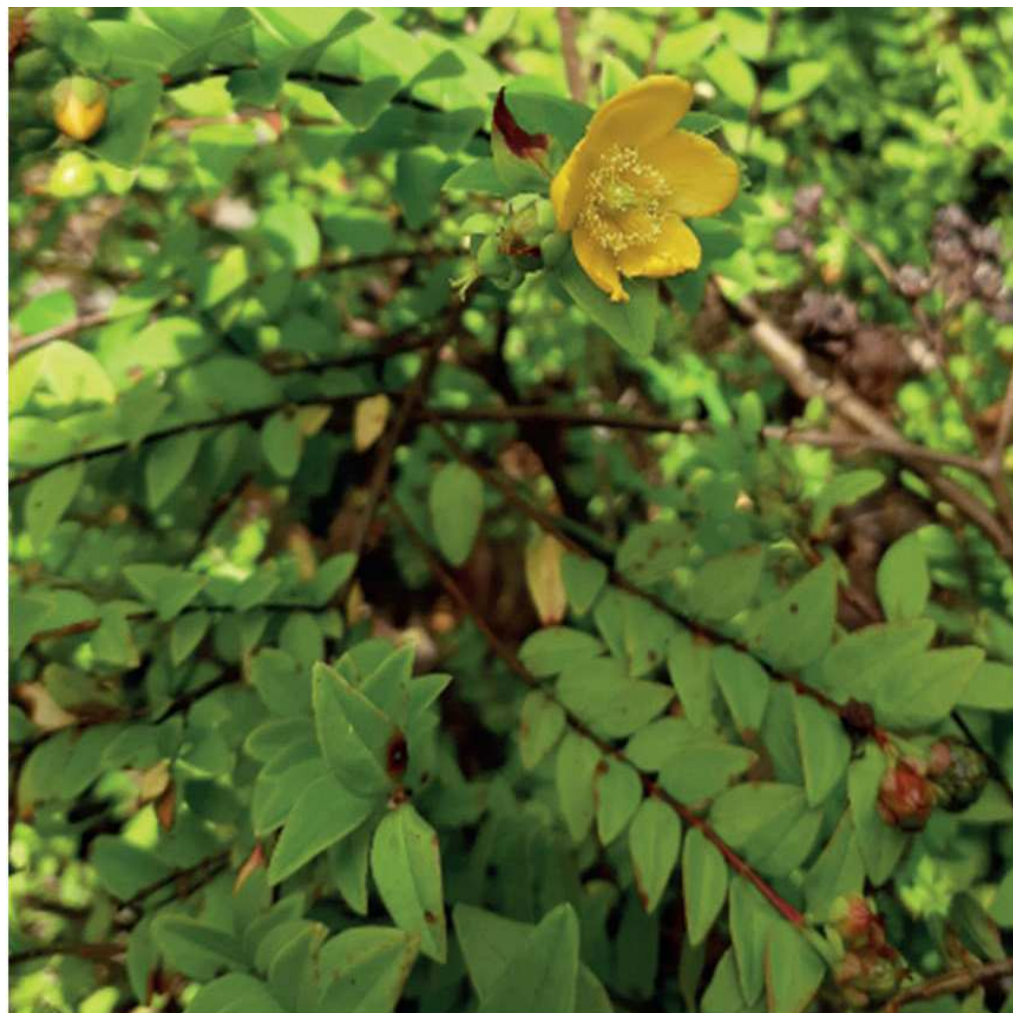
44.2 Scientific name:	<i>Geranium refractum</i> (Edgew. & Hook.f.)
Vernacular name:	Lhagang (D)
Habitat:	Open dry grassland, shrubberies and mountain leas.
Altitude range:	From 3,500 to 4,600 masl
Plant part collected:	Root.
Uses:	As ingredient in traditional medicine by MSP.
Time of collection:	September to October.
Distribution and availability status:	Availability is plenty in Bumthang, Gasa, Lhuentse, and Thimphu districts.

45 Family: Hydrangeaceae



45.1 Scientific name:	<i>Hydrangea febrifuga</i> (Lour.) Y.De Smet & Granados
Vernacular name:	Hoodum / Hindonam / Hogenam / Hodom (D), Bhasak / Bansuli (L)
Habitat:	Warm broadleaved forest, clearings of Castanopsis & Quercus forests, shrubberies and wet areas, alongside of the streams and rivers.
Altitude range:	From 900 to 2,400 masl.
Plant part collected:	Shoots and root-bark.
Uses:	Its decoction is taken like tea to relief from cough and fever.
Time of collection:	As and when necessary.
Distribution and availability status:	Grow plenty in Chhukha, Gasa, Haa, Mongar, Punakha, Samtse, Sarpang, Trashigang and Trongsa districts.

46 Family: Hypericaceae



46.1 Scientific name:	<i>Hypericum hookerianum</i> (Wight & Arn.)
Vernacular name:	Sonamchojey (Ty)
Habitat:	Wet evergreen forest, cool broadleaved and fir forests, thickets on slopes, forest edges.
Altitude range:	From 1,400 to 3,400 masl.
Plant part collected:	Leaves.
Uses:	For making tealeaf. Trashiyangtse farmers group make tealeaf for sale.
Time of collection:	April to August.
Distribution and availability status:	Bumthang, Punakha, Samdrupjongkhar, Thimphu, Trashigang, Trashiyangtse and Trongsa districts.

47 Family: Juglandaceae



47.1 Scientific name:	<i>Juglans regia</i> (L.)
Vernacular name:	Ta / Tago Shing (D), Okhar (L), Khey shing (S), Tarka (Ku), Khuchizewa (K)
Habitat:	Mixed conifer & broadleaved forests, mixed broadleaved forests.
Altitude range:	From 1,000 to 2,800 masl.
Plant part collected:	Hard fruit / Kernel and bark.
Uses:	Nut inside of hard fruit is eaten. Kernel is used religiously in Diwali puja. Fruits are seen selling in the available market. Bark used for dyeing purpose. People said bark has medicinal value.
Time of collection:	Hard fruit / nut – between July and October, bark – whenever necessary.
Distribution and availability status:	It is moderately found in Chhukha, Dagana, Gasa, Lhuentse, Mongar, Paro, Pemagatshel, Punakha, Samdrupjongkhar, Samtse, Sarpang, Thimphu, Trashigang, Trashiyangtse, Trongsa, Tsirang, Wangduephodrang and Zhemgang districts. People used to cultivate this tree within their homestead areas for its valuable fruits and timber.

48 Family: Lamiaceae



48.1 Scientific name:	<i>Callicarpa vestita</i> (Wall. ex C.B. Clarke)
Vernacular name:	Bakam (D), Guaylo / Guyalo / Guyelo (L), Bakam / Bakama (W1)
Habitat:	Sub-tropical forest foothill forest, open shrub-lands.
Altitude range:	From 400 to 1,500 masl.
Plant part collected:	Bark, flower, leaves.
Uses:	Bark used as medicine for diarrhoea, flower to make yeast. Leaves used as fodder and as incubation wrapper while making "Kenema" (Fermented roast and boiled soya beans).
Time of collection:	Bark and leaves whenever required. Flower from April to May.
Distribution and availability status:	Moderately available in Punakha, Samdrupjongkhar, Samtse, Sarpang, Tsirang and Wangduephodrang, Zhemgang districts.



48.2 Scientific name:	<i>Dracocephalum tanguticum</i> (Maxim.)
Vernacular name:	Tee Yang Ku (D)
Habitat:	Grassy hill slopes, cliffs, herbaceous grassland or dry leas.
Altitude range:	From 3,400 to 5,000 masl.
Plant part collected:	Aerial parts.
Uses:	As ingredient in traditional medicine by MSP.
Time of collection:	June to July.
Distribution and availability status:	It is found rarely in Bumthang and Thimphu.



48.3 Scientific name:	<i>Gmelina arborea</i> (Roxb. ex Sm.)
Vernacular name:	Gamarshing (D), Khamari (L), Kholomshing (S)
Habitat:	Mixed deciduous forest of the foothills regions, stony slope edges, along river and stream banks.
Altitude range:	From 200 to 1,500 masl.
Plant part collected:	Flower, bark and leaves.
Uses:	Flowers are used as vegetable. Bark juice cure pneumonia, stomach trouble, dysentery, ring-worm and also used to relief from food poison or indigestion (for both human & cattle) also used at times of "Bagay" (local term for a kind of sickness). Bud is rubbed on bull's back-neck to cure cracks. Bark sometimes used to extract brownish-yellow dye. Leaves are used as fodder.
Time of collection:	Flowers in March and April. Leaves: As fodder from June to December and bark whenever necessary.
Distribution and availability status:	Moderately available in Chhukha, Dagana, Mongar, Pemagatshel, Samdrupjongkhar, Samtse, Sarpang and Tsirang districts.



48.4 Scientific name:	<i>Mentha spicata</i> (L.)
Vernacular name:	Ooshila (D), Padena / Pudina (L), Aushila (S)
Habitat:	Moist or marshy places, edges of the lakes and ponds, alongsides of the creeks, damp disturbed vegetation areas. Most oftenly people cultivate within the home-garden.
Altitude range:	From 150 to ca.2,200 masl.
Plant part collected:	Aerial parts.
Uses:	Eat as green salad or making paste pickle mixing with other salad ingredients. Farmers group in Trashiyangtse started to make tealeaf and sell it in the available market.
Time of collection:	All year round. However for making tealeaf, Trashiyangtse people collects leaves from January through March.
Distribution and availability status:	Moderately available in Chhukha, Dagana, Samdrupjongkhar, Samtse, Sarpang, Trashiyangtse and Wangduephodrang districts



48.5 Scientific name:	<i>Pogostemon amaranthoides</i> (Benth.)
Vernacular name:	Namna / Namnang / Namshay / Namda (D, K, Ku), Nam tshodma (S), Rudilo (L)
Habitat:	Mixed forests, forest margin, or on open ravine.
Altitude range:	From 1,200 to 2,800 masl.
Plant part collected:	Young aerial parts.
Uses:	As spices or eaten as wild green vegetable. It is seen selling in the available market and by the roadside vegetable stalls.
Time of collection:	Any time of the year.
Distribution and availability status:	Moderately available in Chhukha (Plenty), Dagana, Lhuentse, Mongar, Punakha, Samtse (Limited) and Tsirang districts.



48.6 Scientific name:	<i>Salvia castanea</i> (Diels)
Vernacular name:	Zeeptshe chenpo (M)
Habitat:	Open forest or clearing areas, montane forest, grasslands, and hillsides.
Altitude range:	From 2,500 to ca.3,900 masl.
Plant part collected:	Entire plant.
Uses:	For medicinal purposes.
Time of collection:	July – August. Farmers group of Thimphu used to collect.
Distribution and availability status:	Moderately available in Bumthang, Gasa, Thimphu, Trongsa and Wangduephodrang districts.



48.7 Scientific name:	<i>Vitex negundo</i> (L.)
Vernacular name:	Sewali / Se-yali / Simali (L)
Habitat:	Deciduous forests, open plain areas, along the river or stream banks, wet-places, along canals, often grow as hedge plants or live fence.
Altitude range:	From 150 to 1,800 masl.
Plant part collected:	Entire, leaves and roots.
Uses:	Entire plant planted as hedge or live fence. People believe its leaves & roots have medicinal value.
Time of collection:	As and when necessary.
Distribution and availability status:	Plenty in Chhukha, Dagana, Samtse, Sarpang districts, but in Trashigang it is Limited

49 Family: Lauraceae



49.1 Scientific name:	<i>Cassytha filiformis</i> (L.)
Vernacular name:	Akash beli / Paheinle lahara (L)
Habitat:	Among bushes, shrubs or hedges, at the edges of natural lakes and ponds.
Altitude range:	Upto 700 masl.
Part collected:	It is parasitic yellow thread like vines so collects entire vines or climbers.
Uses:	As herbal medicine to cure jaundice.
Time of collection:	Whenever required.
Distribution and availability status:	Moderately available in Chhukha, Dagana, Samdrupjongkhar, Samtse, Sarpang and Tsirang districts.



49.2 Scientific name:	<i>Cinnamomum glaucescens</i> (Buch.-Ham. ex Nees) Hand.-Mazz.
Vernacular name:	Malagiri (L), Dhurka shing (S), Tshok-shengma (Sk = Sarpang Kheng)
Habitat:	Subtropical forests among Schima stands, stony and nearby dry agricultural sites, along sides of the springs or streams, foothill areas.
Altitude range:	From ca.450 to 2,500 masl.
Plant part collected:	Bark, heart-wood or entire trunk and foliage.
Uses:	Bark used as local incense for various religious purposes. Usually this species is well-known among shamanists as it is believed that burning incense out of its bark and heart-wood chips will drive away the ghost and spirit. Smoke from its sawdust can rid-off bed-buck and even snake. Foliage can be used as fodder.
Time of collection:	Whenever required.
Distribution and availability status:	Moderately available in Dagana, Pemagatshel, Punakha, Samtse and Sarpang districts.



49.3 Scientific name:	<i>Cinnamomum tamala</i> (Buch.-Ham.) T.Nees & C.H.Eberm.
Vernacular name:	Shingtsha (D / Pn), Tezpata / Kespata (L), Tespar (S)
Habitat:	Transitional evergreen broadleaved forests, warm broadleaved forests, moist-shady ravine slopes, shady plains. Some farmers plant it within their homestead areas.
Altitude range:	From 350 to 2,200 masl.
Plant part collected:	Leaves & bark
Uses:	Both leaves and bark used as spice or condiment. They are also used medicinally. Mostly the farmers collect or harvest from wild or from their homestead and sell in the available market. It can be seen in the vegetable markets.
Time of collection:	Best season to collect is in winter months.
Distribution and availability status:	Moderate in Dagana, Pemagatshel, Samdrupjongkhar, Samtse Wangdue and Zhemgang districts. Farmers cultivate few stands within their homestead.



49.4 Scientific name:	<i>Cinnamomum verum</i> (J.Presl)
Vernacular name:	Dalchini / Sinkauli (L), Shingtsha (S), Samsala (T)
Habitat:	Scattered or thick warm broadleaved forests, slightly stony slope sites.
Altitude range:	From 200 to 2,200 masl.
Plant part collected:	Bark of the stem and root.
Uses:	Bark powder or bark it-self is used as spice. Bark including root bark is of sweet taste. It can fetch good selling price in the market. Bark also use as one of the ingredients of the traditional medicine by MSP.
Time of collection:	During dry season. MSP collects it from Trongsa in the month of October – November.
Distribution and availability status:	Resource is limited though it is found in Chhukha, Dagana, Pemagatshel, Samdrupjongkhar, Samtse, Sarpang, Trongsa and Zhemgang districts. People have said that before 1990s rampant bark collection was done and some traders taken to India for sale.



49.5 Scientific name:	<i>Litsea cubeba</i> (Lour.) Pers.
Vernacular name:	Sil-timbur (L), Nenshing / Nensey (S), Gashi thingney / Phartshag-pa (Sk = Sarpang Kheng locals)
Habitat:	Subtropical and tropical forests within thin stands, bushes, alongside of streams and gullies.
Altitude range:	From 300 to 3,200 masl.
Plant part collected:	Leaves and seeds.
Uses:	Essential oil extracted from seed used for medicinal purposes. Oil applies on forehead; swallow little bit to relief cold & cough, headache, fever, throat-pain, mouth ulcer. Leaves are used as fodder for cattle.
Time of collection:	Seeds collected from September to February. Leaves whenever requires but especially from May until August.
Distribution and availability status:	Moderately available in Chhukha, Dagana, Pemagatshel, Mongar, Samdrupjongkhar, Samtse (limited), Sarpang, Trashiyangtse, Tsirang and Zhemgang districts.



49.6 Scientific name:	<i>Machilus edulis</i> (King ex Hook.fil.)
Vernacular name:	Guli (D / Ku / S), Phamphal / Phampot / Bharuwa (L)
Habitat:	Warm broadleaved forest, partially shade or open sites, moist/ damp soil, places that occupies loamy-clay or thick humus soil.
Altitude range:	From ca.900 to 2,400 masl.
Plant part collected:	Fruit.
Uses:	Fruit edible like that of avocado grown in horticulture orchard. It can be pickled too. Fruit seeds have potential to extract edible oil. During its fruiting season, it is seen in local market selling by farmers. It is a source of some off-farm income to farmers.
Time of collection:	From August till October.
Distribution and availability status:	Moderately available in Chhukha, Dagana, Lhuentse, Samdrupjongkhar, Samtse, Sarpang, Trashigang, Trashiyangtse, Tsirang and Zhemgang districts.



49.7 Scientific name:	<i>Machilus macranthus</i> (Nees)
Vernacular name:	Kaulo / Kaula / Kawla (L), Gulee serposhing (S / K)
Habitat:	Open forests, evergreen, semi-evergreen, subtropical, and moist deciduous forests.
Altitude range:	From ca.400 to 1,900 masl.
Plant part collected:	Bark, leaves and fruit.
Uses:	Barks collected as raw materials for incense. Reddish-brown dye can also be extracted from barks. Leaves used as cattle fodder and fruit edible.
Time of collection:	Barks mostly in winter season. Leaves whenever required and fruit in June – July.
Distribution and availability status:	Resource is limited Samtse, Sarpang, Tsirang and Zhemgang districts. People have said that before 1990s, a huge bark collection was done and exported locally to India from the areas of southern foothill.



49.8 Scientific name:	<i>Parasassafras confertiflora</i> (Meisn.) D.G.Long
Vernacular name:	Seyma (D), Bori / Kalo bori (L), Selung / Sey Shing (S), Shingmar (Pl), Shingmar / Gashingma / Mashingma (K)
Habitat:	Open shrub-lands, sandy-loamy hillside slopes, mixed broadleaved and coniferous forests.
Altitude range:	From 1,000 to 2,700 masl.
Plant part collected:	Seed, bark and burr / knot.
Uses:	Seed to extract edible oil like butter. People said the oil is good to consume by the delivery women as it helps to restore the normal health. In olden days people used this oil to burn the lamps. Bark used as medicine to cure cattle against "Lahamutay" disease i.e. red urine. Bark has potential to extract black dye. Burr or knot is used to craft into wooden plates and cups (Dapa & phob).
Time of collection:	Seed – November to January, bark and burr / knot as and when required.
Distribution and availability status:	Moderately available in Dagana, Gasa, Pemagatshel, Samdrupjongkhar, Trashiyangtse, Tsirang and Zhemgang districts. It is rare in Lhuentse and Samtse districts.

50 Family: Liliaceae



50.1 Scientific name:	<i>Fritillaria delavayi</i> (Franch.)
Vernacular name:	Tsika / Tsilea/ Lagop (D), Karpo cheek thup / Abikha (M)
Habitat:	Alpine zones, open stony / gravelly steep slope, scree slope.
Altitude range:	From 4,000 to 4,800 masl.
Plant part collected:	Bulb.
Uses:	Medicinal purposes. Use as one of the ingredients in the traditional medicine by MSP.
Time of collection:	August to October.
Distribution and availability status:	It is rare in Gasa, Haa and Thimphu districts.



50.2 Scientific name:	<i>Lilium nanum</i> (Klotzsch)
Vernacular name:	Drey tshiga / tshima (D), Abbikha (M)
Habitat:	Forest margins, alpine grasslands, leas and open grassland slopes, marshy hillsides, among rocks in open field, rocky hillsides, along streams and rivers, amidst stunted shrubs of junipers, potentilla, rhododendron, etc...
Altitude range:	From 3,300 to 4,800 masl.
Plant part collected:	Entire plant.
Uses:	For medicinal purposes.
Time of collection:	July to August. Farmers group of Thimphu district collects and manages it.
Distribution and availability status:	Limited available in Bumthang, Paro, Thimphu, Trashigang and Trongsa districts.

51 Family: Malvaceae



51.1 Scientific name:	<i>Bombax ceiba</i> (L.)
Vernacular name:	Pema Geysar (D / M / S), Simal (L)
Habitat:	Subtropical forests, grassy plains, riverine, hot moist / dry river valleys.
Altitude range:	From 200 to 1,400 masl.
Plant part collected:	Flowers, leaves, flosses.
Uses:	MSP uses flowers in formulating traditional medicine. Flowers and leaves are used as fodder for cattle. Flosses used to stuffing mattresses and pillow as it is good substitute to cotton. Sometime people plants as ornamental.
Time of collection:	Flowers- February to March, Flosses- April to May, Leaves whenever required. MSP collect flowers from Trongsa in January – February.
Distribution and availability status:	Moderately available in Chhukha, Dagana, Punakha, Samdrupjongkhar, Samtse, Sarpang, Trashigang, Trongsa, Tsirang and Wangduephodrang districts.



51.2 Scientific name:	<i>Firmiana colorata</i> (Roxb.) R.Br.
Vernacular name:	Seti / seto odal (L)
Habitat:	Moist deciduous and semi-evergreen forests, subtropical foothill forests, hilly slopes.
Altitude range:	From 300 to 1,200 masl.
Plant part collected:	Bark, inner bark and foliage.
Uses:	Bark is used to make rope. Inner bark yields a quality fibre. Foliage is used as cattle fodder.
Time of collection:	Bark and Inner bark usually in winter and foliage whenever required.
Distribution and availability status:	Moderately available in Samtse and Sarpang districts.



51.3 Scientific name:	<i>Malva sylvestris</i> (L.)
Vernacular name:	Niga (D)
Habitat:	Gravel-wasteland and grassland.
Altitude range:	From ca.3,600 to 4,200 masl.
Plant part collected:	Aerial parts
Uses:	As ingredient in traditional medicine by MSP.
Time of collection:	July to August
Distribution and availability status:	Moderate in Bumthang district.



51.4 Scientific name:	<i>Sida acuta</i> (Burm.fil.)
Vernacular name:	Khareto / Jharu (L), Shekshem (K / S)
Habitat:	Anywhere in foothill areas.
Altitude range:	From 150 to 1,500 masl.
Plant part collected:	Entire aerial parts and bark.
Uses:	Entire aerial parts without debarking use as hard-broom. Bark uses as rope to fasten / tying small things. The farmers groups of Dagana and Sarpang make hard-broom out of the collected material and sell in the available market.
Time of collection:	October to December.
Distribution and availability status:	It is found plenty in southern region of the country.



51.5 Scientific name:	<i>Sterculia villosa</i> (Roxb.)
Vernacular name:	Odal / Zat odal (L), Odola / Phrang shing (S), Shongshali / Sheydey (K), Sheydey (Sk)
Habitat:	Subtropical foothill mixed forests, deciduous forest slope, in ravines, rocky places.
Altitude range:	From ca. 200 to 1,500 masl.
Plant part collected:	Bark, resin (exudates) and seed.
Uses:	To make strong rope. Rope is utilized in multiple farmhouse activities. Resin / exudates used as leaven while making selroti (Like doughnut). Seed is edible after roasting.
Time of collection:	Usually in winter.
Distribution and availability status:	Moderately available in Chhukha, Mongar, Samtse (Limited), Sarpang, Trongsa, Wangduephodrang and Zhemgang districts.

52 Family: Marantaceae



52.1 Scientific name:	<i>Phrynium pubinerve</i> (Blume)
Vernacular name:	Kawai-pat (L)
Habitat:	Semi-evergreen broadleaved forests, wet or dampy places.
Altitude range:	From 150 to 1,800 masl.
Plant part collected:	Leaves with petiole.
Uses:	Leaves are used as general wrapper; village people wrap fresh butter and cheese, wild or any other vegetables and take the wrapped items to sell in the local market. Women make plate out of leaves and used in any social and religious occasions. In the villages, people used leaves along with petiole to roof small house and any livestock-shed. Also make "Ghum" (Rain gear) which is used in rainy season instead of umberalla.
Time of collection:	Any seasons of the year.
Distribution and availability status:	Moderately available in Samdrupjongkhar, Samtse and Sarpang districts.

53 Family: Melanthiaceae

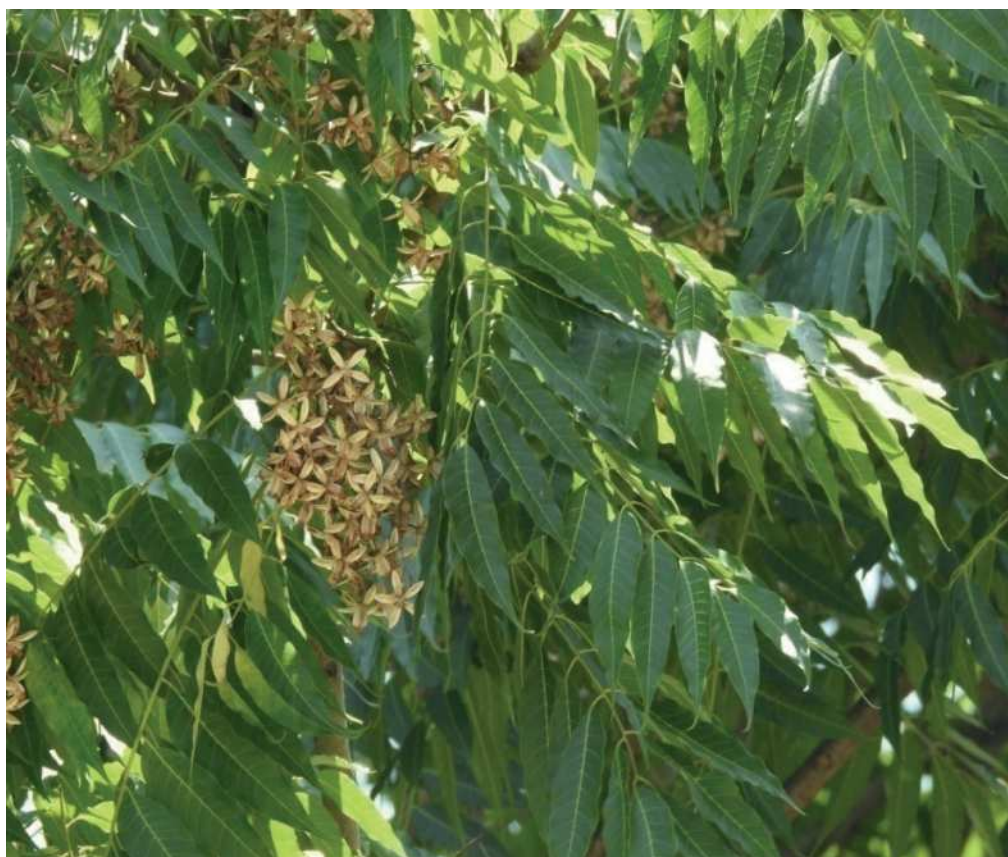


53.1 Scientific name:	<i>Paris polyphylla</i> (Sm.)
Vernacular name:	Dho / dho sethuchen / tshema kewa (D), Satuwa (L), Dochu-Kewa (Plp = Punakha locals), Thoksampa / Thoksumpa (S), Jagpa / Jakpa (Ll, Lla, Mt), Ngam dow (T)
Habitat:	Moist and humus rich soil under a broadleaved forest canopy of full to partial shade, along the sides of the streams, sometimes among scrub.
Altitude range:	From 1,300 to 3,900 masl.
Plant part collected:	Rootstock / rhizome
Uses:	People used to sale in the available market. It is considered a high value wild cash crop. Also it is used as ingredient in traditional medicine by MSP. However in Samtse only few individual know this plants and people expressed that much of resources are raided by people of the nearby Dzongkhag.
Time of collection:	October to November.
Distribution and availability status:	Moderately available although it is widely distributed in the followibg districts Bumthang, Chhukha, Haa, Lhuentse, Mongar, Paro, Pemagatshel, Punakha, Samdrupjongkhar, Samtse (Rare), Thimphu, Trashigang, Trongsa (Limited), Wangduephodrang, Zhemgang (Rare). It is because of collection pressure from the people. In some places people do collect without getting permission from government and sell without the knowledge of the concerned authority.

54 Family: Meliaceae



54.1 Scientific name:	<i>Heynea trijuga</i> (Roxb.)
Vernacular name:	Akha-taruwa (L)
Habitat:	Foothills forests, bamboo and mixed deciduous forests, mixed evergreen and deciduous forests, deciduous Castanopsis forests, along the river banks, open areas in hill evergreen forest.
Altitude range:	From 500 to 1,800 masl.
Plant part collected:	Matured seed.
Uses:	Extract oil and used medicinally. People said its oil cures ringworm, removes lice and ticks.
Time of collection:	November to December.
Distribution and availability status:	Limitedly distributed in Dagana, Punakha, Samtse, Tsirang and Wangduephodrang districts.



54.2 Scientific name:	<i>Toona ciliata</i> (M. Roem.)
Vernacular name:	Nyng zho sha (M), Toone / Tun (L), Rawashing (S)
Habitat:	Subtropical forest, wet evergreen forest, moist deciduous forest, seldom in riverine, open hillsides, disturbed areas.
Altitude range:	From 150 to ca.1,700 masl.
Plant part collected:	Fruit.
Uses:	As ingredient in traditional medicine by MSP.
Time of collection:	October – November. MSP collects it from Trongsa area.
Distribution and availability status:	Moderately available in Chhukha, Dagana, Gasa, Punakha, Samdrupjongkhar, Samtse, Sarpang, Trashiyangtse and Trongsa districts.

55 Family: Menispermaceae



55.1 Scientific name:	<i>Stephania glabra</i> (Roxb.) Miers
Vernacular name:	Paheinlo tamarkay / tambarkay (L), Zalamathang / Zalamathangsay (S)
Habitat:	Warm broadleaved forests, shady and wet places, nearby streams.
Altitude range:	From ca.200 to 1,400 masl.
Plant part collected:	Young vine with buds and leaves, tuberous rootstock.
Uses:	Young vine with buds and leaves used as vegetable. Tuberous rootstock is used to make small tub to feed water to poultry and is said that the water from this tub has general medicinal value to poultry (especially of disease called "Rani Khet" which is one of chicken sicknesses).
Time of collection:	Tender vine with buds and leaves – March & April, tuberous rootstock – during dry season.
Distribution and availability status:	Plenty in Dagana, Samdrupjongkhar, Samtse and Sarpang districts.



55.2 Scientific name:	<i>Stephania glandulifera</i> (Miers)
Vernacular name:	Cechu robji (D), Gujurgano (L), Zala mathang ru (S)
Habitat:	Mixed tropical and subtropical forests or warm broadleaved forests.
Altitude range:	From 450 to 1,900 masl.
Plant part collected:	Tuber.
Uses:	Tuber powder or fresh tuber mix in feed and given to cattle to treat liver fluke and also to boost the cattle' health.
Time of collection:	January to March.
Distribution and availability status:	Limited in Chhukha, Punakha and Samtse districts.



55.3 Scientific name:	<i>Tinospora cordifolia</i> (Willdenow) Hook. f. & Thomson
Vernacular name:	Curjo (L), Letre / Ngajurmey (T), Sle-tres (M), Phamru / Famru (S)
Habitat:	Deciduous moist or dry forests, scrub jungles, also riparian plain forests
Altitude range:	From 150 to 1,400 masl.
Plant part collected:	Entire climber with fruits, leaves or without leaves.
Uses:	Climber used as medicinal purposes in case of diabetes, fever, body & joint-pain, high blood pressure, ulcer, jaundice, to regularize irregular menstruation. Its paste used to bind fracture. MSP used it as one of the ingredients in formulation of traditional medicine. People claims using as fodder can cure cattle sickness called “Niranjan” i.e. stoppage of urine. Also people feed to milking-cow to enhance lactation or to increase milk production.
Time of collection:	As and when necessary. However, MSP used to collect vine along with its fruits from November until January from Trongsa region.
Distribution and availability status:	It is found plenty in Chhukha, Dagana, Samdrupjongkhar, Samtse, Sarpang and Trongsa districts.

56 Family: Moraceae



56.1 Scientific name:	<i>Artocarpus lacucha</i> (Buch.-Ham. ex D.Don)
Vernacular name:	Barar / Badar (L)
Habitat:	Evergreen, semi-evergreen and moist broadleaved forests, forests of limestone hilly sites.
Altitude range:	From 150 to 1,800 masl.
Plant part collected:	Bark, leaves, and fruit.
Uses:	Bark is used to make tea also extract red dye. People believe bark has medicinal value for piles. Leaves are used as excellent livestock fodder. Fruit is edible.
Time of collection:	Bark and leaves whenever necessary. Fruit: July - August.
Distribution and availability status:	Moderately available in Samdrupjongkhar, Samtse, Sarpang and Tsirang districts.



56.2 Scientific name:	<i>Ficus auriculata</i> (Lour.)
Vernacular name:	Beykushing (D), Nebhara, Nebharo (L), Chongma shing (S), Dabgo / Dogashing / Boku / Boksho / Khoma (Sk = Sarpang kheng locals)
Habitat:	Warm broadleaved and subtropical forests, moist valleys, often in grazing-land also along sides of the creeks and streams.
Altitude range:	From 150 to 2,100 masl.
Plant part collected:	Leaves and fig.
Uses:	Leaves are used to make plate also serves excellent cattle fodder. Ripened figs are sometimes eaten like any other fruit. However, figs too are given to cattle as feed after cooking.
Time of collection:	Leaves throughout the year round. Figs: June onwards.
Distribution and availability status:	Limited in the wild. It is found in Chhukha, Dagana, Samtse, Sarpang, Trashiyangtse, Trongsa and Tsirang districts. However, most people cultivate within their farmland.



56.3 Scientific name:	<i>Ficus lacor</i> (Buch.-Ham.)
Vernacular name:	Kabra / Kabro / Kavro (L), Phi Shing (S)
Habitat:	Warm and dry places of subtropical to tropical regions, seldom in humid places, along the terrace bund of the cultivated fields.
Altitude range:	From 200 to 1,650 masl.
Plant part collected:	Tender leaves and buds, entire foliage, bark & fibre.
Uses:	Tender leaves and buds are used to make preserved pickle, sometimes people eat as vegetable by blanching and then cooking. Entire foliage used as fodder to livestock. People believe bark has some medicinal value. Fibre is use as rope.
Time of collection:	Tender leaves and buds from February to April, bark, fibre and entire foliage are when necessary.
Distribution and availability status:	Moderately available in Chhukha, Dagana, Samdrupjongkhar, Samtse, Sarpang Mongar Lhuentse and Tsirang districts. People cultivate within their farmland.



56.4 Scientific name:	<i>Ficus pubigera</i> (Wall. ex Miq.) Miq.
Vernacular name:	Dudhay lahara / Dude lahara (L), Ru shi (Wl)
Habitat:	Deciduous to evergreen forests, limestone areas, mountain slopes, sometime scramble over rocks.
Altitude range:	From 400 to 2,800 masl.
Plant part collected:	Entire parts and bark.
Uses:	Entire parts are used to make local tealeaf and also given to cattle which served an excellent fodder. Bark chew as doma (betel-nut).
Time of collection:	As and when required.
Distribution and availability status:	Moderately available in Chhukha, Dagana, Samtse, Sarpang, Tsirang and Wangduephodrang districts.



56.5 Scientific name:	<i>Ficus racemosa</i> (L.)
Vernacular name:	Dumri (L), Zhoshing (S)
Habitat:	Open subtropical forests, evergreen to moist deciduous forests, damp places, and riverine.
Altitude range:	From 150 to 1,700 masl.
Plant part collected:	Young leaves and bud, leaves, ripened fig, milky juice.
Uses:	Leaves used as fodder for livestock, figs edible. People take milky juice to cure diarrhoea and dysentery.
Time of collection:	Leaves from April to July. Collect figs from August to April or whenever ripened. Milky juice whenever required. Trashiyangtse farmer group collects young leaves and buds from April through September and make local tealeaf and sell in the available market.
Distribution and availability status:	Moderately available throughout southern foothills and Trashiyangtse districts. People cultivate within their farmland too.



56.6 Scientific name:	<i>Ficus semicordata</i> (Buch.-Ham. ex Sm.)
Vernacular names:	Ridangshing (D), Khanew / Rai khanew (L), Barachongma (S)
Habitat:	Subtropical forests and arid hillsides, along the pathways, valleys, forest edges.
Altitude range:	From 400 to 1,900 masl.
Plant part collected:	Bud along with tender leaves, ripened fig / fruit, entire foliage.
Uses:	Bud along with tender leaves processed into local tealeaf, fresh ripened fig / fruit is eaten as like other fruit, entire foliage used as fodder to cattle.
Time of collection:	Bud along with tender leaves from March to April, ripened fig / fruit in December / January, entire foliage whenever necessary.
Distribution and availability status:	Moderately available in Chhukha, Dagana, Samtse, Sarpang, Trashigang, Trashiyangtse, Tsirang and Wangduephodrang districts. Some people cultivate within their farmland.



56.7 Scientific name:	<i>Ficus subincisa</i> (Buch.-Ham. ex Sm.)
Vernacular name:	Lutey khanew (L), Gugaichongma / Chongma (S)
Habitat:	Sparse forests of subtropical and tropical regions, open shrublands and along streams.
Altitude range:	From 400 to 1,850 masl.
Plant part collected:	Tender leaves with bud, leaves only.
Uses:	Tender leaves and buds processed into local tealeaf. Leaves feed to cattle as nutritious fodder.
Time of collection:	Tender leaves, leaves and buds can be collected throughout the year. It depends upon lopping.
Distribution and availability status:	Moderately available in Chhukha, Dagana, Samtse, Sarpang and Tsirang districts. People cultivate within their farmland.



56.8 Scientific name:	<i>Morus australis</i> (Poir.)
Vernacular name:	Yosershing (D / Wl), Kimbu / Sanu Kimbu (L)
Habitat:	Subtropical to cool broadleaved forests, very dry to wet forest areas, open shrub-land.
Altitude range:	From 200 to 1,500 masl.
Plant part collected:	Ripe fruit, root and foliage.
Uses:	Ripe fruit is eaten fresh. It has good sweet taste. Root used medicinally, people says it cures jaundice. Root juice also taken to expulse warm from the stomach. Foliage used as fodder.
Time of collection:	Fruit – April to June, root and foliage – whenever necessary.
Distribution and availability status:	It grows limited in Chhukha, Dagana, Lhuentse, Samdrupjongkhar, Samtse, Tsirang, Wangduephodrang and Zhemgang districts. Some individual put it as live hedge plant.

57 Family: Musaceae



57.1 Scientific name:	<i>Musa balbisiana</i> (Colla)
Vernacular name:	Ban kera (L)
Habitat:	Foothill broadleaved forest, wet gravelly slope on river banks, moist gorgeous & valleys, either sides of the waterfall or streams.
Altitude range:	From 200 to 1,000 masl.
Plant part collected:	Fruit, flower buds, entire including leaves.
Uses:	Fruit edible like any other banana fruit but contains too many seeds. Flower buds are used as vegetable. It is seen selling in vegetable market. Leaves along with succulent stem given to cattle as fodder. Leaves are used as roofing materials especially of the livestock shed. Leaves itself or making into plates and cups are used in special social gathering on which religious offerings and edible items are served.
Time of collection:	Throughout the year round.
Distribution and availability status:	Moderately available in Samtse district.



57.2 Scientific name:	<i>Musa griersonii</i> (Noltie)
Vernacular name:	Ban-kera (L), Chomtsha (Sk)
Habitat:	Warm broadleaved forest / subtropical forest slopes, wet gravelly slope on river banks, moist gorgeous & valleys, either sides of the waterfall or streams.
Altitude range:	From 200 to 1,850 masl.
Plant part collected:	Fruit, flower buds or entire including leaves.
Uses:	Fruit edible like any other banana fruit but contains too many seeds. Flower buds and inner tender parts are used as vegetable. Juice from its rootstock is used to cure dysentery. Leaves along with succulent stem given to cattle as fodder. Leaves used as roofing materials for cattle shed. Leaves are used to make plates and cups which are used to serve during social and religious gatherings.
Time of collection:	Throughout the year round.
Distribution and availability status:	Moderately available Chhukha, Dagana, Mongar, Sarpang, Tsirang, Wangduephodrang and Zhemgang districts.



57.3 Scientific name:	<i>Musa sikkimensis</i> (Kurz.)
Vernacular name:	Ban kera (L), Layshingpachala / Waga Laisi / Laishing (S), Pakpali (K)
Habitat:	Moist subtropical forest, middle hill forest, wet gravelly slope on river banks, moist gorgeous & valleys, either sides of the waterfall or streams.
Altitude range:	From ca.800 to 1,950 masl.
Plant part collected:	Tender pith, tender inflorescences and leaves.
Uses:	Eaten as vegetable. During season can be seen in local market selling tender inflorescences. Leaves along with succulent stem given to cattle as fodder. Leaves used to roof shed and hut. Leaves it-self or by making plates and cups used in special religious or social gathering on which offerings and edible items are served.
Time of collection:	Tender pith and leaves: As and when necessary. Tender inflorescences: February – May.
Distribution and availability status:	Sporadically available in Mongar, Pemagatshel, Samdrupjongkhar, Wangduephodrang and Zhemgang districts.

58 Family: Myricaceae



58.1 Scientific name:	<i>Myrica esculenta</i> (Buch.-Ham. ex D. Don)
Vernacular name:	Dezam chisishing (D), Kaphal (L), Tsutsu shing (S)
Habitat:	Warm moist broadleaved forests.
Altitude range:	From 900 to 2,300 masl.
Plant part collected:	Fruit and bark.
Uses:	Fruit edible. Bark is useful at times of diarrhoea, stomachache, piles, high blood pressure, pneumonia, snuffing its powder relief sinusitis. Bark paste is used to treat fracture. Also bark is boiled and drink like tea.
Time of collection:	Fruit from April to May, bark any time of the year.
Distribution and availability status:	Population is limited in Chhukha, Dagana, Lhuentse, Mongar, Punakha, Samtse, Trashiyangtse, Tsirang and Wangduephodrang districts.

59 Family: Myristicaceae



59.1 Scientific name:	<i>Knema tenuinervia</i> (W.J.de Wilde)
Vernacular name:	Ramguwa / Runchepat (L), Durka shing (S)
Habitat:	Primary forests of the tropical and sub-tropical regions, usually on foothill slopes.
Altitude range:	From ca.400 to 750 masl.
Plant part collected:	Bark.
Uses:	One of the raw-materials to process traditional incense, which is used religiously. Farmers collect bark and sell to incense factory. It is also used as one of the ingredients in traditional medicine by MSP.
Time of collection:	Best in dry / winter season. MSP collects its trunk from Zhemgang in the month of December – January.
Distribution and availability status:	Rarely available in Pemagatshel, Samdrupjongkhar, Samtse, Sarpang, Tsirang and Zhemgang districts.

60 Family: Myrtaceae



60.1 Scientific name:	<i>Syzygium cumini</i> (L.) Skeels
Vernacular name:	Nyasse shing / Ngatshi / Nago tselu (D, G), Jamuna (L), Mitsu shing / Menntse say shing (S), Sra-bras (M)
Habitat:	Warm broadleaved forests of tropical & sub-tropical regions, gravelly hillside slopes, damp and riverine sites, moist or fairly dry places, near to watercourses, along river or stream banks.
Altitude range:	From 400 to 2,000 masl.
Plant part collected:	Ripened fruit and bark.
Uses:	Ripened fruit is edible. People said bark has medicinal value used at times of diarrhoea & dysentery. MSP used fruit as one of the ingredients in traditional medicine.
Time of collection:	Ripened fruit – From June to mid – August. MSP collects its fruit from Trongsa between May to June. Bark – As and when required.
Distribution and availability status:	Availability is limited in Chhukha, Dagana, Gasa, Lhuentse, Punakha, Samdrupjongkhar, Samtse, Sarpang, Trongsa and Tsirang districts.



60.2 Scientific name:	<i>Syzygium nervosum</i> (DC.)
Vernacular name:	Kya-muna (L), Mitsu shing (S)
Habitat:	Warm broadleaved forests, besides creek, stream and river, edges of the marshy lands.
Altitude range:	From 150 to 1,500 masl.
Plant part collected:	Ripened fruits and leaves.
Uses:	Ripened fruit edible and can be made into jam, jelly, juice or wine. Leaves are used as fodder for goat and sheep.
Time of collection:	Fruit from August – September.
Distribution and availability status:	Moderately available in Chhukha, Punakha, Samtse, Sarpang, Trashigang and Tsirang districts.

61 Family: Orchidaceae



61.1 Scientific name:	<i>Cymbidium erythraeum</i> (Lindl.)
Vernacular name:	Olachotok (D), Sunakhari (L)
Habitat:	Broadleaved forest mostly the stands of <i>Castanopsis</i> , <i>Daphniphyllum</i> , <i>Michelia</i> and <i>Quercus</i> .
Altitude range:	From 1,200 to 2,700 masl.
Plant part collected:	Tender part along with buds or entire plant.
Uses:	Used as vegetable. But most of the collectors sell in the available market. It can be seen selling in the roadside vegetable stall. Collectors / sellers fetch good amount of money. People collect entire plant from wild and keep in their houses for vegetable or as an ornamental plant.
Time of collection:	Tender part along with buds collect from July end until November. Collect entire plant from wild anytime of the year.
Distribution and availability status:	Very rare in its niche habitat districts Chhukha, Gasa, Mongar, Punakha, Thimphu, Trashigang, Trongsa, Tsirang, Wangduephodrang and Zhemgang. People collect rampantly from wild for their homely purposes.



61.2 Scientific name:	<i>Cymbidium hookerianum</i> (Rchb.f.)
Vernacular name:	Olachotok (D), Sunakhari (L)
Habitat:	Cool evergreen temperate forests, dense and humid forests or Quercus and Castanopsis forests.
Altitude range:	From 1,500 to 2,700 masl.
Plant part collected:	Tender part along with buds or entire plant.
Uses:	Used as vegetable. But mostly the collectors sell in the available market. It can be seen selling in the roadside vegetable stall. Collectors / sellers fetch good amount of money. People collect entire plant from wild and keep in their houses for vegetable or as an ornamental plant.
Time of collection:	Tender part along with buds collect from October until February. Collect entire plant from wild anytime of the year.
Distribution and availability status:	Very rare in its niche habitat districts Chhukha, Dagana, Gasa, Lhuentse, Punakha, Thimphu, Trongsa, Tsirang and Wangduephodrang. People collect rampantly from wild for their homely purposes.



61.3 Scientific name:	<i>Cymbidium iridioides</i> (D. Don)
Vernacular name:	Olachotok (D), Sunakhari (L)
Habitat:	Broadleaved forest usually on trees having mosses, limestone edges and hill slopes.
Altitude range: F	From 900 to 2,800 masl.
Plant part collected:	Tender part along with buds or entire plant.
Uses:	Used as vegetable. Mostly the collectors sell in the available local market. It can be seen selling in the roadside vegetable stall. Collectors / sellers fetch good amount of money. People collect entire plant from wild and keep in their houses for vegetable or as an ornamental plant.
Time of collection:	Tender part along with buds collect from September until October. Collect entire plant from wild at any time of the year.
Distribution and availability status:	Quite rare in its niche habitat districts Mongar, Punakha, Samtse, Thimphu, Trashigang, Trongsa, Tsirang, Wangduephodrang and Zhemgang. People collect rampantly from wild for their homely purposes.



61.4 Scientific name:	<i>Dactylorhiza hatagirea</i> (D. Don) Soo
Vernacular name:	Wangla (D), Pach-auley (L), Jaa amla (Ly)
Habitat:	Temperate to alpine zones, mostly in damp ground, open or shrub places and also in open leas.
Altitude range:	From 2,800 to 4,500 masl.
Plant part collected:	Rootstock.
Uses:	As ingredient in traditional medicine by MSP.
Time of collection:	September to October.
Distribution and availability status:	Extremely rare in its niche habitat districts Bumthang, Gasa and Thimphu.



61.5 Scientific name:	<i>Pholidota recurva</i> (Lindl.)
Vernacular name:	Pu-shel-rtse (M)
Habitat:	Moist oak forest, wet evergreen forest, mossy tree trunk, cold and shady places.
Altitude range:	From 700 to 2,000 masl
Plant part collected:	Stem.
Uses:	As ingredient in traditional medicine by MSP.
Time of collection:	November to December. MSP collects it from Trongsa sites.
Distribution and availability status:	Moderate in Trashigang, Trongsa and Zhemgang districts.

62 Family: Orobanchaceae



62.1 Scientific name:	<i>Pedicularis longiflora</i> Rudolph var. <i>tubiformis</i> (Klotzsch) P.C. Tsoong
Vernacular name:	Lukro serpo (M)
Habitat:	Marshy leas, damp grassy slopes, alongside of the river.
Altitude range:	From 3,000 to 5,500 masl.
Plant part collected:	Entire parts.
Uses:	As ingredient in traditional medicine by MSP.
Time of collection:	June to July
Distribution and availability status:	Plenty in Bumthang, Haa, Gasa, Paro Lhuentse, Trashigang, Tashiyangtse and Thimphu districts.



62.2 Scientific name:	<i>Pedicularis megalantha</i> (D.Don)
Vernacular name:	Lukro marpo (M)
Habitat:	Sub-alpine spruce forest, grassy alpine hillsides, clearings of the Abies forest, bamboo forest and scrub, forest margins, shrubland, wet grassy slopes, moist place along banks of stream, marshy sites.
Altitude range:	From 2,300 to 4,400 masl.
Plant part collected:	Flowers and leaves.
Uses:	For medicinal purposes.
Time of collection:	June to September. Thimphu farmers group collects and manages it.
Distribution and availability status:	Moderately available in Bumthang, Haa, bLhuentse, Paro Punakha, Trashigang, Tashiyangtse, Thimphu and Trongsa districts.



62.3 Scientific name:	<i>Pedicularis siphonantha</i> (D. Don)
Vernacular name:	Lukro marpo (M)
Habitat:	Abies forest and rhododendron scrub, leas and moist alpine places, rocky slopes, moraine heaps.
Altitude range:	From 3,000 to 4,500 masl.
Plant part collected:	Entire plant
Uses:	As ingredient in traditional medicine by MSP.
Time of collection:	July to August.
Distribution and availability status:	Plenty in Bumthang, Gasa, Haa, Mongar, Punakha, Thimphu and Trongsa districts.

63 Family: Papaveraceae



63.1 Scientific name:	<i>Corydalis crisper</i> (Prain)
Vernacular name:	Bashaka (D), Khamlug bashaka (M)
Habitat:	Moist alpine scree places and gravel slopes.
Altitude range:	From 3,300 to 4,600 masl.
Plant part collected:	Entire plant
Uses:	As ingredient in traditional medicine by MSP.
Time of collection:	July to August.
Distribution and availability status:	Rare in Bumthang and Thimphu districts.



63.2 Scientific name:	<i>Hypocoum leptocarpum</i> (Hook. f. & Thoms.)
Vernacular name:	Par-pa-ta (D)
Habitat:	Alpine grasslands, wet places, open stony hillsides, along river banks, wasteland, and cultivated field periphery.
Altitude range:	From ca. 2,700 to 4,800 masl.
Plant part collected:	Entire plant
Uses:	As ingredient in traditional medicine by MSP.
Time of collection:	June to August
Distribution and availability status:	Plenty in Bumthang, Haa and Thimphu districts.



63.3 Scientific name:	<i>Meconopsis discigera</i> (Prain)
Vernacular name:	Gotshen meto (D)
Habitat:	Alpine leas, cliffs, moraines, scree, rocky slope crevices, rocky ravines.
Altitude range:	From 3,600 to 4,900 masl.
Plant parts collected:	Entire plant.
Uses:	For medicinal purposes.
Time of collection:	From July to October. Farmers group of Thimphu collects and manages it.
Distribution and availability status:	Rarely found in Paro and Thimphu districts.



63.4 Scientific name:	<i>Meconopsis horridula</i> (Hook. f. & Thomson)
Vernacular name:	Tsher Gnoin (M)
Habitat:	Moraine heaps, alpine cliffs and screes, dry rocky slope areas.
Altitude range:	From 3,000 to 5,800 masl.
Plant part collected:	Aerial parts.
Uses:	As ingredient in traditional medicine by MSP.
Time of collection:	June to August.
Distribution and availability status:	The resource availability is becoming extremely rare although it is found in Bumthang, Gasa, Haa and Thimphu districts.



63.5 Scientific name:	<i>Meconopsis paniculata</i> (D.Don) Prain
Vernacular name:	Utpel Serpo (D), Upel Serpo / Utpal / Upal (M)
Habitat:	Grasslands or grassy and rocky alpine hillsides, Fir forest, forest margins, admist Juniper and Rhododendron scrub.
Altitude range:	From 3,300 to 5,700 masl.
Plant part collected:	Flowers.
Uses:	For medicinal purposes or as ingredient in traditional medicine by MSP.
Time of collection:	July to August.
Distribution and availability status:	Moderately available in Bumthang, Haa, Paro, Thimphu, Trashigang and Trongsa districts.



63.6 Scientific name:	<i>Meconopsis simplicifolia</i> (D. Don) Walpers.
Vernacular name:	Upel Gnoinpo (M)
Habitat:	Amidst to scrub of Juniper and Rhododendron, grassland slopes, rocky crevices, screes and on rocky alpine hillsides.
Altitude range:	From 3,300 to 4,600 masl.
Plant part collected:	Aerial parts.
Uses:	As ingredient in traditional medicine by MSP.
Time of collection:	July to August.
Distribution and availability status:	Extremely rare although its niche areas are in Bumthang, Paro and Thimphu districts.

64 Family: Parnassiaceae



64.1 Scientific name:	<i>Parnassia nubicola</i> (Wall.)
Vernacular name:	Ngueltig (D)
Habitat:	Alpine leas, open sandy soil among grasses and low shrubs, open slopes, wet areas.
Altitude range:	From 2,900 to 4,400 masl.
Plant part collected:	Entire plant.
Uses:	For medicinal purposes.
Time of collection:	October. Thimphu farmer group collects and manages it.
Distribution and availability status:	Moderately found in Bumthang, Chhukha and Thimphu districts.

65 Family: Phyllanthaceae



65.1 Scientific name:	<i>Antidesma acidum</i> (Retz)
Vernacular name:	Archal (L)
Habitat:	Deciduous and evergreen forests, dry deciduous forest, forest margins, open gaps, among sal and bamboo stands, degraded or oftenly in burnt shrublands.
Altitude range:	From 150 to 1,500 masl.
Plant part collected:	Bud, fruit, bark and leaves.
Uses:	Bud eat like salad, ripened fruit edible, bark and leaves used as medicine for stomach pain.
Time of collection:	Bud in March-April, fruit from October till December, bark and leaves whenever required.
Distribution and availability status:	Moderate in the districts Chhukha, Mongar, Samdrupjongkhar, Samtse, Sarpang, Trongsa and Zhemgang.



65.2 Scientific name:	<i>Baccaurea ramiflora</i> (Lour.)
Vernacular name:	Kusum (L), Gotham paisay (S)
Habitat:	Subtropical forests, somewhat degraded places or slopes, along the banks of stream and river.
Altitude range:	From 200 to 950 masl.
Plant part collected:	Ripened fruits, barks.
Uses:	Eat as any other fruits. People used to sell fruit in the available market. Bark can use as mordant while dyeing cloths.
Time of collection:	May to August.
Distribution and availability status:	Rare in the wild of Chhukha, Dagana, Samdrupjongkhar, Samtse, Sarpang and Tsirang districts. Some farmers / people use to grow this tree fruit within their homestead.



65.3 Scientific name:	<i>Bischofia javanica</i> (Blume)
Vernacular name:	Goileshing (D), Kaijal (L), Chumshing (S)
Habitat:	Warm and moist broadleaved forests of subtropical and tropical zones, old secondary dry and deciduous forest, evergreen, teak forest, alongsides of the rivers, shady ravines, swamp places, also an open grassland areas.
Altitude range:	From 150 to 1,800 masl.
Plant part collected:	Bark and bud along with young leaves.
Uses:	Bark to cure stomach pain, diarrhoea and dysentery. Bark also used to extract red dye. Bud along with young leaves processed into home-made pickle. Or young leaves eat as vegetable.
Time of collection:	Bark any season of the year. Bud and young leaves: from January till April.
Distribution and availability status:	Limited in Mongar, Punakha, Samtse, Trashigang, Trongsa and Wangduephodrang districts.



65.4 Scientific name:	<i>Phyllanthus emblica</i> (L.)
Vernacular name:	Omla (D), Churoo (M), Amla (L), Chhorgen / Chhorgensay (S)
Habitat:	Dry mixed forests, warm broadleaved and Chir Pine forests, dry open scrub or scant forests, Eastern or western aspects in scrub along river banks, dry or moist soil sites.
Altitude range:	From 200 to 1,800 masl.
Plant part collected:	Fruit, flower, root and bark.
Uses:	Fruits are blanch and processed into preserved pickle, fruits also eaten raw as it has sour and astringent taste. Dried fruits are taken to cure diarrhoea & dysentery. People / farmers said that flower, root, bark can cure asthma & stomach disorders. MSP also used fruit as one of the ingredients while formulating traditional medicine.
Time of collection:	Fruit – November to February, Flower – March to April, Root & bark – As and when necessary.
Distribution and availability status:	Plenty available in Dagana, Lhuentse, Mongar, Pemagatshel, Punakha, Samdrupjongkhar, Samtse (Limited), Sarpang, Trashigang, Trashiyangtse, Trongsa, Tsirang, Wangduephodrang and Zhemgang districts. People of the limited resource places cultivated this fruit tree in the farmland.

66 Family: Phytolaccaceae



66.1 Scientific name:	<i>Phytolacca acinosa</i> (Roxb.)
Vernacular name:	Kashakani / Kashikana (D), Jaringo / Jaraylo / Zaraylo (L)
Habitat:	Moist sites of forest clearings, forest edges, forest understories, valleys, hillsides and roadsides or edge of roadsides, nearby by cattle herders' settlements, around cultivation.
Altitude range:	From 900 to 3,400 masl.
Plant part collected:	Tender leaf along with young shoot, root, and entire plant.
Uses:	Tender leaves along with young shoot eat as green leafy vegetable. Root (a bit of root is eaten) to relief stomach-ache & food poison. People said it is also helpful in eye problem. Entire plant used as feed to pig.
Time of collection:	Tender leaf along with young shoot is from March to May. Root during dry season. Entire plant collection is possible only in summer season in winter plant is usually withered-out.
Distribution and availability status:	Commonly available in the following districts Bumthang, Chhukha, Dagana, Haa, Lhuentse, Pemagatshel, Punakha, Samtse, Thimphu, Trashigang, Trongsa, Tsirang and Wangduephodrang

67 Family: Pinaceae



67.1 Scientific name:	<i>Abies densa</i> (Griff.)
Vernacular name:	Dungshi (D), Gobray salla (L)
Habitat:	Coniferous forests / mixed deciduous forests, rocky soil sites, incline areas.
Altitude range:	From 2,400 to 4,000 masl.
Plant part collected:	Leaves, twigs or branches.
Uses:	Religiously burnt as incense during ritual or any ceremonies.
Time of collection:	Whenever required.
Distribution and availability status:	It is distributed moderately and throughout west to east and northern region of the country. However, people from Paro and Wangduephodrang use this species religiously.



67.2 Scientific name:	<i>Pinus roxburghii</i> (Sarg.)
Vernacular name:	Thetongphu (D), Khotosal-la (L), Roinangshing / Reynangshing / Roju (S)
Habitat:	Dry slope / valley, among lemongrass bushy shrubs, mostly forms pure stands in arid places.
Altitude range:	From 700 to 2,000 masl or sometimes upto 2,300 masl.
Plant part collected:	Resin & heart-wood (Mepchi).
Uses:	People tapped resin and sell to company which then processed into rosin and turpentine. Farmers used heart-wood as fire starter as it is easily burnt.
Time of collection:	Tapping of resin – March to December, heart-wood – whenever necessary.
Distribution and availability status:	Available quite plenty in Dagana, Lhuentse, Mongar, Pemagatshel, Punakha, Samdrupjongkhar, Sarpang, Trashigang, Trashiyangtse, Trongsa, Tsirang and Wangduephodrang districts.

68 Family: Piperaceae



68.1 Scientific name:	<i>Piper betleoides</i> (C.DC.)
Vernacular name:	Pani / Paney (D), Jungali paan (L), Pan (S), Dhem pan (K)
Habitat:	Evergreen forests of the foothill areas, edge of the forest, river, stream or gorges.
Altitude range:	From 150 to 1,200 masl.
Plant part collected:	Leaves and roots.
Uses:	Chew with lime and betel-nut. Leaves are also used religiously. People collect and consume at homes if more sell in the available markets. People generate good sum of money by selling its leaves. Roots are used medicinally.
Time of collection:	Throughout the year the leaves are collected. Roots: Whenever required.
Distribution and availability status:	Moderately found in Chhukha, Mongar, Pemagatshel, Samtse, Sarpang, Wangduephodrang and Zhemgang districts but observing the declining trend.



68.2 Scientific name:	<i>Piper hamiltonii</i> (C. DC.)
Vernacular name:	Pani / Paney (D), Jungali paan (L), Pan (S)
Habitat:	Moist forests in subtropical region.
Altitude range:	From 150 to 1,550 masl.
Plant part collected:	Leaves and roots.
Uses:	Chew with lime and betel-nut, which is one of the Bhutanese traditions. Leaves are also used religiously. Can be seen selling in the available markets or by the roadside vegetable stall. By selling leaves, people earns good sum of money. Roots are used to cure pneumonia.
Time of collection:	Throughout the year the leaves are collected. Roots: Whenever necessary.
Distribution and availability status:	Moderately available in Chhukha, Dagana, Gasa, Haa, Lhuentse, Mongar, Pemagatshel, Samdrupjongkhar, Samtse, Tsirang, Wangduephodrang and Zhemgang districts. Some people or farmers cultivate it within their homestead and in registered private forest.



68.3 Scientific name:	<i>Piper longum</i> (L.)
Vernacular name:	<i>Peepla / Pipla or Chaitey Pipla (L), Sakapani (S)</i>
Habitat:	Subtropical forests, Open shrub-land.
Altitude range:	From 140 to 800 masl.
Plant part collected:	Fruit / spike and root.
Uses:	Fruit / spike use to cure cold and coughs and insomnia. Root decoction taken to cure headache. But most of the people / farmers sell in the available markets or to the middlemen. It is one of the income sources of the farmers.
Time of collection:	Mid-March to Mid-April.
Distribution and availability status:	Moderately available in Chhukha, Dagana, Mongar, Pemagatshel, Samdrupjongkhar, Samtse, Sarpang, Tsirang and Zhemgang districts. Some people / farmers cultivate it within their homestead or in registered private forest areas.



68.4 Scientific name:	<i>Piper mullesua</i> (Buch.- Ham. ex D.Don)
Vernacular name:	Pipiling (M), Dallay Chabo (L)
Habitat:	Subtropical forest slopes, warm broadleaved forests, evergreen Castanopsis and Quercus forests, wet valleys and shrubberies, damp mosses stony places, moist mosses tree trunks, riverines.
Altitude range:	From 200 to 2,500 masl.
Plant part collected:	Fruit / spike.
Uses:	As one of the ingredients in traditional medicine by MSP.
Time of collection:	From September onwards. MSP collects it from Zhemgang.
Distribution and availability status:	Available plenty in Chhukha, Mongar, Pemagatshel, Samdrupjonkhar, Samtse, Sarpang, Trashigang, Trongsa and Zhemgang districts.



68.5 Scientific name:	<i>Piper pedicellatum</i> (C.DC.)
Vernacular name:	Sakapani / Pipla (S), Bonzalo / Pansey (Pl), Pipla (T)
Habitat:	Sub-tropical broadleaved forests, thicket under shady places, damp or wet sites.
Altitude range:	From 200 to 2,200 masl.
Plant part collected:	Fruits.
Uses:	Medicinal as well as spices purposes. However, people mostly collect and sell in the available markets. MSP uses as one of the ingredients while formulating traditional medicine.
Time of collection:	October till January.
Distribution and availability status:	Available plenty in Chhukha, Mongar, Pemagatshel, Punakha, Samdrupjongkhar, Samtse, Sarpang, Trashigang, Trongsa and Zhemgang districts.



68.6 Scientific name:	<i>Piper peepuloides</i> (Roxb.)
Vernacular name:	Dolley Peepla / Pipla, Bhuin Peepla / Pipla, Ruk Peepla / Pipla (L)
Habitat:	Tropical to subtropical evergreen forests, along river and stream banks, partially open forests sites, stony or gravelly sites.
Altitude range:	From 200 to 1,000 masl.
Plant part collected:	Fruit / spike and root.
Uses:	Fruit / spike use to cure cold and coughs and insomnia. Root decoction taken to cure headache. But most of the people / farmers sell in the available markets or to the middlemen.
Time of collection:	Mid-August to End-October.
Distribution and availability status:	Available plenty in Chhukha, Dagana, Mongar, Samtse and Sarpang districts.

69 Family: Plantaginaceae



69.1 Scientific name:	<i>Neopicrorhiza scrophulariiflora</i> (Pennell) D.Y.Hong
Vernacular name:	Hong-len (D / M), Kutki or kutaki (L)
Habitat:	Moist alpine meadows, scrubland, rocky slopes or amidst of rocks and boulders on open grassy hillsides.
Altitude range:	From 3,500 to 4,880 masl
Plant part collected:	Root / rhizome
Uses:	As ingredient in traditional medicine by MSP. Root soaked water use to drink by the people at times of cold, cough and fever.
Time of collection:	October to December.
Distribution and availability status:	Moderately available in Bumthang, Dagana, Gasa, Haa, LhuentseParo, Thimphu, Trongsa and Wangduephodrang districts.



69.2 Scientific name:	<i>Plantago depressa</i> (Willd.)
Vernacular name:	Tasoma / Tharam (D)
Habitat:	Moist mountain places and slopes, leas, grazing ground, waste places near settlement, stream or river banks and roadsides.
Altitude range:	From 2,300 to 4,500 masl.
Plant part collected:	Entire plant
Uses:	Farmers group collects and manges for medicinal purposes.
Time of collection:	From June to October.
Distribution and availability status:	Pleny in Gasa, Paro and Thimphu districts.

70 Family: Poaceae



70.1 Scientific name:	<i>Ampelocalamus patellaris</i> (Gamble) Stapleton
Vernacular name:	Neba / Nibha / Nebara, Gopi bans (L)
Habitat:	Moist deciduous and temperate forests, sandyloam areas and hill-slope sites.
Altitude range:	From 800 to 2,000 masl.
Plant part collected:	Young shoot, foliage and culm.
Uses:	Young shoot use as vegetable, foliage good fodder for cattle. Culm is very flexible and has long internodes so it is very much suitable for any type of construction purposes and even for weaving craft items. Sometimes the seed are used to produce flour for consumption.
Time of collection:	Young shoot: June - August, Foliage: Whenever necessary. For weaving culm is harvested in autumn and for construction in the dry months.
Distribution and availability status:	Moderately found in Samtse, Sarpang and Tsirang districts



70.2 Scientific name:	<i>Bambusa alamii</i> (Stapleton)
Vernacular name:	Mugi bans (L), Dingso (Sre), Jacsui (K)
Habitat:	Foothill forests, along the roadsides and water channel, often within the habitation areas.
Altitude range:	From 200 to 1,000 masl.
Plant part collected:	Culm, young shoot and foliage.
Uses:	High-quality woven handcraft products such as food and drinks containers, hats, arrows and quivers, durable mats for building constructions, fencing materials, shoots as vegetable. During winter and dry season its foliage is use as livestock fodder.
Time of collection:	For weaving purposes, culm harvest in winter (November to March). Young shoot – from June until September, foliage as and when necessary.
Distribution and availability status:	Moderately available in Dagana, Pemagatshel, Samdrupjongkhar, Samtse, Tsirang and Zhemgang districts.



70.3 Scientific name:	<i>Bambusa balcoa</i> (Roxb.)
Vernacular name:	Jhushing (D), Dhanu / Ban bans (L)
Habitat:	Grows anywhere in plain valley as well as hillsides.
Altitude range:	upto 1,600 masl.
Plant part collected:	Culm and foliage.
Uses:	Culm for house construction or raw materials for any constructions and foliage used as fodder.
Time of collection:	October to April
Distribution and availability status:	Limitedly available in Chhukha, Sarpang and Tsirang districts. People cultivate for their own home-use.



70.4 Scientific name:	<i>Bambusa bambos</i> (L.) Voss
Vernacular name:	Katha / Valka / Kanta bans (L)
Habitat:	Mixed deciduous moist forest, fewer in mixed deciduous dry forest, semi-evergreen forests, along-sides of the river valley, foothills sites.
Altitude Range:	Upto 1000 masl.
Plant part collected:	Young shoot, foliage, culm.
Uses:	Young shoot as vegetable, foliage for cattle fodder, culm used for everything as constructional materials, making furniture. Often farmers plant this bamboo as live fencing as it is friendly fencing for cattle, good for gusty wind break. As per regional literatures, this bamboo species is used medicinally too.
Time of collection:	Young shoot from May until the end of September, foliage – whenever required and culm usually from autumn until the end of winter month.
Distribution and availability status:	Sporadically found in Dagana, Samdrupjongkhar, Samtse, Sarpang and Tsirang districts.



70.5 Scientific name:	<i>Bambusa clavata</i> (Stapleton)
Vernacular name:	Pagshing (D), Chiley / Chile bans (L), Pagshi (K)
Habitat:	Grows anywhere in plain valley as well as hillsides.
Altitude range:	From 300 to 1,600 masl.
Plant part collected:	Culm and foliage.
Uses:	Culm for light construction like cattle shed. Its thin split can be used to weave some craft items. The foliage used as fodder.
Time of collection:	October to April
Distribution and availability status:	Very limited Chhukha, Dagana, Punakha, Samdrupjongkhar, Samtse, Sarpang, Trongsa, Tsirang and Zhemgang districts. People cultivate for their own home-use. Perhaps it is native to Bhutan.



70.6 Scientific name:	<i>Bamusa nepalensis</i> (Stapleton)
Vernacular name:	Khasrey / Khosre bans (L)
Habitat:	Foothill forests, warm broadleaved forests, plain areas.
Altitude range:	From 200 to 1,000 masl
Plant part collected:	Young shoot, culm, leaves.
Uses:	Young shoot as vegetable and to make preserve pickle, culm for making fine split (“choya”) which uses for tying or fastening purposes; weaving any agricultural handicraft items; even matured culm used in construction. Leaves are use as cattle fodder.
Time of collection:	Young shoot: From April until September. Fine split: Whenever new culm attains 9 months old or below 1 year old. Leaves: Whenever necessary.
Distribution and availability status:	Quite rare found in Sarpang and Tsirang districts. Mostly it is cultivated by few individuals within their homestead areas. Probably this is the new bamboo species record for Bhutan.



70.7 Scientific name:	<i>Bambusa nutans</i> (Wall. ex Munro subsp.) <i>cupulata</i> (Stapleton)
Vernacular name:	Mal / Mali / Mola / Moli / Magla / Makla / Mala / Maley bans (L), Tsai (K)
Habitat:	Grows anywhere in plain valley as well as hillsides under moderate shade.
Altitude range:	From 300 to 1,500 masl. But it can be cultivated upto 1,700 masl.
Plant part collected:	Culm, young shoot, foliage.
Uses:	Culm used for construction and scaffolding. Young shoot consume as vegetable and foliage as fodder for cattle.
Time for collection:	Foliage any time of the year. Young shoot from May till September. Culm: From November to March.
Distribution and availability status:	Plenty in Chhukha, Dagana, Pemagatshel, Punakha, Samdrupjongkhar, Samtse, Sarpang, Trongsa, Tsirang and Zhemgang districts. People cultivates for their own home-use.



70.8 Scientific name:	<i>Bambusa pallida</i> (Munro)
Vernacular name:	Bijuli bans (L)
Habitat:	Warm broadleaved forests, open forest areas.
Altitude range:	From 150 to 700 masl.
Plant part collected:	Culm and foliage.
Uses:	Culm use in any general purposes and foliage as fodder to animals.
Time of collection:	Culm usually in dry seasons, foliage anytime of the year.
Distribution and availability status:	Limited in Samtse and Sarpang districts. Mostly people cultivated within the farmland. It is recently updated to Bhutan bamboo list.



70.9 Scientific name:	<i>Bambusa tulda</i> (Roxb.)
Vernacular name:	Jhushing / Zhushing (D), Bangay bans / Shingaray mal bans / Shigaray / Singari / Shingari / Shigari bans (L), Jushi (K)
Habitat:	Deciduous or semi-deciduous broadleaved forests, foothill sides.
Altitude range:	From 150 to 1,200 masl.
Plant part collected:	Young shoot, culm and foliage.
Uses:	Young shoot harvest and used as vegetable, some people makes pickle too. Culm is very suitable for construction. Foliage served as cattle fodder.
Time of collection:	Young shoot from May until August. Culm: In dry seasons, foliage whenever required.
Distribution and availability status:	Plenty in Tsirang and limited to moderate in Dagana, Samtse, Wangduephodrang and Zhemgang districts. Farmer cultivates in their farmland.



70.10 Scientific name:	<i>Borinda grossa</i> (T.P.Yi) Stapleton
Vernacular name:	Baa (D / Ku), Rhui (B & K), Shee / Shi (S), Rim baa (Wl)
Habitat:	Moist mixed coniferous forest confined within temperate areas.
Altitude range:	From 2,600 to 3,200 masl.
Plant part collected:	Culm.
Uses:	Raw materials for making hut, weaving mat & handicraft items and as fencing materials.
Time of collection:	December to February.
Distribution and availability status:	Available plenty in Bumthang, Lhuentse, Mongar, Paro, Samdrupjongkhar, Thimphu, Trashigang, Trashiyangtse, Trongsa, Wangdue and Zhemgang districts.



70.11 Scientific name:	<i>Cephalostachyum capitatum</i> (Munro)
Vernacular name:	Jhi (D), Phusrey bans / Phurse nigalo / Dulloo bans (L), Kalang (Sre), Pishima (K)
Habitat:	Outskirt of the degraded or secondary forests, forms thickets along sides of the creeks and over the hillsides.
Altitude range:	From 600 to ca.1,900 masl.
Plant part collected:	Foliage and culm.
Uses:	Sometimes foliage collected as fodder for cattle. Culms are mostly used to make beaten bamboo mat which then castoff in small construction like cowshed in the farmhouse. Sometimes they are also used for development of product like bamboo baskets.
Time of collection:	Foliage whenever required. Culm: Usually in dry months.
Distribution and availability status:	Moderately found in Samdrupjongkhar, Samtse, Sarpang, Trongsa and Zhemgang districts.



70.12 Scientific name:	<i>Cephalostachyum latifolium</i> (Munro)
Vernacular name:	Jhi (D), Gopay or Murali Bans (L), Pishima (K), Lokpa (Cm), Baa (H), Wey (S), Oephela (Tm)
Habitat:	High rainfall forests in association with alder and oaks, cooler subtropical forests.
Altitude range:	From 1,200 to 2,000 masl.
Plant part collected:	Culm and foliage.
Uses:	Culm to weave household handicraft items, fencing home-garden. Foliage used as very palatable fodder to cattle.
Time of collection:	Whenever, it is necessary by the farmers.
Distribution and availability status:	Moderately available in Chhukha, Dagana, Haa, Samdrupjongkhar, Sarpang, Trongsa, Tsirang and Zhemgang districts.



70.13 Scientific name:	<i>Chimonobambusa callosa</i> (Munro) Nakai
Vernacular name:	Yue / U (D), Karay malingo (L), Rawa/ Roaw baa, Rabay / Glem (K), Rashu / Rasu / Rashi (S)
Habitat:	Cloud and cool broadleaved forest areas, damp and shady with good amount of humus on sites.
Altitude range:	From ca. 1,200 to 2,600 masl.
Plant part collected:	Young shoots, culm.
Uses:	Young shoots are used as vegetable. It is seen selling in the roadside mostly between Suntolakha and Jumja vegetable stall. For collectors, it fetches good amount of money. Seldom people use its matured culm for fencing and making beaten bamboo-mats.
Time of collection:	June to September.
Distribution and availability status:	It is plenty in Chhukha, Dagana, Lhuentse, Mongar, Samdrupjongkhar, Samtse, Sarpang, Trashigang, Trongsa, Tsirang, Wangdue and Zhemgang districts.



70.14 Scientific name:	<i>Dendrocalamus hamiltonii</i> (Munro var. <i>hamiltonii</i>)
Vernacular name:	<i>Pakshi / Pagshi (D) Choya / Tama / Jungali / Ban bans (L), Tsu (K), Songopa / Soo / Lishing / Leeshing (S), Paa (Tm)</i>
Habitat:	Foothills, deciduous forest. Often people cultivates within the farmland.
Altitude range:	From 300 to 1,500 masl.
Plant part collected:	Foliage, young shoot, culm.
Uses:	Foliage used as fodder, young shoots – vegetable as well as preserve and make pickle. Young shoot itself and its product like pickle sell in available market. Even it can be seen selling by the roadside vegetable stall. Culm used for various purposes viz. in construction, fencing, thin fine split bamboo used to make rope and other household handicraft items. Farmers said seed are used to produce flour for consumption.
Time of collection:	Foliage as and when requires. Young shoot, from May to September. Culm: from November to April.
Distribution and availability status:	Found plenty Chhukha, Dagana, Mongar, Pemagatshel, Punakha, Samdrupjongkhar, Samtse, Sarpang, Trashigang, Trongsa, Tsirang, Wangduephodrang and Zhemgang districts.



70.15 Scientific name:	<i>Dendrocalamus hookeri</i> (Munro)
Vernacular name:	Pakshi / Pakshing (D / S), Bom bans, Bhalu / Kalo bans (L), Zang-ngoma (K)
Habitat:	Wetter sites of the foothill regions. Often it is cultivated within/ at the edge of the farmland.
Altitude range:	From ca. 350 to 2,000 masl.
Plant part collected:	Foliage, young shoot, culm.
Uses:	It is multipurpose bamboo species. Foliage used as fodder. It is good source of fodder in winter. Young shoot used as vegetable and preserve as well and make into pickle. Young shoot itself and its product like pickle sell in available market. Matured culm used in construction, fencing, thin fine split bamboo from young culm used to make rope and household handicraft items.
Time of collection:	Foliage as and when requires. Young shoot, from May to September. Culm: from November to April.
Distribution and availability status:	Limitedly available in Chhukha, Mongar, Pemagatshel, Samtse (Becoming rare), Sarpang, Trashigang and Tsirang districts.



70.16 Scientific name:	<i>Dendrocalamus sikkimensis</i> (Gamble ex Oliv.)
Vernacular name:	Daem / Demchar / Demcharbu / Demtshar / Dem chherring (S), Bhalu bans (L), Dawong (Tm), Zang (K)
Habitat:	Tropical or sub-tropical forests that includes moist and dry deciduous, evergreen and semi-evergreen forests, also along edges or gentle slope sites of the hilly forests.
Altitude range:	From 150 to 2,100 masl.
Plant part collected:	Foliage and culm.
Uses:	Foliage as cattle fodder, culm for general purposes like in construction of small structure (House, hut or shed), culm itself converted into water container, milk or salt tea churner, or container (Tongba) to soak and sip malt liquor.
Time of collection:	Foliage whenever required. Culm usually harvest in autumn and winter seasons.
Distribution and availability status:	Limitedly found in Chhukha, Lhuentse, Pemagatshel Samdrupjongkhar, Samtse, Sarpang, Trongsa and Zhemgang districts. It is also seen cultivated few clump at the edges of the farmland.



70.17 Scientific name:	<i>Drepanostachyum annulatum</i> (Stapleton)
Vernacular name:	Him (D), Negalo / Negala (L), Chaksu / Phan (K)
Habitat:	Gentle slopes of cloud forest, deciduous forest.
Altitude range:	From 1,000 to 2,000 masl.
Plant part collected:	Young shoot, foliage, culm.
Uses:	Young shoot eat as vegetable but it has bit bitter taste. Foliage: as livestock fodder. Culm: used as stacking / support to beans, fencing, and sometime make fine split and weave minor household handicraft items.
Time of collection:	Young shoot: April – May. Foliage: anytime of the year. Culm: usually in dry season.
Distribution and availability status:	Moderately available in Chhukha, Dagana, Mongar, Tsirang and Zhemgang districts.



70.18 Scientific name:	<i>Drepanostachyum intermedium</i> (Munro) Keng f.
Vernacular name:	Negalo / Negala / Titey negalo (L), Phan (K)
Habitat:	Dry subtropical forests, evergreen forests of <i>Castanopsis</i> and <i>Quercus</i> .
Altitude range:	From 1,000 to 2,300 masl.
Plant part collected:	Culm and foliage.
Uses:	Culm used to make furniture, mats and other handicraft items and also as homestead fencing materials. Foliage serves good livestock fodder.
Time of collection:	Culm: usually in dry months. Foliage whenever requires.
Distribution and availability status:	Moderately available in Samtse, Sarpang and Zhemgang districts.



70.19 Scientific name:	<i>Drepanostachyum khasianum</i> (Munro) Keng f.
Vernacular name:	Daphey (D), Hikchu (W1), Negalo (L), Phan (K)
Habitat:	Forested areas of the sub-tropical forests, deciduous forests, roadsides.
Altitude range:	From 1000 to ca.2000 masl.
Plant part collected:	Foliage and culm.
Uses:	Foliage as fodder, culm to make fine split that can use as rope, fine split is used to make bamboo basket and other household handicraft items.
Time of collection:	Foliage whenever requires. Culm: usually in dry months.
Distribution and availability status:	Moderately available in Samdrupjongkhar, Wangduephodrang and Zhemgang districts.



70.20 Scientific name:	<i>Himalayacalamus falconeri</i> (Hook.f. ex Munro) Keng f.
Vernacular name:	Singhaney / Siganey bans (L)
Habitat:	Cool broadleaved forests especially stand comprising of oak and rhododendron.
Altitude range:	From 1,900 to ca.3,000 masl.
Plant part collected:	Young shoots, culms and leaves.
Uses:	Young shoots edible like vegetable, during its season can be seen in local market. Culms for making handicraft items, bamboo mat, even as fencing materials. Leaves used as fodder for cattle.
Time of collection:	Young shoots from June until end of September. Culms and leaves: whenever required except at times of shoots flashing.
Distribution and availability status:	Moderately available in Chhukha, Lhuentse, Samdrupjongkhar and Samtse districts.



70.21 Scientific name:	<i>Himalayacalamus hookerianus</i> (Munro) Stapleton
Vernacular name:	Pah-ryang (L)
Habitat:	Mixed broadleaved forests, wet places.
Altitude range:	From 900 to 2,500 masl.
Plant part collected:	Young shoot, culm and foliage.
Uses:	Young shoot cooked and eat as vegetable curry. It is most delicious shoot among all other bamboo shoots. Selling of young shoot is seen in the local vegetable market. Culm used to weave into household handicrafts, foliage feed to cattle as it serves one of the good fodders.
Time of collection:	Young shoot: Mid – August to mid – October. Culm and foliage: Whenever necessary.
Distribution and availability status:	Moderately available in Dagana, Samtse, Sarpang and Tsirang districts. Farmers / people used to cultivate this bamboo within their homestead land.



70.22 Scientific name:	<i>Melocanna baccifera</i> (Roxb.) Kurz
Vernacular name:	Philing bans (L)
Habitat:	Foothills forests and plains, hilly slopes, forest clearings.
Altitude range:	From 150 to 1,400 masl.
Plant part collected:	Young shoots, culms and leaves.
Uses:	Young shoot edible as vegetable. Sometimes people sell in the available vegetable markets. Culm use in general farmhouse purposes like house construction, making into mat and weaving handicraft items. Leaves feed to cattle as fodder.
Time of collection:	Young shoots from May to September. Culm and leaves: Whenever required.
Distribution and availability status:	Moderately available in Samtse, Sarpang and Tsirang districts. Most of the people cultivate within the farmland.



70.23 Scientific name:	<i>Neomicrocalamus andropogonifolius</i> (Griff) Stapleton
Vernacular name:	Yula / Yule (K), Ringshu (S), Aoo (Cb), Malingo (L)
Habitat:	Sub-tropical broadleaved forests, ca. +>60% slope, coarse sandy loam soil sites, degraded forests.
Altitude range:	From ca. 300 to 1,850 masl.
Plant part collected:	Culm and foliage.
Uses:	Foliage as fodder. Culm used as an excellent raw material for weaving household handicrafts (bangchung, hat, net and balap) and other souvenir items.
Time of collection:	December to May.
Distribution and availability status:	Moderately available in Chhukha, Dagana, Mongar, Pemagatshel, Samdrupjongkhar, Sarpang, Trashigang (Limited) and Zhemgang districts.



70.24 Scientific name:	<i>Pseudostachyum polymorphum</i> (Munro)
Vernacular name:	Philling or Filling (L), Daii / Dem (K), Phen (Ccb), Dem / Dempala (Sk)
Habitat:	Cool and moist broadleaved forests or subtropical forests valleys, mostly under shade of the trees / shady places, close-by water catchment areas.
Altitude range:	From ca.250 to 1,500 masl.
Plant part collected:	Culm, foliage, & young shoots.
Uses:	Culm used to make basket, especially malleted mats. Foliage: as fodder. Some people collect young shoot as vegetable.
Time of collection:	Culm in dry season, foliage as and when necessary. Young shoot from July onwards.
Distribution and availability status:	Moderately available in Chhukha, Mongar, Samtse, Sarpang, Trongsa, Samdrupjonkhar and Zhemgang districts.



70.25 Scientific name:	<i>Sarocalamus racemosus</i> (Munro) Stapleton
Vernacular name:	Baa (D), Sanu maling (L), Maxilla (K)
Habitat:	Mixed broadleaved and coniferous forests, as understorey, also in alpine leas.
Altitude range:	From ca.2,500 to 3,500 masl.
Plant part collected:	Culm.
Uses:	Making mats, thin fine culm split used as rope.
Time of collection:	Usually from October until March.
Distribution and availability status:	Moderately available in Bumthang, Mongar, Punakha, Thimphu, Trongsa and Zhemgang districts.



70.26 Scientific name:	<i>Thamnocalamus spathiflorus</i> (Trin.) Munro
Vernacular name:	Hum (D), Rato nigalo (L)
Habitat:	Mixed temperate forest, damp areas, and steep slope sites.
Altitude range:	From 2,800 to 3,600 masl.
Plant part collected:	Entire aerial parts.
Uses:	Matured small branches uses as hard-broom, matured culm used as support for beans and other kitchen garden vegetables. Green foliage used as fodder.
Time of collection:	As and when required.
Distribution and availability status:	Moderately available in Haa, Punakha, Thimphu, Trashigang, Wangduephodrang and Zhemgang districts.



70.27 Scientific name:	<i>Yushania hirsuta</i> (Munro) R B Majumdar
Vernacular name:	Hima (D)
Habitat:	Broadleaved and coniferous forests.
Altitude range:	From 1,800 to 2,600 masl.
Plant part collected:	Culm.
Uses:	Makes bamboo thrashed mat, basket and thin & fine split as tying rope.
Time of collection:	As and when necessary.
Distribution and availability status:	Moderately in Chhukha, Gasa, Thimphu and Trongsa district.



70.28 Scientific name:	<i>Yushania maling</i> (Gamble) R.B.Majumdar & Karthik.
Vernacular name:	Baa (D), Malingo (L)
Habitat:	Mixed temperate forest especially with stands of birch, oak, rhododendron and spruce.
Altitude range:	From 1,700 to 3,100 masl.
Plant part collected:	Culm, leaves.
Uses:	Big ones make into mats, small as broom, small and straight used to make traditional arrows. Leaves used as fodder.
Time of collection:	Usually collect in dry seasons. Leaves: Whenever requires.
Distribution and availability status:	Moderately available in Chhukha, Punakha, Samtse, Thimphu, Tsirang and Wangduephodrang districts.



70.29 Scientific name:	<i>Cymbopogon bhutanicus</i> (Noltie)
Vernacular name:	Solobhang / Sorbhang (S), Kagateyghass / Lasuney jhar / Pirayghass (L)
Habitat:	Chirpine forests, dry hills & valleys, sandy or gravelly or rocky slopes, sites having rich loam to poor laterite soil, much opened crown density sites.
Altitude range:	From ca.550 to 1,700 masl.
Plant part collected:	Entire aerial parts.
Uses:	Extract essential oil (lemongrass essential oil) and sell it to the available markets. Farmers get good income by selling lemongrass oil.
Time of collection:	June to December.
Distribution and availability status:	Plenty to moderate in Lhuentse, Mongar, Samdrupjongkhar, Trashigang and Trashiyangtse districts.



70.30 Scientific name:	<i>Imperata cylindrica</i> (L.) P.Beauv.
Vernacular name:	Becho (D), Seeru / Khar (L), Toe posem (T)
Habitat:	Degraded forests, forest clearings, grasslands, bushy-shrublands, open drylands, abandoned places, gravelly or sandy places, riverine, open hillsides, cultivated places, edges of the dry-plain lands, along road or pathways.
Altitude range:	From 150 to 1,800 masl.
Plant part collected:	Entire aerial parts and roots.
Uses:	Dried entire aerial parts used for roofing purposes. Root paste relieves tooth-pain; juice from its root is used for de-worming.
Time of collection:	Entire aerial parts from December until March. Root whenever required.
Distribution and availability status:	Moderately available in Chhukha, Dagana, Punakha, Samdrupjongkhar, Samtse, Sarpang, Trashigang, Tsirang and Wangduephodrang districts.



70.31 Scientific name:	<i>Thysanolaena latifolia</i> (Roxb. ex Hornem.) Honda
Vernacular name:	Tshakushey / tshakusha, chayeezom, tshasha (D), Amleso/ Kucho (L), Beyshawa (S), Shakushawa (SI), Berungla / berumla (K)
Habitat:	Degraded places, eroded sides of the road, dry and less fertile sites, steep hills, cliff edges, along river sandy banks & ravines.
Altitude range:	From 200 to 2,000 masl.
Plant part collected:	Inflorescence, root, leafy aerial parts.
Uses:	Inflorescence used as soft broom. Individual people or community group sells soft broom in the available market even out of the country like India. Root paste applies over boils to mature and curing; juice extract from root is used to deworming purposes. Leafy aerial parts used as cattle fodder.
Time of collection:	Inflorescence from December to March. Root and leafy aerial parts as and when required.
Distribution and availability status:	Plenty in Chhukha, Dagana, Mongar, Pemagatshel, Punakha, Samdrupjongkhar, Samtse, Sarpang, Trashigang, Trongsa, Tsirang, Wangduephodrang and Zhemgang districts. Even then people cultivates in their homestead land.

71 Family: Polygonaceae



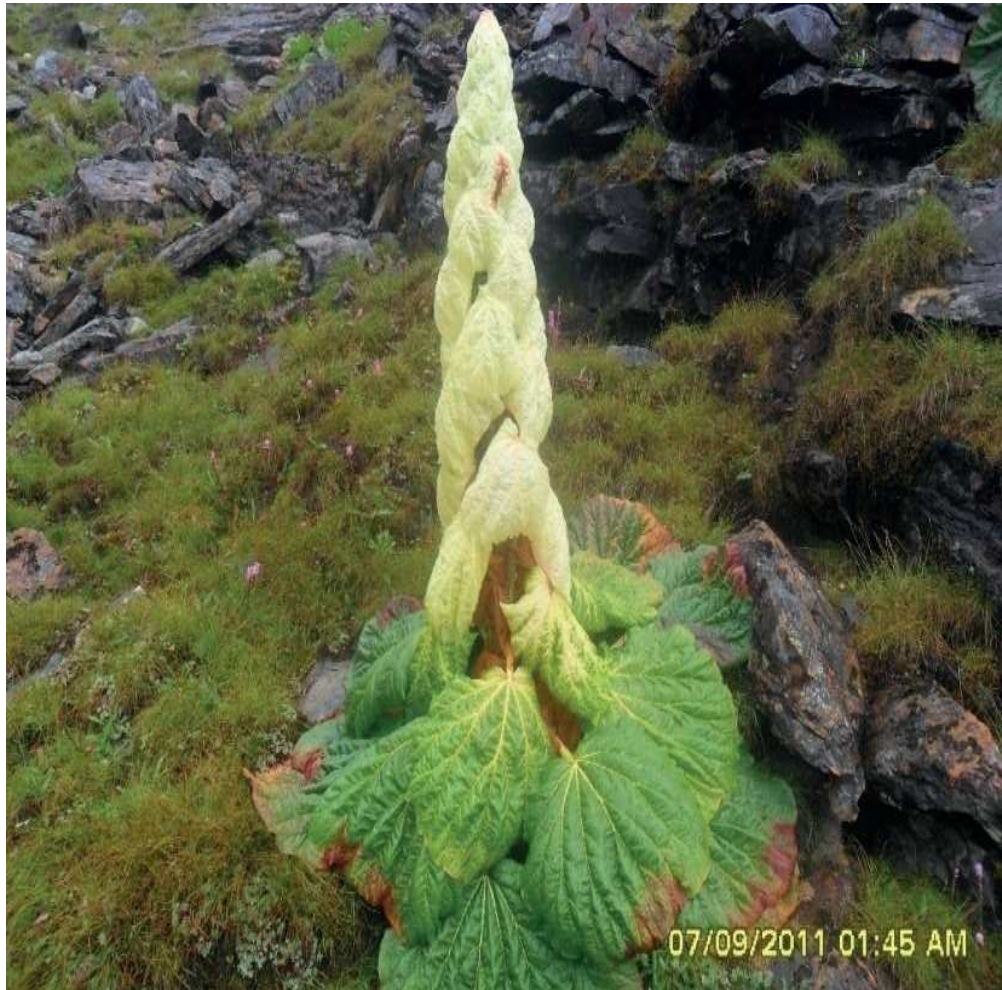
71.1 Scientific name:	<i>Bistorta macrophylla</i> (D. Don) Sojak
Vernacular name:	Pangja meto / Pang-ram (D)
Habitat:	Wet grassy slopes and meadows of subalpine and alpine zones
Altitude range:	From 3,000 to 5,000 masl
Plant part collected:	Root
Uses:	As ingredient in traditional medicine by MSP.
Time of collection:	September to October.
Distribution and availability status:	Get plenty from Bumthang, Haa, Gasa, Thimphu and Trashigang Dzongkhags.



71.2 Scientific name:	<i>Rheum acuminatum</i> (Hook.fil. & Thomson)
Vernacular name:	Chhu-tsa (M), Khokim / Padamchal (L)
Habitat:	Open forests of Fir / Rhododendron, edges of forests, open slope and leas.
Altitude range:	From 3,200 to 4,300 masl.
Plant part collected:	Rootstock.
Uses:	Medicinal purposes. MSP used as one of the ingredients in the formulation of the traditional medicine.
Time of collection:	June to September.
Distribution and availability status:	Moderately available in Bumthang, Haa, Mongar and Thimphu Dzongkhags.



71.3 Scientific name:	<i>Rheum australe</i> (D. Don)
Vernacular name:	Chu-rtsa (M), Chulthi amilo (L)
Habitat:	Alpine leas, open mountain rocky slopes, moist scrub, edges of forest.
Altitude range:	From 2,600 to 4,200 masl.
Plant part collected:	Rootstock.
Uses:	As ingredient in traditional medicine by MSP.
Time of collection:	September to October.
Distribution and availability status:	Available plenty in Bumthang, Dagana, Gasa, Paro and Thimphu Dzongkhags



71.4 Scientific name:	<i>Rheum nobile</i> (Hook.f. & Thomson)
Vernacular name:	Chhuka / Chhuka meto (D), Chhuka Dongpo (M), Padamchal (L)
Habitat:	Open alpine mountain grassy and rocky slopes, also moraine heaps.
Altitude range:	From 3,600 to 5,000 masl.
Plant part collected:	Entire plant.
Uses:	As ingredient in traditional medicine by MSP.
Time of collection:	June to July.
Distribution and availability status:	Found rarely in Bumthang, Gasa, Haa and Thimphu Dzongkhags.



71.5 Scientific name:	<i>Rumex nepalensis</i> (Spreng.)
Vernacular name:	Tsa shom / Khem-sum / Sho ma (G), Halhaley (L), Shambali (T), Sho ma (Wl)
Habitat:	Wet open and grazing ground, forest edges, cultivated places.
Growth range:	From 1,500 to 4,300 masl.
Plant part collected:	Root.
Uses:	Root paste is used as medicine to cure cuts and wounds. People believe root's decoction cures jaundice. Leaf-paste used to treat eczema.
Time of collection:	As and when required.
Distribution and availability status:	Gets plenty from Chhukha, Gasa, Haa, Mongar, Samtse, Thimphu, Trashigang Trongsa, Tsirang, and Wangduephodrang Dzongkhags.

72 Family: Primulaceae



72.1 Scientific name:	<i>Primula sikkimensis</i> (Hook.)
Vernacular name:	Shangshangdilbu / Shing drel serpo (M)
Habitat:	Alpine leas, open slopes, moist and marshy places, along sides of river & stream, shady ground, rocky sites.
Altitude range:	From 2,750 to 4,800 masl.
Plant part collected:	Entire plant.
Uses:	For medicinal purposes. Thimphu farmers group collects and manages it.
Time of collection:	July – August.
Distribution and availability status:	Available plenty in Bumthang, Gasa, Mongar, Thimphu, Trashigang and Trongsa Dzongkhags.

73 Family: Ranunculaceae



73.1 Scientific name:	<i>Aconitum ferox</i> Wall. (ex Ser.)
Vernacular name:	Tshendug / Bong (D), Bikh / Bikhma (L)
Habitat:	In the midst of shrubs, shady and wet places, moist spruce forest.
Altitude range:	From 2,100 to 3,800 masl.
Plant part collected:	Roots.
Uses:	People used it medicinally, according to them a very small bit piece is consume to relief from stomachache related to food poison.
Time of collection:	September to November.
Distribution and availability status:	Rarely available in Chhukha, Dagana, Trongsa and Wangduephodrang Dzongkhags



73.2 Scientific name:	<i>Aconitum laciniatum</i> (Bruhl) Stapf.
Vernacular name:	Bongkar (D), Dhug-tsi-loma (M), Maanchhen (S)
Habitat:	Midst of shrubs community in sub-alpine and alpine regions.
Altitude range:	From 3,300 and 4,600 masl.
Plant part collected:	Leaf, root.
Uses:	Menjong Sorig Pharmaceutical (MSP) used as one of the ingredients in traditional medicine. Sometimes people make poison for arrow using its root paste.
Time of collection:	May to June.
Distribution and availability status:	Available plenty Bumthang, Gasa, Haa, Paro, Thimphu, Trashigang, Trongsa and Wangduephodrang Dzongkhags.



73.3 Scientific name:	<i>Aconitum orochryseum</i> (Stapf.)
Vernacular name:	Bong nga karmo (D), Bong nga (S), Nirmasee (L)
Habitat:	Alpine regions, open leas, shrubland.
Altitude range:	From 3,500 to 4,900 masl.
Plant part collected:	Rootstock, entire plant along with its flowers.
Uses:	Medicinal purposes. However, people collect and sell to the available market. MSP also use as one of the ingredients while formulating traditional medicine.
Time of collection:	Rootstock: From September to November. Entire plant along with its flowers: From July to October.
Distribution and availability status:	The population of this plant is extremely rare although its niche places are Bumthang, Paro, Thimphu, Trongsa and Wangduephodrang Dzongkhags.



73.4 Scientific name:	<i>Actaea spicata</i> (L.)
Vernacular name:	Tumkue (Ll)
Habitat:	Temperate forests, limestone sites, damp stony areas, shady ravines places and along sides of the stream.
Altitude range:	From ca. 1,500 to 3,050 masl.
Plant part collected:	Root.
Uses:	As one of the raw-material ingredients while making incense.
Time of collection:	June to October. Lhuentse farmers group collect and manage it.
Distribution and availability status:	Moderately available in Lhuentse, Paro and Thimphu Dzongkhags.



73.5 Scientific name:	<i>Anemone rivularis</i> (Buch.-Ham.)
Vernacular name:	Supdra (D), Supka (M)
Habitat:	Temperate and alpine regions, meadows, edge and opened-up forest (Hemlock, blue pine & evergreen oak forests) and field, Lake Periphery and along the sides of the stream.
Altitude range:	From 1,900 to 4,900 masl.
Plant part collected:	Seed.
Uses:	MSP use as one of the ingredients in traditional medicine.
Time of collection:	August to September.
Distribution and availability status:	It is plenty in Chhukha, Gasa and Haa to Trashigang Dzongkhags.



73.6 Scientific name:	<i>Delphinium glaciale</i> (Hook. f. & Thomson)
Vernacular name:	Jagoid Poy / Jagoe Poi (M)
Habitat:	Alpine screes and stoniness gravel slopes.
Altitude range:	From 4,730 to ca. 5,300 masl. It has very limited range of occurrence.
Plant part collected:	Entire plant
Uses:	As ingredient in traditional medicine by MSP.
Time of collection:	August to September
Distribution and availability status:	Population is extremely rare in Bumthang, Gasa and Thimphu Dzongkhags.



73.7 Scientific name:	<i>Delphinium muscosum</i> (Exell & Hillc.)
Vernacular name:	Jakang (M)
Habitat:	Gravel and sandy slope, grassy open and leas in alpine region.
Altitude range:	From 3,000 to 5,800 masl.
Plant part collected:	Entire plant.
Uses:	As ingredient in traditional medicine by MSP.
Time of collection:	September to November.
Distribution and availability status:	It is becoming extremely rare in its habitation Dzongkhags Bumthang and Haa.



73.8 Scientific name:	<i>Thalictrum chelidonii</i> (DC.)
Vernacular name:	Ngo Tin (D / M)
Habitat:	Coniferous forests, Juniper / Rhododendron scrub, open slopes, rocky places.
Altitude range:	From ca.2,100 - 4,500 masl.
Plant part collect:	Leaf.
Uses:	As ingredient in traditional medicine by MSP.
Time of collection:	July to August.
Distribution and availability status:	Plenty in Bumthang, Gasa, Haa – Mongar and Lhuentse Dzongkhags.



73.9 Scientific name:	<i>Thalicttrum foliolosum</i> (DC.)
Vernacular name:	Ngontin Chagkyu (M), Dampate (L)
Habitat:	Clearings of the broadleaved and coniferous forests, open slopes, shrubland, besides stream, even in cultivated sites.
Altitude range:	From 1,000 to 3,500 masl.
Plant part collect:	Root and leaf.
Uses:	People from Haa uses for the general medicinal purposes.
Time of collection:	Collects as and when required.
Distribution and availability status:	Available plenty in Haa, Mongar, Punakha, Samdrupjongkhar, Trashigang and Trongsa Dzongkhags.

74 Family: Rhamnaceae



74.1 Scientific name:	<i>Ziziphus mauritiana</i> (Lam.)
Vernacular name:	Tshoshing (D), Ba-er (L), Khangkhari Shing (S)
Habitat:	Arid tropics areas, sandy loamy places, places of gravelly and alluvial soil deposit, dry hot river beds / banks, hot riverine sites and along the roadsides.
Altitude range:	From 200 to 1,000 masl.
Plant part collected:	Ripened fruits, roots.
Uses:	Ripened fruits are freshly eaten, also preserved, pickled and eat. People believe roots have medicinal value to cure pneumonia.
Time of collection:	October to January.
Distribution and availability status:	Plenty in Chhukha, Dagana, Lhuentse, Mongar, Samtse, Sarpang, Samdrupjonkar, Trashigang and Trashiyangtse Dzongkhags.

75 Family: Rosaceae



75.1 Scientific name:	<i>Docynia indica</i> (Wall.) Decne.
Vernacular name:	Tong (D / Ku), Mehel (L), Chaitong (K), Thungkagpoo / Thungkakpasay / Thungchurpa shing (S)
Habitat:	Dense broadleaved forest, along-sides of the creeks and streams, slopes, and also in open areas.
Altitude range:	From 900 to 2,000 masl.
Plant part collected:	Fruits.
Uses:	Fruit used as mordant while dyeing the yarn. Also fruit is eaten. Prepare vinegar ("Chuk") out of ripened fruits. This vinegar used as medicinal purposes for indigestion, stomach pain, diarrhoea and dysentery.
Time of collection:	From September until December.
Distribution and availability status:	Thinly populated in Chukha, Dagana, Lhuentse, Mongar, Pemagatshel, Punakha, Samdrupjongkhar, Samtse, Trashigang, Trashiyangtse, Tsirang and Wangduephodrang Dzongkhags.



75.2 Scientific name:	<i>Fragaria nubicola</i> Lindl. (ex Lacaita)
Vernacular name:	De-ta-sa-dzin (D), Bhuin aeiselu (L)
Habitat:	Open, moist edge places in cool broadleaved forests and shrub-land, shady bank verges.
Altitude range:	From 2,000 to 4,200 masl.
Plant part collected:	Entire plant.
Uses:	As ingredient in traditional medicine by MSP.
Time of collection:	From August to September. MSP collects it from Bumthang and Thimphu.
Distribution and availability status:	Moderately available in Bumthang, Chhukha, Gasa, Punakha, Thimphu and Trongsa Dzongkhags.



75.3 Scientific name:	<i>Potentilla arbuscula</i> (D. Don, Prodr.)
Vernacular name:	Penma (D), Chiriya-fal (L)
Habitat:	Amidst of Juniper scrub, alpine grasslands, open slopes and stoniness hillsides.
Altitude range:	From 2,700 to 4,600 masl.
Plant part collected:	Entire plant.
Uses:	As ingredient in traditional medicine by MSP.
Time of collection:	July to September. MSP use to collect from Bumthang, Gasa and Thimphu.
Distribution and availability status:	Plenty in Bumthang, Gasa, Haa and Thimphu Dzongkhags.



75.4 Scientific name:	<i>Prunus napaulensis</i> (Ser. Ex DC.) Steud.
Vernacular name:	Kham-greeoy shing (D / H), Arupatey (L), Kurmalay (T)
Habitat:	Evergreen oak / broadleaved forests or mixed deciduous forests, open places along streams or creeks.
Altitude range:	From 1,200 to 3,000 masl
Plant part collected:	Leaves and ripened fruits.
Uses:	Leaves are used as fodder. Ripened fruits edible and has potential to make into jam or fruit juice. Fruits are also used by MSP as one of the ingredients in traditional medicine.
Time of collection:	Leaves whenever requires, ripened fruits from end of June to August. MSP collect fruits from Trongsa.
Distribution and availability status:	Moderately available in Chhukha, Haa, Dagana, Lhuentse, Mongar, Samtse, Trongsa, Tashiyangtse, Tsirang, Wangduephodrang and Zhemgang Dzongkhags.



75.5 Scientific name:	<i>Pyrus pashia</i> (Buch.-Ham. ex D.Don)
Vernacular name:	Lee (D), Jungali naspati (L), Leshing / Litong / Leethungshing(S), Sali (K)
Habitat:	Forest edges near settlement, shrubberies, moist sandy places, close to marshy sites and small creek, fringes of cultivation areas.
Altitude range:	From ca.2,000 to 3,000 masl.
Plant part collected:	Ripened fruit.
Uses:	Eat as any other fruit. Fully ripened fruit indeed has good taste. During its season, it can be seen selling in local market. People can earn some income by selling them.
Time of collection:	From September until November.
Distribution and availability status:	Moderately available in Bumthang, Haa, Mongar, Punakha, Thimphu, Trashigang and Trashiyangtse Dzongkhags.



75.6 Scientific name:	<i>Rosa macrophylla</i> (Lindley)
Vernacular name:	Tse-Go (D), Sey-gae (M), Jungali gulab (L)
Habitat:	Forest floors / edges, hillsides, shrubland.
Altitude range:	From 2,100 to 4,200 masl.
Plant part collected:	Fruit.
Uses:	As ingredient in traditional medicine by MSP.
Time of collection:	August to September.
Distribution and availability status:	Plenty in Bumthang, Gasa, Haa, Mongar, Paro, Punakha and Thimphu Dzongkhags.



75.7 Scientific name:	<i>Rosa sericea</i> (Lindley)
Vernacular name:	Sew Shing (D), Sewai Metog (M), Jungali Seto Gulab (L)
Habitat:	Open dry hill slopes, forest floor, shrub-land, along sides of the stream.
Altitude range:	From 1,200 to 4,600 masl.
Plant part collected:	Flowers.
Uses:	As ingredient in traditional medicine by MSP. It is said that the flower has medicinal property that can regulate bile.
Time of collection:	March to April.
Distribution and availability status:	Plenty in Bumthang, Chhukha, Haa, Paro, Thimphu, Trashigang, and Wangduephodrang Dzongkhags.



75.8 Scientific name:	<i>Rubus biflorus</i> (Buch.-Ham. ex Sm.)
Vernacular name:	Tagchay / Taktse meto (D), Kentakare (M), Bhotay aeiselu (L), Thulu gongsey (S)
Habitat:	Forest clearings, forest edges, scrub and open slopes, stream & river sides, valleys, thickets, and alongsides of the road.
Altitude range:	From 1,500 to 3,500 masl.
Plant part collected:	Flowers. Thimphu farmers group collects and manages it.
Uses:	For medicinal purposes.
Time of collection:	From July to August.
Distribution and availability status:	Plenty in Bumthang, Gasa, Haa, Thimphu, Trashiyangtse and Trongsa Dzongkhags.



75.9 Scientific name:	<i>Rubus ellipticus</i> (Sm.)
Vernacular name:	Tshema tshelu (D), Aiselu, Rani / Sanu / Naitey / Aulay Aiselu (L), Gongsey / Sergong (S), Tshema (T)
Habitat:	Outskirt of the forests, scattered tree stands, montane valleys, dry to damp mountain slopes, open foothills & grasslands, grazing lands, thickets, along roadsides.
Altitude range:	From 1,000 to 3,000 masl.
Plant part collected:	Roots and ripened fruits.
Uses:	Roots as home remedial medicine, its paste instantly heals the burnt-out part either by fire or hot water, root decoction is taken to cure diarrhoea. Ripened fruits are edible.
Time of collection:	Roots can collect whenever required. Ripened fruits: June to August.
Distribution and availability status:	Plenty or moderate in Chhukha, Paro, Punakha, Mongar, Samtse (Limited), Sarpang, Thimphu, Trashigang, Trashiyangtse, Tsirang and Wangduephodrang Dzongkhags.



75.10 Scientific name:	<i>Rubus lineatus</i> (Reinw. ex Blume)
Vernacular name:	Nob tshelu / Balu tshelu / Dom tshelu (D), Nob tshelu (Sk), Gyampay / Bhotay aeiselu (L)
Habitat:	Moist broadleaved forest, margins of forests or scrubs, hillside places, ravines.
Altitude range:	From 1,400 to 2,700 masl.
Plant part collected:	Ripened fruit and root.
Uses:	Ripened fruit is eaten like any other berries. Juice extract from root is taken to cure pneumonia and relief from food poison. People believe that decocotion of its bud cures gastritis and ulcer.
Time of collection:	Fruit – from September onwards, root – as and when necessary, bud – from March onwards.
Distribution and availability status:	Moderately available in Dagana, Mongar, Samdrupjongkhar, Samtse, Sarpang and Tsirang Dzongkhags.

76 Family: Rubiaceae



76.1 Scientific name:	<i>Catunaregam longispina</i> (Link) Tirveng.
Vernacular name:	Maidalu kara (L), Nerthung shing / Shoshoma-zoo-shing (S)
Habitat:	Moist foothill forests, open forest areas, among bamboo forest, along canal.
Altitude range:	From 150 to 1,000 masl.
Plant part collected:	Bark and fruit.
Uses:	Bark is used to cure diarrhoea and dysentery. Fruit is chocolate – brown when it ripens. It is edible but not that much palatable.
Time of collection:	Bark whenever required. Fruit: In June-July.
Distribution and availability status:	Moderately available in Samdrupjongkhar, Samtse, Sarpang, Trashigang and Trashiyangtse Dzongkhags.



76.2 Scientific name:	<i>Coffea benghalensis</i> (B.Heyne ex Schult.)
Vernacular name:	Kalo / Seto Chitu (L)
Habitat:	Subtropical and tropical moist broadleaved forests, dampy areas, along creeks, streams or rivers, gravelly shallow sites, high forest humus places, also dry mixed forests especially of teak and sal stands, often degraded and disturbed forest sites.
Altitude range:	From 150 to 1,050 masl.
Plant part collected:	Roots, leaves, and seeds.
Uses:	Roots and leaves are uses for the treatment of fracture or sprain. Decoction of entire parts can be used to relief from “nash” i.e. food poison. Its bean can substitute to coffee.
Time of collection:	Roots and leaves whenever required. Seeds from September end onwards.
Distribution and availability status:	Moderately available in Dagana, Samdrupjongkhar, Samtse, Sarpang, Tsirang and Wangduephodrang Dzongkhags.



76.3 Scientific name:	<i>Galium aparine</i> (L.)
Vernacular name:	Zangtsi-karpo (D), Zangtshey (M)
Habitat:	Open space in Fir / Rhododendron forest, limestone scree, hedge and waste places or as dry-land weeds.
Altitude:	From 2,000 to 4,270 masl.
Plant part collected:	Aerial parts.
Uses:	As ingredient in traditional medicine by MSP.
Time of collection:	July to August.
Distribution and availability status:	Plenty available in Bumthang, Haa and Trongsa Dzongkhags.



76.4 Scientific name:	<i>Mussaenda roxburghii</i> (Hook.f.)
Vernacular name:	Dhobenee, Dhobee, Dhobee Pa-ta, Dhobee Phul, Setalu (L), Menchha Patong (S)
Habitat:	Subtropical forests, forest peripheries, secondary scrub, damp and shaded creeks and stream banks, shallow places, or gully sites.
Altitude range:	From 150 to 500 masl.
Plant part collected:	Roots.
Uses:	Roots are used to cure fever, pneumonia, sore throat and burning urination (UTI). Small tree itself is ornamental.
Time of collection:	Whenever required.
Distribution and availability status:	Moderately available in Chhukha, Samtse and Sarpang Dzongkhags.



76.5 Scientific name:	<i>Paederia foetida</i> (L.)
Vernacular name:	Biri lahara (L)
Habitat:	Foothill forests, mesic hammocks to xeric areas, lowland places, riverine, drylands, along or besides roads and pathways.
Altitude range:	From 150 to 1,000 masl.
Plant part collected:	Root or entire climber.
Uses:	People believe and use this smelly climber medicinally to cure sinusitis, piles, fever, stomach and liver weakness. Climber has potential to extract black dye.
Time of collection:	Any season of the year.
Distribution and availability status:	Available plenty as unwanted invasive weeds throughout southern parts of the country.



76.6 Scientific name:	<i>Rubia cordifolia</i> (L)
Vernacular name:	Manjit (L), Tsod / tsut (K), La-nyi-roo (S), Tshuth (T)
Habitat:	Open areas, over the walls, rocks, shrubs at forest edges or shrub-land, along the paths.
Altitude range:	From 1,100 to 3,000 masl.
Plant part collected:	Stem, root or entire parts.
Uses:	To extract dye. People believe entire plant has medicinal value to relief body-pain. Stem use by MSP, collects from Trongsa.
Time of collection:	November to February. MSP collects in October – November.
Distribution and availability status:	Moderately available in Chhukha, Dagana, Haa, Lhuentse, Mongar, Paro, Pemagatshel, Samdrupjongkhar, Samtse (Rare because of over-exploitation), Sarpang, Trashigang, Trashiyangtse, Trongsa, Tsirang, Wangduephodrang, Zhemgang Dzongkhags.



76.7 Scientific name:	<i>Rubia sikkimensis</i> (Kurz.)
Vernacular name:	Tsoy / tsey / Tsoe (D), Tsoyd (Ku), Tsod (M), Majito (L), La-nyiroo (S), Laniru (PI)
Habitat:	Forests in speckled shade, moist shady slope edge, open scrub, hanging at the edge of roads.
Altitude range:	From 450 to 1,600 masl.
Plant part collected:	Entire.
Uses:	Apply on body-joint to relief pain. Hot powder wrapped in cloth, place over head / forehead and move gently like massaging to relief headache. Extract red dye too. Dried and cut pieces are seen selling in the available market. People used to fetch good income from the plant.
Time of collection:	January to April.
Distribution and availability status:	Plenty in Chhukha, Lhuentse, Pemagatshel, Punakha, Trashigang, Trashiyangtse, Trongsa, Tsirang, Wangduephodrang and Zhemgang Dzongkhags.



76.8 Scientific name:	<i>Uncaria scandens</i> (Sm.) Hutch.
Vernacular name:	Bhaisey kara (L)
Habitat:	Foothill warm broadleaved forests, often associated with Rhipidophora straggling over a big tree stands.
Altitude range:	From ca.200 to 1,400 masl.
Plant part collected:	Entire climber along with its roots.
Uses:	Decoction is taken as tea to get relief from the severe body-pain. Leaves poultice for sores. The paste is used for treating legs fracture especially of cattle.
Time of collection:	Whenever required.
Distribution and availability status:	Moderately available in Samtse, Sarpang and Tsirang Dzongkhags.



76.9 Scientific name:	<i>Wendlandia puberula</i> (DC.)
Vernacular name:	Yonten dem (D), Kangya phul / Kangeyo kath (L), Yonten dema / Basharong shing / Gong jakpa shing (S), Sonam chozey (K), Jabo shing (W1)
Habitat:	Moist broadleaved forests of the tropical and subtropical regions, mixed broadleaved and deciduous forest, open and somewhat degraded areas, secondary scrub of the dry valleys, edges of the cultivated lands.
Altitude range:	From 700 to 2,000 masl.
Plant part collected:	Young leaves.
Uses:	Make into local tealeaf. Some people sell this local tealeaf in the available local market.
Time of collection:	From end of February till early May.
Distribution and availability status:	Moderately available in Chhukha, Mongar, Punakha, Samtse, Thimphu, Trashigang, Trongsa and Wangduephodrang Dzongkhags.

77 Family: Rutaceae



77.1 Scientific name:	<i>Citrus medica</i> (L.)
Vernacular name:	Phumpa / Humpa (D), Bimira (L), Kapoor-zaymo / Num / Numpang (S), Numpang / Samphur (K)
Habitat:	Open forests, shrubby gentle slope sites, along the river and stream banks, edges of the marshy lands, dry evergreen hill forests.
Altitude range:	From 200 to 1,600 masl.
Plant part collected:	Ripened fruit.
Uses:	Extract juice and taken as soft drink also taken as appetizer along with meals. People sell this in the available market. Extracted juice is also used to make local vinegar (called "Chuk"). This vinegar is used medicinally to cure stomach trouble and diarrhoea, juice extract from its bark is used to cure Pneumonia.
Time of collection:	Can be collected throughout the year but more quantities of fruit available from June to October.
Distribution and availability status:	Available plenty in Chhukha, Dagana, Mongar, Samtse, Sarpang, Trashigang, Trashiyangtse, Tsirang and Zhemgang Dzongkhags.



77.2 Scientific name:	<i>Murraya koenigii</i> (L.) Spreng.
Vernacular name:	Mitho nim / Mechia sag (L), Ngebtang shing (S), Sondhaling (Ku)
Habitat:	Moist forests, dry low forestland, dry stony places, riverine, along river and stream banks.
Altitude range:	From 150 to 2,200 masl.
Plant part collected:	Leaves.
Uses:	As spice in curry, fried leaves used to seasoning salad or pickle. Sometimes it is seen people selling in the vegetable market.
Time of collection:	Whenever required.
Availability status:	Limited to moderate in certain areas of Chhukha, Dagana, Lhuentse, Samtse, Sarpang, Trashigang, Trashiyangtse, Trongsa, Tsirang and Wangduephodrang Dzongkhags.



77.3 Scientific name:	<i>Zanthoxylum acanthopodium</i> (DC.)
Vernacular name:	Bokey timbur (L), Tai thingney (Cbg), Gee daza (S)
Habitat:	Open evergreen forests and thickets, montane forest margins, slope area with minimum inundated surface run-off water, open damp places.
Altitude range:	From 1,200 to 3,200 masl.
Plant part collected:	Fruits.
Uses:	As spice also processed into pickle and take. Sell in available market.
Time of collection:	From July onwards.
Distribution and availability status:	Limited and sporadic in Chhukha, Dagana, Mongar, Samtse, Sarpang and Tsirang Dzongkhags.



77.4 Scientific name:	<i>Zanthoxylum armatum</i> (DC.)
Vernacular name:	Zhungthe (D), Zat-timbur (L), Gee / Gi (S), Yerma (Mt), Chowa(K)
Habitat:	Undergrowth of lower altitude forests and high elevation oak forests, shrub-lands, degraded slopes, also around cultivated land.
Altitude range:	From 250 to 3,100 masl.
Plant part collected:	Fruits.
Uses:	Fruits used indigenously to extract essential oil and use as general medicinal purposes. Also as spice or eat by making pickle. Sell in available market too.
Time of collection:	August to November.
Distribution and availability status:	Moderately available in Chhukha, Dagana, Gasa, Mongar, Paro, Samdrupjongkhar, Samtse, Sarpang, Thimphu, Trongsa, Tsirang, Wangduephodrang and Zhemgang Dzongkhags.



77.5 Scientific name:	<i>Zanthoxylum bungeanum</i> (Max.)
Vernacular name:	Menchhu Thingney (D), Timbur (L), Gee (S)
Habitat:	Dense undergrowth in the dry hill places or open scrub, rare in moist areas.
Altitude range:	From 1,150 to 3,200 masl.
Plant part collected:	Fruits.
Uses:	As spice though they have bit bitter taste.
Time of collection:	August to November.
Distribution and availability status:	Plenty Chhukha, Pemagatshel, Samdrupjongkhar, Trashigang, Trashiyangtse, Trongsa and Zhemgang Dzongkhag.



77.6 Scientific name:	<i>Zanthoxylum rhetsa</i> (Roxb.) DC.
Vernacular name:	Menchhu thingney (D), Karay timbur / Timbur (L)
Habitat:	Sub-tropical deciduous forests, open thinly stand forests, edges of the forests, sometimes in open isolated places.
Altitude range:	From 200 to 500 masl.
Plant part collected:	Fruits.
Uses:	As spice or eat by making pickle. Sell in available market too.
Time of collection:	July to September.
Distribution and availability status:	Rare as it is thinly available in Chhukha, Samtse, Sarpang and Tsirang Dzongkhags.

78 Family: Santalaceae



78.1 Scientific name:	<i>Osyris lanceolata</i> (Hochst. & Steud.)
Vernacular name:	Chemarmo (D / WI), Jaa (D), Tsu-tsu rava-shing / Tsutsuraba / tsishiraba shing (S), Jashing (K)
Vernacular name:	Tsu-tsurava-shing/ tsishirabashing (S), Jashing (K)
Habitat:	Chirpine and dry montane forest, evergreen bushland, grassland, scrub in dry valleys, forest margins, cleared forest, rocky places.
Altitude range:	From 900 to 2,650 masl.
Plant part collected:	Leaves along with twigs, bark.
Uses:	Used to process into local tealeaf. Such tealeaf can be seen selling in local market. People can generate some income by selling this plant's tealeaf.
Time of collection:	Whenever required.
Distribution and availability status:	Moderately available in Lhuentse, Mongar , Pemagatshel, Trashigang and Wangduephodrang Dzongkhags.

79 Family: Sapindaceae



79.1 Scientific name:	<i>Acer campbellii</i> (Hook.f. & Thomson ex Hiern)
Vernacular name:	Chalum (D), Kapasay (L), Sermiling Shing (S), Kashisang shing (W1)
Habitat:	Mixed forests, evergreen Oak and Hemlock forests.
Altitude range:	From 1,800 to 3,700 masl.
Plant part collected:	Leaves.
Uses:	To process into tealeaf and as fodder. Trashiyangtse farmers group makes tea-leaf.
Time of collection:	From March to June for tea. Fodder: Whenever required or during its leafy season.
Distribution and availability status:	Available plenty in Bumthang, Chhukha, Mongar, Punakha, Sarpang, Thimphu, Trashigang, Trashiyangtse, Trongsa and Wangduephodrang Dzongkhags.



79.2 Scientific name:	<i>Sapindus mukorossi</i> (Gaertn.)
Vernacular name:	Nakapani (D), Nakapani / Po-so-cha (M), Ritha (L), Keeling / Kiling shing (S)
Habitat:	Foothills forest slope, loamy gravelly or rocky places, nearby streams.
Altitude range:	From 300 to 1,400 masl.
Plant part collected:	Fruit / nut.
Uses:	As soap to wash. It is also use by goldsmith for washing the ornaments. Soap uses as repellent to leech. Seed use in traditional medicine by MSP and collects from Trongsa. Nut used locally and for religious soap (soap use during ritual/religious ceremony)
Time of collection:	October onwards.
Distribution and availability status:	Available plenty in Chhukha, Dagana, Lhuentse, Mongar, Samdrupjongkhar, Samtse (moderate), Trongsa, Wangduephodrang and Zhemgang Dzongkhags.

80 Family: Sapotaceae

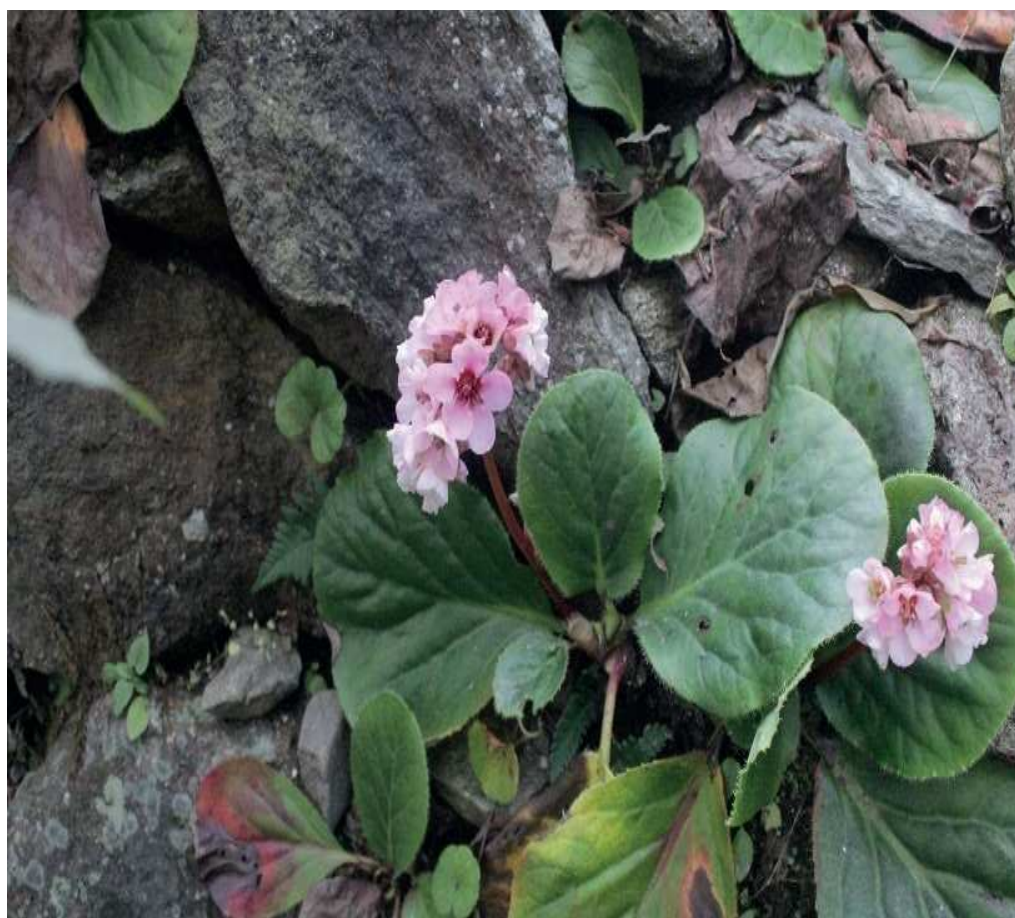


80.1 Scientific name:	<i>Diploknema butyracea</i> (Roxb.) H.J.Lam
Vernacular name:	Yikashing / Yega / Yeka Shi (D), Chueri (L), Pin-shing / Pinsay / Pinshingsay (S), Khair mar (K)
Habitat:	Subtropical and moist deciduous forests of mid-hills region, steep slopes, cliffs and ravines.
Altitude range:	From ca.350 to 1,700 masl.
Plant part collected:	Fruit, seed and leaves.
Uses:	Ripened fruit is eaten like any other fruit. It has palatable sweet taste. Fresh or roasted seed also eaten like nuts. More importantly, seeds are used to extract oil that can substitute to butter. Leaves are good fodder then feed to livestock.
Time of collection:	Ripened fruit and seed – April to July, Leaves – whenever required as fodder.
Distribution and availability status:	Rarely available in Chhukha, Dagana, Lhuentse, Mongar, Punakha, Samdrupjongkhar, Samtse (Too rare), Sarpang, Trashiyangtse, Tsirang, Wangduephodrang and Zhemgang Dzongkhags.

81 Family: Saxifragaceae



81.1 Scientific name:	<i>Astilbe rivularis</i> (Buch.-Ham. ex D.Don)
Vernacular name:	Jubge (D), Buro-okhati (L), Tonsargugay (S)
Habitat:	Moist hillsides, sandy-loam-humus slopes, roadsides.
Altitude range:	From ca. 1,500 to 3,000 masl.
Plant part collected:	Rhizome / rootstock
Uses:	Rhizomes and young leaves are used to make local tealeaf. People believe its tea relief body-pain and stomach-pain and also said it is really good to women to ease post-delivery pain. Rootstock is useful at times of toothache.
Time of collection:	Usually in winter season.
Distribution and availability status:	Available plenty in Chhukha, Dagana, Gasa, Haa, Mongar, Paro, Pemagatshel, Punakha, Samdrupjongkhar, Samtse (Rare), Sarpang, Thimphu, Trashigang, Tsirang and Zhemgang Dzongkhags.



81.2 Scientific name:	<i>Bergenia ciliata</i> (Haw.) Sternb.
Vernacular name:	Pakhanved (L)
Habitat:	Shady places, rock and cliff faces, wet rock ledges in forests.
Altitude range:	From 900 to 3,600 masl.
Plant part collected:	Rhizome.
Uses:	Chew as betel-nut cures gum bleeding. Prepare tea and drink relief body-pain, normalizes heavy menstruation flow. It is helpful for delivery women to relief post-delivery pain. Also apply paste to cuts & wounds to heal. Root's decoctions relief diarrhoea, tooth & gum ache. Also root paste is used to treat fracture.
Time of collection:	September to November.
Distribution and availability status:	Plenty in Chhukha, Dagana, Samtse, Sarpang, Thimphu and Tsirang Dzongkhags



81.3 Scientific name:	<i>Chrysosplenium nudicaule</i> (Bunge)
Vernacular name:	Yakima / Yachima (M)
Habitat:	Alpine scrub, scree, gravelly moist places, damp rocky slopes.
Altitude range:	From 3,800 to ca. ± 5,000 masl.
Plant part collected:	Leaves and flowers.
Uses:	For medicinal purposes. MSP use as one of the ingredients while formulating traditional medicine.
Time of collection:	From May to September. Thimphu farmers group collects and manages it.
Distribution and availability status:	Rarely found in Gasa, Thimphu and Trashiyangtse Dzongkhags.

82 Family: Schisandraceae



82.1 Scientific name:	<i>Illicium griffithii</i> (Hook.fil. & Thomson)
Vernacular name:	Doomleeshing (D), Wounba tsinang / Khaila tsinang, Leechi or li-tshi, Sengpa shing (S), Penchar dee (Rt)
Habitat:	Sub-tropical to temperate forests, moist and shady sites, sandy loam or heavy clay soil areas, gentle humus slope, mostly in southern aspect.
Altitude range:	From 1,200 to 3,000 masl.
Plant part collected:	Fruit.
Uses:	Seedless fruit used while preparing suja (salted butter tea) or even in sugar tea as spices. Sometimes people even use while processing local liquor to increase liquor's strength. So, seedless fruit is used to make local tealeaf for suja. Dried seedless fruit is burnt as incense religiously. Seedless fruit used medicinally to cure cough, toothache & even for sinusitis. However most of the farmers collect the matured fruit and sell in the available market. Thus it's the source of income to farmers.
Time of collection:	From October till December.
Distribution and availability status:	Plenty in Mongar, Thimphu (Moderate), Trashigang (Moderate), Trashiyangtse and Samdrupjongkhar Dzongkhags.

83 Family: Scrophulariaceae



83.1 Scientific name:	<i>Buddleja asiatica</i> (Lour.)
Vernacular name:	Bhimsen-pati / pate (L)
Habitat:	Secondary growth forests, grasslands, landslide areas, sandy riverine, open places, periphery of the open forests.
Altitude range:	From 150 to 2,800 masl.
Plant part collected:	Leaves, twigs, root.
Uses:	Leaves and twigs are used as incense. Decoction of root and leaf relieves food poison. Leaves and twigs are good fodder for cattle. Sometimes people cultivate within their homestead as ornamental plant. Plant itself is ornamental.
Time of collection:	As and when required.
Distribution and availability status:	Moderately available in Dagana, Samtse, Tsirang and Wangduephodrang Dzongkhags.



83.2 Scientific name:	<i>Verbascum thapsus</i> (L.)
Vernacular name:	Kachum / Ser-zyed (D)
Habitat:	Open dry exposed and stony slopes, clearing forest of blue-pines, dry wastelands, often on sandy soil, shrub-land, and cultivated sites.
Altitude range:	From ca. 1,200 to 4,000 masl.
Plant part collected:	Seed.
Uses:	As ingredient in traditional medicine by MSP.
Time of collection:	October to November.
Distribution and availability status:	Plenty in Chhukha and Thimphu to Bumthang Dzongkhags.

84 Family: Solanaceae



84.1 Scientific name:	<i>Datura metel</i> (L.)
Vernacular name:	Dhaturo / Kalo Dhaturo (L)
Habitat:	Foothill plains, mostly in abandoned and waste sites, disturbed places, sunny sides.
Altitude range:	Upto 2,000 masl.
Plant part collected:	Leaves, flower, seeds.
Uses:	Village people inhale smoke of dried leaves, flowers & seeds to relieve from asthma. Few seeds crushed mixed in food and gives to dog to prevent or cure rabies.
Time of collection:	Leaves and flower throughout the year. Seed: March – April.
Status and availability status:	Limited and scattered in Samdrupjongkhar, Samtse and Sarpang Dzongkhags.



84.2 Scientific name:	<i>Datura stramonium</i> (L.)
Vernacular name:	Dhaturo (L), Nyangmo throkchang (S)
Habitat:	Abandoned or wastage fields, stony sites, peripheral areas of the settlement, open places, fertile soil of the dry lands.
Altitude range:	From 1,000 to 2,700 masl.
Plant part collected:	Leaves & seeds.
Uses:	Inhalation of smoke from the burning leaves and fruits said to be good for relieving asthma.
Time of collection:	Leaves whenever necessary and seeds can be collected in winter days.
Distribution and availability status:	Quite common Chhukha, Dagana, Haa, Samtse, Sarpang, Thimphu, Trashigang, Trongsa and Wangduephodrang Dzongkhags.

85 Family: Symplocaceae



85.1 Scientific name:	<i>Symplocos paniculata</i> (Miq.)
Vernacular name:	Pangtse shing / Doom or Dum shing / Zimshing (D), Kharaney / Gunilo (L), Lekshingsay (S)
Habitat:	Broadleaved forests and shrubberies, even within Blue Pine Forest areas, mixed forest slopes, along river or stream banks.
Altitude range:	From 1,500 to 2,800 masl.
Plant part collected:	Seeds and leaves.
Uses:	Seeds are collected to extract oil like butter which is used as vegetable cooking oil and also as fuel to lamps. Leaves are used to extract yellow dye.
Time of collection:	Fruit – October to December, Leaves – whenever required.
Availability status:	Moderately available in Bumthang, Chhukha, Dagana, Gasa, Haa, Punakha, Samdrupjongkhar, Samtse (Limited), Thimphu, Tsirang and Wangduephodrang Dzongkhags.



85.2 Scientific name:	<i>Symplocos ramosissima</i> (Wall.)
Vernacular name:	Byitang-ga (M), Kharaney (L)
Habitat:	Mixed forests of cool broad-leaved and evergreen oak trees, seldom in open hillsides and scrub.
Altitude range:	From 1,000 to 2,600 masl.
Plant part collected:	Fruit.
Uses:	As ingredients in traditional medicine by MSP.
Time of collection:	Fruiting occurs from May onwards. MSP collects it in November– December from Trongsa areas.
Distribution and availability status:	Plenty in Chhukha, Gasa, Punakha, Thimphu, Trashigang, Trashiyangtse and Trongsa Dzongkhags.



85.3 Scientific name:	<i>Symplocos theifolia</i> (D.Don)
Vernacular name:	Dom shi / Khyapshing (D), Zhukhen (M), Lekh Kharaney (L)
Habitat:	Mixed trees of warm broadleaved forests and evergreen oak forests.
Altitude range:	From 500 to 2,600 masl.
Plant part collected:	Leaves.
Uses:	As one of the ingredients of traditional medicine by MSP.
Time of collection:	October – November. MSP collects it from Trongsa.
Distribution and availability status:	Quite plenty in Chhukha, Sarpang, Samdrupjongkhar, Punakha, Trongsa, Mongar, Trashigang, Lhuentse Dzongkhags.

86 Family: Tamaricaceae



86.1 Scientific name:	<i>Myricaria rosea</i> (W.W. Smith.)
Vernacular name:	Hong-Bu (D)
Habitat:	Riverine shrubby grasslands, stream sides rocky and gravel areas.
Altitude range:	From 3,300 to 4,500 masl.
Plant part collected:	Aerial parts.
Uses:	As ingredient in traditional medicine by MSP.
Time of collection:	July to August.
Distribution and availability status:	Available plenty in Bumthang, Thimphu, Haa, Trongsa, Gasa and Trashiyangtse Dzongkhags.

87 Family: Taxaceae



87.1 Scientific name:	<i>Taxus wallichiana</i> (Zucc.)
Vernacular name:	Ha shing (D), Dhengre / Lauth salla (L), Keyrang-shing (S)
Habitat:	Moist places of mixed coniferous or cool broadleaved forests, shady ravines, bit marshy sites.
Altitude range:	From 1,800 to 3,400 masl.
Plant part collected:	Leaves along with twigs and bark.
Uses:	Leaves along with twigs used to burn as incense religiously. At one time leaves and bark are collected for trade obtaining special permission from Department of Forests. MSP also collects to use as one of the ingredients in traditional medicine.
Time of collection:	As and when required.
Distribution and availability status:	Limited and very sporadic in Bumthang, Haa, Mongar, Thimphu, Trongsa and Wangduephodrang Dzongkhags.

88 Family: Theaceae



88.1 Scientific name:	<i>Camellia oleifera</i> (Abel.)
Vernacular name:	Ban chiya (L)
Habitat:	Foothills forests, thickets, alongsides of the rivers and streams.
Altitude range:	From 500 to 1,300 masl.
Plant part collected:	Leaves.
Uses:	Leaves are used to make tea leaf. Farmers of Samtse (Especially of Bara – Tendu makes tealeaf)
Time of collection:	Any season of the year.
Distribution and availability status:	Limitedly available in Chhukha, Samtse, Sarpang, Trongsa and Zhemgang Dzongkhags.

89 Family: Thymelaeaceae



89.1 Scientific name:	<i>Aquilaria malaccensis</i> (Lam.)
Vernacular name:	Agur / Agar (L), Agura (K)
Habitat:	Primary or secondary warm mixed forests, drier hill slopes or foothill plains.
Altitude range:	From 150 to 1,000 masl.
Plant part collected:	Resin and heartwood / trunk. Fungus infected heartwood is highly valuable.
Uses:	As incense. MSP used it as one of the ingredients in traditional medicine.
Time of collection:	No season as such or whenever available. However, MSP collects trunk from Zhemgang in November – December.
Distribution and availability status:	Rare in Samdrupjongkhar, Sarpang and Zhemgang Dzongkhags. Therefore, most of the farmers in southern Bhutan started cultivating within their dry farmland areas



89.2 Scientific name:	<i>Daphne bholua</i> (Buch.-Ham. ex D. Don)
Vernacular name:	De shing / Dhey nap (D), Kagatey / Kagati (L), Shoko shing (T), Shogo / Shugu shing (S), Desho (Lla)
Habitat:	Moist forests as understory shrubs, mixed coniferous & broadleaved forests.
Altitude range:	From ca. 1,900 to 4,000 masl.
Plant part collected:	Bark.
Uses:	Bark is used to make rope. It is also the raw material to make traditional paper.
Time of collection:	March to June
Distribution and availability status:	Moderately available in Chhukha (Limited), Gasa, Haa, Lhuentse, Mongar, Punakha, Samdrupjongkhar, Thimphu, Trongsa and Wangduephodrang Dzongkhags.



89.3 Scientific name:	<i>Daphne papyracea</i> (Wall. ex Steud.)
Vernacular name:	Dhey shing / Dhey nap (D), Kagatey / Kagati (L), Shogo / Shugu shing (S)
Habitat:	Mixed broadleaved and chir-pine forest, shrublands, shady or semi-shady places.
Altitude range:	From ca.700 to 3,200 masl.
Plant part collected:	Bark / fibre, root.
Uses:	The local paper factory used as main raw materials to produce traditional paper. The famer community group collects as raw-materials and sells it to traditional paper making factory. Root is used as remedy for food poisons (also fruits and barks are powdered and make small pill with fresh butter. This pill is to be taken in food poisoning) and also for jaundice.
Time of collection:	From March until October.
Distribution and availability status:	Plenty in Mongar, Paro, Punakha, Samdrupjongkhar, Samtse (Rare), Sarpang and Wangduephodrang Dzongkhags.



89.4 Scientific name:	<i>Daphne sureil</i> (W.W. Smith & Cave)
Vernacular name:	DheyNap (D), Kagatey / Kagati (L)
Habitat:	Rocky gentle foot-hill slopes, evergreen oak forests, temperate broadleaved forest, and subtropical cloud forest.
Altitude range:	From ca. 1,200 to 2,800 masl.
Plant part collected:	Root, fruit & stem bark.
Uses:	Root used to relief food poison, gastric. Fruits and barks are powdered and make small pill with fresh butter. This pill is to be taken to relief from food poison. People also believe it is helpful for jaundice. Bark is used to make rope. It is the raw material for manufacturing traditional paper. Traditional paper factory used to get raw materials from this area.
Time of collection:	Collection time of root is whenever needed. Fruit: From January. Stem bark from March to June.
Distribution and availability status:	Moderately available in Chhukha, Dagana, Mongar, Punakha, Samdrupjongkhar, Trashigang, Trashiyangtse and Trongsa Dzongkhags.



89.5 Scientific name:	<i>Edgeworthia gardneri</i> (Meisn.)
Vernacular name:	Dheykap (D), Argayle / Lokta (L), Shogo shing ballingmee (S)
Habitat:	Besides streams and shallows, gentle slopes in open shrubby landscape, in a small patchy group within forested areas.
Altitude range:	From 1,500 to 3,500 masl.
Plant part collected:	Bark.
Uses:	To make into rope. It is one of the raw materials to manufacture traditional paper. Thus, traditional paper factory collect for their raw material from various Dzongkhags.
Time of collection:	March to June
Distribution and availability status:	Plenty in Chhukha, Dagana, Pemagatshel, Samtse (moderate), Sarpang, Trongsa and Zhemgang Dzongkhags.

90 Family: Urticaceae



90.1 Scientific name:	<i>Dendrocnide sinuata</i> (Blume) Chew
Vernacular name:	Morongay / Moringe (L), Phronglo (S)
Habitat:	Subtropical wet evergreen forests, alongsides of the creeks and streams, along roads and tracks.
Altitude range:	From 250 to 1,400 masl.
Plant part collected:	Flowers and barks (Both pick carefully as it has nettle hair).
Uses:	Flowers as vegetable and barks to make quality fibre-rope.
Time of collection:	Flowers: From August until October. Bark usually collects in winter season.
Distribution and availability status:	Moderately in Samdrupjongkhar, Samtse and Sarpang Dzongkhags.



90.2 Scientific name:	<i>Elatostema lineolatum</i> (Wight)
Vernacular name:	Damru / damroo (D / Ku), Chhotey Gagleyto / Gaglahta, Mirgeyjhar (L), Drimom / Gremom (S), Dham-boor (G), Dambaroo (Pl)
Habitat:	Humid forests, rocky shallow & shady slopes, banks of the stream and river, sub-tropical and warm broadleaved forests.
Altitude range:	From 250 to 2,000 masl.
Plant part collected:	Aerial parts.
Uses:	As green vegetable. It is seen selling in the available market or even by the roadside vegetable stall. It is an additional off-farm income source for the people.
Time of collection:	Throughout the year.
Distribution and availability status:	Plenty in Chhukha, Dagana, Gasa, Lhuentse, Mongar, Pemagatshel, Punakha, Samdrupjongkhar, Samtse, Sarpang, Trashigang, Tsirang, Wangduephodrang and Zhemgang Dzongkhags.



90.3 Scientific name:	<i>Girardinia diversifolia</i> (Link) Friis
Vernacular name:	Zocha (D), Bhangrey sisnu (L), Gom Jazu (S), Eubay (Wl)
Habitat:	Gullies, alongside of the stream and river, gentle slopes or roadside edges, damp and shady sites, shrubberies, warm broadleaved forests and seldom in cool broadleaved forests.
Altitude range:	From ca. 450 to 2,800 masl.
Plant part collected:	Flower, bud and young leaves, bark.
Uses:	Flower, bud and young leaves used as vegetable, rather make thick soup and take. Bark used to make fine rope which is used for various purposes.
Time of collection:	Flowers from July to September, young leaves and buds from March to May. Bark usually during dry season.
Distribution and availability status:	Moderately available in Chhukha, Dagana, Pemagatshel, Samdrupjongkhar, Samtse, Sarpang, Thimphu, Trashigang, Trongsa, Tsirang and Wangduephodrang Dzongkhags.



90.4 Scientific name:	<i>Laportea bulbifera</i> (Siebold & Zucc.) Wedd.
Vernacular name:	Zocha (D), Patley sisnu (L), Zo-soenam (Cpz)
Habitat:	Warm broadleaved forest, scanty in cool broadleaved forest, damp forest floor and moist places, alongside of the streams and gullies, edges of forest and roadsides.
Altitude range:	From 700 to 3,500 masl.
Plant part collected:	Young leaves along with buds.
Uses:	Consume as wild green vegetable. It can be prepared into thick delicious soup. People believe, consuming its soup helps to lower high blood pressure. Thus, it is used as medicine. Leaves also used as feed to livestock.
Time of collection:	March to June.
Distribution and availability status:	Moderately available in Bumthang, Chhukha, Dagana, Gasa, Punakha, Samdrupjongkhar, Samtse, Trashigang, Trongsa, Tsirang and Wangduephodrang Dzongkhags.



90.5 Scientific name:	<i>Pouzolzia hirta</i> (Blume) Hasskarl
Vernacular name:	Chipley (L)
Habitat:	Bushy channel, stream banks, gullies, weedy sites, outskirts of the forests, even in the cultivated lands.
Altitude range:	From 200 and seldom upto 2,700 masl.
Plant part collected:	Entire, or root bark.
Uses:	Paste of entire can be used to treat fracture and sprain. Root bark paste is very helpful at times of throat-pain. It can be applied both sides of the throat inner and outer sides.
Time of collection:	As and when necessary.
Distribution and availability status:	Plenty in Chhukha, Dagana, Punakha, Samdrupjongkhar, Sarpang, Thimphu, Trongsa and Tsirang Dzongkhags.



90.6 Scientific name:	<i>Pouzolzia rugulosa</i> (Wedd.) Acharya & Kravtsova
Vernacular name:	Jardhashing (D), Dar / Daar (L), Dhongtshong shing (S)
Habitat:	Subtropical and warm broadleaved forest, forest margins, open or degraded places, mostly to vicinity of the creeks and rivers, often alongside of the path and road.
Altitude range:	From 300 to 1,900 masl.
Plant part collected:	Trunk, bark, resin, & foliage.
Uses:	Trunk used to make wine container “Jandop” and even a container to churn milk / curd. Bark and resin are among the raw materials to make traditional incense. Foliage: As fodder. Tree is ornamental.
Time of collection:	Trunk and bark usually in winter season. Resin from April – July during dry days, foliage – whenever required.
Distribution and availability status:	Moderately available in Pemagatshel, Samdrupjongkhar, Trashigang and Wangduephodrang Dzongkhags.



90.7 Scientific name:	<i>Pouzolzia sanguinea</i> (Blume) Merr.
Vernacular name:	Hay (D), Chipley or Lipey (L), Yongjiba / Yongeebu (S), Youngjuva / Yangziba (Pl)
Habitat:	Warm evergreen broadleaved forests, edges of the forests, within scrub in dry valleys, bushes, roadsides and abandoned cultivation sites.
Altitude range:	From 800 to 2,300 masl
Plant part collected:	Bark, foliage and root.
Uses:	Source of fibre to make rope. More importantly, bark and root are main constituents of incense making. Incense factory collects them. Foliage is very palatable fodder to livestock.
Time of collection:	Bark from August to February. Foliage: Whenever necessary.
Distribution and availability status:	Plenty in Chhukha, Mongar, Pemagatshel, Punakha, Samdrupjongkhar, Sarpang, Trashigang, Trongsa, Tsirang and Wangduephodrang Dzongkhags.



90.8 Scientific name:	<i>Urtica ardens</i> (Link)
Vernacular name:	Zocha (D), Gharia sisnu (L), Jazu (S), Bakui (K)
Habitat:	Open or partially shady moist places, bushes, along stream and river banks or road / footpath sides, over the edges of the cultivated land, degraded forest sites.
Altitude range:	From 750 to 4,500 masl.
Plant part collected:	Leaves & flower, stem bark and root.
Uses:	Given to chickens and ducks especially when they are wounded and fracture. Stem bark used to make rope. Flower, bud and young leaves used as vegetable. Root is used as spiritual remedy to relief from “Mosh” (Lhotshamp term). Shaminist says mosh is the sickness of small baby child which causes by dead evil spirit.
Time of collection:	Leaves and root: Whenever required, flower from March to August.
Distribution and availability status:	Moderately available in Chhukha, Dagana, Mongar, Punakha, Samtse, Sarpang, Tsirang and Wangduephodrang Dzongkhags.

91 Family: Valerianaceae



91.1 Scientific name:	<i>Nardostachys jatamansi</i> (D. Don) DC
Vernacular name:	Pangpoi / Pangpay (D / S), Jatamasi (L), Jhapay (H)
Habitat:	Dry scrub of juniper and stunted rhododendron, open alpine stony dry to wet slopes, maximum in steep rocky slopes, outcrops and leas.
Altitude range:	From 3,200 to 5,300 masl.
Plant part collected:	Entire / rootstock.
Uses:	As one of the ingredients of incense by the incense factory. Entire parts use as ingredient in traditional medicine by MSP. The dry rootstock with mixture of other materials burnt at times of religious event.
Time of collection:	June to October.
Distribution and availability status:	Moderately available in Bumthang, Gasa, Haa, Lhuentse, Paro, Thimphu, Trashigang, Trashiyangtse, Trongsa and Wangduephodrang Dzongkhags.

92 Family: Zingiberaceae



92.1 Scientific name:	<i>Kaempferia rotunda</i> (L.)
Vernacular name:	Bhuin champa (L)
Habitat:	Suptropical forests, especially within bamboo, sal or teak growing areas.
Altitude range:	From 150 to 1,200 masl.
Plant part collected:	Root nodules.
Uses:	Root nodules paste is applied over fracture. The paste binds the skin tightly so the fracture recovers within a short period of time. People believe nodule as an appetizer. Few individuals plant within the home garden as an ornamental plant.
Time of collection:	Whenever necessary.
Distribution and availability status:	Limitedly available in sporadic location within Samtse, Sarpang and Tsirang Dzongkhags.



92.2 Scientific name:	<i>Roscoeae capitata</i> (Sm.)
Vernacular name:	Ga-cha (M)
Habitat:	Grassy hillsides, steep and rocky slopes, wet ravines, frequently on degraded places.
Altitude range:	From 1,200 to 2,600 masl.
Plant part collected:	Root.
Uses:	As one of the ingredients in traditional medicine by MSP.
Time of collection:	From November to December.
Distribution and availability status:	Limitedly within Trongsa Dzongkhag.



92.3 Scientific name:	<i>Alpinia nigra</i> (Gaertn.) Burt
Vernacular name:	Baray-ra / Baray-ro (L), Zee-seli (Cpz)
Habitat:	Moist deciduous and evergreen forests, damp hilly slopes, besides streams and rivers.
Altitude range:	From ca.200 to 1,900 masl.
Plant part collected:	Young shoots or pith and leaves.
Uses:	Young shoots or pith used as vegetable. Vegetable out of cooked shoots is very tasty with its distinct aroma. Leaves are used as wrapping materials for vegetable, fresh farm butter and cheese. During its season, young shoots are seen in the local available vegetable market selling by the farmers. It is one of the good sources of income for the farmers.
Time of collection:	Young shoots from end of March until May. Leaves are collected as and when required.
Distribution and availability status:	Moderately available in Chhukha, Dagana, Samtse, Sarpang and Tsirang Dzongkhags.

FUNGI (MUSHROOMS) AND ALGAE

93 Family: Amanitaceae



93.1 Scientific name:	<i>Amanita cf. caesarea</i> (Scop.: Fr.) Pers.
Vernacular name:	Gongdo / Gongsay shamu (D)
Habitat:	Mostly Blue Pine Forests, hillsides amidst of the Rosa shrubberies.
Altitude range:	From 2,300 to ca.3,000 masl.
Parts collected:	Entire mushroom.
Uses:	Cooked and eat like any other vegetable curry. It can be seen people selling in the available market.
Time of collection:	It grows singly or in group of few individuals and emerges from June until around mid-October.
Distribution and availability status:	Moderately available in Gasa, Punakha, Thimphu and Wangduephodrang Dzongkhags.

94 Family: Auriculariaceae



94.1 Scientific name:	<i>Auricularia auricular-judae</i> (Bull.) Quel.
Vernacular name:	Bjili Namcho / Jilinamcho (D), Kaney / Bajay kan / Musa kaney/ Rato ka-nay / Chipley chaew (L)
Habitat:	Decayed and dead wood which includes logs, branches and stumps during wet season. It is solitary to gregarious.
Altitude range:	Available at any elevation range depending on its suitable habitat.
Part collected:	Entire
Uses:	Consumption, cook and eat. But most of the collectors sell in the available market or at the roadside vegetable stall.
Time of collection:	Wet season.
Distribution and availability status:	It is found everywhere like in Chhukha, Dagana, Gasa, Haa, Punakha, Samdrupjongkhar, Samtse, Sarpang, Thimphu, Trongsa, Tsirang, Wangduephodrang and Zhemgang Dzongkhags. Availability depends on suitability of the growing conditions.



94.2 Scientific name:	<i>Exidia</i> (spp.)
Vernacular name:	Sew shamu / Jilnamcho shamu (B), Sheru / Sisi shamu (H), Seuchu shamu (Wg)
Habitat:	On dead decaying shrub woods, mainly of <i>Rosa sericea</i> Lindley, <i>R. macrophylla</i> Lindley, and occasionally on dead climber of <i>Schisandra</i> spp.
Altitude range:	From ca. 2,600 to 3,700 masl.
Part collected:	Entire mushroom.
Uses:	Sale in available market. Considers fetching high cash income, and seems to have medicinal value.
Time of Collection:	March to April & September to November.
Distribution and availability status:	Moderately available in Bumthang, Haa, Thimphu and Wangduephodrang Dzongkhags whereas limited to moderate in Chhukha Dzongkhag.

95 Family: Boletaceae



95.1 Scientific name:	<i>Boletus cf. edulis</i> (Bull.: Fr.)
Vernacular name:	Bam / Phap shamu / shamong (D)
Habitat:	Mixed coniferous forests, deciduous or semi-evergreen forests Grow individually or in a scattered group of 3 to 4 in numbers.
Altitude range:	From ca.2,600 to 3,500 masl.
Part collected:	Entire mushroom.
Uses:	Cook and eat like any other vegetable curry.
Time of collection:	August-September.
Distribution and availability status:	Moderately found in Gasa Dzongkhag.

96 Family: Bondarzewiaceae



96.1 Scientific name:	<i>Bondarzewia cf. monticola</i> (Quel.) Sing.
Vernacular name:	Kow / Kou shamou /shamong (D), Gai-zibray / Bha-ainsay chaew (L)
Habitat:	Cloud broadleaved forest, moist and warm broadleaved forest in foothill areas, within matured stands of <i>Castanopsis</i> , <i>Hovenia</i> , <i>Quercus</i> and <i>Stereospermum</i> . It usually sprouts from the base of the matured trunk.
Altitude range:	From ca.500 to 2,100 masl.
Part collected:	Entire mushroom.
Uses:	Cook and eat as delicious vegetable. People also sell in the available market. It is seen selling by the roadside vegetable stalls.
Time of collection:	May to September.
Distribution and availability status:	Sporadically available in Chhukha, Dagana, Punakha, Samtse, Sarpang, Tsirang and Wangduephodrang Dzongkhags

97 Family: Cantharellaceae



97.1 Scientific name:	<i>Cantharellus cibarius</i> (Fr.)
Vernacular name:	Sisi shamu / seersi shamu (D) Kan-ney chaew (L), Gowyang/ Gowayan bamung (S)
Habitat:	Quercus, Castanopsis and Blue-pine forests areas. It is scattered to gregarious.
Altitude range:	From ca. 1,600 to 2,400 masl.
Part collected:	Entire mushroom.
Uses:	As vegetable. But mostly the collectors sell in the available market. Also it is seen selling by the roadside vegetable stalls. Farmers earn good sum of money by selling it.
Time of collection:	June to October.
Distribution and availability status:	Plenty in Chhukha, Dagana, Gasa, Haa, Paro, Pemagatshel, Punakha, Samdrupjongkhar, Samtse, Sarpang, Thimphu, Trongsa, Tsirang and Wangduephodrang Dzongkhags. There are two types of this mushroom, the other one has faint yellow-white colour. However, quantities of the both types are being decreasing yearly.

98 Family: Cortinariaceae



98.1 Scientific name:	<i>Cortinarius caperatus</i> (Pers.) Fr.
Vernacular name:	Dungsi / Dungshing shamung / shamong (D), Dungru shamung (H)
Habitat:	Fir forest, mixed forest of fir with other conifer stands like hemlock, moist places.
Altitude range:	From 2,800 to ca.3,900 masl.
Part collected:	Entire mushroom.
Uses:	Eaten as vegetable. It is quite delicious. Sometimes it is seen selling in the available market. People earn good income out of it.
Time of collection:	June to August.
Distribution and availability status:	It is found in Gasa, Haa, Thimphu and Wangduephodrang Dzongkhags. Availability quantity is completely depends on the suitability of the seasons.



98.2 Scientific name:	<i>Cortinarius emodensis</i> (Berk.)
Vernacular name:	Bjishi Dungshi (D)
Habitat:	Ground floor of mixed broadleaved and coniferous forests.
Altitude range:	From 2,800 to ca.3,700 masl.
Part collected:	Entire mushroom.
Time of collection:	June to August.
Uses:	Eaten as vegetable. It is delicious. Sometimes it is seen selling in the available market. It is one of the income sources of the farmers.
Distribution and availability status:	It is found in Thimphu and Wangduephodrang Dzongkhags. Availability quantity is depends on the suitability of the seasons

99 Family: Fomitopsidaceae



99.1 Scientific name:	<i>Laetiporus cf. cincinnatus</i> (Morgan) Burdsall, Banik, & Volk
Vernacular name:	Taa shamu / Baw / Tashing shamu (D), Mirgay / Pahlenlay chaew/ Guwashay chaew (L), Muga / Irumogan chaew (Mo)
Habitat:	On the ground glued to roots (down-end of the hardwood trees), buried wood. Base of tree trunk especially of <i>Castanopsis</i> and <i>Quercus</i> .
Altitude range:	It is a mushroom. Can grow anywhere in <i>Castanopsis</i> and <i>Quercus</i> forests if prevails suitable conditions for growth of mushroom.
Part collected:	Entire mushroom.
Uses:	Used as wild edible vegetable mushroom. It is seen selling in the available market or even by the roadside vegetable stall. It is an additional off-farm income source of the people.
Time of collection:	July to October.
Distribution and availability status:	Available in Chhukha, Dagana, Haa, Paro, Punakha, Samtse, Sarpang, Tsirang and Wangduephodrang Dzongkhags. The quantity depends upon the suitability of the growing season.

100 Family: Gomphaceae



100.1 Scientific name:	<i>Ramaria asiatica</i> (R.H. Petersen & M. Zang) R.H. Petersen
Vernacular name:	Bjichu Kangru (D)
Habitat:	On soil within broadleaved or in mixed coniferous forests.
Altitude range:	Grows upto 2800 masl.
Part collected:	Harvest entire mushroom.
Uses:	Consume as vegetable. Some people sell in the available local market and earns good sum of money.
Time of collection:	August to October.
Distribution and availability status:	Found in Pemagatshel and Punakha Dzongkhags. Quantity availability depends upon the suitability of the growing season.



100.2 Scientific name:	<i>Ramaria botrytis</i> (Pers.) Bourdot
Vernacular name:	Jichu or Juchu Kangru / Bjichu Kangru (D)
Habitat:	Terrestrial found under and either of broadleaved or conifer forests, even the dead and dying woods of <i>Quercus</i> and <i>Castanopsis</i> .
Altitude range:	From 1,700 above 2,800 masl.
Part collected:	Harvest entire mushroom.
Uses:	Eat as vegetable. It is bit astringent in taste. It is seen selling in the available market and by the roadside vegetable stall. People earn good income out of it.
Time of collection:	July to September.
Distribution and availability status:	It is found in Chhukha, Gasa, Paro, Punakha, Thimphu, Tsirang and Wangduephodrang Dzongkhags. Availability of quantity depends upon the suitability of the growing months. However people observed quantity in decreasing trend.

101 Family: Grifolaceae



101.1 Scientific name:	<i>Grifola frondosa</i> (Dicks.) Gray
Vernacular name:	Ram shamu (D / Wl)
Habitat:	Broadleaved temperate forests, mixed broadleaved – coniferous forest, usually natural old growth-forests, on old dead or dying log or remnant or around the base of the old dead or dying trees.
Altitude range:	From ca.2,300 to 3,500 masl.
Part collected:	Entire part.
Uses:	Eat as vegetable. It is seen selling in the available market and by the roadside vegetable stall. People earn good income out of it.
Time of collection:	September to November.
Distribution and availability status:	Limited in Thimphu and Wangduephodrang Dzongkhags. However its quantity depends upon the suitability of the weather conditions.

102 Family: Hericiaceae



102.1 Scientific name:	<i>Hericium cf. erinaceus</i> (Bull.: Fr.) Pers
Vernacular name:	Rapoe Jaow (D)
Habitat:	Temperate broadleaved forests, on old living - dead or dying trees of <i>Castanopsis</i> , <i>Quercus</i> or even <i>Betula</i> species, sometimes on cut edges of the freshly felled trees its solitary.
Altitude range:	From ca.2,300 to 2,900 masl.
Part collected:	Entire part.
Uses:	Eat as vegetable. Sometime it is seen selling in the available market. It earns additional off-farm income to farmer.
Time of collection:	July to November.
Distribution and availability status:	Limited in Lhuentse, Mongar, Thimphu and Wangduephodrang Dzongkhags. It is observed in declining trend.

103 Family: Hydnaceae



103.1 Scientific name:	<i>Hydnum repandum</i> (L.)
Vernacular name:	Chey Shamu / Shamong (D)
Habitat:	Mosses and leaf mold of the coniferous or mixed broadleaved forests floor.
Altitude range:	From ca.2,000 to 3,800 masl.
Part collected:	Entire mushroom.
Uses:	As vegetable. Dried and preserved to use during lean vegetable season. Some collectors sell in the available market.
Time of collection:	June to October
Distribution and availability status:	Moderate in Gasa and Wangduephodrang Dzongkhags.

104 Family: Hygrophoraceae



104.1 Scientific name:	<i>Hygrophorus cf. russula</i> (Schaeff. Ex Fr.)
Vernacular name:	Eto Shamu / Shamong (D)
Habitat:	Rhododendron forests.
Altitude range:	From ca.2,500 to 3,500 masl.
Part collected:	Entire mushroom.
Uses:	Consume fresh as vegetable. Sometimes dried and preserved to use during lean vegetable season. Some collectors sell in the available market.
Time of collection:	July to October
Distribution and availability status:	Moderately available in Gasa Dzongkhag.

105 Family: Lyophyllaceae



105.1 Scientific name:	<i>Lyophyllum aggregatum</i> (Schaeff.: Fr.) Kühner
Vernacular name:	Ruru Shamu / Bjishi Ruru (D)
Habitat:	Semi-deciduous broadleaved forest especially some species of castanopsis and oak trees, rich humus areas and on bushy/grassy places.
Altitude range:	From ca. 1,200 to 2,300 masl.
Parts collected:	Entire mushroom.
Uses:	Household consumption and sell in the available local market.
Time of collection:	From July to November.
Distribution and availability status:	It is found in Punakha and its availability completely depends upon the favourable weather conditions of the place.



105.2 Scientific name:	<i>Lyophyllum shimeji</i> (Kawam.) Hongo
Vernacular name:	Kashi Shamu / Shamong (D)
Habitat:	Quercus and Pinus forests in association with lichen.
Altitude range:	From ca.2,000 to 2,600 masl
Part collected:	Entire mushroom.
Uses:	Cook and eat as vegetable curry with meals. If excess, sell in the available market.
Time of collection:	August to October.
Distribution and availability status:	Moderately available in Haa and Thimphu Dzongkhags.



105.3 Scientific name:	<i>Termitomyces eurhizus</i> (Berk.) R. Heim
Vernacular name:	Ka-lungay / Ka-lingay chaew (L), Minbamung (S), Girang shamu (Cg), Leeka shamu (Cpz)
Habitat:	Open bushy ground, forest edges, cultivated land, terrestrial, and grows in solitary or in groups near termite and small ant mound.
Altitude range:	From 450 to 1,800 masl
Part collected:	It is a mushroom so collects entire.
Uses:	Cooked and eat. It makes delicious mushroom curry. It is even roasted inside the local oven under ash and burning coal and eats simply with a pinch of salt.
Time of collection:	June to September
Distribution and availability status:	Quite common but available in small quantity (Few kilograms) in Chhukha, Dagana, Lhuentse, Mongar, Pemagatshel, Samtse and Tsirang Dzongkhags.



105.4 Scientific name:	<i>Termitomyces heimii</i> (Natarajan)
Vernacular name:	Deo-ley / Dhip chaew (L), Tshu tshu / Putang Bamung (S)
Habitat:	Open bushy ground, forest edges, cultivated land, and grows on termite mounds and clayey soil.
Altitude range:	From 150 to ca.600 masl.
Part collected:	Entire mushroom.
Uses:	Cook and eat. It is very delicious and tasty mushroom. It fetches good money to farmer. Before 1990s farmers used to sell in the nearby Indian market.
Time of collection:	From May to July.
Distribution and availability status:	Moderate to plenty in Samdrupjongkhar and Samtse Dzongkhags.



105.5 Scientific name:	<i>Termitomyces microcarpus</i> (Berk. & Broome) R. Heim
Vernacular name:	Zari / zaree chaew (L)
Habitat:	Foothill broadleaved forests, cultivated maize fields, sometimes very close to termite mounds.
Altitude range:	From ca. 150 to 1,250 masl.
Part collected:	It is edible fungi so collects entire mushroom.
Uses:	As one of the natural grown vegetable. It is tiny mushroom and it's very delicious.
Time of collection:	During rainy season. Usually from: May to July.
Distribution and availability status:	Moderately available in Chhukha, Samdrupjongkhar, Samtse, Sarpang and Tsirang Dzongkhags depending upon its season suitability.

106 Family: Morchellaceae



106.1 Scientific name:	<i>Morchella esculenta</i> (L.) Pers.
Vernacular name:	Gep shamu (D)
Habitat:	Dense broadleaved and coniferous forests.
Altitude range:	From ca.3,000 to ca.3,500 masl.
Part collected:	Entire mushroom.
Uses:	Cooked and eat making delicious curry. It is also dried and preserved to eat during lean vegetable season.
Time of collection:	March to July.
Distribution and availability status:	Rare but found in Gasa, Thimphu and Tsirang Dzongkhag.

107 Family: Ophiocordycipitaceae



107.1 Scientific name:	<i>Ophiocordyceps sinensis</i> (Berk.) G.H.Sung, J.M.Sung, Hywel-Jones & Spatafora
Vernacular name:	Yartsa guenbub (D), Yarsha gumba or kira jhar (L / N)
Habitat:	Treeless alpine zone, wet open grasslands or shrublands.
Altitude range:	From 3,000 to 5,200 masl.
Plant part collected:	Entire (actually it is fungi combination of grass and caterpillar).
Uses:	As ingredient in traditional medicine by MSP and for other medicinal purposes. However, the people sell all through auction as it is the high cash value crop of the highlanders.
Time of collection:	May to July
Distribution and availability status:	Collected in Bumthang, Gasa, Haa (Limited), Lhuentse, Paro, Thimphu Tashiyangtse and Wangduephodrang Dzongkhags

108 Family: Pleurotaceae



108.1 Scientific name:	<i>Pleurotus citrinopileatus</i> (Singer)
Vernacular name:	Seli / sili shamu (D)
Habitat:	Sub tropical zones, usually on dead trunks of trees (Castanopsis, Quercus, and other hardwoods), decayed of other plants too.
Altitude range:	Within the range of Castanopsis and Quercus growing areas.
Part collected:	Entire mushroom.
Uses:	Eat as vegetable. It is seen selling in the available market and by the roadside vegetable stall. People earn good income out of this mushroom.
Time of collection:	April to September.
Distribution and availability status:	Available in Chhukha, Dagana, Gasa, Punakha, Tsirang, Wangduephodrang and Zhemgang Dzongkhags. Harvest yield depends upon the suitability of the growing months



108.2 Scientific name:	<i>Pleurotus ostreatus</i> (Jacq.) P.Kumm.
Vernacular name:	Nakey / Naki Shamu / Shamong (D)
Habitat:	Deciduous forests of sub-tropical and temperate zones, forest trees especially of <i>Populus</i> and <i>Quercus</i> species. Found growing on logs, fallen trunks, and large branches, on dead or dying trees. Rarely found on in conifers area too.
Altitude range:	Within sub-tropical and temperate regions.
Part collected:	Entire mushroom.
Uses: Eat as delicious vegetable.	It is seen selling in the available market and by the roadside vegetable stall. People earn good income out of this mushroom.
Time of collection:	May to September, sometimes in January and February.
Distribution and availability status:	Available in Chhukha, Gasa, Punakha and Wangduephodrang Dzongkhags depending upon the suitability of the growing months.

109 Family: Polyporaceae



109.1 Scientific name:	<i>Lentinus squarrosulus</i> (Mont. Singer)
Vernacular name:	Sokey / Tongphu Shamu / Shamong (D), Katusay Chaew (L), Tshatse / Tshatshee Bamung (S)
Habitat:	On dead stumps and logs of <i>Castanopsis</i> and <i>Quercus</i> tree species.
Altitude range:	From 900 to 2,100 masl.
Part collected:	Entire mushroom.
Uses:	Cooked and eat making delicious curry. It is also dried and preserved to eat during lean vegetable season. People sell it in the available market. Even, it is seen selling in the roadside vegetable stalls.
Time of collection:	March to July.
Distribution and availability status:	Quite plenty in Chhukha, Dagana, Gasa, Samdrupjongkhar, Samtse, Trongsa, Tsirang Wangduephodrang and Zhemgang Dzongkhags

110 Family: Russulaceae



110.1 Scientific name:	<i>Lactarius cf. deliciosus</i> (L.: Fr.) S F Grey
Vernacular name:	Om Shamu / Shamong (D), Dud chaew (L)
Habitat:	Evergreen and semi-evergreen forests.
Altitude range:	From ca. 1,150 to ca. 2,500 masl.
Part collected:	Entire mushroom.
Uses:	Consume fresh as vegetable. Sometimes dried and preserved to use during lean vegetable season. Some collectors sell in the available vegetable market.
Time of collection:	August to October
Distribution and availability status:	Limited in Gasa, Punakha and Samtse Dzongkhags.



110.2 Scientific name:	<i>Russula delica</i> (Fr.)
Vernacular name:	Ga / Gah shamu / shamong (D), Dunclu shamu (H), Gasha shamu (Wl)
Habitat:	Both broadleaved and coniferous forests.
Altitude range:	From ca.2,000 to 3,900 masl.
Part collected:	Entire mushroom.
Uses:	Freshly or dried preserved is cooked and eat as vegetable. Sometimes it is seen selling in the available market.
Time of collection:	June to October
Distribution and availability status:	Moderate in Gasa, Haa, Thimphu, and Wangduephodrang Dzongkhags.

111 Family: Schizophyllaceae



111.1 Scientific name:	<i>Schizophyllum commune</i> (Fr.)
Vernacular name:	Tsetsering bamung (S)
Habitat:	Over the dead and decaying deciduous trees or trunks, amongst the lichens.
Altitude range:	Have no specific range.
Part collected:	Entire.
Uses:	Eat as vegetable. Sometimes it is seen selling in the available market.
Time of collection:	Throughout the year round or much prominent immediately after the end of rainy season.
Distribution and availability status:	Moderate in Punakha and Samdrupjongkhar Dzongkhags.

112 Family: Sparassidaceae



12.1 Scientific name:	<i>Sparassis crispa</i> (Wulf.) ex Fr.
Vernacular name:	Meto Shamu / Shamong (D)
Habitat:	Old coniferous forests, on the wood debris, at base or on root of living conifer trees, root network of pine trees.
Altitude range:	From 1100 masl onwards
Part collected:	Entire mushroom.
Uses:	Eat as vegetable. Sometimes it is seen selling in the available market. It is one of the sorted kitchen delicacies.
Time of collection:	Usually from August to November.
Distribution and availability status:	Moderate in Thimphu, Trongsa, Wangduephodrang and Zhemgang Dzongkhags.

113 Family: Strophariaceae



113.1 Scientific name:	<i>Hypholoma capnoides</i> (Fr.) P.Kumm.
Vernacular name:	Yika shamu (D)
Habitat:	Sub-tropical evergreen forests, decayed coniferous wood, nearby decaying conifer logs, over old tree stumps and roots, in clear cut forests areas.
Altitude range:	From ca. 1,450 to 2,500 masl.
Parts collected:	Entire mushroom.
Uses:	Consume as vegetable. Collect, dry and keep to consume during lean vegetable season. Some farmers collect and sell in the available local market.
Time of collection:	From July to September.
Distribution and availability status:	Quite plenty in Punakha, Tsirang and Wangduephodrang Dzongkhags, but its production depends upon the suitability of the prevailing micro-climatic conditions.

114 Family: Suillaceae



114.1 Scientific name:	<i>Suillus pictus</i> (Peck) A. H. Sm. & Thiers
Vernacular name:	Keshay Losha (D)
Habitat:	Grassy floor of the coniferous forests.
Altitude range:	From ca. 1,500 masl onwards
Part collected:	Entire mushroom
Uses:	Consumption as wild vegetable mushroom. It is not that much tasty as it produces too much of slippery extracts.
Time of collection:	From June to September.
Distribution and availability status:	Plenty in Thimphu and Wangduephodrang Dzongkhags.

115 Family: Tricholomataceae



115.1 Scientific name:	<i>Tricholoma matsutake</i> (S.Ito & Imai) Singer
Vernacular name:	Sangay Shamu / Po Shamu (D)
Habitat:	Temperate forests which comprises stands of Pinus, Picea, Tsuga and Quercus.
Altitude range:	From ca. 2,000 to 4,500 masl.
Part collected:	Entire sizeable mushroom.
Uses:	As delicacy vegetable. However, it is mainly selling in the available markets both in local and international places. It is also one of the highest value cash wild crops of the mentioned place farmers.
Time of collection:	July to October.
Distribution and availability status:	Moderate in Bumthang, Gasa, Haa, Thimphu and Wangduephodrang Dzongkhags.

116 Family: Ulvaceae



116.1 Scientific name:	<i>Ulva</i> (spp.)
Vernacular name:	Churu (D)
Habitat:	Fresh running water of streams and rivers.
Altitude range:	Have no specific range.
Part collected:	Entire algae.
Uses:	Consume as vegetable by making starchy soup. It is seen selling in the available vegetable market.
Time of collection:	From September to November when running water is not muddy.
Distribution and availability status:	Available everywhere in those fresh running water. However Wangduephodrang farmers collect and dry and used to sell in the available markets.

FERNS AND FERN-ALLIES

117 Family: Aspleniaceae



117.1 Scientific name:	<i>Deparia boryana</i> (Willd.) M.Kato
Vernacular name:	Kali neguro (L)
Habitat:	Warm broadleaved forests, rich humus areas.
Altitude range:	From 1,000 to 2,500 masl.
Plant part collected:	Root-stock, young frond.
Uses:	Root-stock is used to cure stomach-pain and dysentery. Young fronds cook and eat as green vegetable.
Time of collection:	From February till May.
Distribution and availability status:	Moderate in Samtse and Sarpang Dzongkhags.



117.2 Scientific name:	<i>Diplaziopsis javanica</i> (Blume) C.Chr.
Vernacular name:	Sanu chipley neguro (L), Chukey (Cpz)
Habitat:	Warm broadleaved forests, montane forests.
Altitude range:	Upto 2,000 masl.
Plant part collected:	Young frond and leaves.
Uses:	Cooked and eat as any other vegetables. Sometimes farmers sell in the available market.
Time of collection:	From June to September.
Distribution and availability status:	Moderate in Chhukha, Samdrupjongkhar, Samtse, Sarpang and Tsirang Dzongkhags.

118 Family: Athyriaceae



118.1 Scientific name:	<i>Diplazium esculentum</i> (Retz.) Sw.
Vernacular name:	Pangkey / Nakey (D), Auley Chipley neguro / Charee khutay neguro (L), Dawai (S), Zeelema / Jeema (K), Zhima (Mt)
Habitat:	Secondary growth forest, rainforests, moist valley, open moist sites, damp areas, along the sides of rivers and streams.
Altitude range:	From ca. 200 to 2,300 masl.
Plant part collected:	Young fronds along with leaves.
Uses:	Consume as vegetable. People use to sell in the available market. Even it is seen selling by the roadside vegetable stall. People generate income out of this off-farm vegetable resources.
Time of collection:	Mid-April to October.
Distribution and availability status:	Available plenty in Chhukha, Dagana, Gasa, Lhuentse, Mongar, Paro (Moderate), Pemagatshel, Punakha, Samdrupjongkhar, Samtse, Sarpang, Trongsa, Tsirang, Wangduephodrang and Zhemgang Dzongkhags.



118.2 Scientific name:	<i>Diplazium himalayense</i> (Ching) Panigrahi
Vernacular name:	Nakey (D), Danthey neguro (L)
Habitat:	Open forest areas, swampy places, also dry and semi-shady sites.
Altitude range:	From ca.1,000 to 1,500 masl
Plant part collected:	Young frond.
Uses:	Boil, drain-out water, then cook as vegetable and eat with meals. Also farmers sell in the available vegetable market.
Time of collection:	From April to June.
Distribution and availability status:	Plenty in Chhukha, Haa, Thimphu, Trongsa and Wangduephodrang Dzongkhags.



118.3 Scientific name:	<i>Diplazium maximum</i> (D.Don) C.Chr.
Vernacular name:	Toenkey / Nakey (D), Neguro (L)
Habitat:	Warm broadleaved forests, damp places, alongside of the streams or small gorges, water source sites.
Altitude range:	From 1,600 to 1,800 masl.
Plant part collected:	Young Frond(s).
Uses:	Cook curry and eat like any other vegetable. Some people sell in the available markets for their household income.
Time of collection:	March to May (First flush in less quantity) and July –August (Second flush in maximum quantity).
Distribution and availability status:	Moderate to plenty in Chhukha, Gasa, Punakha, Thimphu, Trongsa, Tsirang and Wangduephodrang Dzongkhags.

119 Family: Dennstaedtiaceae



119.1 Scientific name:	<i>Microlepia caudigera</i> (Moore)
Vernacular name:	Titey neguro (L)
Habitat:	Cloud broadleaved forest, moist places at edges of forests, grasslands, and damp humus areas.
Altitude range:	From 500 to 1,750 masl.
Plant part collected:	FronDS / young leafy parts.
Uses:	Cook curry and eat as wild green vegetable. Has palatable bitter taste. Curry is appetizer for weak people.
Time of collection:	February to May.
Distribution and availability status:	Quite plenty in Chhukha, Dagana and Samtse Dzongkhags.

120 Family: Icmadophilaceae



120.1 Scientific name:	<i>Thamnolia vermicularis</i> (Sw.) Schaer.
Vernacular name:	Shawa Rapchu (Ll)
Habitat:	Alpine regions where dwarf bushes grow. It comes on wet and damp places, surface of the ground and stones or rocks.
Altitude range:	Above ca.3,500 masl.
Part collected:	It is a lichen species, thus entire lichen is collected.
Uses:	As one of the raw-materials for making incense. Entirely used for religious purposes.
Time of collection:	August and September.
Distribution and availability status:	Very limited available in Lhuentse Dzongkhag.

121 Family: Loranthaceae



121.1 Scientific name:	<i>Taxillus kaempferi</i> (DC.) Danser
Vernacular name:	Lam Deka / Lam tekala / Tertela / Zashee kanta / Lamdey kha (D)
Habitat:	Mountain slopes, mixed conifer forests (Blue pine, hemlock, & others), parasitic to Picea, Pinus&Tsuga.
Altitude range:	From 900 to 3,600 masl.
Plant part collected:	Leaves.
Uses:	To make or process local / traditional tealeaf.
Time of collection:	Whenever needed.
Distribution and availability status:	Limited in Chhukha, Dagana, Gasa and Punakha Dzongkhags.

122 Family: Marattiaceae



122.1 Scientific name:	<i>Angiopteris helferiana</i> (C.Presl)
Vernacular name:	Gai-khuray neguro (L), Fatai / Deng / Shelung (K)
Habitat:	Moist forests, wet slopes, along sides of the stream.
Altitude range:	From 900 to ca.1,800 masl.
Plant part collected:	Rootstock.
Uses:	To cure itching especially itching of feet due to mud or muddy-water. It also applies to treat bull's crack neck. People believe it has some medicinal values. It can maintain in flower garden as it is ornamental.
Time of collection:	As and when necessary.
Distribution and availability status:	Limited in Chhukha, Dagana, Mongar and Pemagatshel Dzongkhags.

123 Family: Nephrolepidaceae



123.1 Scientific name:	<i>Nephrolepis cordifolia</i> (L.) C. Presl
Vernacular name:	Zam-gondo / Chaihepto (D), Pani / Bhuin amla (L), Khowchi/ Khiwchi (Lla)
Habitat:	Secondary forest, edge of forest-grassland, warm and wet places, thickets, grassland, humus-rich sites, on rocks and trunks, even in open places.
Altitude range:	From ca. 450 to 2,000 masl.
Plant part collected:	Tuber
Uses:	As general medicinal purposes by the village folks. Some says tuber is useful at times of UTI, indigestion, fever, headache, cold & cough, jaundice and leucorrhoea.
Time of collection:	May to September but can be collected whenever necessary.
Distribution and availability status:	Moderte in Chhukha, Dagana, Lhuentse, Samtse (limited), Sarpang, Trashigang, Trongsa, Tsirang, Wangduephodrang and Zhemgang Dzongkhags.

124 Family: Polypodiaceae



124.1 Scientific name:	<i>Lepisorus contortus</i> (H. Christ) Ching
Vernacular name:	Dak posp (D)
Habitat:	Temperate to alpine zones, mostly in rocky places.
Altitude range:	From ca.1,980 to 4,600 masl.
Plant part collected:	Leaves.
Uses:	As ingredient in traditional medicine by MSP.
Time of collection:	July to August.
Distribution and availability status:	Rare in Bumthang and Thimphu Dzongkhags.

125 Family: Selaginellaceae



125.1 Scientific name:	<i>Selaginella pulvinata</i> (Hook. & Grev.) Maxim
Vernacular name:	Chu srin dermo (M)
Habitat:	Wet and shaded places of hill and mountain sides, on moist rock or trunk.
Altitude range:	From ca. 1500 masl onwards
Part collected:	Leaves.
Uses:	Medicinal purposes.
Time of collection:	November – December.
Distribution and availability status:	Moderate in Trashigang Dzongkhag.

126 Family: Viscaceae



126.1 Scientific name:	<i>Viscum articulatum</i> (Burm. f.)
Vernacular name:	Ngenshithup (D), Harchur / hatichur (L), Ngynashing / Neyshing Jorma/ Jorma or Jormu (S), Tsathuthmey (T)
Habitat:	Woody shrubs and trees in moist deciduous and semi-evergreen forests.
Altitude range:	From 1,000 to 3,000 masl.
Part collected:	Entire.
Uses:	Boil and drink like tea to relief body-pain. Its pastes apply over fracture or sprain for binding and early recovery. MSP also used as one of the ingredients in traditional medicine.
Time of collection:	Any months of the year. Trashiyangtse farmers' group collect in November – December to make local tealeaf. MSP collects it from Trongsa between December and February.
Distribution and availability status:	Available limitedly though it is found in many places of Chhukha, Dagana, Gasa, Lhuentse, Pemagatshel, Punakha, Samdrupjongkhar, Samtse, Sarpang, Trashiyangtse, Trongsa, Tsirang and Wangduephodrang Dzongkhags.

INSECTS

127 Family: Apidae



127.1 Scientific name:	<i>Apis laboriosa</i> (Smith)
Vernacular name:	Jungali / Vir Maouri (L)
Habitat:	Open hill areas, isolated forests, nest mainly on large steep rocky cliff places.
Altitude range:	From 1,200 to 3,500 masl.
Products collected:	Comb along with honey.
Uses:	Honey used as general medicinal purpose, comb used to make wax.
Time of collection:	Especially during or end of plants' flowering seasons.
Distribution and availability status:	Sporadically available Chhukha, Dagana, Samtse, Sarpang, Tsirang and Zhemgang Dzongkhags.



127.2 Scientific name:	<i>Lepidotrigona arcifera</i> (Cockerell)
Vernacular name:	Putka (L)
Habitat:	Foothill forests, inside hallow trunk and stone caves.
Altitude range:	From 150 to 1,500 masl.
Products collected:	Honey and sticky propolis
Uses:	Both honey and sticky propolises are used medicinally. Honey is highly priced as it has exclusive medicinal value. It is used to cure most of the diseases. In Lhotshampkha, sticky propolis is called “Tooti” or “tuti”. Spiritually, Lhotshamp people used to inhale its smoke to relief from various illnesses.
Time of collection:	Usually end of autumn and spring seasons.
Distribution and availability status:	Sporadically available Chhukha, Dagana, Samtse, Sarpang, Tsirang and ZhemgangDzongkhags. People collects trunk containing these bees and used to rear in their backyard.

128 Family: Kerriidae



128.1 Scientific name:	<i>Kerria lacca</i> (Kerr, 1782)
Vernacular name:	Laha (L), Tshos (S) [Actually both these name are used for encrustation of this insect]
Habitat of an insect:	Foothill forests, shrubby or shrublands.
Altitude range:	From 150 to 900 masl.
Part collected:	Exudates.
Uses:	For the purpose of traditional dyeing of yarn / clothes. It is used as medicine to stop dysentery. Also it is widely used to fix the handles of the knives (Khukuri, patang, gichu or any other sickles).
Time of collection:	When insect deposits its exudates on the branches of the shrubs.
Distribution and availability status:	Limited in Pemagatshel, Samdrupjongkhar and Sarpang Dzongkhags.

MINERAL

129 Group: Exudate



129.1 Scientific name:	<i>Asphaltum, Black Bitumen, Mineral Pitch, or Mineral Wax</i>
Vernacular name:	Brag-zhun (M), Shilajeet / Shilajit / Shilaju (L)
Habitat:	Steep rocky cliffs, mountain edges, damp and moist places.
Found:	From 1,000 to 5,000 masl.
What to use or collect:	It is tar-like exudates oozes out of rocky-cliff. So use exudes.
Uses:	For medicinal purposes. People drink it by mixing in warm water or milk at times of body-pain or when parts of the body fractured or sprained, diarrhoea & dysentery. Apply over cuts and wounds to recover as early as possible. The collectors collect from wild and sell in the available markets and earns good sum of money. MSP also used it as one of the ingredients while formulating traditional medicines.
Time of collection:	March to September.
Distribution and availability status:	Found in Chhukha, Dagana Gasa, Haa and Samtse Dzongkhags in limited quantity.

Bibliographies

A.J.C. Grierson & D.G. Long. (1983). Flora of Bhutan. Including a Record of Plants from Sikkim. Vol. 1 Part 1. Royal Botanic Garden, Edinburgh. Published by the Royal Botanic Garden, Edinburgh, for the Overseas Development Administration, Eland House, Stag Place, London, and the Royal Government of Bhutan. © Royal Botanic Garden, Edinburgh 1983. ISBN 0 9504270 1 2.

A.J.C. Grierson & D.G. Long. (1984). Flora of Bhutan. Including a Record of Plants from Sikkim. Vol. 1 Part 2. Royal Botanic Garden, Edinburgh. Published by the Royal Botanic Garden, Edinburgh, for the Overseas Development Administration, Eland House, Stag Place, London, and the Royal Government of Bhutan. © Royal Botanic Garden, Edinburgh 1984. ISBN 0 9504270 2 0.

A.J.C. Grierson & D.G. Long. (1987). Flora of Bhutan. Including a Record of Plants from Sikkim. Vol. 1 Part 3. Royal Botanic Garden, Edinburgh. Published by the Royal Botanic Garden, Edinburgh, for the Overseas Development Administration, Eland House, Stag Place, London, and the Royal Government of Bhutan. © Royal Botanic Garden, Edinburgh 1987. ISBN 0 9504270 6 3.

A.J.C. Grierson & D.G. Long. Edited by D. G. Long. Illustrations by Mary Bates. (1999). Flora of Bhutan. Including a Record of Plants from Sikkim and Darjeeling. Vol. 2 Part 2. Royal Botanic Garden Edinburgh. Royal Government of Bhutan. Published by the Royal Botanic Garden, Edinburgh EH3 5LR, UK and the Royal Government of Bhutan. © Royal Botanic Garden, Edinburgh 1999. ISBN 1 872291 43 0.

A.J.C. Grierson & D.G. Long. Edited by L. S. Springate. (2001). Flora of Bhutan. Including a Record of Plants from Sikkim and Darjeeling. Vol. 2 Part 3. Royal Botanic Garden Edinburgh. Royal Government of Bhutan. Published by the Royal Botanic Garden, Edinburgh, 20A Inverleith Row, Edinburgh EH3 5LR, UK and the Royal Government of Bhutan. © Royal Botanic Garden, Edinburgh and Royal Government of Bhutan 2001. ISBN 1 872291 93 7.

A.J.C. Grierson & D.G. Long. Illustrations by Mary Bates and Glenn Rodrigues. (1991). Flora of Bhutan. Vol. 2 Part 1. Royal Botanic Garden, Edinburgh. Published by the Royal Botanic Garden, Edinburgh. © Royal Botanic Garden, Edinburgh 1991. ISBN 1 872291 02 3.

Adrian and Storrs, J. (1990). Trees and Shrubs of Nepal and the Himalayas. Pilgrims book house, P.O. Box 3872 Thamel, Kathmandu, Nepal. Revised Edition 1990, © Adrian and Jimmie Storrs, All rights reserved.

Agreement of Samten Group for collection of *Rubia cordifolia* & *Yongiba* (2013-2018). Martshala Geog, Samdrup Jongkhar Dzongkhag.

Ao, T., Deb, C.R. (2019). Wild Mushrooms of Nagaland, India – An Important Bioresource. *Studies in Fungi* 4(1), 61–78, Doi 10.5943/sif/4/1/9.

Barbhuiya, A. R., Khan, M. L. & Dayanandan, S. (2016). Genetic structure and diversity of natural and domesticated populations of *Citrus medica* L. in the Eastern Himalayan region of Northeast India. *Ecology and Evolution* 2016; 6(12): 3898–3911, doi: 10.1002/ece3.2174.

Batasey NWFP Management Plan (2018-2022). Batasey NWFP Group. Kilkhorthang Gewog, Tsirang Dzongkhag.

Bawri, A., Gajural, P. R., and Khan, M. L. (2017). *Primula sikkimensis* Hook. And *P. oblique* W.W.Sm. (Primulaceae) – new additions to the flora of Arunachal Pradesh, India. *Pleione* 11(1): 167 – 171. 2017. ISSN: 0973-9467. © East Himalayan Society for Spermatophyte Taxonomy.

Baytselung Non Wood Forest Products Management Plan (2011-2014). Baytselung Shingmen Yargay Gongphel Tshogpa, Lauri geog, Samdrupjongkhar Dzongkhag.

Betar NWFP Management Plan. (2018-2021). Betar NWFP (Bamboo and Broom) Management and Marketing Group. Chukha, Samphelling. Department of Forests and Park Services.

Beyulangdra Shingmaen Thuenkuen Dhang Tshongdrel Tshogpa (2018-2021). Kazhi Geog, Wangduephodrang Dzongkhag.

Bimkhar Bamboo Management Group (2020-2023). Yangtse Geog, Trashiyangtse Dzongkhag.

Bumdir Herbal Tea Management Group (2019-2022). Bumdeling Geog, Trashiyangtse Dzongkhag.

Bumpa Shingmean Dulen Tshogpa. Non Wood Forest Product Collection Group (2010-2013). Dovan Geog, Sarpang Dzongkhag.

Cane Management and Marketing Plan (2019-2022). Broksar Shingmen Thuenken Detshen (Cane). Saling, Mongar Dzongkhag. Department of Forests and Park Services.

Chew Chew Khachap Chetrin Tshogpa. NWFP Management and Marketing Group Plan (2019-2022). Merak Gewog, Trashigang Dzongkhag.

Chimong Non Wood Forest Products Management Plan. (2017-2020). Chimong Shingmoen Thoenkey Zinchong Tshogpa. Pemagatshel, Chimong. Department of Forests and Park Services.

DAMC. (2019). *Cordyceps* Auction Report. Department of Agricultural Marketing & Cooperatives, Ministry of Agriculture & Forests, Thimphu, Bhutan. www.agrimarket.gov.bt.

Dandung Menrig Tshogpa Management Plan (2011-2014). Langthel Gewog, Trongsa Dzongkhag.

Dangchu Gewog Chithun NWFPs Group (2018 – 2021). Dangchu Gewog, Wangduephodrang Dzongkhag.

Das, D., and Datta, B. K. (2018). New distributional record of *Stephania glabra* (Roxb.) Miers (Menispermaceae) in Tripura, India and its domestication in Reang Home-Gardens. *Pleione* 12(2): 337 – 340. 2018. ISSN: 0973-9467. © East Himalayan Society for Spermatophyte Taxonomy. Doi: 10.26679/Pleione.12.2.2018.337-340.

Doringphu Shingmean Dulen Tshogpa. Non Wood Forest Product Collection Group (2010-2013). Jigmecholing Geog, Sarpang Dzongkhag.

Dorji, T. (2015). Policy Analysis Paper. Sustainable Water Source Management in Tshogonpa and Khaimanma villages, Lumang Gewog, Trashigang, Bhutan.

Dozam Revin Community Forest Management Plan–3rdPhase. (2017 – 2027). Drameitse, Monggar Dzongkhag. Department of Forests and Park Services.

Drakpa, R., Tenzin, J., Choden, T., Gyeltshen, N., & Tshering, T., (2018). A Field Guide to Medicinal Plants of Bumthang. Ugyen Wangchuck Institute for Conservation and Environmental Research. Department of Forests & Park Services, Ministry of Agriculture and Forests, Royal Government of Bhutan. Lamai Goempa: Bumthang.

Drukdingsa NWFP Management & Marketing Group. (2017-2020). Drukdingsa NWFP Management and Marketing Group. Chukha, Dungna. Department of Forests and Park Services.

Dungkhar Shingmean Dulen Tshogpa. Non Wood Forest Product Collection Group (2010-2013). Dovan Geog, Sarpang Dzongkhag.

Dungmanma Non Wood Forest Products Management Plan (2011-2014). Dungmanma Shingmen Gakey Pelzom Tshogpa, Lauri geog, Samdrupjongkhar Dzongkhag.

Flora of China. FOC Vol. 20-21 Page 285, 286 http://www.efloras.org/florataxon.aspx?flora_id=2&taxon_id=242351291.

Flowers of the Bhutan Himalaya Facebook page @DrukBlossoms Education.

FRDS. (1998). Non Wood Forest Products. A Report on Thimphu and Paro Dzongkhags. Royal Government of Bhutan. Ministry of Agriculture. Forestry Services Division. Forest Resources Development Section. Thimphu Bhutan.

Gamung Non Wood Forest Products Management Plan. (2017-2020). Gamung Shingmen Detshen. Pemagatshel, Shumar. Department of Forests and Park Services.

Gang Yao, Yun-Fei Deng & Xue-Jun Ge. (2015). A taxonomic revision of *Pogostemon* (Lamiaceae) from China. (Phytotaxa 200). 67 pp.; 30 cm. ISBN 978-1-77557-649-5 (paperback), ISBN 978-1-77557-650-1 (Online edition). <http://www.mapress.com/phytotaxa>.

Gangri Phuensum Ngoemen Tshogpai Zenchong Tsharzee (2018-2021). Naro Gewog, Thimphu Dzongkhag.

Geney Mushroom Management Plan (2008 – 2018). Geney Community Mushroom Management Group, Geney Gewog, Thimphu Dzongkhag.

Ghimire S.K., Sapkota I.B., Oli B.R. and Parajuli-Rai R. 2008. Non-Timber Forest Products of Nepal Himalaya: Database of Some Important Species Found in the Mountain Protected Areas and Surrounding Regions. WWF Nepal, Kathmandu, Nepal.

Gorgoen Shingmin Thoenketh Management Group (2019 – 2022). Gogona, Gangtey Geog, Wangduephodrang Dzongkhag.

Gurung, D., B. (2006). An Illustrated Guide to the Orchids of Bhutan. Royal University of Bhutan. Natural Resources Training Institute, Faculty of Forestry. ISBN 99936-12-08-1. Published by DSB Publication, GPO Box 435, Thimphu Bhutan.

H.J. Noltie. (1994). Flora of Bhutan. Including a Record of Plants from Sikkim and Darjeeling. Vol. 3 Part 1. Royal Botanic Garden Edinburgh. Published by the Royal Botanic Garden Edinburgh, Inverleith Row, Edinburgh EH3 5LR, UK. © Royal Botanic Garden Edinburgh 1994. ISBN 1 872291 11 2.

H.J. Noltie. (2000). Flora of Bhutan. Including a Record of Plants from Sikkim and Darjeeling. Vol. 3 Part 2. The Grasses of Bhutan. Royal Botanic Garden Edinburgh. Royal Government of Bhutan. Published by the Royal Botanic Garden Edinburgh, 20A Inverleith Row, Edinburgh EH3 5LR, UK and the Royal Government of Bhutan. © Royal Botanic Garden Edinburgh and Royal Government of Bhutan 2000. ISBN 1 872291 63 5.

Himalayan Biodiversity and Landscape. <https://www.flickr.com/photos/himalayanbotany/>.

Hourt, K., E. (2008). A Field Guide of the Rattans of Cambodia. Published 2008 by WWF Greater Mekong – Cambodia Country Programme. © text 2008 WWF. All rights reserved. Supported by IKEA/WWF partnership WWF Greater Mekong – Cambodia Country Programme No. 54, Street 352, Boeung Keng Kang 1, Cambodia.

IJRPC 2013, 3(1) Vadnere Gautam et al. *Diplocyclos palmatus*: A Phytopharmacological Review. ISSN: 2231-2781. Available online at www.ijrpc.com.

Khangma Non Wood Forest Products Management Plan. (2017-2020). Khangma Shing Theonkey Zinchong Tshogpa. Pemagatshel, Yurung. Department of Forests and Park Services.

Kuenphen Poina Tshogpa. NWFP Management and Marketing Group Plan (2019-2022). Merak Gewog, Trashigang Dzongkhag.

Lagay Shingmen Tshogpa NWFP Management and Marketing Group Plan (2018-2021). Tsenkhar, Lhuentse Dzongkhag. Department of Forests and Park Services.

Lamjithang Shingmin Nagtshel Thenkey Zinchong dang Tshongdrel Tshogpa (2018 – 2021). Thedtsho Gewog, Wangduephodrang Dzongkhag.

Lauri Non Wood Forest Products Management Plan (2011-2014). Lauri Gaki Shingmei Thoenkey Tshogpa, Lauri geog, Samdrupjongkhar Dzongkhag.

Laya Ngoemen Zinchong Dang Tshongdrel Tshar Zhee (2020-2023). Laya Ngoemen Zinchong Dang Tshongdrel Deychen. Laya, Gasa Dzongkhag. Department of Forests and Park Services.

Limbu, D. H and Das, M. Journal of Bioresources 5(2): 72-76 (2018). ISSN 2394-4315. India.

Litchen Daphne Management Group (2020-2025). Yangtse Geog, Trashiyangtse Dzongkhag.

Majuwa Pangkha Non Wood Forest Product Management Group (2019-2022). Dophuchen Gewog, Samtse Dzongkhag.

Mata, M., Penjor, D., Pradhan, S. (2010). Fungi of Bhutan. Copyright© National Mushroom Centre. Department of Agriculture. Ministry of Agriculture and Forests. ISBN 978-99936-817-1-7. First published: 2010 with support from Programme for South – South Cooperation.

Mawong Non Wood Forest Products Management Plan (2014-2019). Mawong Chirphen Shingmen Thuenkey Tshogpa, Martshala Geog, Samdrup Jongkhar Dzongkhag.

Meena, D., Binaibabu, N. & Doss, J. (2012). Future Prospects for the Critically Endangered Medicinally Important Species, *Canarium strictum* Roxb. A Review. International Journal of Conservation Science. Vol. 3, Issue 3, July-September 2012: 231-237. www.ijcs.uaic.ro.

Momring Non Wood Forest Products Management Plan (2011-2014). Momring Shingmen Thoenkey Tshogpa, Lauri geog, Samdrupjongkhar Dzongkhag.

Mondokha NWFP Management & Marketing Group. (2017-2020). Mondokha NWFP Management and Marketing Group. Chukha, Dungna. Department of Forests and Park Services.

Monpa Selwai Yoezer Tshogpa. Community Forest Management Plan for Cane and Bamboo (2018-2028). Jigme Singye Wangchuk National Park, Tshangkha, Langthel Gewog, Trongsa Dzongkhag.

Mukhia, P. K and Wangchuk, T. (2000). Preliminary Survey Report on Cane of Chukha Dzongkhag. Forest Resources Development Division. Department of Forestry Services. Ministry of Agriculture. Royal Government of Bhutan. Thimphu Bhutan.

Mukhia, P. K. (2000). Non Wood Forest Products. A Report on Haa Dzongkhag. Forest Resources Development Division. Department of Forestry Services. Ministry of Agriculture. Royal Government of Bhutan. Thimphu Bhutan.

Mukhia, P. K. (2001). Non Wood Forest Products in Gasa, Punakha and Wangduephodrang Dzongkhags. A Report. Forest Resources Development Division. Department of Forestry Services. Ministry of Agriculture. Royal Government of Bhutan. Thimphu Bhutan.

Mukhia, P. K. (2003). Report on Non Wood Forest Products of Dagana and Tsirang Dzongkhags. Forest Resources Development Division. Department of Forest Services. Ministry of Agriculture. Royal Government of Bhutan. Thimphu Bhutan.

Mukhia, P. K. (2005). Report on Non Wood Forest Products of Chhukha, Samtse and Sarpang Dzongkhags. Forest Resources Development Division. Department of Forests. Ministry of Agriculture. Royal Government of Bhutan. Thimphu Bhutan.

Mukhia, P. K. (2006). Management Guidelines for *Illicium griffithii* for Community Forests of Bhutan. PFMP Report 32. Participatory Forest Management Project / Helvetas, Social Forestry Section. Social Forestry Division, Department of Forests, Ministry of Agriculture. Thimphu Bhutan.

Mukhia, P. K. (2013). Preliminary Bamboo Resource Survey Report of the Dzongkhags Samtse, Samdrupjongkhar, Tsirang and Zhemgang. Social Forestry and Extension Division, Department of Forests and Park Services. Ministry of Agriculture and Forests. Royal Government of Bhutan.

Mukhia, P. K. (2005). General Guidelines for Management of Bamboo in Bhutan. Forest Resources Development Division, Thimphu. Department of Forest. Ministry of Agriculture. Royal Government of Bhutan.

N.R. Pearce & P.J. Cribb. Illustrated by Susanna Stuart-Smith. (2002). Flora of Bhutan. Including a Record of Plants from Sikkim and Darjeeling. Vol. 3 Part 3. The Orchids of Bhutan. Royal Botanic Garden Edinburgh. Royal Government of Bhutan. Published by the Royal Botanic Garden Edinburgh, 20A Inverleith Row, Edinburgh EH3 5LR, UK and the Royal Government of Bhutan. © Royal Botanic Garden Edinburgh and Royal Government of Bhutan 2002. ISBN 1 872291 19 8.

Namgyel, P. (2000). Working Document WDOC 2000 / 1. The Story of Buddha Mushroom – *Tricholoma matsutake*. Renewable Natural Resources, Research Centre Western Region:

Yusipang. Department of Research & Development Services, Ministry of Agriculture, Thimphu, Bhutan.

Namgyel, P. (2003). Household Income, Property Rights and Sustainable Use of NTFP in Subsistence Mountain Economy: The Case of Cordyceps and Matsutake in Bhutan Himalayas. Paper Presented at the Regional CBNRM Workshop, 4-7 Nov 2003, NRTI Lobeysa. Organized by RGOB, IDRC, SDC, ICIMOD, GTZ and SNV.

Namseling NWFP Management and Marketing Group (2019-2022). Sa-Ngag Choling Geog, Samtse Dzongkhag.

Namther Throgmen Tshogpa Management Plan (2014-2018). Dzongkhag Forestry Sector, Trongsa.

NARMSAP. (2004). CFC-TIS Document Series No. 107. RB60.086. Manual on Bamboos of Nepal. Natural Resource Management Sector Assistance Programme. Community Forestry Component. Tree Improvement and Silviculture. Department of Forest. HMG / N, Ministry of Forests and Soil Conservation, Nepal.

Ngangray Non Wood Forest Products Management Plan. (2016-2021). Ngangray NWFP Zinchong Tshogpa. Pemagatshel, Decheling. Department of Forests and Park Services.

Ngomen Meto Pema NWFP Group (2018 – 2021). Sephu Gewog, Wangduephodrang Dzongkhag.

Nidup, T. (2021). Report on the stingless bees of Bhutan (Hymenoptera: Apidae: Meliponini). *Journal of Threatened Taxa* 13(5): 18344-18348. <https://doi.org/10.11609/jott.4504.13.5.18344-18348>.

Nimtola Tsharzo Detshen Non Wood Forest Produce Management and marketing Plan (2020-2025). Nimtola Tsharzo Detshen. Dorona, Dagana Dzongkhag. Department of Forests and Park Services.

Non Wood Forest Product Management & Marketing Group, Lamtang village (2018-2020). Goshing Gewog, Zhemgang Dzongkhag.

Non Wood Forest Product Management & Marketing Group, Marangduth village (2019-2022). Ngangla Gewog, Zhemgang Dzongkhag.

Non Wood Forest Product Management and Marketing Plan (2019-2022). Resa Shingmen Thuenken Nyamrup Dhetsen. Saling, Mongar Dzongkhag. Department of Forests and Park Services.

Non Wood Forest Products Management and Marketing Group Plan (2018 – 2021). Yengkartseng Group. Dramedtse, Monggar Dzongkhag. Department of Forests and Park Services.

Non Wood Forest Products Management and Marketing Group Plan (2020-2023). Balam Shingmen Detshen. Balam, Mongar Dzongkhag. Department of Forests and Park Services.

Non Wood Forest Products Management and Marketing Group Plan (2020-2023). Mangling Rangwang Chithuen Shingmin Detshen. Saling, Mongar Dzongkhag. Department of Forests and Park Services.

Non Wood Forest Products Management and Marketing Group Plan (2020 – 2023). Gakey Group. Thangrong, Mongar Dzongkhag. Department of Forests and Park Services.

NonWood Forest Products Management and Marketing Group Plan – Revised (2019 – 2022) Deysho Cheroup Dulen Detshen. Ngatshang, MongarDzongkhag. Department of Forests and Park Services.

NWFP Group Management and Marketing Plan (2019 – 2022). Goling Jamphel Thoenkhung Tshogpa. Nangkor Gewog, Zhemgang Dzongkhag.

NWFP Group Management and Marketing Plan (2019 – 2022). Nyakhar Dung Shingmen Tshogpa. Nangkor Gewog, Zhemgang Dzongkhag.

NWFP Group Management and Marketing Plan (2019 – 2022). Shobling Shingmen Tshogpa. Nangkor Gewog, Zhemgang Dzongkhag.

NWFP Group Management and Marketing Plan (2019 – 2022). Thinleygang ShingmenTshogpa. Ngangla Gewog, Zhemgang Dzongkhag.

NWFP Group Management and Marketing Plan (2019 – 2022). Tshaidang Shingmen Tshogpa. Nangkor Gewog, Zhemgang Dzongkhag.

NWFP Group Management and Marketing Plan (2020 – 2025). Dali Shingmen Tshogpa. Bjoka Gewog, Zhemgang Dzongkhag.

NWFP Management & Marketing Plan (2109-2024). Devi Shingmen Tshogpa. Lhamoizingkha, Dagana Dzongkhag. Department of Forests and Park Services.

NWFP Management & Marketing Plan (2109-2024). Dorjiphu Nagtshel Shingmen Tshogpa. Karmaling, Dagana Dzongkhag. Department of Forests and Park Services.

NWFP Management Prescription & Marketing for Drakey-Chinto Ngomen Tshogpa. (2011 – 2014). Doteng, Paro Dzongkhag. Department of Forests and Park Services.

Oongar Non Wood Forest Product Management & Marketing Plan. (2018-2021). Oongar Non Wood Forest Product Management and Marketing Plan. Lhuentse, Metsho. Department of Forests and Park Services.

Orchid Management Plan (2011-2016). Simpho, Nubi Geog, Trongsa Dzongkha.

P. Chimmi. (2006). List of NWFPs used for incense, Nado Incense Factory. Proceedings of the National Workshop on Development of Non-wood Forest Products in Bhutan held on 5 & 6 December 2006 in Thimphu, Bhutan. Forest Resources Development Division Department of Forest Ministry of Agriculture Royal Government of Bhutan.

Parker, C. (1992). Weeds of Bhutan. National Plant Protection Centre Simtokha. Royal Government of Bhutan.

Pathak, M. L., Shrestha, B. B., & et al. (2018). Anatomy of two Rhododendron species along the elevational gradient, Eastern Nepal. Banko Janakari, Vol 28 No. 2, 2018, Pp 32-44.

Patil, S. M., Antony, R., Nampy, S. & Rajput, K. S. (2019). Diversity, Distribution and Conservation Status of the Genus Tectaria Cav. From Deccan Peninsula and Western Ghats of India. Not Sci Biol, 2019, 11(3):475-480. DOI: 10.15835/nsb11310486. Notulae Scientia Biologicae. Print ISSN 2067-3205; Electronic 2067-3264. Available online: www.notulaebiologicae.ro.

Patpanadhang Non Wood Forest Products Management Plan (2013-2018). Patpanadhang Shingmen Dondrup Tshogpa, Lauri geog, Samdrupjongkhar Dzongkhag.

Petari Kabesa NWFP Management Plan. Petari Thuendrel Shingmen Tshokpa.Kabjisa, Punakha Dzongkhag.Department of Forests and Park Services.

Peters, C. and A. Henderson. (2014). Systematics, Ecology and Management of Rattans in Cambodia, Laos and Vietnam. The Biological Bases of Sustainable Use. WWF-Greater Mekong and The New York Botanical Garden.

Phangyul – Kumchi & Goenkha NWFP Group (2018 – 2021). Phangyul Gewog, Wangduephodrang Dzongkhag.

Phobjikha Shingmin Nagtshel Thenkey Zinchong dang Tshongdrel Tshogpa (2015 – 2020). Phobjikha Gewog, Wangduephodrang Dzongkhag.

Phuensum Community Forest Management Plan–Revised 2ndManagement Phase (2018 – 2028). Dramedtse, Monggar Dzongkhag. Department of Forests and Park Services.

Phuntsog Thingney Tshogpa (2019-2022). Yallang Geog, Trashiyangtse Dzongkhag.

PRU, MoH (2011). Reference List for Low Altitude Plants, High Altitude Plants, Animal-part Ingredients and Minerals Based Ingredients. Pharmaceutical and Research Unit, Ministry of Health, Thimphu, Bhutan.

Remung Non Wood Forest Products Management Plan (2014-2019). Remung Lhundreup Shingmin Gongphel Detshen, Orong Geog, Samdrupjongkhar Dzongkhag.

Renang Non Wood Forest Products Management Plan (2011-2014). Renang Shingmen Thuenkey Tshogpa, Lauri geog, Samdrupjongkhar Dzongkhag.

Risum Non Wood Forest Products Management Plan (2013-2018). Risum Tsholing Shingmein Tshogpa, Serthi Geog, Jomotsangkha Dungkhag, Samdrup Jongkhar Dzongkhag.

Rubia cordifolia (Tsoy) Management and Marketing Group. (2019-2022). Khamdang Geog, Trashiyangtse Dzongkhag.

Sarphu NWFP Management Group. (2018-2023). Revised Broomgrass Management and Business Plan. A Business Plan for Sustainable Management and Marketing of Brooms. Gedu, Darla, Chhukha, Bhutan.

Serthi Non Wood Forest Products Management Plan (2013-2018). Serthi Shingmein Yargay Phunsum Tshogpa, Serthi Geog, Jomotsangkha Dungkhag, Samdrup Jongkhar Dzongkhag.

SFD. (2009). Interim Framework for Collection and Management of Non Wood Forest Products. Social Forestry Division, Department of Forest, Ministry of Agriculture, Thimphu, Bhutan.

SFED. (2011). Interim Framework for Management and Marketing of Non Wood Forest Products. Social Forestry & Extension Division, Department of Forests and Park Services, Ministry of Agriculture and Forests, Thimphu, Bhutan.

Sharma, G., and Nautiyal, A.R. (2011). Review Article. Cinnamomum tamala: A valuable tree from Himalayas. High Altitude Plant Physiology Research Centre, HNB Garhwal University (A Central University), Srinagar Garhwal, Uttarakhand, India. Int. J. Med. Arom. Plants, ISSN

2249 – 4340. Vol. 1, No. 1, pp. 1-4, June 2011.

Shingkar Ngomen Tshogpa. NWFP Management and Marketing Group Plan (2019-2022). Merak Gewog, Trashigang Dzongkhag.

Singye Dzong Sangzey Management Group. (2019-2022). Singye Dzong Sangzey Management Group. Lhuentse, Khoma. Department of Forests and Park Services.

SNV Bhutan, IFAD. (2012). A Field Manual on Nursery Management and Cultivation of Chiraita (*Swertia chirayita*). Submitted by ANSAB.

SNV Bhutan, IFAD. (2012). A Field Manual on Nursery Management and Cultivation of Satuwa (*Paris polyphylla*). Submitted by ANSAB.

Soe Yaksa Ngomen Tshogpa, Soe Yaksa Chewog, TsentogGewog, ParoDzongkhag.

Stapleton, C. (1994). Bamboos of Bhutan. An Illustrated Guide. Forestry Department, University of Aberdeen, Royal Botanic Garden Edinburgh, Royal Botanic Gardens Kew in association with Forest Research Division, Forest Department, Royal Government of Bhutan, Thimphu.

Storrs, J. and Adrian. (1990). Trees and shrubs of Nepal and the Himalayas. Revised Edition 1990. Published by Pilgrims Book House, P. O. Box 3872 Thamel, Kathmandu, Nepal.

Taksha Yuesum Non Wood Forest Product Group (2017 – 2021). Taksha Silli Chewog, Daga Gewog, Wangduephodrang Dzongkhag.

Tashiling Non Wood Forest Product Management Plan (2020-2025). Semjong Geog, Tsirang Dzongkhag.

Thekcho Choeling Gonpa Non Wood Forest Products Management Plan (2011-2014). Thekcho Choeling Gonpa Shingmein Tshogpa, Lauri geog, Samdrupjongkhar Dzongkhag.

Thruendrel Shingmean Dulen Tshogpa. Non Wood Forest Product Collection Group (2010-2013). Jigmecholing Geog, Sarpang Dzongkhag.

Thungshing Non Wood Forest Products Management Plan (2014-2019).Thungshing Yubephodrang Shingmin Detshen, Orong Geog, Samdrupjongkhar Dzongkhag.

Tokari Non Wood Forest Products Management Plan. (2017-2020). Tokari Shingmen Detshen. Pemagatshel, Nanong. Department of Forests and Park Services.

Tsakaling Gewog NWFP Management and Marketing Plan. (2018-2020). Tsakaling NWFP Group. Mongar, Tsakaling. Department of Forests and Park Services.

Tsetena Kuenphen Shingmen Tshokpa Plan (2019 – 2022). Tsetena Kuenphen Shingmen Tshokpa. Kabjisa, Punakha Dzongkhag. Royal Government of Bhutan. Ministry of Agriculture and Forests, Divisional Forest Office, Wangdue Division: Lobesa.

Tsheyrim Yuegyel Ngoemen Tshogpai Zenchong Tsharzee (2018-2021). Lingshi Gewog, Thimphu Dzongkhag.

Uma Khatoe Community Forest Management Plan (2013 – 2023). Daga Gewog, Wangduephodrang Dzongkhag.

Vivek KumarRaman, Manish Saini, Amit Sharma and Dr.Bharat Parashar (2018). “Probiotic properties of lactic acid bacteria isolated from animal sources”, International Journal of Development Research, 8, (03), 19660-19665.

Wangchuck Centennial National Park, Bumthang. (2012). Information on non-wood forest supplied during the year 2010, 2011 & 2012 till date. Department of Forests and Park Services, Ministry of Agriculture and Forests.

Wangchuk et al. (2016). Medicinal plants of Dagala region in Bhutan: their diversity, distribution, uses and economic potential. Journal of Ethnobiology and Ethnomedicine (2016) 12:28, DOI 10.1186/s13002-016-0098-7.

Wangchuk, P, Samten and Ugyen. (2009). High Altitude Medicinal Plants of Bhutan. An Illustrated Guide for Practical Use. Pharmaceutical and Research Unit, Institute of Traditional Medicine Services, Ministry of Health, Thimphu, Bhutan.

Wangchuk, T. (2020). A Pictorial Guide to High Altitude Medicinal Flora of Bhutan – A Concise Guide to Field Identification, Volume – I: February 2020. © 2020 gSoRig R&D Division, DoTMS, Ministry of Health, Thimphu. ISBN-978-99936-712-6-8 Printed @ Tshangpa Printing Press, Thimphu.

Woongthii Non Wood Forest Products Management Plan (2011-2014). Woongthii Shingmein Natshok Thuendrel Tshogpa, Lauri geog, Samdrupjongkhar Dzongkhag.

Zangthi Non Wood Forest Products Management Plan (2011-2014). Zangthi Shingmen Thuenkey Tshogpa, Lauri geog, Samdrupjongkhar Dzongkhag.

Zarog gang Community Forest Management Plan (2016 – 2025). Athang Gewog, Wangduephodrang Dzongkhag.

Zoem Dakar Ngoemen Tshogpai Dulane dang Tshongdrel Tsharzee (2019-2022). Dakarla Gewog, Thimphu Dzongkhag.

Bhutan Biodiversity Portal. <https://www.google.com/search?q=bhutan+biodiversity+portal>.

By Adbar – Own work, CC BY-SA 3.0, <https://commons.wikimedia.org/w/index.php?curid=31939563>.

By Forstbirdo – Own work, CC BY 3.0, <https://commons.wikimedia.org/w/index.php?curid=19350218>.

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By Krzysztof Ziarnek, Kenraiz – Own work, CC BY-SA 4.0, <https://commons.wikimedia.org/w/index.php?curid=65088327>.

<http://bamboo-identification.co.uk/html/khasianum.html> (Accessed online on 28/4/2022).

<http://had0.big.ous.ac.jp/plantsdic/angiospermae/dicotyledoneae/choripetalae/loranthaceae/matsugumi/matsugumi.htm>.

[http://issg.org/database/species/ecology.asp?si=632&fr=1&sts=&lang=EN#:~:text=wetlands%20Habitat%20description,.P.,water%20\(IFAS%2C%202001\).](http://issg.org/database/species/ecology.asp?si=632&fr=1&sts=&lang=EN#:~:text=wetlands%20Habitat%20description,.P.,water%20(IFAS%2C%202001).) (Accessed online on 26/3/2022).

<http://meconopsisworld.blogspot.com/2013/01/meconopsis-discigera.html> (Accessed online on 15 May 2022).

<http://www.bamboo-identification.co.uk/html/racemosus1.html> (Accessed online on 24 January 2022).

http://www.epilepsynaturapedia.com/images/c/c2/P80_3.jpg (Accessed online on 16 May 2022).

<http://www.theplantlist.org>.

<http://www.worldfloraonline.org>.

https://biodiversity.bt/files-api/api/get/raw/img//Schizophyllum%20commune/Schizophyllum_commune_SP_Kabesa_e.jpg (Accessed online on 26 May 2022).

https://biodiversity.bt/files-api/api/get/raw/img//Sparassis%20crispa/Sparassis_crispa_LB_Lamperi_2010_2.jpg (Accessed online on 26 May 2022).

https://biodiversity.bt/files-api/api/get/raw/img//Thalictrum%20foliolosum/Thalictrum_foliosum.JPG (Accessed online on 17 May 2022).

<https://biodiversity.bt/files-api/api/get/raw/observations//145e5adb-8e1c-49d1-a18b-4c6d1720eb8a/b012cd88f5374f07b68d340c98f19a15.jpg> (Accessed online on 14 May 2022).

<https://biodiversity.bt/files-api/api/get/raw/observations//145e5adb-8e1c-49d1-a18b-4c6d1720eb8a/96a884419b8a446583169b4f9d253f8c.jpg> (Accessed online on 14 May 2022).

<https://biodiversity.bt/files-api/api/get/raw/observations//3d933326-5fe5-454a-b171-77ec215904b3/389.jpg> (Accessed online on 22 May 2022).

<https://biodiversity.bt/files-api/api/get/raw/observations//3ef6c742-b495-4c35-862d-082030d0629b/500.jpg> (Accessed online on 18 May 2022).

<https://biodiversity.bt/files-api/api/get/raw/observations//4405cc45-7381-4a7c-ba18-3ae204733b2b/876.png> (Accessed online on 17 May 2022).

<https://biodiversity.bt/files-api/api/get/raw/observations//45c4e4cc-00d6-49a7-95ae-4d3bab232e64/664.JPG> (Accessed online on 18 May 2022).

<https://biodiversity.bt/files-api/api/get/raw/observations//47761479-65e5-47c7-bcc8-97149022b988/597.JPG>

<https://biodiversity.bt/files-api/api/get/raw/observations//47c9ad28-51ec-4730-bf01-65938786117f/6fc9d3cddd3d4c419c3bdc41dd9ba14e.JPG> (Accessed online on 14 May 2022).

<https://biodiversity.bt/files-api/api/get/raw/observations//4e770177-551f-455d-9ba9-6284984d4dda/643.JPG> (Accessed online on 13 May 2022).

<https://biodiversity.bt/files-api/api/get/raw/observations//52d3f486-4931-41b6-a226-32684b2ac198/176.jpg> (Accessed online on 13 May 2022).

<https://biodiversity.bt/files-api/api/get/raw/observations//54b0a0f2-485b-4aa2-b335-d81c0b8c05db/637.JPG> (Accessed online on 11 May 2022).

<https://biodiversity.bt/files-api/api/get/raw/observations//54b0a0f2-485b-4aa2-b335-d81c0b8c05db/678.JPG> (Accessed online on 11 May 2022).

<https://biodiversity.bt/files-api/api/get/raw/observations//5fc9d257-9292-42af-8d5f-d4611f46453c/937.jpg> (Accessed online on 17 May 2022).

<https://biodiversity.bt/files-api/api/get/raw/observations//6ec590fa-5fd3-4ca8-842d-75483837cb98/345.jpg> (Accessed online on 14 May 2022).

<https://biodiversity.bt/files-api/api/get/raw/observations//7e5ae3d1-b484-4829-a9cd-fbedc2a04e3d/962.JPG> (Accessed online on 16 May 2022).

<https://biodiversity.bt/files-api/api/get/raw/observations//92068556-749c-4a71-91b4-93a6c39f64f7/243.jpg> (Accessed online on 17 May 2022).

<https://biodiversity.bt/files-api/api/get/raw/observations//9499861f-9517-4470-8d77-0555ee9c2da1/703.JPG> (Accessed online on 16 May 2022).

<https://biodiversity.bt/files-api/api/get/raw/observations//99999331-4400-4b0d-9f70-1ddd23e8f86c/902.jpg> (Accessed online on 10 May 2022).

<https://biodiversity.bt/files-api/api/get/raw/observations//a9062429-4879-4c90-936d-b1b237f30516/310.jpg> (Accessed online on 12 May 2022).

<https://biodiversity.bt/files-api/api/get/raw/observations//a92fd551-a938-49e0-bced-9e4aeaadde5f/a34f2b9a39d445f4b532e5df88205df2.jpg> (Accessed online on 11 May 2022).

<https://biodiversity.bt/files-api/api/get/raw/observations//aab6e50f-32f2-4f41-b151-d201cc330180/50.JPG> (Accessed online on 24 May 2022).

<https://biodiversity.bt/files-api/api/get/raw/observations//aab6e50f-32f2-4f41-b151-d201cc330180/50.JPG> (Accessed online on 28/4/2022).

<https://biodiversity.bt/files-api/api/get/raw/observations//aad49faa-a52c-474e-91f6-60770401fbc8/807.JPG> (Accessed online on 16 May 2022).

<https://biodiversity.bt/files-api/api/get/raw/observations//aadfadc9-0e2d-49f9-8bd9-f2b6316e6835/928.jpg> (Accessed online on 12 May 2022).

<https://biodiversity.bt/files-api/api/get/raw/observations//aba98e45-2fa2-43fe-ad51-e8b85762d01c/345.JPG> (Accessed online on 13 May 2022).

<https://biodiversity.bt/files-api/api/get/raw/observations//aclaa9c8-bf7b-4426-9d1d-6b66d2e2a18a/431.JPG> (Accessed online on 11 May 2022).

<https://biodiversity.bt/files-api/api/get/raw/observations//b5c28afc-e2bf-498e-9976-10130f875f06/471.JPG> (Accessed online on 12 May 2022).

<https://biodiversity.bt/files-api/api/get/raw/observations//d79d9a91-5276-4cac-adac-fff3a6c2d7cd/1777bc71aedd414c93a15686d1a02621.jpg> (Accessed online on 17 May 2022).

<https://biodiversity.bt/files-api/api/get/raw/observations//e3f43ddc-ded9-4eab-82b5-e7e11ac71539/642.JPG> (Accessed online on 31/3/2022).

<https://biodiversity.bt/observation/show/65231> (Accessed online on 5/8/2021).

<https://efloraofindia.com/wp-content/uploads/2017/06/Jaeschkea-oligosperma-3-scaled.jpg> (Accessed online on 13 May 2022).

https://efloraofindia.com/wp-content/uploads/2020/10/_MG_0109_12Nov14.jpg (Accessed online on 22 May 2022).

https://efloraofindia.com/wp-content/uploads/2020/10/7838414118_d0d14cd202_b.jpg (Accessed online on 10 May 2022).

https://efloraofindia.com/wp-content/uploads/2020/10/DSC_0033-6-9.JPG (Accessed online on 15 May 2022).

https://efloraofindia.com/wp-content/uploads/2020/10/DSC_0911-9.JPG (Accessed online on 15 May 2022).

https://efloraofindia.com/wp-content/uploads/2020/10/DSC_0914-9-4.JPG (Accessed online on 15 May 2022).

<https://efloraofindia.com/wp-content/uploads/2020/10/DSC00307-4.JPG> (Accessed online on 17 May 2022).

[https://en.wikipedia.org/wiki/Salvia_castanea#/media/File:Salvia_castanea_\(8079304146\).jpg](https://en.wikipedia.org/wiki/Salvia_castanea#/media/File:Salvia_castanea_(8079304146).jpg) (Accessed online on 14 May 2022).

<https://indiabiodiversity.org>.

<https://indiabiodiversity.org/files-api/api/get/raw/observations//b0988143-f60d-40c3-b6da-368d5029f093/575.JPG> (Accessed online on 13 May 2022).

<https://mpns.science.kew.org/mpns-portaldrugDetail?drugName=gujurgano&query=Stephania+glandulifera&filter=nameSearch%3A%22gujurgano%22&fuzzy=false&nameType=all>.

<https://ngoosen.fotki.com/saxifragaceae/chrysosplenium/chrysosplenium-nudicaule.html> (Accessed online on 22 May 2022).

<https://powo.science.kew.org/taxon/urn:lsid:ipni.org:names:798110-1> (Accessed online on 22 May 2022).

<https://vikaspedia.in/agriculture/post-harvest-technologies/natural-resins-and-gums-of-commercial-importance/dammar> (Accessed online on 2/7/2021).

https://www.asianfagaceae.com/castanopsis/castanopsis_tribuloides/ (Accessed online on 2/7/2021).

<https://www.facebook.com/DrukBlossoms/photos/a.582888522242715/908921176306113>
(Accessed online on 15 May 2022).

<https://www.facebook.com/groups/722613327796096/search/?q=Artocarpus%20lacucha%20>
(Accessed online on 29/3/2022).

<https://www.facebook.com/groups/722613327796096/search/?q=Kaempferia%20rotunda>
(Accessed online on 9/3 2022).

<https://www.facebook.com/groups/722613327796096/search/?q=Wallichia%20oblongifolia>
(Accessed online on 4/1/2022).

<https://www.facebook.com/photo/?fbid=1252058684969267&set=gm.3380772195313516>
(Accessed online on 21/3/2022).

<https://www.facebook.com/photo/?fbid=144590780697745&set=pcb.3346489302105289>
(Accessed online on 24 May 2022).

<https://www.facebook.com/photo/?fbid=1933556876850566&set=gm.4439759376111604>
(Accessed online on 24 May 2022).

<https://www.facebook.com/photo/?fbid=2118547778217787&set=pcb.530005047430303>
(Accessed online on 15 May 2022).

<https://www.facebook.com/photo/?fbid=736976376792394&set=pcb.2729052003818875>
(Accessed online on 4/1/2022).

<https://www.facebook.com/photo?fbid=1756583894669925&set=pcb.1335746069816149>
(Accessed online on 28/3/2022).

<https://www.facebook.com/photo?fbid=2118678024871429&set=pcb.530005047430303>
(Accessed online on 15 May 2022).

<https://www.facebook.com/photo?fbid=3741522089277898&set=pcb.3741522179277889>
(Accessed online on 3/8/2021).

<https://www.facebook.com/photo?fbid=748336902650802&set=pcb.3250896391634431>
(Accessed online on 21/3/2022).

<https://www.gbif.org>.

<https://www.gbif.org/occurrence/3327705017> (Accessed online on 4/8/2021).

https://www.google.com/search?q=tinospora+cordifolia&tbm=isch&source=iu&ictx=1&fir=rBhRhrNFFPjKM%252CQzPgj09-9iwb7M%252C_&vet=1&usg=AI4_-kTSHznaeqPJWvhMx6Gs2amRgAkFPQ&sa=X&ved=2ahUKEwjBneamxJnxAhXNgf0HHbrNCV4Q_hl6BAgxEAE#imgsrc=rBhRhrNFFPjKM.

<https://www.ipni.org>.

<https://www.netmeds.com/health-library/post/shilajit-benefits-uses-formulations-ingredients-method-dosage-and-side-effects> (Accessed online on 22/06/2021).

Index List of Non Wood Forest Products

<i>Abies densa</i> Griff.	Pinaceae	Dungshi (D), Gobray salla (L)	160
<i>Acacia catechu</i> (L.f.) Willd.	Fabaceae	Toeja (D), Khair (L)	92
<i>Acanthocalyx nepalensis</i> <i>subsp. nepalensis</i> (D.Don) M.J.Cannon	Caprifoliaceae	Chang Tsherloma Towa (D / M)	60
<i>Acer campbellii</i> Hook.f. & <i>Thomson ex Hiern</i>	Sapindaceae	Chalum (D), Kapasi (L), Sermiling Shing (S), Kashisang shing (Wl)	224
<i>Achyranthes bidentata</i> Blume	Amarantha- ceae	Datiwan / apamarga (L)	9
<i>Aconitum ferox</i> Wall. ex Ser.	Ranunculace- ae	Tshendug / Bong (D), Bikh / Bikhma (L)	197
<i>Aconitum laciniatum</i> (Bruhl) Stapf.	Ranunculace- ae	Bongkar (D), Dhug-tsi-loma (M), Maanchhen (S)	197
<i>Aconitum orochryseum</i> Stapf.	Ranunculace- ae	Bong nga karmo (D), Bong nga (S), Nirmasee (L)	198
<i>Acorus calamus</i> L.	Acoraceae	Chudala / Chudar / Chuta rekey (D), Bojo (L), Bar-tsi (S), Shuda (Lla / Ll), Shudag nagpo (M), Shuthagla / Chushenderma (T)	6
<i>Actaea spicata</i> L.	Ranunculace- ae	Tumkue (Ll)	199
<i>Actinidia callosa</i> Lindl.	Actinidiaceae	Thekiphal, teekiphal, tekiphal (L)	7
<i>Allium hookeri</i> Thwaites	Amaryllida- ceae	Rum (D), Dung-du-nya / Dung- dunge (L)	10
<i>Allium wallichii</i> Kunth	Amaryllida- ceae	La-gop / Lagok (D), Ban pyaz (L)	10
<i>Alpinia nigra</i> (Gaertn.) Burtl	Zingiberaceae	Baray-ra / Baray-ro (L), Zee-seli (Cpz)	250
<i>Amanita cf. caesarea</i> (Scop.: Fr.) Pers.	Amanitaceae	Gongdo / gongsay shamu (D)	251
<i>Amorphophallus paeoniifolius</i> (Dennst.) Nicolson	Araceae	Gurbo / Gurbu (L), Dochu gurum (Cpz)	22
<i>Ampelocalamus patellaris</i> (Gamble) Stapleton	Poaceae	Neba / Nibha / Nebara, Gopi bans (L)	168
<i>Anemone rivularis</i> Buch.-Ham. ex DC.	Ranunculace- ae	Supdra (D), Supka (M)	200
<i>Angiopteris helferiana</i> C.Presl	Marattiaceae	Gai-khuray neguro (L), Fatai / Deng / Shelung (K)	282
<i>Antidesma acidum</i> Retz	Phyllanthace- ae	Archal (L)	156
<i>Apis laboriosa</i> Smith	Apidae	Vir / Jungali mouri (L)	286
<i>Aquilaria malaccensis</i> Lam.	Thymelaeace- ae	Agur, agar, agura	237

<i>Artemisia dubia</i> Wall. ex Besser	Asteraceae	Khempa (D), Titey-pati (L)	41
<i>Artemisia moorcroftiana</i> Wall. ex DC.	Asteraceae	Khempa (D), Titey-pati (L)	42
<i>Artemisia myriantha</i> Wall. ex Bess.	Asteraceae	Khempa (D), Titey-pati (L), Mayreng-ma (S)	43
<i>Artemisia verlotiorum</i> Lamotte	Asteraceae	Khempa (D), Titey-pati (L)	44
<i>Artocarpus lacucha</i> Buch.-Ham. ex D.Don	Moraceae	Barar, badar (L)	132
<i>Asparagus filicinus</i> Buch.-Ham. ex D.Don	Asparagaceae	Ngyna khagchu (D), Ban kurilo / Satawari (L), Nga Khagchung (K), Nyi-shing (M)	38
<i>Astilbe rivularis</i> Buch.-Ham. ex D.Don	Saxifragaceae	Jubge (D), Buro-okhati (L), Tonsar-gugay (S)	227
<i>Aucklandia lappa</i> DC.	Asteraceae	Ruta shing (D), Ruta (M)	44
<i>Auricularia auricular-judae</i> (Bull.) Quel.	Auriculariaceae	Bjili Namcho / Jilnamcho (D), Kaney / Bajay kan / Musa kaney / Rato ka-nay / Chipley chaew (L)	251
<i>Baccaurea ramiflora</i> Lour.	Phyllanthaceae	Kusum (L), Gotham paisay (S)	157
<i>Bambusa alamii</i> Stapleton	Poaceae	Mugi bans (L), Dingso (Sre), Jacsui (K)	169
<i>Bambusa balcooa</i> Roxb.	Poaceae	Jhushing (D), Dhanu / ban bans (L)	169
<i>Bambusa bambos</i> (L.) Voss	Poaceae	Katha / valka / kanta bans (L)	170
<i>Bambusa clavata</i> Stapleton	Poaceae	Pagshing (D), Chiley / chile bans (L), Pagshi (K)	171
<i>Bambusa nepalensis</i> Stapleton	Poaceae	Khasrey / Khosre bans (L)	172
<i>Bambusa nutans</i> Wall. ex Munro subsp. <i>cupulata</i> Stapleton	Poaceae	Mal / mali / mola / moli / magla / makla / mala / maley bans (L), Tsai (K)	173
<i>Bambusa pallida</i> Munro	Poaceae	Bijuli bans (L)	174
<i>Bambusa tulda</i> Roxb.	Poaceae	Zhushing (D), Shigaray / shingaray mal bans / Bangay bans (L), Jushi (K)	174
<i>Bauhinia purpurea</i> L.	Fabaceae	Zibzibshing (D), Taa-ki (L), Peg-peyposhing (S), Tingka lakchu (Ts)	93
<i>Bauhinia variegata</i> L.	Fabaceae	Ruchashing (D), Koiralo (L), Balingshing (S)	94
<i>Beaumontia grandiflora</i> Wall.	Apocynaceae	Dug mo nyung (M), Gangla (T), Gothaley phul (L)	19
<i>Berberis aristata</i> DC.	Berberidaceae	Kheybi tsang / Kepaitsang (D), Ban chutro (L)	50

<i>Berberis asiatica</i> Roxb. ex DC.	Berberidaceae	Kepaitsang (D), Chutro (L), Kerpa (T)	51
<i>Bergenia ciliata</i> (Haw.) Sternb.	Saxifragaceae	Pakhanved (L)	227
<i>Betula alnoides</i> Buch.-Ham. ex D. Don	Betulaceae	Tab / tapchu / paynap (D), Saur (L)	53
<i>Bischofia javanica</i> Blume	Phyllanthaceae	Kaijal (L)	158
<i>Bistorta macrophylla</i> (D. Don) Sojak	Polygonaceae	Pangja meto / Pang-ram (D)	192
<i>Boletus cf. edulis</i> Bull.: Fr.	Boletaceae	Bam / Phap shamu / shamong (D)	253
<i>Bombax ceiba</i> L.	Malvaceae	Pema Geysar (D,M,S), Simal (L)	123
<i>Bondarzewia cf. monticola</i> (Quel.) Sing.	Bondarzewiaceae	Kow / Kou shamu /shamong (D), Gai-zibray / bha-ainsay chaew (L)	254
<i>Borinda grossa</i> (T.P.Yi) Stapleton	Poaceae	Baa (D / Ku), Rhui (B & K), Shee / Shi (S), Rim baa (Wl)	175
<i>Buddleja asiatica</i> Lour.	Scrophulariaceae	Bhimsen-pati / pate (L)	230
<i>Butea buteiformis</i> (Voigt) Grierson	Fabaceae	Marutshey (M), Phrogpa laga (S)	94
<i>Calamus acanthospathus</i> Griff.	Arecaceae	Tshimtsha (D), Gauribet (L), Minji (S), Krath (K), Moo (Tm)	26
<i>Calamus erectus</i> Roxb.	Arecaceae	Phegkray, pekri, phekri, phekori (L), Kheershing (S), Bher (K)	27
<i>Calamus flagellum</i> Griff.	Arecaceae	Soka / Tangtangma (K)	28
<i>Calamus latifolius</i> Roxb.	Arecaceae	Dey-tsha / Muu (D), Balsey bet / Putle bet / Dhang-ray / Dangri / Dangray bet, Mau bet, Aulay bet Lauri / Lauray bet (L), Khran (K), Drey (S), Humpela (Tm)	29
<i>Calamus leptospadix</i> Griff.	Arecaceae	Titipi / Tangtangma (K)	30
<i>Calamus tenius</i> Roxb.	Arecaceae	Zeechum-tsha (D), Kukhrey / kukhurey / pani bet (L), Krab (Ks)	31
<i>Callicarpa vestita</i> Wall. ex C.B. Clarke	Lamiaceae	Bakam (D), Guaylo / Guyalo / Guyelo (L), Bakam / Bakama (Wl)	110
<i>Camellia oleifera</i> Abel.	Theaceae	Ban chiya (L)	236
<i>Canarium strictum</i> Roxb.	Burseraceae	Poikar (M), Gokuldhup (L), Poikar / Posker / Poskar Shing (S)	57
<i>Cantharellus cibarius</i> Fr.	Cantharellaceae	Sisi shamu / seersi shamu (D) Kan-ney chaew (L), Gowyang / Gowayan bamung (S)	254
<i>Caryota urens</i> L.	Arecaceae	Thakchung Shing (S) / Rang-bhang (L)	32
<i>Cassia fistula</i> L.	Fabaceae	Rajbrikshay (L)	95
<i>Cassiope fastigiata</i> (Wall.) D. Don	Ericaceae	Khandu Auta (Ku), Falu (L)	83

<i>Cassytha filiformis</i> L.	Lauraceae	Akash beli / Paheinle lahara (L)	115
<i>Castanopsis hystrix</i> Hook. f. & Thomson ex A. DC.	Fagaceae	Sokeyshing (D), Patley katus (L), Tshatshe / Tshaishing / Tsheshing (S)	99
<i>Castanopsis indica</i> (Roxb. ex Lindl.) A. DC.	Fagaceae	Dhalney / karay katus (L)	100
<i>Castanopsis tribuloides</i> (Sm.) A. DC.	Fagaceae	Musuray katus (L), Tongpa shing (T)	101
<i>Catunaregam longispina</i> (Link) Tirveng.	Rubiaceae	Maidalu kara (L), Nerthung shing / Shoshoma-zoo-shing (S)	212
<i>Cephalostachyum capitatum</i> Munro	Poaceae	Jhi (D), Phusrey bans / Phurse nigalo / Dulloo bans (L), Kalang (Sre), Pishima (K)	176
<i>Cephalostachyum latifolium</i> Munro	Poaceae	Jhi (D), Gopay or Murali Bans (L), Pishima (K), Lokpa (Cm), Baa (H), Wey (S), Oephela (Tm)	177
<i>Chimonobambusa callosa</i> (Munro) Nakai	Poaceae	Yue / U (D), Karay malingo (L), Rawa/ Roaw baa, Rabay / Glem (K), Rashu / Rasu / Rashi (S)	178
<i>Choerospondias axillaris</i> (Roxb.) B.L.Burt & A.W.Hill	Anacardiaceae	Charashing (D), Labsi / lapsi (L), Phrumchungsay / Throongchung (S), Achoela (Ts), Kurmuling (T), Ruthmula clumchin (K)	11
<i>Chrysosplenium nudicaule</i> Bunge	Saxifragaceae	Yachima (M)	228
<i>Cinnamomum glaucescens</i> (Buch.-Ham. ex Nees) Hand.-Mazz.	Lauraceae	Malagiri (L), Dhurka shing (S), Tshok-shengma (Sk = Sarpang Kheng)	116
<i>Cinnamomum tamala</i> (Buch.-Ham.) T.Nees & C.H.Eberm.	Lauraceae	Shingtsha (D / Pn), Tezpata / Kespata (L), Tespar (S)	117
<i>Cinnamomum verum</i> J.Presl	Lauraceae	Dalchini / Sinkauli (L), Shingtsha (S), Samsala (T)	118
<i>Citrus medica</i> L.	Rutaceae	Phumpa / Humpa (D), Bimira (L), Kapoor-zaymo / Num / Numpang (S), Numpang / Samphur (K)	219
<i>Codonopsis convolvulacea</i> Kurz	Campanulaceae	Nyne-wa-ngong-po (M)	58
<i>Coffea benghalensis</i> B.Heyne ex Schult.	Rubiaceae	Kalo / Seto Chitu (L)	213
<i>Colocasia esculenta</i> (L.) Schott	Araceae	Manay (L)	22
<i>Cortinarius caperatus</i> (Pers.) Fr.	Cortinariaceae	Dungsi / Dungshing shamung / shamong (D), Dungru shamung (H)	255
<i>Cortinarius emodensis</i> Berk.	Cortinariaceae	Bjishi Dungshi (D)	256
<i>Corydalis crisper</i> Prain	Papaveraceae	Khamlug bashaka (M)	151

<i>Costus lacerus</i> Gagnep.	Costaceae	Bet lauri	66
<i>Crateva religiosa</i> G.Forst.	Capparaceae	Shipley kanay (L)	59
<i>Cupressus corneyana</i> Knight & Perry ex Carrière	Cupressaceae	Tshenden / Tshendey (D), Dhupi (L)	73
<i>Cymbidium erythraeum</i> Lindl.	Orchidaceae	Olachotok (D), Sunakhari (L)	144
<i>Cymbidium hookerianum</i> Rchb.f.	Orchidaceae	Olachotok (D), Sunakhari (L)	145
<i>Cymbidium iridioides</i> D. Don	Orchidaceae	Olachotok (D), Sunakhari (L)	146
<i>Cymbopogon bhutanicus</i> Noltie	Poaceae	Solobhang / Sorbhang (S), Kagat-eyghass / Lasuney jhar / Pirayghass (L)	190
<i>Cynanthus lobatus</i> Wall. ex Benth.	Campanulaceae	Chunglay meto karmo / Ngonpo (D)	59
<i>Dactylorhiza hatagirea</i> (D. Don) Soo	Orchidaceae	Wangla (D), Pach-auley (L), Jaa amla (Ly)	147
<i>Daemonorops jenkinsiana</i> (Griff.) Mart.	Areaceae	Hung-tsha (D), Dudia / dut / Lauri bet (L)	33
<i>Daphne bhollua</i> Buch.-Ham. ex D. Don	Thymelaeaceae	De shing / Dheynap (D), Kagatey / Kagati (L), Shoko shing (T), Shogo / shugu shing (S), Desho (Lla)	238
<i>Daphne papyracea</i> Wall. ex Steud.	Thymelaeaceae	Dhey shing / Dheynap (D), Kagatey / Kagati (L), Shogo / shugu shing (S)	239
<i>Daphne sureil</i> W.W. Smith & Cave	Thymelaeaceae	Dheynap (D), Kagatey / kagati (L)	240
<i>Datura metel</i> L.	Solanaceae	Dhaturo (L)	231
<i>Datura stramonium</i> L.	Solanaceae	Dhaturo (L), Nyangmo throkchang (S)	232
<i>Delphinium glaciale</i> Hook. f. & Thomson	Ranunculaceae	Jagoid Poy / Jagoe Poi (M)	201
<i>Delphinium muscosum</i> Exell & Hillc.	Ranunculaceae	Jakang (M)	201
<i>Dendrocalamus hamiltonii</i> Munro var. <i>hamiltonii</i>	Poaceae	Pakshi / pagshi (D) Choya / tama / jungali / ban bans (L), Tsu (K), Songopa / Soo / Lishing / leeshing (S), Paa (Tm)	178
<i>Dendrocalamus hookeri</i> Munro	Poaceae	Pakshi / Pakshing (D / S), Bom bans, Bhalu / Kalo bans (L), Zang-ngoma (K)	179
<i>Dendrocalamus sikkimensis</i> Gamble ex Oliv.	Poaceae	Daem / Demchar / Demcharbu / Demtshar / Dem chherring (S), Bhalu bans (L), Dawong (Tm), Zang (K)	180
<i>Dendrocnicte sinuata</i> (Blume) Chew	Urticaceae	Morongay / Moringe (L), Phronglo (S)	241

<i>Deparia boryana</i> (Willd.) M.Kato	Aspleniaceae	Kali neguro (L)	276
<i>Dioscorea belophylla</i> (Prain) Voigt ex Haines	Dioscoreaceae	Kayte / Tshema keywa (D), Ban tarul (L), Rekey / Ato Kewa (Cbgg), Borang joktang (S), Ronkey / Dai-chela key (K), Kha-tye keywa (G)	76
<i>Dioscorea bulbifera</i> L.	Dioscoreaceae	Geetha (L)	77
<i>Dioscorea hispida</i> Dennst.	Dioscoreaceae	Bharlang (L)	78
<i>Dioscorea pentaphylla</i> L.	Dioscoreaceae	Chaka / Sutee-kewa / Tshakey kewa / Apsukewa (D), Bhyagur / Bhaegur (L), Fantang / Phantang (S), Jukpang key (K)	79
<i>Diplaziopsis javanica</i> (Blume) C.Chr.	Aspleniaceae	Sanu chipley neguro (L)	277
<i>Diplazium esculentum</i> (Retz.) Sw.	Athyriaceae	Pangkey / Nakey (D), Auley Chipley neguro / Charee khutay neguro (L), Dawai (S), Zeelema / Jeema (K), Zhima (Mt)	278
<i>Diplazium himalayense</i> (Ching) Panigrahi	Athyriaceae	Nakey (D), Danthey neguro (L)	278
<i>Diplazium maximum</i> (D.Don) C.Chr.	Athyriaceae	Toenkey / nakey (D), Neguro (L)	279
<i>Diplocyclos palmatus</i> (L.) C.Jeffrey	Cucurbitaceae	Ban / Gol kakra / kakray (L)	68
<i>Diploknema butyracea</i> (Roxb.) H.J.Lam	Sapotaceae	Yikashing / Yega / Yeka Shi (D), Chueri (L), Pin-shing / Pinsay / Pinshingsay (S), Khair mar (K)	226
<i>Docynia indica</i> (Wall.) Decne.	Rosaceae	Tong (D / Ku), Mehel (L), Chaitong (K), Thungkagpoo / Thungkakpasay / Thungchurpa shing (S)	204
<i>Dracocephalum tanguticum</i> Maxim.	Lamiaceae	Tee Yang Ku (D)	111
<i>Drepanostachyum annulatum</i> Stapleton	Poaceae	Him (D), Negalo / negala (L), Chaksu / Phan (K)	181
<i>Drepanostachyum intermedium</i> (Munro) Keng f.	Poacea	Negalo / Negala / titey negalo (L), Phan (K)	182
<i>Drepanostachyum khasianum</i> (Munro) Keng f.	Poaceae	Daphey (D), Hikchu (Wl), Negalo (L), Phan (K)	183
<i>Drosera peltata</i> Thunb.	Droseraceae	Tag Ngu (D)	81
<i>Edgeworthia gardneri</i> Meisn.	Thymelaeaceae	Dheykap (D), Argayle / Lokta (L), Shogo shing ballingmee (S)	240
<i>Elatostema lineolatum</i> Wight	Urticaceae	Damru / damroo (D / Ku), Chho-tey gagleyto / gaglahta, mirgey-jhar (L), Drimom / Gremom (S), Dham-boor (G), Dambaroo (Pl)	242

<i>Entada rheedii</i> Spreng.	Fabaceae	Pang-ra / Pangro (L), Kolokpa (S), Meyyangkali / Yanggalichewa (T), Yangkali / Khangkha (K)	96
<i>Eryngium foetidum</i> L.	Apiaceae	Jungali dhaneya / bhotey / karay / ghora dhaneya (L)	15
<i>Erythrina arborescens</i> Roxb.	Fabaceae	Chassee (D), Phaledo (L), Kharsh- ing (S), Khem shok sho (T)	96
<i>Euphorbia griffithii</i> Hook.f.	Euphorbia- ceae	Dhurji (D), Durjit (M)	89
<i>Euphorbia royleana</i> Bioss.	Euphorbia- ceae	Lushing (T), Nimthomozoo (S)	89
<i>Exidia</i> spp.	Auricularia- ceae	Sew shamu / Jilnamcho shamu (B), Sheru / Sisi shamu (H), Seu- chu shamu (Wg)	251
<i>Ficus auriculata</i> Lour.	Moraceae	Beykhushing (D), Nebhara, Nebharo (L), Chongma shing (S), Dabgo / Dogashing / Boku / Bok- sho / Khoma (Sk)	133
<i>Ficus lacor</i> Buch.-Ham.	Moraceae	Kabra / Kabro / Kavro (L), Phi Shing (S)	134
<i>Ficus pubigera</i> (Wall. ex Miq.) Miq.	Moraceae	Dudhay lahara / Dude lahara (L), Ru shi (Wl)	135
<i>Ficus racemosa</i> L.	Moraceae	Dumri	136
<i>Ficus semicordata</i> Buch.-Ham. ex Sm.	Moraceae	Ridangshing (D), Khanew (L), Barachongma (S)	136
<i>Ficus subincisa</i> Buch.-Ham. ex Sm.	Moraceae	Lutey khanew (L), Gugaichongma / Chongma (S)	137
<i>Firmiana colorata</i> (Roxb.) R.Br.	Malvaceae	Seti / seto odal (L)	124
<i>Fragaria nubicola</i> Lindl. ex Lacaita	Rosaceae	De-ta-sa-dzin (D), Bhuin aeiselu (L)	205
<i>Fritillaria delavayi</i> Franch.	Liliaceae	Tsika / Tsilea/ Lagop (D)	122
<i>Galium aparine</i> L.	Rubiaceae	Zangtsi-karpo (D)	214
<i>Garcinia xanthochymus</i> Hook.f. ex T.Anderson	Clusiaceae	Chunyel (L)	63
<i>Gaultheria fragrantissima</i> Wall.	Ericaceae	Shakchomashing (S), Dhasingare (L)	83
<i>Gentiana algida</i> Pallas	Gentianaceae	Pang-geon meto / Pang-geon ngon po (D), Pangen meto (S)	102
<i>Gentiana robusta</i> King ex Hook.f.	Gentianaceae	Kichu (D), Kyiche karpo (M)	103
<i>Gentiana urnula</i> H. Sm.	Gentianaceae	Gangchu (D), Gangachhung (M)	104
<i>Geranium lambertii</i> Sweet	Geraniaceae	Ligadur / Gadur (M)	107
<i>Geranium refractum</i> Edgew. & Hook.f.	Geraniaceae	Lhagang (D)	107
<i>Girardinia diversifolia</i> (Link) Friis	Urticaceae	Zocha (D), Bhangrey sisnu (L), Gom Jazu (S), Eubay (Wl)	243

<i>Gmelina arborea</i> Roxb. ex Sm.	Lamiaceae	Gamarshing (D), Khamari (L), Kholomshing (S)	112
<i>Grisola frondosa</i> (Dicks.) Gray	Grifolaceae	Ram shamu (D / Wl)	259
<i>Gynocardia odorata</i> R.Br.	Achariaceae	Gantay (L), Dorkhoshing (S)	5
<i>Halenia elliptica</i> D. Don	Gentianaceae	Chaktig (M)	104
<i>Hericium cf. erinaceus</i> (Bull.: Fr.) Pers	Hericiaceae	Rapoe Jaow (D)	260
<i>Herpetospermum pedunculolum</i> (Seringe) Clarke	Cucurbitaceae	Ser-mey-dru (M), Kurkurey kakra / Ban karelaa (L)	69
<i>Heynea trijuga</i> Roxb.	Meliaceae	Akha-taruwa (L)	128
<i>Himalayacalamus falconeri</i> (Hook.f. ex Munro) Keng f.	Poaceae	Singhaney bans (L)	184
<i>Himalayacalamus hookerianus</i> (Munro) Stapleton	Poaceae	Pah-ryang (L)	184
<i>Hippophae salicifolia</i> D. Don	Elaeagnaceae	Tarbu (M), Tare / Tari caum (D)	82
<i>Hodgsonia macrocarpa</i> (Blume) Cogn.	Cucurbitaceae	Gheeu-phal (L), Tersha (S)	70
<i>Hydnum repandum</i> L.	Hydnaceae	Chey shamu / shamong (D)	261
<i>Hydrangea febrifuga</i> (Lour.) Y.De Smet & Granados	Hydrangeaceae	Hoodum / Hindonam / Hogena / Hodom (D), Bhasak/bansuli (L)	108
<i>Hygrophorus cf. russula</i> (Schaeff. Ex Fr.) Kauffman	Hygrophoraceae	Eto shamu (D)	262
<i>Hypocoum leptocarpum</i> Hook. f. & Thoms.	Papaveraceae	Par-pa-ta (D)	151
<i>Hypericum hookerianum</i> Wight & Arn.	Hypericaceae	Sonamchojey (Ty)	109
<i>Hypholoma capnoides</i> (Fr.) P.Kumm.	Strophariaceae	Yika shamu (D)	273
<i>Illicium griffithii</i> Hook.fil. & Thomson	Schisandra- ceae	Doomleeshing (D), Wounba tsinang / Khaila tsinang, Leechi or li-tshi, Sengpa shing (S), Penchar dee (Rt)	229
<i>Imperata cylindrica</i> (L.) P.Beauv.	Poaceae	Becho (D), Seeru / Khar (L), Toe posem (T)	191
<i>Inula grandiflora</i> Willd.	Asteraceae	Mingchen serpo (D / M)	45
<i>Inula racemosa</i> Hook.f.	Asteraceae	Manu (D)	46
<i>Isotrema griffithii</i> (Hook.fil. & Thomson ex Duchartre) C.E.C. Fisch.	Aristolochia- ceae	Baleka (M)	37
<i>Jaeschkea oligosperma</i> (Griseb.) Knobl.	Gentianaceae	Chagtik (M)	105
<i>Jatropha curcas</i> L.	Euphorbia- ceae	Sanu Kadam / Sajiwan (L), Nera Khar Shing (S), Jashing (T)	90

<i>Juglans regia</i> L.	Juglandaceae	Ta / Tago Shing (D), Okhar (L), Khey shing (S), Tarka (Ku), Khuchizewa (K)	110
<i>Juniperus indica</i> Bertol.	Cupressaceae	Shugpa / la-shug / shug-tsher (M), Dhupi (L), Moshoe (Ku)	74
<i>Juniperus recurva</i> Buch.-Ham. ex D.Don	Cupressaceae	Shup / shuk-pa (D), Shupo shing (S / T), Dhupi / Bhairung Dhupi (L)	75
<i>Juniperus squamata</i> Buch.-Ham. ex D.Don	Cupressaceae	Shup shing / Shugpa - sherken (M), Shukpoo (Ku)	76
<i>Justicia adhatoda</i> L.	Acanthaceae	Bashakha (D), Asuro / Kalo basak (L), Khagtsherma / Khagteermu / Khatserim (S), Khagshala meto / Khasali (K), Khashaling (T)	3
<i>Kaempferia rotunda</i> L.	Zingiberaceae	Bhuin champa (L)	248
<i>Kerria lacca</i> (Kerr, 1782)	Kerriidae	Laha (L), Tshos (S)	287
<i>Knema tenuinervia</i> W.J.de Wilde	Myristicaceae	Durka shing (S), Ramguwa / Runcheypat (L)	142
<i>Lactarius cf. deliciosus</i> (L.: Fr.) S F Grey	Russulaceae	Om shamung / shamong (D), Dud chaew (L)	270
<i>Laetiporus cf. cincinnatus</i> (Morgan) Burdsall, Banik, & Volk	Fomitopsidaceae	Taa shamung / Baw / Tashing shamung (D), Mirgay / Pahenlay chaew / Guwashay chaew (L), Mugan / Irumogan chaew (Mo)	257
<i>Laportea bulbifera</i> (Siebold & Zucc.) Wedd.	Urticaceae	Zocha (D), Patley sisnu (L)	244
<i>Lentinus squarrosulus</i> Mont. Singer	Polyporaceae	Sokey / Tongphu shamung (D), Katusay chaew (L), Tshatshee bamung (S)	269
<i>Lepidotrigona arcifera</i> Cockerell	Apidae	Putka (L)	287
<i>Lepisorus contortus</i> (H. Christ) Ching	Polypodiaceae	Dak posp (D)	284
<i>Ligularia amplexicaulis</i> (Wall.) DC.	Asteraceae	Shelempha / Rishog (D), Dola (S), Ankhe phul (L)	47
<i>Ligusticopsis wallichiana</i> (DC.) Pimenov & Kljuykov	Apiaceae	Dungtshu Katshu (D), Rabe / Tsed (M)	15
<i>Lilium nanum</i> Klotzsch	Liliaceae	Aabhi kha (M), Drey tshiga (D)	122
<i>Liquidambar excelsa</i> (Noronha) Oken	Altingiaceae	Seti / seti phal (L)	8
<i>Litsea cubeba</i> (Lour.) Pers.	Lauraceae	Sil-timbur (L), Nenshing / Nensey (S), Gashi thingney / Phar-tshagpa (Sk)	118
<i>Luffa aegyptiaca</i> Mill.	Cucurbitaceae	Ka-bed (M), Jungali Ghiraula (L)	70
<i>Lyophyllum aggregatum</i> (Schaeff.: Fr.) Kühner	Lyophyllaceae	Ruru shamung / Bjishi Ruru (D)	263

<i>Lyophyllum shimeji</i> (Kawam.) Hongo	Lyophyllaceae	Kashi shamu / shamong (D)	263
<i>Machilus edulis</i> King ex Hook. fil.	Lauraceae	Guli (D / Ku), Phamphal / Pham- pot / Bharuwa (L)	119
<i>Machilus macranthus</i> Nees	Lauraceae	Kaulo / kaula / kawla (L), Gulee serposhing (S / K)	120
<i>Macropanax dispermus</i> (Blume) Kuntze	Araliaceae	Chindey (L)	24
<i>Malva sylvestris</i> L.	Malvaceae	Niga (D)	124
<i>Mangifera sylvatica</i> Roxb.	Anacardiaceae	Aam-tsukuli (D), Jungali / Tsuchey amp (L), Zhutali (K), Amsey (S), Abras (M)	12
<i>Meconopsis discigera</i> Prain	Papaveraceae	Gotshen meto (D)	152
<i>Meconopsis horridula</i> Hook. f. & Thomson	Papaveraceae	Tsher Gnoin (M)	153
<i>Meconopsis paniculata</i> (D.Don) Prain	Papaveraceae	Utpel serpo (D)	153
<i>Meconopsis simplicifolia</i> (D. Don) Walpers.	Papaveraceae	Upel Gnoinpo (M)	154
<i>Melocanna baccifera</i> (Roxb.) Kurz	Poaceae	Philing bans (L)	185
<i>Mentha spicata</i> L.	Lamiaceae	Ooshila (D), Padena / Pudina (L), Aushila (S)	112
<i>Microlepia caudigera</i> Moore	Dennstaedtia- ceae	Titey neguro (L)	280
<i>Mimosa pudica</i> L.	Fabaceae	Buhari jhar / Bohari jhar / Buhari kara (L)	97
<i>Momordica charantia</i> L.	Cucurbitaceae	Jungali titey karayla / Ban karayla (L)	71
<i>Momordica dioica</i> Roxb. ex Willd.	Cucurbitaceae	Jungali karayla / Khagsi (L), Bum- buru (Cpz)	72
<i>Morchella esculenta</i> (L.) Pers.	Morchellaceae	Gep shamu (D)	266
<i>Morus australis</i> Poir.	Moraceae	Yosershing (D / Wl), Kimbu / Sanu kimbu (L)	138
<i>Mucuna macrocarpa</i> Wall.	Fabaceae	Baldengra (L), Praiyangkali / Yangalichungwa (T), Pra-yangka- ling (K)	98
<i>Murraya koenigii</i> (L.) Spreng.	Rutaceae	Mitho nim / Mechia sag (L), Ngebtang shing (S), Sondhaling (Ku)	220
<i>Musa balbisiana</i> Colla	Musaceae	Ban kera (L)	139
<i>Musa griersonii</i> Noltie	Musaceae	Ban-kera (L), Chomtsha (Sk)	139
<i>Musa sikkimensis</i> Kurz.	Musaceae	Ban kera (L), Layshingpachala / Waga Laisi / Laishing (S), Ban kera (L), Pakpali (K)	140

<i>Mussaenda roxburghii</i> Hook.f.	Rubiaceae	Dhobenee, dhobee, dhobee pa-ta, dhobee phul, setalu (L), Menchha Patong (S)	215
<i>Myrica esculenta</i> Buch.-Ham. ex D. Don	Myricaceae	Dezam chisishing (D), Kaphal (L), Tsutsu shing (S)	141
<i>Myricaria rosea</i> W.W. Smith.	Tamaricaceae	Hong-Bu (D)	235
<i>Nardostachys jatamansi</i> (D. Don) DC	Valerianaceae	Pangpoi / Pangpay (D / S), Jata-masi (L), Jhapay (H)	248
<i>Nasturtium officinale</i> W.T.Aiton	Brassicaceae	Simrayo (L)	55
<i>Neomicrocalamus andropogonifolius</i> (Griff) Stapleton	Poaceae	Yula / Yule (K), Ringshu (S), Aoo (Cb), Malingo (L)	186
<i>Neopicrorhiza scrophulariiflora</i> (Pennell) D.Y.Hong	Plantaginaceae	Hong-len (D / M), Kutki or kutaki (L)	167
<i>Nephrolepis cordifolia</i> (L.) C. Presl	Nephrolepidaceae	Chaihepto (D), Pani amla / bhuin amla (L), Khowchi / khiwchi (Lla)	283
<i>Onosma hookeri</i> Clarke	Boraginaceae	Mukchi (D), Drimook (M), Mugtsi / muktsi (S), Chundiling (Ku), Mutshi (Lla), Maharangi (L)	54
<i>Ophiocordyceps sinensis</i> (Berk.) G.H.Sung, J.M.Sung, Hywel-Jones & Spatafora	Ophiocordycipitaceae	Yartsa guenbub (D), Yarsha gum-ba or kira jhar (L / N)	267
<i>Oroxylum indicum</i> (L.) Kurz	Bignoniaceae	Tsampa / Tsampaka meto (D), Totola (L), Namkalingshing (S)	53
<i>Osyris lanceolata</i> Hochst. & Steud.	Santalaceae	Chemam (D / Wl), Jaa (D), Tsu-tsu rava-shing / Tsutsuraba / tsishiraba shing (S), Jashing (K)	223
<i>Paederia foetida</i> L.	Rubiaceae	Biri lahara (L)	216
<i>Panax pseudoginseng</i> Wall.	Araliaceae	Drahingee-ra-za / maru go-nay / Daa-zu (M)	25
<i>Parasassafra confertiflora</i> (Meisn.) D.G.Long	Lauraceae	Seyma (D), Bori / kalo bori (L), Selung / Sey Shing (S), Shingmar (Pl), Shingmar / Gashingma / Mashingma (K)	121
<i>Paris polyphylla</i> Sm.	Melanthiaceae	Dho / dho sethuchen / tshema kewa (D), Satuwa (L), Dochu-Kewa (Plp = Punakha locals), Thoksampa / Thoksumpa (S), Jagpa / Jakpa (Ll, Lla, Mt), Ngam dow (T)	127
<i>Parnassia nubicola</i> Wall.	Parnassiaceae	Nguelting (D)	155
<i>Pedicularis longiflora</i> Rudolph var. <i>tubiformis</i> (Klotzsch) P.C. Tsoong	Orobanchaceae	Lukro serpo (M)	148
<i>Pedicularis megalantha</i> D.Don	Orobanchaceae	Lukro marpo (M)	149
<i>Pedicularis siphonantha</i> D. Don	Orobanchaceae	Lukro marpo (M)	150

<i>Phlogacanthus thyrsoformis</i> (Roxb. ex Hardw.) Mabb.	Acanthaceae	Jungali tsuwa, titey tshuwa (L), Bashaka marp (Cpz)	4
<i>Phoenix acaulis</i> Roxb.	Arecaceae	Dagsha (D / WI / Sk) Thakal (L), Thaagm / Phigzem (K), Lari / Lar- ishabu (S), Pyrala (Sk)	34
<i>Pholidota recurva</i> Lindl.	Orchidaceae	Pu-shel-rtse (M)	147
<i>Phrynium pubinerve</i> Blume	Marantaceae	Kawai-pat (L)	126
<i>Phyllanthus emblica</i> L.	Phyllanthace- ae	Omla (D), Churoo (M), Amla (L), Chhorgen / Chhorgensay (S)	158
<i>Phytolacca acinosa</i> Roxb.	Phytolacca- ceae	Kashakani / Kashikana (D), Jarin- go / Jaraylo / Zaraylo (L)	159
<i>Pinus roxburghii</i> Sarg.	Pinaceae	Thetongphu (D), Khote sal-la (L), Roinang shing / Reynang shing / Roju (S)	161
<i>Piper betleoides</i> C.DC.	Piperaceae	Pani / Paney (D), Jungali paan (L), Pan (S), Dhem pan (K)	162
<i>Piper hamiltonii</i> C. DC.	Piperaceae	Pani / Paney (D), Jungali paan (L), Pan (S)	163
<i>Piper longum</i> L.	Piperaceae	Peepla / pipla or chaitey pipla (L), Sakapani (S)	164
<i>Piper mullesua</i> Buch.- Ham. ex D.Don	Piperaceae	Pipiling (M), Dallay chabo (L)	164
<i>Piper pedicellatum</i> C.DC.	Piperaceae	Sakapani / Pipla (S), Bonzalo / Pansey (Pl), Pipla (T)	165
<i>Piper peepuloides</i> Roxb.	Piperaceae	Dolley peepla / pipla, Bhuin pee- pla / pipla, Ruk peepla / pipla (L)	166
<i>Plantago depressa</i> Willd.	Plantagina- ceae	Tha-ram (D)	167
<i>Plectocomia himalayana</i> Griff.	Arecaceae	Pa-tsha (D), Phegkray, tokri, tara, damley, dhoray bet (L), Raycha (K), Tama-dapchu (G / WI), Rey / Phashi (S), Ray (Tm)	35
<i>Pleurospermum amabile</i> Cra- ib & W.W. Smith	Apiaceae	Tsed, Rtsad, Tsey (M)	16
<i>Pleurotus citrinopileatus</i> Singer	Pleurotaceae	Seli / sili shamung (D)	268
<i>Pleurotus ostreatus</i> (Jacq.) P.Kumm.	Pleurotaceae	Nakey / Naki Shamung (D)	268
<i>Plumeria rubra</i> L.	Apocynaceae	Tsuwa / chuwa or Thulo tsuwa / chuwa (L)	19
<i>Podophyllum hexandrum</i> Royle	Berberidaceae	Yoelmo-se (D), Laghu patra (L)	52
<i>Pogostemon amaranthoides</i> Benth.	Lamiaceae	Namna / Namnang / Namshay / Namda (D, K, Ku), Nam tshodma (S), Rudilo (L)	113

<i>Polygonatum verticillatum</i> (L.) All.	Asparagaceae	Ra Ngye (M), Goen (D)	39
<i>Poranopsis paniculata</i> (Roxb.) Roberty	Convolvulaceae	Sikari-lahara (L)	66
<i>Potentilla arbuscula</i> D. Don, Prodr.	Rosaceae	Penma (D)	206
<i>Pouzolzia hirta</i> (Blume) Has- skarl	Urticaceae	Chipley (L)	244
<i>Pouzolzia rugulosa</i> (Wedd.) Acharya & Kravtsova	Urticaceae	Jardhashing (D), Dar / Daar (L), Dhongtshong shing (S)	245
<i>Pouzolzia sanguinea</i> (Blume) Merr.	Urticaceae	Hay (D), Chipley or Lipey (L), Yongjiba / Yongeebu (S), Youngju- va / Yangziba (Pl)	246
<i>Primula sikkimensis</i> Hook.	Primulaceae	Shing drel serpo (M)	196
<i>Prunus napaulensis</i> (Ser. Ex DC.) Steud.	Rosaceae	Kham-greeoy shing (D / H), Arupatey (L), Kurmalay (T)	207
<i>Pseudostachyum polymor- phum</i> Munro	Poaceae	Philling / Filling (L), Dai / Dem (K), Phen (Ccb), Dem / Dempala (Sk)	187
<i>Pterocephalus hookeri</i> (C.B. Clarke) Diels	Caprifoliaceae	Pangtse-dobo (D)	61
<i>Pyrularia edulis</i> A.DC.	Cervantesiaceae	Amphi / Omphi (Rare)	62
<i>Pyrus pashia</i> Buch.-Ham. ex D.Don	Rosaceae	Lee (D), Jungali naspati (L), Lesh- ing / Litong / Leethung-shing (S), Sali (K)	208
<i>Quercus griffithii</i> Hook.f. & Thomson ex Miq.	Fagaceae	Si-Si (D), Kasru (L), Pe Seng (Tn), Beynang Shing (S), Monchara (M)	101
<i>Ramaria asiatica</i> (R.H. Peters- en & M. Zang) R.H. Petersen	Gomphaceae	Bjichu Kangru (D)	258
<i>Ramaria botrytis</i> (Pers.) Bourdot	Gomphaceae	Jichu or Juchu kangru / Bjichu Kangru (D)	258
<i>Rauwolfia serpentine</i> (L.) Benth. ex Kurz	Apocynaceae	Kulane / ban kulane (L)	20
<i>Remusatia vivipara</i> (Roxb.) Schott	Araceae	Jaluka / Jaluki / Jaluko (L)	23
<i>Rheum acuminatum</i> Hook.fil. & Thomson	Polygonaceae	Chhu-tsa (M), Khokim / Padam- chal (L)	193
<i>Rheum australe</i> D. Don	Polygonaceae	Chu-rtsa (M), Chulthi amilo (L)	194
<i>Rheum nobile</i> Hook.f. & Thomson	Polygonaceae	Chhuka / Chhuka meto (D), Ch- huka Dongpo (M), Padamchal (L)	194
<i>Rhodiola crenulata</i> (Hook.fil. & Thomson) H. Ohba	Crassulaceae	Tro-Lo-Marpo (D)	67
<i>Rhododendron anthopogon</i> D.Don	Ericaceae	Balu karmo (D), Dali metog (D / M), Sunpaati (L)	84

<i>Rhododendron arboreum</i> Sm.	Ericaceae	Eto Metog / Aeto meto (D), Gurass / Laligurass (L), Zhu-dang Metog / Yedang Metog (S)	85
<i>Rhododendron ciliatum</i> Hook. f.	Ericaceae	Baloo / Balue (D / S)	86
<i>Rhododendron glaucophyllum</i> Rehder	Ericaceae	Tagma shing (D)	86
<i>Rhododendron lepidotum</i> Wall.	Ericaceae	Balu nakpo (D), Dali metog (M) Bhalay sunpaati (L)	87
<i>Rhododendron setosum</i> D. Don	Ericaceae	Sulu (D / S)	88
<i>Rhus chinensis</i> Mill.	Anacardiaceae	Datick (M), Bhakimlo (L), Pok Pokpa Shing / Roptang Shing (S), Brampa (K)	13
<i>Ricinus communis</i> L.	Euphorbiaceae	Matri-shing / Matti-shing (D), Denrog (M), Arandi (L), Chamling shing (S), Emala (T)	91
<i>Rosa macrophylla</i> Lindley	Rosaceae	Tse-Go (D), Sey-gae (M), Jungali Gulab (L)	208
<i>Rosa sericea</i> Lindley	Rosaceae	Sew Shing (D), Sewai Metog (M), Jungali Seto Gulab (L)	209
<i>Roscoea capitata</i> Sm.	Zingiberaceae	Ga-cha (M)	249
<i>Rubia cordifolia</i> L.	Rubiaceae	Manjit (L), Tsod / tsut (K), La-nyi-roo (S), Tshuth (T)	216
<i>Rubia sikkimensis</i> Kurz.	Rubiaceae	Tsoy / tsey / Tsoe (D), Tsoyd (Ku), Tsod (M), Majito (L), La-nyi-roo (S), Laniru (PI)	217
<i>Rubus biflorus</i> Buch.-Ham. ex Sm.	Rosaceae	Tagchay meto (D)	210
<i>Rubus ellipticus</i> Sm.	Rosaceae	Tshema tshelu (D), Aiselu, rani / sanu / naitey / aulay aiselu (L),	211
<i>Rubus lineatus</i> Reinw. ex Blume	Rosaceae	Nob tshelu / Balu tshelu / Dom tshelu (D), Nob tshelu (Sk), Gyampay / Bhotay aiselu (L)	211
<i>Rumex nepalensis</i> Spreng.	Polygonaceae	Tsa shom / Khem-sum / Sho ma (G), Halhaley (L), Shambali (T), Sho ma (WI)	195
<i>Russula delica</i> Fr.	Russulaceae	Ga / gah shamu / shamong (D), Dunclu shamu (H), Gasha shamu (WI)	271
<i>Salvia castanea</i> Diels	Lamiaceae	Zeeptshe chenpo (M)	114
<i>Sambucus adnata</i> Wall.	Adoxaceae	Yu-gu-shing (D, M)	7
<i>Sapindus mukorossi</i> Gaertn.	Sapindaceae	Nakapani (D), Nakapani / Po-socha (M), Ritha (L), Keeling / Kiling shing (S)	225

<i>Sarocalamus racemosus</i> (Munro) Stapleton	Poaceae	Baa (D), Sanu maling (L), Maxilla (K)	188
<i>Saussurea obvallata</i> (DC.) Sch.Bip.	Asteraceae	Zadug nakpo (M)	47
<i>Schizophyllum commune</i> (Fr.)	Schizophylla- ceae	Tsetsering bamung (S)	271
<i>Selaginella pulvinata</i> (Hook. & Grev.) Maxim	Selaginella- ceae	Chu srin dermo (M)	284
<i>Selinum vaginatum</i> C.B.Clarke	Apiaceae	Tongkuen Nagpo (M)	17
<i>Shorea robusta</i> C.F.Gaertn.	Dipterocarpa- ceae	Payka / Pe-kar (D), Sal / Sakhuwa / Sal-dhup (L)	80
<i>Sida acuta</i> Burm.fil.	Malvaceae	Khareto / Jharu (L)	125
<i>Sparassis crispa</i> (Wulf.) ex Fr.	Sparassida- ceae	Meto shamong / shamu (D)	272
<i>Spatholobus parviflorus</i> (Roxb. ex G.Don) Kuntze	Fabaceae	Debri Lahara	98
<i>Spondias pinnata</i> (L.fil.) Kurz	Anacardiaceae	Amaru / amara (L), Ambar / Bo- chong shing (S)	14
<i>Stephania glabra</i> (Roxb.) Miers	Menisperma- ceae	Paheinlo tamarkay / tambarkay (L), Zalamathang / Zalamathang- say (S)	130
<i>Stephania glandulifera</i> Miers	Menisperma- ceae	Chechu robji (D), Gujurgano (L), Zala mathang ru (S)	131
<i>Sterculia villosa</i> Roxb.	Malvaceae	Odal (L), Odola / Phrang shing (S), Shongshali (K), Sheydey (Sk)	126
<i>Strobilanthes cusia</i> (Nees) Kuntze	Acanthaceae	Ran (D), Shang-ja (K), Yangsawa (S)	4
<i>Suillus pictus</i> (Peck) A. H. Sm. & Thiers	Suillaceae	Keshay Losha (D)	274
<i>Swertia angustifolia</i> Buch.- Ham. ex D.Don	Gentianaceae	Bhaley chiraito (L), Khalu / Tikta (S)	105
<i>Swertia chirayita</i> (Roxb.) H.Karst.	Gentianaceae	Chiraito (L), Khalu / Tikta (S)	106
<i>Symplocos paniculata</i> Miq.	Symplocaceae	Pangtse shing / Doom or Dum shing / Zimshing (D), Kharaney / Gunilo (L), Lekshingsay (S)	233
<i>Symplocos ramosissima</i> Wall.	Symplocaceae	Byitang-ga (M), Kharaney (L)	233
<i>Symplocos theifolia</i> D.Don	Symplocaceae	Dom shi / Khyapshing (D), Zhukhen (M), Lekh Kharaney (L)	234
<i>Syzygium cumini</i> (L.) Skeels	Myrtaceae	Nyasse shing / Ngatshi / Nago tselu (D, G), Jamuna (L), Mitsu shing / Menntse say shing (S), Sra-bras (M)	143
<i>Syzygium nervosum</i> DC.	Myrtaceae	Kya-muna (L), Mitsu shing (S)	144
<i>Tabernaemontana divaricata</i> (L.) R.Br. ex Roem. & Schult.	Apocynaceae	Baramashay phul	21

<i>Tanacetum nubigenum</i> Wall. ex DC.	Asteraceae	Sangchu-karm / Sangzey-karchu (D), Khenkar (M), Khengkar (Ku)	48
<i>Taraxacum eriopodum</i> (D.Don) DC.	Asteraceae	Khur mang (D)	49
<i>Taxillus kaempferi</i> (DC.) Danser	Loranthaceae	Lam Deka / Lam tekala / Tertela / Zashee kanta / Lamdey kha (D)	281
<i>Taxus wallichiana</i> Zucc.	Taxaceae	Ha shing (D), Dhengre / Lauth salla (L), Keyrang-shing (S)	236
<i>Terminalia bellirica</i> (Gaertn.) Roxb.	Combretaceae	Baru / Baroo (D, S, M), Bar-ra (L)	64
<i>Terminalia chebula</i> Retz.	Combretaceae	Aru / Aroo (D, S, M); Har-ra (L)	65
<i>Termitomyces eurhizus</i> (Berk.) R. Heim	Lyophyllaceae	Ka-lungay / ka-lingay chaew (L), Minbamung (S), Girang shamu (Cg)	264
<i>Termitomyces heimii</i> Natarajan	Lyophyllaceae	Deo-ley chaew	265
<i>Termitomyces microcarpus</i> (Berk. & Broome) R. Heim	Lyophyllaceae	Zari / zaree chaew (L)	265
<i>Tetrataenium nepalense</i> (D.Don) Manden.	Apiaceae	Trunag / Tunak (M), Chimping (L)	18
<i>Thalictrum chelidonii</i> DC.	Ranunculaceae	Ngo Tin (D)	202
<i>Thalictrum foliolosum</i> DC.	Ranunculaceae	Dampate (L)	203
<i>Thamnocalamus spathiflorus</i> (Trin.) Munro	Poaceae	Hum (D), Rato nigalo (L)	188
<i>Thamnia vermicularis</i> (Sw.) Schaer.	Icmaadophila- ceae	Shawa Rapchu (Ll)	281
<i>Thlaspi arvense</i> L.	Brassicaceae	Drega / Deyga (D / M)	56
<i>Thysanolaena latifolia</i> (Roxb. ex Hornem.) Honda	Poaceae	Tshakushey / tshakusha, chayee- zom, tshasha (D / S), Beyshawa (S), Amleso / Kucho (L), Berungla / berumla (K), Tshakusha (T)	192
<i>Tibetiodes stracheyi</i> (Hook. fil.) Nesom	Asteraceae	Chu-de-ba (M)	50
<i>Tinospora cordifolia</i> (Willde- now) Hook. f. & Thomson	Menispermaceae	Gurjo (L), Letre / Ngajurmey (T), Sle-tres (M), Phamru / Famru (S)	131
<i>Toona ciliata</i> M. Roem.	Meliaceae	Nyng zho sha (M)	129
<i>Tricholoma matsutake</i> (S.Ito & Imai) Singer	Tricholomata- ceae	Sangay shamu / Po shamu (D)	274
<i>Trichosanthes lepiniana</i> (Naudin) Cogn.	Cucurbitaceae	Indraynee / Indrenee (L), Wang- pem meto (Cpz)	72
<i>Tupistra nutans</i> Wall. ex Lindl.	Asparagaceae	Wangpem / wangpem meto (D, K), Nakima (L), Thur-mum / Thormom / Tholu-mum (S), Thor- mangyu / Wangpai mo (K)	40

<i>Ulva</i> spp.	Ulvaceae	Churu (D)	275
<i>Uncaria scandens</i> (Sm.) Hutch.	Rubiaceae	Bhaisey kara (L)	218
<i>Urtica ardens</i> Link	Urticaceae	Zocha (D), Gharisa sisnu (L), Jazu (S), Bakui (K)	247
<i>Verbascum thapsus</i> L.	Scrophulariaceae	Kachum / Ser-zyed (D)	230
<i>Viscum articulatum</i> Burm. f.	Viscaceae	Ngenshithup (D), Harchur / hatichur (L), Ngynashing / Neyshing Jorma/ Jorma or Jormu (S), Tsathuthmey (T)	285
<i>Vitex negundo</i> L.	Lamiaceae	Sewali / Se-yali / Simali (L)	115
<i>Wallichia disticha</i> T.Anderson	Arecaceae	Lai (L), Seytsam / Saitsham / Saitsee (S)	36
<i>Wallichia oblongifolia</i> Griff	Arecaceae	Thagra / thagray (L), Dungreytsa / Patara / Namthame (Sk)	37
<i>Wendlandia puberula</i> DC.	Rubiaceae	Yonten dem (D), Kangya phul / Kangeyo kath (L), Yonten dema / Basha rong shing / Gong jakpa shing (S), Sonam chogey (K), Jabo shing (Wl)	219
<i>Yushania hirsuta</i> (Munro) R B Majumdar	Poaceae	Hima (D)	189
<i>Yushania maling</i> (Gamble) R.B.Majumdar & Karthik.	Poaceae	Baa (D), Malingo (L)	190
<i>Zanthoxylum acanthopodium</i> DC.	Rutaceae	Bokey timbur (L), Tai thingney (Cbg), Gee daza (S)	221
<i>Zanthoxylum armatum</i> DC.	Rutaceae	Thingney (D), Zat-timbur (L), Gee / Gi (S), Yerma (Mt), Chowa (K)	222
<i>Zanthoxylum bungeanum</i> Max.	Rutaceae	Thingney (D), Timbur (L), Gee (S)	222
<i>Zanthoxylum rhetsa</i> (Roxb.) DC.	Rutaceae	Menchhu thingney (D), Karay timbur / Timbur (L)	223
<i>Ziziphus mauritiana</i> Lam.	Rhamnaceae	Tshoshing (D), Ba-er (L), Khangkhari Shing (S)	203
<i>Asphaltum</i>		Brag-zhun (M), Shilajeet (L)	288

Scale of Availability Status

1	2	3	4	5	6	7	8	9	10
Rare	Limited - Sporadic			Moderate			Plenty		

Annexure

Annex: Numbers of officials / people interacted during the field survey

Bumthang Dzongkhag / PO

Mr. Yonten Norbu CFO (Phumsingla National Park)

Mr. Phuntsho Wangdi FR II (Phumsingla National Park)

Mr. Ugyen Lhendup Sr. FR II (Phumsingla National Park)

Chhukha Dzongkhag / DFO

Mr. Pema Wangda CFO (Gedu Territorial Forest Division Office)

Mr. Pema Gyeltshen Sr. FR I (Gedu Territorial Forest Division Office)

Mr. Rinchen Wangdi Sr. FR I (Gedu Territorial Forest Range Office)

Dagana Dzongkhag / DFO

Mr. Jambay Gyeltshen Sr. FR (Dagapela Territorial Forest Range Office)

Mr. Sonam Jamtsho Sr. FR (Lhamoizingkha Territorial Forest Range Office)

Gasa Dzongkhag / PO

Mr. Rinzin Dorji CFO (Jigme Dorji National Park, Damji – Gasa)

Mr. Sangay Tenzin Sr. FR III (Jigme Dorji National Park, Damji – Gasa)

Haa Dzongkhag

Mr. Tshewang Penjor Farmer, Puduna – Haa

Lhuentse Dzongkhag / PR

Mr. Kezang Dukpa Sr. FR I (Autsho Park Range / Bumdeling Wildlife Sanctuary)

Mr. Kinzang Thinley Sr. FR I (Khoma Park Range / Bumdeling Wildlife Sanctuary)

Mr. Sonam Drugyel Sr. FR II (Mongar Territorial Forest Division Office)

Mongar Dzongkhag / DFO

Mr. Karma Tempa CFO ((Mongar Territorial Forest Division Office)

Mr. Sonam Drugyel Sr. FR II (Mongar Territorial Forest Division Office)

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Mr. Ugyen Wangchuk CFO (Pemagatshel Territorial Forest Division Office)

Mr. Kinley Dorji FO (Pemagatshel Territorial Forest Division Office)

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Mr. Karma Tenzin CFO

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Mr. Phuntsho Namgay Sr. FO

Samdrupjongkhar Dzongkhag

Mr. Karma, Orong Gewog

Mr. Tshewang Dorji, SFED, Thimphu

Samtse Dzongkhag / DFO

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Mrs. Narayan Maya Sunuwar, Farmer, Dephelling Nga

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Mr. Kharka Bahadur Rai, Farmer, Dephelling Nga

Mr. Chandra Kumar Subba, Farmer, Dephelling Nga

Mr. Bidur Ghalley, Farmer / Deesup, Semina-dara, Tading

Trashigang Dzongkhag / Divisional Office

Mr. Karma Leki, CFO

Mr. Pema Tenzin, Sr. FR

Mr. Sonam Wangyel, FO, Sakten Wildlife Sanctuary

Trashiyangtse Dzongkhag

Mr. Lam Norbu, FO

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Mr. Jigme Tshering, Sr. FR

Mr. Sethey Adhikari, Sr. Fr.

Mr. Chandra Singh Subba, Sr. Fr.

Mr. Damcho, Driver

Tsirang Dzongkhag / DFO

Mr. Gem Tshering, PFO

Mr. Kharananda Ghimirey, Sr.FR

Mr. Shiva Lal Dhakal, ESP

Wangduephodrang Dzongkhag / DFO

Mr. Karma Tenzin CFO

Mr. Sonam Tobgay Dy.CFO

Mr. Phuntsho Namgay Sr. FO

Zhemgang Dzongkhag / DFO

Mr. Jigme Dorji, Then CFO

Mr. Dhan Bahadur Subba, Sr. Fr.

Mr. Chakman Monger, Sr. Fr.

Mr. Jamtsho Norbu, Driver