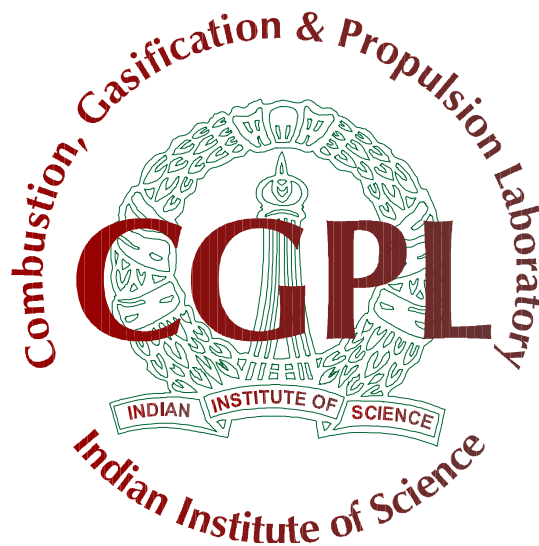


Biomass Mapping for Power Generation for Kerala

Biomass Manual



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Biomass Assessment for Kerala for Kharif, Yearly, Agro



Biomass Assessment for Kerala

1. Kharif

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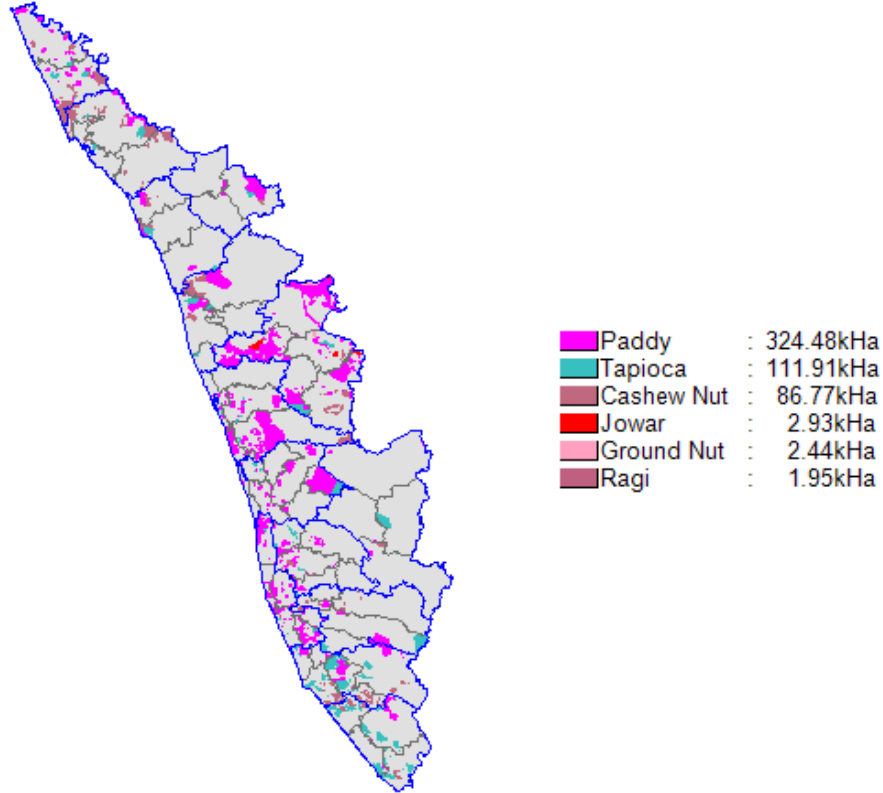
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Kharif

Kerala-Kharif



State Level Residue Wise

State level Residue-wise Data for Kerala; Season : Kharif						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Tapioca	Stalks	111.9	2466.6	1775.9	1243.2	161.6
Paddy	Straw	324.5	885.1	1327.6	132.8	15.9
Paddy	Husk	324.5	885.1	177.0	141.6	15.6
Cashewnut	Stalks	86.8	42.8	77.0	15.4	2.0
Cashewnut	Shell	86.8	42.8	21.4	4.3	0.56
Others	Others	4.9	3.1	6.2	1.1	0.14
Groundnut	Stalks	2.4	1.8	3.6	0.73	0.094
Total		530.5	3399.3	3388.8	1539.1	195.9

State Level District Wise

State level District-wise Data for Kerala ; Season : Kharif					
District	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Kollam	42.7	599.9	466.4	296.1	38.4
Thiruvananthapuram	34.6	478.4	364.5	237.5	30.8
Palakkad	134.6	478.3	685.2	175.0	21.2
Idukki	13.7	275.6	212.4	136.3	17.7
Kottayam	23.9	246.3	220.7	115.6	14.8
Pathanamthitta	15.3	219.0	174.4	107.2	13.9
Malappuram	41.3	229.4	228.1	104.7	13.3
Ernakulam	39.4	220.0	232.8	96.2	12.1
Alappuzha	42.1	168.6	215.2	67.0	8.3
Kannur	40.6	111.8	125.0	51.0	6.5
Thrissur	42.2	135.3	203.6	47.7	5.7
Kozhikode	14.7	85.6	74.8	41.0	5.3
Wayanad	16.3	90.9	107.3	37.7	4.7
Kasaragod	29.0	60.2	78.3	26.1	3.3
Total	530.5	3399.3	3388.8	1539.1	195.9

State Level Taluk Wise

State level Taluk-wise Data for Kerala ; Season : Kharif						
District	Taluk	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Thiruvananthapuram	Neyyattinkara	14.6	245.9	177.9	123.9	16.1
Kollam	Kottarakara	17.0	246.6	188.6	122.5	15.9
Kollam	Kollam	12.5	234.6	170.2	118.2	15.4
Idukki	Udumbanchola	6.9	219.0	157.7	110.4	14.3
Pathanamthitta	Kozhanchery	12.6	189.6	151.1	92.7	12.0
Kottayam	Vaikam	9.7	172.4	133.6	85.0	11.0
Ernakulam	Kotamangalam	24.6	176.0	169.6	80.2	10.2
Malappuram	Tirur	21.4	156.2	144.5	72.9	9.3
Palakkad	Alattur	17.9	138.4	138.5	62.1	7.9
Thiruvananthapuram	Nedumangad	11.2	117.4	99.3	56.3	7.2
Kannur	Talipparamba	33.0	100.4	111.1	45.4	5.8
Palakkad	Ottappalam	50.7	142.6	243.1	44.3	5.1
Thiruvananthapuram	Chirayinkil	5.2	70.1	51.5	35.3	4.6
Wayanad	Sultans Battery	13.6	82.3	92.8	35.1	4.4
Kollam	Pattanapuram	8.9	73.6	68.6	34.1	4.4
Palakkad	Mannarkkad	37.7	106.4	181.5	33.3	3.8
Alappuzha	Kartikapalli	6.9	55.5	45.8	27.1	3.5
Thrissur	Mukundapuram	31.6	86.8	142.7	28.3	3.3
Malappuram	Ernad	19.5	61.3	75.1	25.8	3.2
Idukki	Pirmed	4.7	48.5	42.7	23.1	3.0
Thiruvananthapuram	Thiruvananthapuram	3.6	45.0	35.7	22.0	2.8
Kottayam	Kottayam	10.4	53.4	63.2	22.1	2.8
Palakkad	Palakkad	7.9	45.9	44.0	21.0	2.7
Kollam	Karunagapalli	3.1	41.7	33.4	20.4	2.6
Kozhikode	Kozhikode	5.3	41.3	34.8	19.8	2.6
Kozhikode	Quilandi	4.8	36.1	28.9	17.8	2.3
Alappuzha	Mavelikara	16.4	52.9	80.6	18.2	2.2
Kasaragod	Hosdrug	20.4	35.0	45.7	15.8	2.0
Pathanamthitta	Adur	1.3	27.6	20.0	13.9	1.8
Palakkad	Chittur	20.5	45.0	78.2	14.3	1.7
Alappuzha	Shertallai	5.2	26.3	30.6	10.9	1.4
Thrissur	Kodungallur	4.8	22.0	27.4	8.8	1.1
Thrissur	Thrissur	4.4	19.4	25.0	7.6	0.93
Kottayam	Changanacheri	2.1	15.9	16.1	7.1	0.90

District	Taluk	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Ernakulam	Parur	0.61	12.2	9.1	6.1	0.79
Malappuram	Ponnani	0.51	11.9	8.6	6.0	0.78
Kasaragod	Tellicherry	0.50	11.4	8.2	5.7	0.75
Ernakulam	Kunnatnad	7.6	17.1	29.1	5.3	0.61
Alappuzha	Ambalapulai	7.3	16.5	28.6	5.2	0.61
Kannur	Kannur	2.9	9.1	8.5	4.5	0.59
Kasaragod	Kasaragod	8.0	13.7	24.4	4.5	0.53
Alappuzha	Kuttanad	5.3	14.6	24.7	4.5	0.52
Kozhikode	Badagara	4.6	8.2	11.2	3.4	0.42
Thrissur	Chavakkad	1.4	7.2	8.5	3.0	0.37
Idukki	Devikolam	2.1	6.7	11.1	2.1	0.25
Ernakulam	Kanayannur	2.7	6.1	10.3	1.9	0.22
Wayanad	Manantavadi	1.6	5.1	8.6	1.6	0.18
Ernakulam	Alwaye	2.2	4.9	8.4	1.5	0.18
Kottayam	Minachil	1.8	4.5	7.8	1.4	0.16
Kannur	Tellicherry	4.8	2.3	5.4	1.1	0.14
Wayanad	Vayittiri	1.1	3.5	5.9	1.1	0.12
Kollam	Kunnattur	1.2	3.3	5.6	1.0	0.12
Alappuzha	Chengannur	1.1	2.9	4.9	0.90	0.10
Ernakulam	Muvattupula	1.3	2.7	4.6	0.85	0.098
Idukki	Todupulai	0.046	1.4	1.00	0.69	0.089
Pathanamthitta	Tiruvalla	1.1	1.7	3.0	0.57	0.068
Ernakulam	Cochin	0.42	0.94	1.6	0.29	0.034
Pathanamthitta	Rani	0.27	0.13	0.30	0.061	0.0079
Total		530.5	3399.3	3388.8	1539.1	195.9

District Level Residue Wise

District level Residue-wise Data for Alappuzha; Season : Kharif						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Tapioca	Stalks	4.5	74.1	53.4	37.4	4.9
Paddy	Straw	33.7	92.5	138.8	13.9	1.7
Paddy	Husk	33.7	92.5	18.5	14.8	1.6
Cashewnut	Stalks	4.0	2.0	3.5	0.71	0.092
Others	Others	0	0	0.98	0.20	0.026
Total		42.1	168.6	215.2	67.0	8.3

District level Residue-wise Data for Ernakulam; Season : Kharif						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Tapioca	Stalks	5.8	144.2	103.8	72.7	9.4
Paddy	Straw	33.4	75.7	113.6	11.4	1.4
Paddy	Husk	33.4	75.7	15.1	12.1	1.3
Others	Others	0.17	0.082	0.19	0.038	0.0049
Total		39.4	220.0	232.8	96.2	12.1

District level Residue-wise Data for Idukki; Season : Kharif						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Tapioca	Stalks	8.2	261.6	188.4	131.8	17.1
Paddy	Straw	4.4	13.4	20.1	2.0	0.24
Paddy	Husk	4.4	13.4	2.7	2.1	0.24
Others	Others	1.1	0.55	1.3	0.25	0.033
Total		13.7	275.6	212.4	136.3	17.7

District level Residue-wise Data for Kannur; Season : Kharif						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Tapioca	Stalks	3.5	74.3	53.5	37.4	4.9
Cashewnut	Stalks	26.0	12.8	23.0	4.6	0.60
Paddy	Straw	11.2	24.8	37.1	3.7	0.45
Paddy	Husk	11.2	24.8	5.0	4.0	0.44
Cashewnut	Shell	26.0	12.8	6.4	1.3	0.17
Total		40.6	111.8	125.0	51.0	6.5

District level Residue-wise Data for Kasaragod; Season : Kharif						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Tapioca	Stalks	1.3	30.5	22.0	15.4	2.0
Cashewnut	Stalks	20.2	9.9	17.9	3.6	0.47
Paddy	Straw	7.5	19.7	29.5	3.0	0.35
Paddy	Husk	7.5	19.7	3.9	3.1	0.35
Cashewnut	Shell	20.2	9.9	5.0	0.99	0.13
Total		29.0	60.2	78.3	26.1	3.3

District level Residue-wise Data for Kollam; Season : Kharif						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Tapioca	Stalks	26.4	566.1	407.6	285.3	37.1
Paddy	Straw	11.6	31.4	47.2	4.7	0.57
Paddy	Husk	11.6	31.4	6.3	5.0	0.55
Cashewnut	Stalks	4.8	2.4	4.2	0.85	0.11
Others	Others	0	0	1.2	0.24	0.031
Total		42.7	599.9	466.4	296.1	38.4

District level Residue-wise Data for Kottayam; Season : Kharif						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Tapioca	Stalks	7.8	202.3	145.6	101.9	13.3
Paddy	Straw	15.4	43.6	65.4	6.5	0.79
Paddy	Husk	15.4	43.6	8.7	7.0	0.77
Others	Others	0.80	0.39	0.91	0.18	0.024
Total		23.9	246.3	220.7	115.6	14.8

District level Residue-wise Data for Kozhikode; Season : Kharif						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Tapioca	Stalks	4.4	73.3	52.8	36.9	4.8
Paddy	Straw	6.4	10.4	15.5	1.6	0.19
Paddy	Husk	6.4	10.4	2.1	1.7	0.18
Cashewnut	Stalks	3.9	1.9	3.5	0.70	0.091
Others	Others	0	0	0.97	0.19	0.025
Total		14.7	85.6	74.8	41.0	5.3

District level Residue-wise Data for Malappuram; Season : Kharif						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Tapioca	Stalks	7.3	168.7	121.4	85.0	11.1
Paddy	Straw	22.7	55.2	82.7	8.3	0.99
Paddy	Husk	22.7	55.2	11.0	8.8	0.97
Cashewnut	Stalks	11.4	5.6	10.1	2.0	0.26
Cashewnut	Shell	11.4	5.6	2.8	0.56	0.073
Total		41.3	229.4	228.1	104.7	13.3

District level Residue-wise Data for Palakkad; Season : Kharif						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Tapioca	Stalks	5.7	133.8	96.3	67.4	8.8
Paddy	Straw	116.0	337.0	505.4	50.5	6.1
Paddy	Husk	116.0	337.0	67.4	53.9	5.9
Others	Others	4.9	3.1	7.6	1.4	0.18
Cashewnut	Stalks	5.5	2.7	4.9	0.98	0.13
Groundnut	Stalks	2.4	1.8	3.6	0.73	0.094
Total		134.6	478.3	685.2	175.0	21.2

District level Residue-wise Data for Pathanamthitta; Season : Kharif						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Tapioca	Stalks	9.0	202.3	145.7	102.0	13.3
Paddy	Straw	5.2	16.1	24.2	2.4	0.29
Paddy	Husk	5.2	16.1	3.2	2.6	0.28
Others	Others	1.1	0.56	1.3	0.26	0.034
Total		15.3	219.0	174.4	107.2	13.9

District level Residue-wise Data for Thiruvananthapuram; Season : Kharif						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Tapioca	Stalks	25.3	458.8	330.3	231.2	30.1
Paddy	Straw	6.8	18.4	27.7	2.8	0.33
Paddy	Husk	6.8	18.4	3.7	3.0	0.32
Cashewnut	Stalks	2.5	1.2	2.2	0.44	0.057
Others	Others	0	0	0.61	0.12	0.016
Total		34.6	478.4	364.5	237.5	30.8

District level Residue-wise Data for Thrissur; Season : Kharif						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Paddy	Straw	37.0	105.4	158.1	15.8	1.9
Paddy	Husk	37.0	105.4	21.1	16.9	1.9
Tapioca	Stalks	1.4	28.1	20.2	14.2	1.8
Cashewnut	Stalks	3.8	1.9	3.3	0.67	0.087
Others	Others	0	0	0.93	0.19	0.024
Total		42.2	135.3	203.6	47.7	5.7

District level Residue-wise Data for Wayanad; Season : Kharif						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Tapioca	Stalks	1.4	48.6	35.0	24.5	3.2
Paddy	Straw	13.3	41.5	62.2	6.2	0.75
Paddy	Husk	13.3	41.5	8.3	6.6	0.73
Others	Others	1.6	0.79	1.8	0.36	0.047
Total		16.3	90.9	107.3	37.7	4.7

District Level Taluk Wise

DistrictLevel Taluk-wise Data for Alappuzha ; Season : Kharif					
Taluk	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Kartikapalli	6.9	55.5	45.8	27.1	3.5
Mavelikara	16.4	52.9	80.6	18.2	2.2
Shertallai	5.2	26.3	30.6	10.9	1.4
Ambalapulai	7.3	16.5	28.6	5.2	0.61
Kuttanad	5.3	14.6	24.7	4.5	0.52
Chengannur	1.1	2.9	4.9	0.90	0.10
Total	42.1	168.6	215.2	67.0	8.3

DistrictLevel Taluk-wise Data for Ernakulam ; Season : Kharif					
Taluk	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Kotamangalam	24.6	176.0	169.6	80.2	10.2
Parur	0.61	12.2	9.1	6.1	0.79
Kunnatnad	7.6	17.1	29.1	5.3	0.61
Kanayannur	2.7	6.1	10.3	1.9	0.22
Alwaye	2.2	4.9	8.4	1.5	0.18
Muvattupula	1.3	2.7	4.6	0.85	0.098
Cochin	0.42	0.94	1.6	0.29	0.034
Total	39.4	220.0	232.8	96.2	12.1

DistrictLevel Taluk-wise Data for Idukki ; Season : Kharif					
Taluk	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Udumbanchola	6.9	219.0	157.7	110.4	14.3
Pirmed	4.7	48.5	42.7	23.1	3.0
Devikolam	2.1	6.7	11.1	2.1	0.25
Todupulai	0.046	1.4	1.00	0.69	0.089
Total	13.7	275.6	212.4	136.3	17.7

DistrictLevel Taluk-wise Data for Kannur ; Season : Kharif					
Taluk	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Talipparamba	33.0	100.4	111.1	45.4	5.8
Kannur	2.9	9.1	8.5	4.5	0.59
Tellicherry	4.8	2.3	5.4	1.1	0.14
Total	40.6	111.8	125.0	51.0	6.5

DistrictLevel Taluk-wise Data for Kasaragod ; Season : Kharif					
Taluk	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Hosdrug	20.4	35.0	45.7	15.8	2.0
Tellicherry	0.50	11.4	8.2	5.7	0.75
Kasaragod	8.0	13.7	24.4	4.5	0.53
Total	29.0	60.2	78.3	26.1	3.3

DistrictLevel Taluk-wise Data for Kollam ; Season : Kharif					
Taluk	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Kottarakara	17.0	246.6	188.6	122.5	15.9
Kollam	12.5	234.6	170.2	118.2	15.4
Pattapuram	8.9	73.6	68.6	34.1	4.4
Karunagapalli	3.1	41.7	33.4	20.4	2.6
Kunnattur	1.2	3.3	5.6	1.0	0.12
Total	42.7	599.9	466.4	296.1	38.4

DistrictLevel Taluk-wise Data for Kottayam ; Season : Kharif					
Taluk	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Vaikam	9.7	172.4	133.6	85.0	11.0
Kottayam	10.4	53.4	63.2	22.1	2.8
Changanacherry	2.1	15.9	16.1	7.1	0.90
Minachil	1.8	4.5	7.8	1.4	0.16
Total	23.9	246.3	220.7	115.6	14.8

DistrictLevel Taluk-wise Data for Kozhikode ; Season : Kharif					
Taluk	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Kozhikode	5.3	41.3	34.8	19.8	2.6
Quilandi	4.8	36.1	28.9	17.8	2.3
Badagara	4.6	8.2	11.2	3.4	0.42
Total	14.7	85.6	74.8	41.0	5.3

DistrictLevel Taluk-wise Data for Malappuram ; Season : Kharif					
Taluk	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Tirur	21.4	156.2	144.5	72.9	9.3
Ernad	19.5	61.3	75.1	25.8	3.2
Ponnani	0.51	11.9	8.6	6.0	0.78
Total	41.3	229.4	228.1	104.7	13.3

DistrictLevel Taluk-wise Data for Palakkad ; Season : Kharif					
Taluk	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Alattur	17.9	138.4	138.5	62.1	7.9
Ottappalam	50.7	142.6	243.1	44.3	5.1
Mannarkkad	37.7	106.4	181.5	33.3	3.8
Palakkad	7.9	45.9	44.0	21.0	2.7
Chittur	20.5	45.0	78.2	14.3	1.7
Total	134.6	478.3	685.2	175.0	21.2

DistrictLevel Taluk-wise Data for Pathanamthitta ; Season : Kharif					
Taluk	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Kozhanchery	12.6	189.6	151.1	92.7	12.0
Adur	1.3	27.6	20.0	13.9	1.8
Tiruvalla	1.1	1.7	3.0	0.57	0.068
Rani	0.27	0.13	0.30	0.061	0.0079
Total	15.3	219.0	174.4	107.2	13.9

DistrictLevel Taluk-wise Data for Thiruvananthapuram ; Season : Kharif					
Taluk	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Neyyattinkara	14.6	245.9	177.9	123.9	16.1
Nedumangad	11.2	117.4	99.3	56.3	7.2
Chirayinkil	5.2	70.1	51.5	35.3	4.6
Thiruvananthapuram	3.6	45.0	35.7	22.0	2.8
Total	34.6	478.4	364.5	237.5	30.8

DistrictLevel Taluk-wise Data for Thrissur ; Season : Kharif					
Taluk	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Mukundapuram	31.6	86.8	142.7	28.3	3.3
Kodungallur	4.8	22.0	27.4	8.8	1.1
Thrissur	4.4	19.4	25.0	7.6	0.93
Chavakkad	1.4	7.2	8.5	3.0	0.37
Total	42.2	135.3	203.6	47.7	5.7

DistrictLevel Taluk-wise Data for Wayanad ; Season : Kharif					
Taluk	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Sultans Battery	13.6	82.3	92.8	35.1	4.4
Manantavadi	1.6	5.1	8.6	1.6	0.18
Vayittiri	1.1	3.5	5.9	1.1	0.12
Total	16.3	90.9	107.3	37.7	4.7

Taluk Level Residue Wise

Taluk level Residue-wise Data for Ambalapulai ; Season : Kharif						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Paddy	Straw	5.7	15.8	23.7	2.4	0.28
Paddy	Husk	5.7	15.8	3.2	2.5	0.28
Others	Others	1.5	0.76	1.8	0.35	0.046
Total		7.3	16.5	28.6	5.2	0.61

Taluk level Residue-wise Data for Chengannur ; Season : Kharif						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Paddy	Straw	1.1	2.9	4.3	0.43	0.052
Paddy	Husk	1.1	2.9	0.58	0.46	0.051
Total		1.1	2.9	4.9	0.90	0.10

Taluk level Residue-wise Data for Kartikapalli ; Season : Kharif						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Tapioca	Stalks	3.0	50.3	36.2	25.3	3.3
Paddy	Straw	1.5	4.0	6.0	0.60	0.072
Paddy	Husk	1.5	4.0	0.80	0.64	0.070
Cashewnut	Stalks	2.4	1.2	2.2	0.43	0.056
Others	Others	0	0	0.60	0.12	0.016
Total		6.9	55.5	45.8	27.1	3.5

Taluk level Residue-wise Data for Kuttanad ; Season : Kharif						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Paddy	Straw	5.3	14.6	21.8	2.2	0.26
Paddy	Husk	5.3	14.6	2.9	2.3	0.26
Total		5.3	14.6	24.7	4.5	0.52

Taluk level Residue-wise Data for Mavelikara ; Season : Kharif						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Paddy	Straw	15.8	43.4	65.1	6.5	0.78
Paddy	Husk	15.8	43.4	8.7	6.9	0.76
Tapioca	Stalks	0.57	9.4	6.8	4.8	0.62
Total		16.4	52.9	80.6	18.2	2.2

Taluk level Residue-wise Data for Shertallai ; Season : Kharif						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Tapioca	Stalks	0.86	14.4	10.4	7.3	0.94
Paddy	Straw	4.3	11.9	17.9	1.8	0.21
Paddy	Husk	4.3	11.9	2.4	1.9	0.21
Total		5.2	26.3	30.6	10.9	1.4

Taluk level Residue-wise Data for Alwaye ; Season : Kharif						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Paddy	Straw	2.2	4.9	7.4	0.74	0.089
Paddy	Husk	2.2	4.9	0.98	0.79	0.087
Total		2.2	4.9	8.4	1.5	0.18

Taluk level Residue-wise Data for Cochin ; Season : Kharif						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Others	Others	0.42	0.94	1.6	0.29	0.034
Total		0.42	0.94	1.6	0.29	0.034

Taluk level Residue-wise Data for Kanayannur ; Season : Kharif						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Paddy	Straw	2.7	6.1	9.1	0.91	0.11
Paddy	Husk	2.7	6.1	1.2	0.97	0.11
Total		2.7	6.1	10.3	1.9	0.22

Taluk level Residue-wise Data for Kotamangalam ; Season : Kharif						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Tapioca	Stalks	5.3	132.2	95.2	66.6	8.7
Paddy	Straw	19.3	43.8	65.6	6.6	0.79
Paddy	Husk	19.3	43.8	8.8	7.0	0.77
Total		24.6	176.0	169.6	80.2	10.2

Taluk level Residue-wise Data for Kunthnad ; Season : Kharif						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Paddy	Straw	7.6	17.1	25.7	2.6	0.31
Paddy	Husk	7.6	17.1	3.4	2.7	0.30
Total		7.6	17.1	29.1	5.3	0.61

Taluk level Residue-wise Data for Muvattupula ; Season : Kharif						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Others	Others	1.3	2.7	4.6	0.85	0.098
Total		1.3	2.7	4.6	0.85	0.098

Taluk level Residue-wise Data for Parur ; Season : Kharif						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Tapioca	Stalks	0.48	12.0	8.6	6.0	0.78
Others	Others	0.13	0.29	0.49	0.089	0.010
Total		0.61	12.2	9.1	6.1	0.79

Taluk level Residue-wise Data for Devikolam ; Season : Kharif						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Paddy	Straw	2.1	6.4	9.6	0.96	0.11
Paddy	Husk	2.1	6.4	1.3	1.0	0.11
Others	Others	0.010	0.33	0.24	0.17	0.022
Total		2.1	6.7	11.1	2.1	0.25

Taluk level Residue-wise Data for Pirmed ; Season : Kharif						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Tapioca	Stalks	1.3	40.9	29.5	20.6	2.7
Paddy	Straw	2.3	7.0	10.5	1.1	0.13
Paddy	Husk	2.3	7.0	1.4	1.1	0.12
Others	Others	1.1	0.55	1.3	0.25	0.033
Total		4.7	48.5	42.7	23.1	3.0

Taluk level Residue-wise Data for Todupulai ; Season : Kharif						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Tapioca	Stalks	0.043	1.4	0.98	0.68	0.089
Others	Others	0.0033	0.010	0.017	0.0031	0.00036
Total		0.046	1.4	1.00	0.69	0.089

Taluk level Residue-wise Data for Udumbanchola ; Season : Kharif						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Tapioca	Stalks	6.9	219.0	157.7	110.4	14.3
Others	Others	0.0033	0.010	0.017	0.0031	0.00036
Total		6.9	219.0	157.7	110.4	14.3

Taluk level Residue-wise Data for Kannur ; Season : Kharif						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Tapioca	Stalks	0.37	7.9	5.7	4.0	0.52
Cashewnut	Stalks	2.5	1.2	2.2	0.44	0.058
Others	Others	0	0	0.61	0.12	0.016
Total		2.9	9.1	8.5	4.5	0.59

Taluk level Residue-wise Data for Talipparamba ; Season : Kharif						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Tapioca	Stalks	3.1	66.4	47.8	33.5	4.3
Paddy	Straw	11.2	24.8	37.1	3.7	0.45
Paddy	Husk	11.2	24.8	5.0	4.0	0.44
Cashewnut	Stalks	18.7	9.2	16.6	3.3	0.43
Cashewnut	Shell	18.7	9.2	4.6	0.92	0.12
Total		33.0	100.4	111.1	45.4	5.8

Taluk level Residue-wise Data for Tellicherry ; Season : Kharif						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Cashewnut	Stalks	4.8	2.3	4.2	0.84	0.11
Others	Others	0	0	1.2	0.23	0.030
Total		4.8	2.3	5.4	1.1	0.14

Taluk level Residue-wise Data for Hosdrug ; Season : Kharif						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Tapioca	Stalks	0.84	19.1	13.8	9.6	1.3
Cashewnut	Stalks	16.7	8.2	14.8	3.0	0.38
Paddy	Straw	2.9	7.7	11.5	1.2	0.14
Paddy	Husk	2.9	7.7	1.5	1.2	0.14
Cashewnut	Shell	16.7	8.2	4.1	0.82	0.11
Total		20.4	35.0	45.7	15.8	2.0

Taluk level Residue-wise Data for Kasaragod ; Season : Kharif						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Paddy	Straw	4.6	12.0	18.0	1.8	0.22
Paddy	Husk	4.6	12.0	2.4	1.9	0.21
Cashewnut	Stalks	3.5	1.7	3.1	0.62	0.081
Others	Others	0	0	0.86	0.17	0.022
Total		8.0	13.7	24.4	4.5	0.53

Taluk level Residue-wise Data for Tellicherry ; Season : Kharif						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Tapioca	Stalks	0.50	11.4	8.2	5.7	0.75
Total		0.50	11.4	8.2	5.7	0.75

Taluk level Residue-wise Data for Karunagapalli ; Season : Kharif						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Tapioca	Stalks	1.8	38.3	27.6	19.3	2.5
Paddy	Straw	1.3	3.5	5.2	0.52	0.062
Paddy	Husk	1.3	3.5	0.69	0.55	0.061
Total		3.1	41.7	33.4	20.4	2.6

Taluk level Residue-wise Data for Kollam ; Season : Kharif						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Tapioca	Stalks	10.9	233.8	168.3	117.8	15.3
Others	Others	1.6	0.80	1.8	0.37	0.048
Total		12.5	234.6	170.2	118.2	15.4

Taluk level Residue-wise Data for Kottarakara ; Season : Kharif						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Tapioca	Stalks	11.0	236.1	170.0	119.0	15.5
Paddy	Straw	3.4	9.2	13.8	1.4	0.17
Paddy	Husk	3.4	9.2	1.8	1.5	0.16
Cashewnut	Stalks	2.6	1.3	2.3	0.47	0.061
Others	Others	0	0	0.65	0.13	0.017
Total		17.0	246.6	188.6	122.5	15.9

Taluk level Residue-wise Data for Kunnattur ; Season : Kharif						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Paddy	Straw	1.2	3.3	5.0	0.50	0.060
Paddy	Husk	1.2	3.3	0.66	0.53	0.058
Total		1.2	3.3	5.6	1.0	0.12

Taluk level Residue-wise Data for Pattanapuram ; Season : Kharif						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Tapioca	Stalks	2.7	57.9	41.7	29.2	3.8
Paddy	Straw	5.7	15.5	23.2	2.3	0.28
Paddy	Husk	5.7	15.5	3.1	2.5	0.27
Others	Others	0.53	0.26	0.60	0.12	0.015
Total		8.9	73.6	68.6	34.1	4.4

Taluk level Residue-wise Data for Changanacheri ; Season : Kharif						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Tapioca	Stalks	0.43	11.2	8.0	5.6	0.73
Paddy	Straw	1.7	4.7	7.1	0.71	0.085
Paddy	Husk	1.7	4.7	0.95	0.76	0.083
Total		2.1	15.9	16.1	7.1	0.90

Taluk level Residue-wise Data for Kottayam ; Season : Kharif						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Tapioca	Stalks	1.1	28.3	20.4	14.3	1.9
Paddy	Straw	8.8	24.9	37.3	3.7	0.45
Paddy	Husk	8.8	24.9	5.0	4.0	0.44
Others	Others	0.51	0.25	0.58	0.12	0.015
Total		10.4	53.4	63.2	22.1	2.8

Taluk level Residue-wise Data for Minachil ; Season : Kharif						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Paddy	Straw	1.6	4.4	6.6	0.66	0.080
Paddy	Husk	1.6	4.4	0.88	0.71	0.078
Others	Others	0.23	0.11	0.26	0.052	0.0068
Total		1.8	4.5	7.8	1.4	0.16

Taluk level Residue-wise Data for Vaikam ; Season : Kharif						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Tapioca	Stalks	6.3	162.8	117.2	82.1	10.7
Paddy	Straw	3.4	9.6	14.3	1.4	0.17
Paddy	Husk	3.4	9.6	1.9	1.5	0.17
Others	Others	0.056	0.028	0.063	0.013	0.0016
Total		9.7	172.4	133.6	85.0	11.0

Taluk level Residue-wise Data for Badagara ; Season : Kharif						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Tapioca	Stalks	0.21	3.5	2.5	1.8	0.23
Paddy	Straw	2.2	3.6	5.5	0.55	0.066
Paddy	Husk	2.2	3.6	0.73	0.58	0.064
Others	Others	2.1	1.1	2.4	0.49	0.063
Total		4.6	8.2	11.2	3.4	0.42

Taluk level Residue-wise Data for Kozhikode ; Season : Kharif						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Tapioca	Stalks	2.2	36.3	26.1	18.3	2.4
Paddy	Straw	3.1	5.1	7.6	0.76	0.092
Paddy	Husk	3.1	5.1	1.0	0.81	0.090
Total		5.3	41.3	34.8	19.8	2.6

Taluk level Residue-wise Data for Quilandi ; Season : Kharif						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Tapioca	Stalks	2.0	33.6	24.2	16.9	2.2
Others	Others	2.8	2.5	4.8	0.91	0.11
Total		4.8	36.1	28.9	17.8	2.3

Taluk level Residue-wise Data for Ernad ; Season : Kharif						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Tapioca	Stalks	1.4	32.0	23.1	16.2	2.1
Paddy	Straw	10.5	25.5	38.3	3.8	0.46
Paddy	Husk	10.5	25.5	5.1	4.1	0.45
Cashewnut	Stalks	7.6	3.7	6.7	1.3	0.17
Others	Others	0	0	1.9	0.37	0.048
Total		19.5	61.3	75.1	25.8	3.2

Taluk level Residue-wise Data for Ponnani ; Season : Kharif						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Tapioca	Stalks	0.51	11.9	8.6	6.0	0.78
Total		0.51	11.9	8.6	6.0	0.78

Taluk level Residue-wise Data for Tirur ; Season : Kharif						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Tapioca	Stalks	5.4	124.7	89.8	62.9	8.2
Paddy	Straw	12.2	29.6	44.4	4.4	0.53
Paddy	Husk	12.2	29.6	5.9	4.7	0.52
Cashewnut	Stalks	3.8	1.9	3.4	0.67	0.087
Others	Others	0	0	0.93	0.19	0.024
Total		21.4	156.2	144.5	72.9	9.3

Taluk level Residue-wise Data for Alattur ; Season : Kharif						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Tapioca	Stalks	4.2	98.8	71.2	49.8	6.5
Paddy	Straw	13.6	39.6	59.4	5.9	0.71
Paddy	Husk	13.6	39.6	7.9	6.3	0.70
Others	Others	0.030	0.015	0.033	0.0067	0.00087
Total		17.9	138.4	138.5	62.1	7.9

Taluk level Residue-wise Data for Chittur ; Season : Kharif						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Paddy	Straw	14.4	41.9	62.9	6.3	0.75
Paddy	Husk	14.4	41.9	8.4	6.7	0.74
Cashewnut	Stalks	5.5	2.7	4.9	0.98	0.13
Others	Others	0.58	0.33	2.0	0.37	0.048
Total		20.5	45.0	78.2	14.3	1.7

Taluk level Residue-wise Data for Mannarkkad ; Season : Kharif						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Paddy	Straw	36.3	105.4	158.1	15.8	1.9
Paddy	Husk	36.3	105.4	21.1	16.9	1.9
Others	Others	1.4	0.99	2.3	0.59	0.074
Total		37.7	106.4	181.5	33.3	3.8

Taluk level Residue-wise Data for Ottappalam ; Season : Kharif						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Paddy	Straw	48.8	141.6	212.5	21.2	2.5
Paddy	Husk	48.8	141.6	28.3	22.7	2.5
Others	Others	1.9	0.96	2.3	0.36	0.046
Total		50.7	142.6	243.1	44.3	5.1

Taluk level Residue-wise Data for Palakkad ; Season : Kharif						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Tapioca	Stalks	1.5	34.9	25.2	17.6	2.3
Paddy	Straw	2.9	8.4	12.6	1.3	0.15
Paddy	Husk	2.9	8.4	1.7	1.3	0.15
Others	Others	3.5	2.6	4.6	0.82	0.10
Total		7.9	45.9	44.0	21.0	2.7

Taluk level Residue-wise Data for Adur ; Season : Kharif						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Tapioca	Stalks	1.2	27.6	19.9	13.9	1.8
Others	Others	0.085	0.042	0.096	0.019	0.0025
Total		1.3	27.6	20.0	13.9	1.8

Taluk level Residue-wise Data for Kozhanchery ; Season : Kharif						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Tapioca	Stalks	7.7	174.7	125.8	88.1	11.4
Paddy	Straw	4.8	14.8	22.2	2.2	0.27
Paddy	Husk	4.8	14.8	3.0	2.4	0.26
Others	Others	0.070	0.035	0.080	0.016	0.0021
Total		12.6	189.6	151.1	92.7	12.0

Taluk level Residue-wise Data for Rani ; Season : Kharif						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Others	Others	0.27	0.13	0.30	0.061	0.0079
Total		0.27	0.13	0.30	0.061	0.0079

Taluk level Residue-wise Data for Tiruvalla ; Season : Kharif						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Others	Others	1.1	1.7	3.0	0.57	0.068
Total		1.1	1.7	3.0	0.57	0.068

Taluk level Residue-wise Data for Chirayinkil ; Season : Kharif						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Tapioca	Stalks	3.8	69.4	50.0	35.0	4.5
Others	Others	1.4	0.68	1.6	0.31	0.041
Total		5.2	70.1	51.5	35.3	4.6

Taluk level Residue-wise Data for Nedumangad ; Season : Kharif						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Tapioca	Stalks	5.6	102.4	73.7	51.6	6.7
Paddy	Straw	5.6	15.0	22.5	2.3	0.27
Paddy	Husk	5.6	15.0	3.0	2.4	0.26
Others	Others	0.035	0.017	0.039	0.0078	0.0010
Total		11.2	117.4	99.3	56.3	7.2

Taluk level Residue-wise Data for Neyyattinkara ; Season : Kharif						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Tapioca	Stalks	13.5	245.4	176.7	123.7	16.1
Others	Others	1.1	0.52	1.2	0.24	0.031
Total		14.6	245.9	177.9	123.9	16.1

Taluk level Residue-wise Data for Thiruvananthapuram ; Season : Kharif						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Tapioca	Stalks	2.3	41.5	29.9	20.9	2.7
Paddy	Straw	1.3	3.4	5.1	0.51	0.062
Paddy	Husk	1.3	3.4	0.68	0.55	0.060
Total		3.6	45.0	35.7	22.0	2.8

Taluk level Residue-wise Data for Chavakkad ; Season : Kharif						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Tapioca	Stalks	0.19	3.8	2.7	1.9	0.25
Paddy	Straw	1.2	3.4	5.1	0.51	0.062
Paddy	Husk	1.2	3.4	0.68	0.55	0.060
Total		1.4	7.2	8.5	3.0	0.37

Taluk level Residue-wise Data for Kodungallur ; Season : Kharif						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Tapioca	Stalks	0.52	10.2	7.3	5.1	0.67
Paddy	Straw	4.1	11.6	17.5	1.7	0.21
Paddy	Husk	4.1	11.6	2.3	1.9	0.20
Others	Others	0.22	0.11	0.25	0.050	0.0065
Total		4.8	22.0	27.4	8.8	1.1

Taluk level Residue-wise Data for Mukundapuram ; Season : Kharif						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Paddy	Straw	27.8	79.1	118.6	11.9	1.4
Paddy	Husk	27.8	79.1	15.8	12.7	1.4
Tapioca	Stalks	0.30	5.9	4.3	3.0	0.39
Cashewnut	Stalks	3.5	1.7	3.1	0.63	0.082
Others	Others	0	0	0.87	0.17	0.023
Total		31.6	86.8	142.7	28.3	3.3

Taluk level Residue-wise Data for Thrissur ; Season : Kharif						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Tapioca	Stalks	0.41	8.2	5.9	4.1	0.53
Paddy	Straw	3.9	11.2	16.8	1.7	0.20
Paddy	Husk	3.9	11.2	2.2	1.8	0.20
Total		4.4	19.4	25.0	7.6	0.93

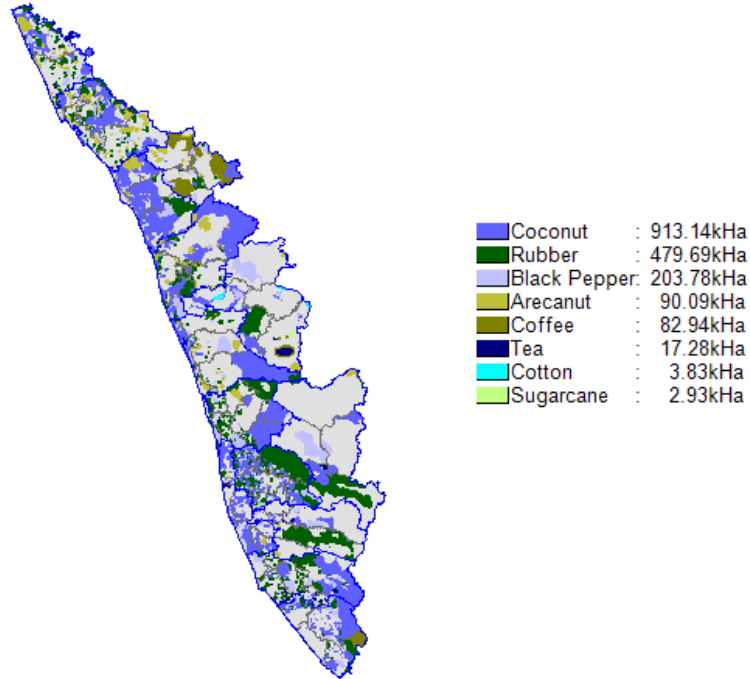
Taluk level Residue-wise Data for Manantavadi ; Season : Kharif						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Paddy	Straw	1.6	5.1	7.6	0.76	0.091
Paddy	Husk	1.6	5.1	1.0	0.81	0.089
Total		1.6	5.1	8.6	1.6	0.18

Taluk level Residue-wise Data for Sultans Battery ; Season : Kharif						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Tapioca	Stalks	1.4	48.6	35.0	24.5	3.2
Paddy	Straw	10.6	32.9	49.4	4.9	0.59
Paddy	Husk	10.6	32.9	6.6	5.3	0.58
Others	Others	1.6	0.79	1.8	0.36	0.047
Total		13.6	82.3	92.8	35.1	4.4

Taluk level Residue-wise Data for Vayittiri ; Season : Kharif						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Paddy	Straw	1.1	3.5	5.2	0.52	0.063
Paddy	Husk	1.1	3.5	0.70	0.56	0.061
Total		1.1	3.5	5.9	1.1	0.12

Yearly

Kerala-Perennial



State Level Residue Wise

State level Residue-wise Data for Kerala; Season : Yearly						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Coconut	FronDs	913.1	1933.7	3652.6	1826.3	255.7
Rubber	Primary Wood	479.7	0	1439.1	1151.3	161.2
Rubber	Secondary Wood	479.7	0	959.4	575.6	80.6
Coconut	Husk & Pith	913.1	1933.7	1024.9	512.4	66.6
Coconut	Shell	913.1	1933.7	425.4	340.3	47.6
Coffee	Pruning & Wastes	82.9	55.7	331.8	265.4	37.2
Arecanut	FronDs	90.1	83.0	270.3	94.6	13.2
Arecanut	Husk	90.1	83.0	66.4	23.3	3.3
Black Pepper	Stalks	203.8	58.3	29.1	17.5	2.3
Coffee	Husk	82.9	55.7	27.8	2.8	0.33
Cotton	Stalks	3.8	6.2	14.6	1.5	0.20
Sugarcane	Tops & Leaves	2.9	24.9	1.2	1.00	0.14

Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Cotton	Bollshell	3.8	6.2	6.8	0.68	0.095
Cotton	Husk	3.8	6.2	6.8	0.68	0.095
Total		1776.4	2161.8	8256.3	4813.3	668.5

State Level District Wise

State level District-wise Data for Kerala ; Season : Yearly					
District	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Kottayam	165.1	67.2	773.9	513.9	71.8
Kozhikode	172.6	332.8	896.9	482.3	66.7
Malappuram	168.7	226.1	782.0	429.7	59.6
Kannur	159.9	230.2	768.8	427.8	59.3
Thiruvananthapuram	140.7	234.1	727.9	423.9	58.7
Ernakulam	138.0	129.1	649.0	392.7	54.6
Kollam	128.4	154.5	611.5	355.9	49.4
Thrissur	122.7	202.8	583.7	315.6	43.7
Kasaragod	105.5	179.3	523.3	287.8	39.9
Palakkad	118.1	133.0	491.1	276.4	38.4
Wayanad	101.6	65.1	397.6	273.4	38.2
Pathanamthitta	87.1	49.1	375.4	243.6	34.0
Idukki	96.4	56.0	340.6	213.2	29.7
Alappuzha	71.8	102.4	334.5	177.0	24.5
Total	1776.4	2161.8	8256.3	4813.3	668.5

State Level Taluk Wise

State level Taluk-wise Data for Kerala ; Season : Yearly						
District	Taluk	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Kannur	Talipparamba	111.7	195.5	598.6	327.3	45.3
Malappuram	Ernad	113.0	191.7	586.4	309.8	42.9
Kollam	Pattanapuram	88.4	128.9	453.8	257.3	35.7
Kottayam	Minachil	71.4	3.0	356.0	254.2	35.6
Thiruvananthapuram	Nedumangad	77.9	167.0	416.7	224.8	31.0
Kozhikode	Kozhikode	78.3	122.1	372.9	212.3	29.4
Thrissur	Mukundapuram	69.7	144.6	388.3	207.9	28.7
Kasaragod	Kasaragod	70.0	135.4	373.0	200.4	27.7
Pathanamthitta	Kozhanchery	48.8	0.10	243.9	175.4	24.6
Idukki	Pirmed	51.7	19.4	257.7	171.1	23.9
Thiruvananthapuram	Neyyattinkara	47.0	45.3	234.7	153.4	21.4
Kozhikode	Quilandi	49.4	116.2	284.2	149.6	20.6
Palakkad	Alattur	42.7	26.5	219.7	143.8	20.1
Ernakulam	Muvattupula	41.7	71.6	223.6	120.2	16.6
Kozhikode	Badagara	44.9	94.5	239.8	120.4	16.6
Wayanad	Sultans Battery	43.7	32.2	164.9	110.2	15.4
Ernakulam	Kuntnatnad	30.1	10.1	147.1	100.4	14.0
Kottayam	Kanjirapalli	34.3	22.2	155.8	98.3	13.7
Palakkad	Ottappalam	38.7	69.7	197.1	97.4	13.5
Kasaragod	Hosdrug	35.5	43.9	150.3	87.4	12.1
Wayanad	Vayittiri	29.2	15.2	117.8	85.3	11.9
Malappuram	Tirur	27.2	19.6	134.1	84.5	11.8
Wayanad	Manantavadi	28.7	17.8	114.9	77.9	10.9
Kottayam	Vaikam	28.9	26.1	121.4	70.8	9.8
Kottayam	Kottayam	23.2	11.2	108.2	70.3	9.8
Thrissur	Chavakkad	22.5	47.2	124.6	66.1	9.1
Ernakulam	Kanayannur	23.5	2.3	78.5	56.4	7.9
Ernakulam	Kotamangalam	19.7	36.9	107.1	56.5	7.8
Kannur	Kannur	29.8	9.2	83.9	55.1	7.7
Alappuzha	Mavelikara	17.8	28.7	92.6	48.3	6.7
Kannur	Tellicherry	18.4	25.4	86.3	45.3	6.3
Alappuzha	Kuttanad	17.5	26.2	83.3	42.6	5.9

District	Taluk	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Kollam	Kottarakara	15.6	14.6	69.1	41.6	5.8
Pathanamthitta	Rani	26.3	28.7	72.8	38.3	5.3
Alappuzha	Shertallai	11.5	16.4	59.9	33.0	4.6
Idukki	Udumbanchola	19.0	20.2	59.9	31.1	4.3
Ernakulam	Alwaye	11.5	7.1	53.0	30.7	4.3
Palakkad	Chittur	13.4	22.9	57.7	28.9	4.0
Thiruvananthapuram	Chirayinkil	10.2	11.3	45.4	28.0	3.9
Alappuzha	Kartikapalli	15.4	14.8	48.9	27.1	3.8
Pathanamthitta	Tiruvalla	10.2	18.1	50.9	26.7	3.7
Kollam	Kunnattur	7.8	0.40	32.3	23.3	3.3
Malappuram	Perintalmanna	8.5	5.3	39.6	23.3	3.3
Thrissur	Talappalli	7.4	0.46	31.1	22.2	3.1
Ernakulam	Cochin	8.3	0.69	29.5	21.2	3.0
Alappuzha	Ambalapulai	7.7	13.2	40.7	21.2	2.9
Kottayam	Changanacheri	7.2	4.6	32.5	20.4	2.8
Kollam	Kollam	7.5	5.8	31.0	19.3	2.7
Thiruvananthapuram	Thiruvananthapuram	5.6	10.5	31.2	17.7	2.4
Kollam	Karunagapalli	9.1	4.8	25.3	14.5	2.0
Thrissur	Kodungallur	10.3	4.2	23.0	12.3	1.7
Malappuram	Ponnani	20.1	9.4	22.0	12.2	1.7
Idukki	Devikolam	5.8	10.4	20.1	9.3	1.3
Ernakulam	Parur	3.3	0.43	10.3	7.3	1.0
Thrissur	Thrissur	12.7	6.3	16.8	7.0	0.98
Alappuzha	Chengannur	1.8	3.0	9.0	4.7	0.65
Palakkad	Palakkad	3.0	7.0	12.5	4.2	0.59
Pathanamthitta	Adur	1.8	2.1	7.7	3.3	0.46
Palakkad	Mannarkkad	20.3	7.0	4.0	2.1	0.28
Idukki	Todupulai	20.0	6.1	2.9	1.7	0.23
Total		1776.4	2161.8	8256.3	4813.3	668.5

District Level Residue Wise

District level Residue-wise Data for Alappuzha; Season : Yearly						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Coconut	Fronds	57.8	99.4	231.4	115.7	16.2
Coconut	Husk & Pith	57.8	99.4	52.7	26.3	3.4
Coconut	Shell	57.8	99.4	21.9	17.5	2.4
Rubber	Primary Wood	3.9	0	11.7	9.4	1.3
Rubber	Secondary Wood	3.9	0	7.8	4.7	0.66
Arecanut	Fronds	2.4	0.81	7.3	2.6	0.36
Black Pepper	Stalks	7.6	2.2	1.1	0.65	0.085
Others	Others	0	0	0.65	0.23	0.032
Total		71.8	102.4	334.5	177.0	24.5

District level Residue-wise Data for Ernakulam; Season : Yearly						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Rubber	Primary Wood	56.9	0	170.6	136.5	19.1
Coconut	Fronds	63.6	121.8	254.4	127.2	17.8
Rubber	Secondary Wood	56.9	0	113.7	68.2	9.6
Coconut	Husk & Pith	63.6	121.8	64.5	32.3	4.2
Coconut	Shell	63.6	121.8	26.8	21.4	3.0
Arecanut	Fronds	4.7	3.7	14.2	5.0	0.70
Arecanut	Husk	4.7	3.7	2.9	1.0	0.14
Black Pepper	Stalks	12.8	3.7	1.8	1.1	0.14
Total		138.0	129.1	649.0	392.7	54.6

District level Residue-wise Data for Idukki; Season : Yearly						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Rubber	Primary Wood	38.5	0	115.4	92.3	12.9
Coconut	Fronds	25.9	34.0	103.8	51.9	7.3
Rubber	Secondary Wood	38.5	0	76.9	46.2	6.5
Coconut	Husk & Pith	25.9	34.0	18.0	9.0	1.2
Coconut	Shell	25.9	34.0	7.5	6.0	0.84
Arecanut	Fronds	3.9	3.4	11.8	4.1	0.58
Black Pepper	Stalks	26.8	7.7	3.8	2.3	0.30
Arecanut	Husk	3.9	3.4	2.7	0.96	0.13
Sugarcane	Tops & Leaves	1.3	10.9	0.55	0.44	0.061
Total		96.4	56.0	340.6	213.2	29.7

District level Residue-wise Data for Kannur; Season : Yearly						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Coconut	Fronds	95.7	211.4	382.9	191.4	26.8
Rubber	Primary Wood	34.1	0	102.2	81.8	11.4
Coconut	Husk & Pith	95.7	211.4	112.1	56.0	7.3
Rubber	Secondary Wood	34.1	0	68.1	40.9	5.7
Coconut	Shell	95.7	211.4	46.5	37.2	5.2
Arecanut	Fronds	14.5	14.3	43.4	15.2	2.1
Arecanut	Husk	14.5	14.3	11.4	4.0	0.56
Black Pepper	Stalks	15.6	4.5	2.2	1.3	0.17
Total		159.9	230.2	768.8	427.8	59.3

District level Residue-wise Data for Kasaragod; Season : Yearly						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Coconut	Fronds	57.7	154.4	230.8	115.4	16.2
Rubber	Primary Wood	22.7	0	68.2	54.6	7.6
Coconut	Husk & Pith	57.7	154.4	81.8	40.9	5.3
Rubber	Secondary Wood	22.7	0	45.5	27.3	3.8
Coconut	Shell	57.7	154.4	34.0	27.2	3.8
Arecanut	Fronds	14.7	22.0	44.0	15.4	2.2
Arecanut	Husk	14.7	22.0	17.6	6.1	0.86
Black Pepper	Stalks	10.4	3.0	1.5	0.89	0.12
Total		105.5	179.3	523.3	287.8	39.9

District level Residue-wise Data for Kollam; Season : Yearly						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Coconut	Fronds	75.3	149.4	301.2	150.6	21.1
Rubber	Primary Wood	37.6	0	112.8	90.2	12.6
Rubber	Secondary Wood	37.6	0	75.2	45.1	6.3
Coconut	Husk & Pith	75.3	149.4	79.2	39.6	5.1
Coconut	Shell	75.3	149.4	32.9	26.3	3.7
Arecanut	Fronds	2.4	1.3	7.3	2.5	0.36
Black Pepper	Stalks	13.1	3.7	1.9	1.1	0.15
Arecanut	Husk	2.4	1.3	1.1	0.38	0.053
Total		128.4	154.5	611.5	355.9	49.4

District level Residue-wise Data for Kottayam; Season : Yearly						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Rubber	Primary Wood	112.3	0	336.8	269.4	37.7
Rubber	Secondary Wood	112.3	0	224.5	134.7	18.9
Coconut	Fronds	39.5	63.1	158.0	79.0	11.1
Coconut	Husk & Pith	39.5	63.1	33.5	16.7	2.2
Coconut	Shell	39.5	63.1	13.9	11.1	1.6
Arecanut	Fronds	1.6	0.74	4.9	1.7	0.24
Black Pepper	Stalks	11.7	3.3	1.7	1.00	0.13
Others	Others	0	0	0.59	0.21	0.029
Total		165.1	67.2	773.9	513.9	71.8

District level Residue-wise Data for Kozhikode; Season : Yearly						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Coconut	Fronds	131.4	316.5	525.7	262.8	36.8
Coconut	Husk & Pith	131.4	316.5	167.7	83.9	10.9
Coconut	Shell	131.4	316.5	69.6	55.7	7.8
Rubber	Primary Wood	17.6	0	52.9	42.3	5.9
Rubber	Secondary Wood	17.6	0	35.3	21.2	3.0
Arecanut	Fronds	11.2	12.9	33.6	11.8	1.6
Arecanut	Husk	11.2	12.9	10.3	3.6	0.50
Black Pepper	Stalks	12.3	3.5	1.8	1.1	0.14
Total		172.6	332.8	896.9	482.3	66.7

District level Residue-wise Data for Malappuram; Season : Yearly						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Coconut	Fronds	104.9	211.1	419.5	209.8	29.4
Rubber	Primary Wood	29.6	0	88.7	71.0	9.9
Coconut	Husk & Pith	104.9	211.1	111.9	55.9	7.3
Coconut	Shell	104.9	211.1	46.4	37.2	5.2
Rubber	Secondary Wood	29.6	0	59.2	35.5	5.0
Arecanut	Fronds	15.3	9.6	45.9	16.1	2.2
Arecanut	Husk	15.3	9.6	7.6	2.7	0.37
Black Pepper	Stalks	19.0	5.4	2.7	1.6	0.21
Total		168.7	226.1	782.0	429.7	59.6

District level Residue-wise Data for Palakkad; Season : Yearly						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Coconut	Fronds	50.7	99.6	202.7	101.3	14.2
Rubber	Primary Wood	29.2	0	87.6	70.0	9.8
Rubber	Secondary Wood	29.2	0	58.4	35.0	4.9
Coconut	Husk & Pith	50.7	99.6	52.8	26.4	3.4
Coconut	Shell	50.7	99.6	21.9	17.5	2.5
Coffee	Pruning & Wastes	4.7	2.4	18.9	15.1	2.1
Arecanut	Fronds	4.1	4.0	12.2	4.3	0.60
Black Pepper	Stalks	24.0	6.9	3.4	2.1	0.27
Cotton	Stalks	3.8	6.2	14.6	1.5	0.20
Arecanut	Husk	4.1	4.0	3.2	1.1	0.16
Cotton	Bollshell	3.8	6.2	6.8	0.68	0.095
Cotton	Husk	3.8	6.2	6.8	0.68	0.095
Sugarcane	Tops & Leaves	1.6	14.0	0.70	0.56	0.078
Others	Others	0	0	1.2	0.12	0.014
Total		118.1	133.0	491.1	276.4	38.4

District level Residue-wise Data for Pathanamthitta; Season : Yearly						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Rubber	Primary Wood	48.7	0	146.0	116.8	16.4
Rubber	Secondary Wood	48.7	0	97.4	58.4	8.2
Coconut	Fronds	23.0	44.0	92.1	46.0	6.4
Coconut	Husk & Pith	23.0	44.0	23.3	11.7	1.5
Coconut	Shell	23.0	44.0	9.7	7.7	1.1
Arecanut	Fronds	1.4	1.1	4.1	1.4	0.20
Black Pepper	Stalks	14.1	4.0	2.0	1.2	0.16
Others	Others	0	0	0.86	0.30	0.042
Total		87.1	49.1	375.4	243.6	34.0

District level Residue-wise Data for Thiruvananthapuram; Season : Yearly						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Coconut	Fronds	90.3	223.7	361.2	180.6	25.3
Rubber	Primary Wood	28.7	0	86.1	68.9	9.6
Coconut	Husk & Pith	90.3	223.7	118.5	59.3	7.7
Coffee	Pruning & Wastes	12.5	7.8	50.2	40.2	5.6
Coconut	Shell	90.3	223.7	49.2	39.4	5.5
Rubber	Secondary Wood	28.7	0	57.4	34.5	4.8
Black Pepper	Stalks	9.1	2.6	1.3	0.78	0.10
Others	Others	0	0	3.9	0.39	0.047
Total		140.7	234.1	727.9	423.9	58.7

District level Residue-wise Data for Thrissur; Season : Yearly						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Coconut	Fronds	85.8	191.6	343.3	171.7	24.0
Coconut	Husk & Pith	85.8	191.6	101.5	50.8	6.6
Coconut	Shell	85.8	191.6	42.1	33.7	4.7
Rubber	Primary Wood	13.5	0	40.5	32.4	4.5
Rubber	Secondary Wood	13.5	0	27.0	16.2	2.3
Arecanut	Fronds	7.2	6.6	21.6	7.6	1.1
Arecanut	Husk	7.2	6.6	5.3	1.8	0.26
Black Pepper	Stalks	16.1	4.6	2.3	1.4	0.18
Total		122.7	202.8	583.7	315.6	43.7

District level Residue-wise Data for Wayanad; Season : Yearly						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Coffee	Pruning & Wastes	65.7	45.5	262.7	210.2	29.4
Coconut	Fronds	11.4	13.7	45.6	22.8	3.2
Rubber	Primary Wood	6.5	0	19.4	15.6	2.2
Rubber	Secondary Wood	6.5	0	13.0	7.8	1.1
Arecanut	Fronds	6.7	2.7	20.0	7.0	0.98
Coconut	Husk & Pith	11.4	13.7	7.3	3.6	0.47
Coconut	Shell	11.4	13.7	3.0	2.4	0.34
Coffee	Husk	65.7	45.5	22.7	2.3	0.27
Black Pepper	Stalks	11.4	3.3	1.6	0.98	0.13
Arecanut	Husk	6.7	2.7	2.2	0.75	0.11
Total		101.6	65.1	397.6	273.4	38.2

District Level Taluk Wise

DistrictLevel Taluk-wise Data for Alappuzha ; Season : Yearly					
Taluk	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Mavelikara	17.8	28.7	92.6	48.3	6.7
Kuttanad	17.5	26.2	83.3	42.6	5.9
Shertallai	11.5	16.4	59.9	33.0	4.6
Kartikapalli	15.4	14.8	48.9	27.1	3.8
Ambalapulai	7.7	13.2	40.7	21.2	2.9
Chengannur	1.8	3.0	9.0	4.7	0.65
Total	71.8	102.4	334.5	177.0	24.5

DistrictLevel Taluk-wise Data for Ernakulam ; Season : Yearly					
Taluk	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Muvattupula	41.7	71.6	223.6	120.2	16.6
Kunnatnad	30.1	10.1	147.1	100.4	14.0
Kanayannur	23.5	2.3	78.5	56.4	7.9
Kotamangalam	19.7	36.9	107.1	56.5	7.8
Alwaye	11.5	7.1	53.0	30.7	4.3
Cochin	8.3	0.69	29.5	21.2	3.0
Parur	3.3	0.43	10.3	7.3	1.0
Total	138.0	129.1	649.0	392.7	54.6

DistrictLevel Taluk-wise Data for Idukki ; Season : Yearly					
Taluk	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Pirmed	51.7	19.4	257.7	171.1	23.9
Udumbanchola	19.0	20.2	59.9	31.1	4.3
Devikolam	5.8	10.4	20.1	9.3	1.3
Todupulai	20.0	6.1	2.9	1.7	0.23
Total	96.4	56.0	340.6	213.2	29.7

DistrictLevel Taluk-wise Data for Kannur ; Season : Yearly					
Taluk	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Talipparamba	111.7	195.5	598.6	327.3	45.3
Kannur	29.8	9.2	83.9	55.1	7.7
Tellicherry	18.4	25.4	86.3	45.3	6.3
Total	159.9	230.2	768.8	427.8	59.3

DistrictLevel Taluk-wise Data for Kasaragod ; Season : Yearly					
Taluk	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Kasaragod	70.0	135.4	373.0	200.4	27.7
Hosdrug	35.5	43.9	150.3	87.4	12.1
Total	105.5	179.3	523.3	287.8	39.9

DistrictLevel Taluk-wise Data for Kollam ; Season : Yearly					
Taluk	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Pattanamparam	88.4	128.9	453.8	257.3	35.7
Kottarakara	15.6	14.6	69.1	41.6	5.8
Kunnattur	7.8	0.40	32.3	23.3	3.3
Kollam	7.5	5.8	31.0	19.3	2.7
Karunagapalli	9.1	4.8	25.3	14.5	2.0
Total	128.4	154.5	611.5	355.9	49.4

DistrictLevel Taluk-wise Data for Kottayam ; Season : Yearly					
Taluk	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Minachil	71.4	3.0	356.0	254.2	35.6
Kanjirapalli	34.3	22.2	155.8	98.3	13.7
Vaikam	28.9	26.1	121.4	70.8	9.8
Kottayam	23.2	11.2	108.2	70.3	9.8
Changanacheri	7.2	4.6	32.5	20.4	2.8
Total	165.1	67.2	773.9	513.9	71.8

DistrictLevel Taluk-wise Data for Kozhikode ; Season : Yearly					
Taluk	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Kozhikode	78.3	122.1	372.9	212.3	29.4
Quilandi	49.4	116.2	284.2	149.6	20.6
Badagara	44.9	94.5	239.8	120.4	16.6
Total	172.6	332.8	896.9	482.3	66.7

DistrictLevel Taluk-wise Data for Malappuram ; Season : Yearly					
Taluk	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Ernad	113.0	191.7	586.4	309.8	42.9
Tirur	27.2	19.6	134.1	84.5	11.8
Perintalmanna	8.5	5.3	39.6	23.3	3.3
Ponnani	20.1	9.4	22.0	12.2	1.7
Total	168.7	226.1	782.0	429.7	59.6

DistrictLevel Taluk-wise Data for Palakkad ; Season : Yearly					
Taluk	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Alattur	42.7	26.5	219.7	143.8	20.1
Ottappalam	38.7	69.7	197.1	97.4	13.5
Chittur	13.4	22.9	57.7	28.9	4.0
Palakkad	3.0	7.0	12.5	4.2	0.59
Mannarkkad	20.3	7.0	4.0	2.1	0.28
Total	118.1	133.0	491.1	276.4	38.4

DistrictLevel Taluk-wise Data for Pathanamthitta ; Season : Yearly					
Taluk	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Kozhanchery	48.8	0.10	243.9	175.4	24.6
Rani	26.3	28.7	72.8	38.3	5.3
Tiruvalla	10.2	18.1	50.9	26.7	3.7
Adur	1.8	2.1	7.7	3.3	0.46
Total	87.1	49.1	375.4	243.6	34.0

DistrictLevel Taluk-wise Data for Thiruvananthapuram ; Season : Yearly					
Taluk	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Nedumangad	77.9	167.0	416.7	224.8	31.0
Neyyattinkara	47.0	45.3	234.7	153.4	21.4
Chirayinkil	10.2	11.3	45.4	28.0	3.9
Thiruvananthapuram	5.6	10.5	31.2	17.7	2.4
Total	140.7	234.1	727.9	423.9	58.7

DistrictLevel Taluk-wise Data for Thrissur ; Season : Yearly					
Taluk	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Mukundapuram	69.7	144.6	388.3	207.9	28.7
Chavakkad	22.5	47.2	124.6	66.1	9.1
Talappalli	7.4	0.46	31.1	22.2	3.1
Kodungallur	10.3	4.2	23.0	12.3	1.7
Thrissur	12.7	6.3	16.8	7.0	0.98
Total	122.7	202.8	583.7	315.6	43.7

DistrictLevel Taluk-wise Data for Wayanad ; Season : Yearly					
Taluk	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Sultans Battery	43.7	32.2	164.9	110.2	15.4
Vayittiri	29.2	15.2	117.8	85.3	11.9
Manantavadi	28.7	17.8	114.9	77.9	10.9
Total	101.6	65.1	397.6	273.4	38.2

Taluk Level Residue Wise

Taluk level Residue-wise Data for Ambalapulai ; Season : Yearly						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Coconut	Fronds	7.7	13.2	30.8	15.4	2.2
Coconut	Husk & Pith	7.7	13.2	7.0	3.5	0.46
Coconut	Shell	7.7	13.2	2.9	2.3	0.33
Total		7.7	13.2	40.7	21.2	2.9

Taluk level Residue-wise Data for Chengannur ; Season : Yearly						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Coconut	Fronds	1.7	2.9	6.8	3.4	0.48
Coconut	Husk & Pith	1.7	2.9	1.5	0.77	0.10
Coconut	Shell	1.7	2.9	0.64	0.51	0.072
Others	Others	0.15	0.042	0.021	0.013	0.0016
Total		1.8	3.0	9.0	4.7	0.65

Taluk level Residue-wise Data for Kartikapalli ; Season : Yearly						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Coconut	Fronds	7.6	13.0	30.3	15.1	2.1
Rubber	Primary Wood	1.6	0	4.8	3.8	0.53
Coconut	Husk & Pith	7.6	13.0	6.9	3.4	0.45
Coconut	Shell	7.6	13.0	2.9	2.3	0.32
Rubber	Secondary Wood	1.6	0	3.2	1.9	0.27
Black Pepper	Stalks	6.3	1.8	0.90	0.54	0.070
Total		15.4	14.8	48.9	27.1	3.8

Taluk level Residue-wise Data for Kuttanad ; Season : Yearly						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Coconut	Fronds	14.8	25.4	59.0	29.5	4.1
Coconut	Husk & Pith	14.8	25.4	13.4	6.7	0.87
Coconut	Shell	14.8	25.4	5.6	4.5	0.62
Arecanut	Fronds	1.6	0.52	4.7	1.6	0.23
Others	Others	1.2	0.33	0.58	0.24	0.033
Total		17.5	26.2	83.3	42.6	5.9

Taluk level Residue-wise Data for Mavelikara ; Season : Yearly						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Coconut	Fronds	16.6	28.5	66.3	33.1	4.6
Coconut	Husk & Pith	16.6	28.5	15.1	7.5	0.98
Coconut	Shell	16.6	28.5	6.3	5.0	0.70
Rubber	Primary Wood	0.49	0	1.5	1.2	0.16
Arecanut	Fronds	0.79	0.26	2.4	0.83	0.12
Rubber	Secondary Wood	0.49	0	0.98	0.59	0.082
Others	Others	0	0	0.21	0.073	0.010
Total		17.8	28.7	92.6	48.3	6.7

Taluk level Residue-wise Data for Shertallai ; Season : Yearly						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Coconut	Fronds	9.5	16.4	38.2	19.1	2.7
Rubber	Primary Wood	1.8	0	5.5	4.4	0.62
Coconut	Husk & Pith	9.5	16.4	8.7	4.3	0.56
Coconut	Shell	9.5	16.4	3.6	2.9	0.40
Rubber	Secondary Wood	1.8	0	3.7	2.2	0.31
Others	Others	0.079	0.026	0.26	0.090	0.013
Total		11.5	16.4	59.9	33.0	4.6

Taluk level Residue-wise Data for Alwaye ; Season : Yearly						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Rubber	Primary Wood	5.5	0	16.4	13.2	1.8
Rubber	Secondary Wood	5.5	0	11.0	6.6	0.92
Coconut	Fronds	2.2	4.1	8.7	4.3	0.61
Arecanut	Fronds	3.8	2.9	11.4	4.0	0.56
Coconut	Husk & Pith	2.2	4.1	2.2	1.1	0.14
Arecanut	Husk	3.8	2.9	2.4	0.82	0.12
Coconut	Shell	2.2	4.1	0.91	0.73	0.10
Total		11.5	7.1	53.0	30.7	4.3

Taluk level Residue-wise Data for Cochin ; Season : Yearly						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Rubber	Primary Wood	5.8	0	17.5	14.0	2.0
Rubber	Secondary Wood	5.8	0	11.7	7.0	0.98
Others	Others	2.4	0.69	0.35	0.21	0.027
Total		8.3	0.69	29.5	21.2	3.0

Taluk level Residue-wise Data for Kanayannur ; Season : Yearly						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Rubber	Primary Wood	15.5	0	46.4	37.1	5.2
Rubber	Secondary Wood	15.5	0	30.9	18.6	2.6
Black Pepper	Stalks	8.0	2.3	1.1	0.69	0.089
Total		23.5	2.3	78.5	56.4	7.9

Taluk level Residue-wise Data for Kotamangalam ; Season : Yearly						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Coconut	Fronds	19.3	36.9	77.2	38.6	5.4
Coconut	Husk & Pith	19.3	36.9	19.6	9.8	1.3
Coconut	Shell	19.3	36.9	8.1	6.5	0.91
Rubber	Primary Wood	0.45	0	1.4	1.1	0.15
Rubber	Secondary Wood	0.45	0	0.91	0.55	0.076
Total		19.7	36.9	107.1	56.5	7.8

Taluk level Residue-wise Data for Kunthattur ; Season : Yearly						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Rubber	Primary Wood	23.8	0	71.5	57.2	8.0
Rubber	Secondary Wood	23.8	0	47.7	28.6	4.0
Coconut	Fronds	5.1	9.8	20.4	10.2	1.4
Coconut	Husk & Pith	5.1	9.8	5.2	2.6	0.34
Coconut	Shell	5.1	9.8	2.2	1.7	0.24
Others	Others	1.2	0.33	0.17	0.100	0.013
Total		30.1	10.1	147.1	100.4	14.0

Taluk level Residue-wise Data for Muvattupuzha ; Season : Yearly						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Coconut	Fronds	37.0	70.9	148.1	74.1	10.4
Coconut	Husk & Pith	37.0	70.9	37.6	18.8	2.4
Coconut	Shell	37.0	70.9	15.6	12.5	1.7
Rubber	Primary Wood	3.8	0	11.5	9.2	1.3
Rubber	Secondary Wood	3.8	0	7.7	4.6	0.65
Areca nut	Fronds	0.84	0.65	2.5	0.88	0.12
Others	Others	0	0	0.52	0.18	0.025
Total		41.7	71.6	223.6	120.2	16.6

Taluk level Residue-wise Data for Parur ; Season : Yearly						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Rubber	Primary Wood	2.0	0	5.9	4.7	0.66
Rubber	Secondary Wood	2.0	0	3.9	2.4	0.33
Others	Others	1.3	0.43	0.54	0.23	0.032
Total		3.3	0.43	10.3	7.3	1.0

Taluk level Residue-wise Data for Devikolam ; Season : Yearly						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Arecanut	Fronds	3.8	3.3	11.5	4.0	0.56
Rubber	Primary Wood	1.1	0	3.3	2.7	0.37
Rubber	Secondary Wood	1.1	0	2.2	1.3	0.19
Arecanut	Husk	3.8	3.3	2.7	0.94	0.13
Others	Others	0.83	7.0	0.35	0.28	0.039
Total		5.8	10.4	20.1	9.3	1.3

Taluk level Residue-wise Data for Pirmed ; Season : Yearly						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Rubber	Primary Wood	37.4	0	112.1	89.7	12.6
Rubber	Secondary Wood	37.4	0	74.7	44.8	6.3
Coconut	Fronds	14.2	18.6	56.7	28.3	4.0
Coconut	Husk & Pith	14.2	18.6	9.9	4.9	0.64
Coconut	Shell	14.2	18.6	4.1	3.3	0.46
Others	Others	0.14	0.79	0.23	0.097	0.014
Total		51.7	19.4	257.7	171.1	23.9

Taluk level Residue-wise Data for Todupulai ; Season : Yearly						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Black Pepper	Stalks	19.9	5.7	2.9	1.7	0.22
Others	Others	0.049	0.39	0.032	0.020	0.0028
Total		20.0	6.1	2.9	1.7	0.23

Taluk level Residue-wise Data for Udumbanchola ; Season : Yearly						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Coconut	FronDs	11.8	15.4	47.1	23.5	3.3
Coconut	Husk & Pith	11.8	15.4	8.2	4.1	0.53
Coconut	Shell	11.8	15.4	3.4	2.7	0.38
Black Pepper	Stalks	6.8	1.9	0.97	0.58	0.076
Others	Others	0.37	2.8	0.32	0.17	0.024
Total		19.0	20.2	59.9	31.1	4.3

Taluk level Residue-wise Data for Kannur ; Season : Yearly						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Rubber	Primary Wood	13.0	0	38.9	31.1	4.4
Rubber	Secondary Wood	13.0	0	25.9	15.5	2.2
Coconut	FronDs	1.4	3.0	5.5	2.7	0.38
Arecanut	FronDs	2.5	2.5	7.5	2.6	0.37
Black Pepper	Stalks	13.0	3.7	1.9	1.1	0.15
Coconut	Husk & Pith	1.4	3.0	1.6	0.80	0.10
Arecanut	Husk	2.5	2.5	2.0	0.69	0.096
Coconut	Shell	1.4	3.0	0.67	0.53	0.075
Total		29.8	9.2	83.9	55.1	7.7

Taluk level Residue-wise Data for Talipparamba ; Season : Yearly						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Coconut	FronDs	85.1	188.0	340.4	170.2	23.8
Coconut	Husk & Pith	85.1	188.0	99.6	49.8	6.5
Rubber	Primary Wood	17.9	0	53.8	43.0	6.0
Coconut	Shell	85.1	188.0	41.4	33.1	4.6
Rubber	Secondary Wood	17.9	0	35.9	21.5	3.0
Arecanut	FronDs	7.2	7.1	21.7	7.6	1.1
Arecanut	Husk	7.2	7.1	5.7	2.0	0.28
Others	Others	1.4	0.40	0.20	0.12	0.016
Total		111.7	195.5	598.6	327.3	45.3

Taluk level Residue-wise Data for Tellicherry ; Season : Yearly						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Coconut	Fronds	9.2	20.4	37.0	18.5	2.6
Rubber	Primary Wood	3.2	0	9.5	7.6	1.1
Coconut	Husk & Pith	9.2	20.4	10.8	5.4	0.70
Arecanut	Fronds	4.7	4.7	14.2	5.0	0.70
Rubber	Secondary Wood	3.2	0	6.4	3.8	0.53
Coconut	Shell	9.2	20.4	4.5	3.6	0.50
Arecanut	Husk	4.7	4.7	3.7	1.3	0.18
Others	Others	1.2	0.35	0.17	0.10	0.014
Total		18.4	25.4	86.3	45.3	6.3

Taluk level Residue-wise Data for Hosdurg ; Season : Yearly						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Coconut	Fronds	13.8	36.9	55.2	27.6	3.9
Rubber	Primary Wood	10.6	0	31.8	25.5	3.6
Rubber	Secondary Wood	10.6	0	21.2	12.7	1.8
Coconut	Husk & Pith	13.8	36.9	19.6	9.8	1.3
Coconut	Shell	13.8	36.9	8.1	6.5	0.91
Arecanut	Fronds	3.1	4.7	9.4	3.3	0.46
Arecanut	Husk	3.1	4.7	3.8	1.3	0.18
Black Pepper	Stalks	7.9	2.3	1.1	0.68	0.088
Total		35.5	43.9	150.3	87.4	12.1

Taluk level Residue-wise Data for Kasaragod ; Season : Yearly						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Coconut	Fronds	43.9	117.5	175.6	87.8	12.3
Rubber	Primary Wood	12.1	0	36.4	29.1	4.1
Coconut	Husk & Pith	43.9	117.5	62.3	31.1	4.0
Coconut	Shell	43.9	117.5	25.8	20.7	2.9
Rubber	Secondary Wood	12.1	0	24.2	14.5	2.0
Arecanut	Fronds	11.5	17.3	34.6	12.1	1.7
Arecanut	Husk	11.5	17.3	13.8	4.8	0.68
Others	Others	2.5	0.70	0.35	0.21	0.027
Total		70.0	135.4	373.0	200.4	27.7

Taluk level Residue-wise Data for Karunagapalli ; Season : Yearly						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Rubber	Primary Wood	2.3	0	6.8	5.4	0.76
Coconut	Fronds	1.4	2.7	5.5	2.8	0.39
Rubber	Secondary Wood	2.3	0	4.5	2.7	0.38
Arecanut	Fronds	1.7	0.95	5.1	1.8	0.25
Coconut	Husk & Pith	1.4	2.7	1.5	0.73	0.095
Others	Others	3.8	1.1	1.3	0.59	0.079
Coconut	Shell	1.4	2.7	0.60	0.48	0.068
Total		9.1	4.8	25.3	14.5	2.0

Taluk level Residue-wise Data for Kollam ; Season : Yearly						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Rubber	Primary Wood	3.1	0	9.4	7.6	1.1
Coconut	Fronds	2.7	5.3	10.6	5.3	0.75
Rubber	Secondary Wood	3.1	0	6.3	3.8	0.53
Coconut	Husk & Pith	2.7	5.3	2.8	1.4	0.18
Coconut	Shell	2.7	5.3	1.2	0.93	0.13
Others	Others	1.7	0.52	0.67	0.29	0.040
Total		7.5	5.8	31.0	19.3	2.7

Taluk level Residue-wise Data for Kottarakara ; Season : Yearly						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Rubber	Primary Wood	5.8	0	17.5	14.0	2.0
Coconut	Fronds	6.8	13.6	27.4	13.7	1.9
Rubber	Secondary Wood	5.8	0	11.7	7.0	0.98
Coconut	Husk & Pith	6.8	13.6	7.2	3.6	0.47
Coconut	Shell	6.8	13.6	3.0	2.4	0.33
Arecanut	Fronds	0.59	0.33	1.8	0.62	0.087
Others	Others	2.4	0.68	0.60	0.30	0.039
Total		15.6	14.6	69.1	41.6	5.8

Taluk level Residue-wise Data for Kunnattur ; Season : Yearly						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Rubber	Primary Wood	6.4	0	19.3	15.4	2.2
Rubber	Secondary Wood	6.4	0	12.9	7.7	1.1
Others	Others	1.4	0.40	0.20	0.12	0.016
Total		7.8	0.40	32.3	23.3	3.3

Taluk level Residue-wise Data for Pattanapuram ; Season : Yearly						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Coconut	Fronds	64.4	127.8	257.7	128.8	18.0
Rubber	Primary Wood	19.9	0	59.8	47.9	6.7
Coconut	Husk & Pith	64.4	127.8	67.7	33.9	4.4
Rubber	Secondary Wood	19.9	0	39.9	23.9	3.4
Coconut	Shell	64.4	127.8	28.1	22.5	3.1
Others	Others	4.0	1.1	0.57	0.34	0.045
Total		88.4	128.9	453.8	257.3	35.7

Taluk level Residue-wise Data for Changanacheri ; Season : Yearly						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Rubber	Primary Wood	3.6	0	10.7	8.6	1.2
Coconut	Fronds	2.7	4.3	10.8	5.4	0.76
Rubber	Secondary Wood	3.6	0	7.2	4.3	0.60
Coconut	Husk & Pith	2.7	4.3	2.3	1.1	0.15
Coconut	Shell	2.7	4.3	0.95	0.76	0.11
Others	Others	0.90	0.28	0.57	0.23	0.031
Total		7.2	4.6	32.5	20.4	2.8

Taluk level Residue-wise Data for Kanjirapalli ; Season : Yearly						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Rubber	Primary Wood	17.3	0	51.8	41.4	5.8
Coconut	Fronds	13.2	21.1	52.8	26.4	3.7
Rubber	Secondary Wood	17.3	0	34.5	20.7	2.9
Coconut	Husk & Pith	13.2	21.1	11.2	5.6	0.73
Coconut	Shell	13.2	21.1	4.6	3.7	0.52
Others	Others	3.9	1.1	0.85	0.43	0.057
Total		34.3	22.2	155.8	98.3	13.7

Taluk level Residue-wise Data for Kottayam ; Season : Yearly						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Rubber	Primary Wood	14.4	0	43.1	34.5	4.8
Rubber	Secondary Wood	14.4	0	28.7	17.2	2.4
Coconut	Fronds	6.6	10.5	26.2	13.1	1.8
Coconut	Husk & Pith	6.6	10.5	5.6	2.8	0.36
Coconut	Shell	6.6	10.5	2.3	1.8	0.26
Arecanut	Fronds	0.63	0.29	1.9	0.66	0.092
Others	Others	1.7	0.48	0.47	0.23	0.030
Total		23.2	11.2	108.2	70.3	9.8

Taluk level Residue-wise Data for Minachil ; Season : Yearly						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Rubber	Primary Wood	69.2	0	207.6	166.1	23.2
Rubber	Secondary Wood	69.2	0	138.4	83.0	11.6
Coconut	Fronds	1.8	2.9	7.2	3.6	0.51
Coconut	Husk & Pith	1.8	2.9	1.5	0.77	0.100
Coconut	Shell	1.8	2.9	0.64	0.51	0.071
Others	Others	0.41	0.14	0.58	0.21	0.029
Total		71.4	3.0	356.0	254.2	35.6

Taluk level Residue-wise Data for Vaikam ; Season : Yearly						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Coconut	Fronds	15.2	24.3	60.9	30.5	4.3
Rubber	Primary Wood	7.9	0	23.7	18.9	2.7
Rubber	Secondary Wood	7.9	0	15.8	9.5	1.3
Coconut	Husk & Pith	15.2	24.3	12.9	6.5	0.84
Coconut	Shell	15.2	24.3	5.4	4.3	0.60
Arecanut	Fronds	0.60	0.27	1.8	0.63	0.088
Black Pepper	Stalks	5.2	1.5	0.74	0.45	0.058
Others	Others	0	0	0.22	0.077	0.011
Total		28.9	26.1	121.4	70.8	9.8

Taluk level Residue-wise Data for Badagara ; Season : Yearly						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Coconut	Fronds	34.8	83.9	139.3	69.7	9.8
Coconut	Husk & Pith	34.8	83.9	44.4	22.2	2.9
Coconut	Shell	34.8	83.9	18.4	14.8	2.1
Arecanut	Fronds	9.2	10.5	27.5	9.6	1.3
Arecanut	Husk	9.2	10.5	8.4	2.9	0.41
Rubber	Primary Wood	0.34	0	1.0	0.80	0.11
Rubber	Secondary Wood	0.34	0	0.67	0.40	0.056
Others	Others	0.59	0.17	0.084	0.050	0.0065
Total		44.9	94.5	239.8	120.4	16.6

Taluk level Residue-wise Data for Kozhikode ; Season : Yearly						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Coconut	Fronds	48.9	117.8	195.6	97.8	13.7
Rubber	Primary Wood	16.8	0	50.3	40.2	5.6
Coconut	Husk & Pith	48.9	117.8	62.4	31.2	4.1
Coconut	Shell	48.9	117.8	25.9	20.7	2.9
Rubber	Secondary Wood	16.8	0	33.5	20.1	2.8
Black Pepper	Stalks	11.7	3.4	1.7	1.0	0.13
Arecanut	Fronds	0.86	0.98	2.6	0.90	0.13
Others	Others	0	0	0.78	0.27	0.038
Total		78.3	122.1	372.9	212.3	29.4

Taluk level Residue-wise Data for Quilandi ; Season : Yearly						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Coconut	Fronds	47.7	114.8	190.7	95.4	13.4
Coconut	Husk & Pith	47.7	114.8	60.9	30.4	4.0
Coconut	Shell	47.7	114.8	25.3	20.2	2.8
Rubber	Primary Wood	0.54	0	1.6	1.3	0.18
Arecanut	Fronds	1.2	1.4	3.6	1.3	0.18
Rubber	Secondary Wood	0.54	0	1.1	0.65	0.090
Arecanut	Husk	1.2	1.4	1.1	0.39	0.054
Total		49.4	116.2	284.2	149.6	20.6

Taluk level Residue-wise Data for Ernad ; Season : Yearly						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Coconut	Fronds	91.8	184.7	367.1	183.5	25.7
Coconut	Husk & Pith	91.8	184.7	97.9	49.0	6.4
Coconut	Shell	91.8	184.7	40.6	32.5	4.6
Rubber	Primary Wood	8.9	0	26.6	21.3	3.0
Arecanut	Fronds	10.3	6.4	30.9	10.8	1.5
Rubber	Secondary Wood	8.9	0	17.8	10.7	1.5
Arecanut	Husk	10.3	6.4	5.2	1.8	0.25
Others	Others	2.0	0.58	0.29	0.17	0.023
Total		113.0	191.7	586.4	309.8	42.9

Taluk level Residue-wise Data for Perintalmanna ; Season : Yearly						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Rubber	Primary Wood	4.1	0	12.4	10.0	1.4
Rubber	Secondary Wood	4.1	0	8.3	5.0	0.70
Coconut	Fronds	1.9	3.8	7.5	3.7	0.52
Arecanut	Fronds	2.4	1.5	7.3	2.6	0.36
Coconut	Husk & Pith	1.9	3.8	2.0	1.00	0.13
Coconut	Shell	1.9	3.8	0.83	0.66	0.093
Arecanut	Husk	2.4	1.5	1.2	0.43	0.060
Others	Others	0.061	0.017	0.0087	0.0052	0.00068
Total		8.5	5.3	39.6	23.3	3.3

Taluk level Residue-wise Data for Ponnani ; Season : Yearly						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Coconut	Fronds	2.1	4.3	8.6	4.3	0.60
Rubber	Primary Wood	1.0	0	3.0	2.4	0.34
Black Pepper	Stalks	16.1	4.6	2.3	1.4	0.18
Rubber	Secondary Wood	1.0	0	2.0	1.2	0.17
Coconut	Husk & Pith	2.1	4.3	2.3	1.1	0.15
Arecanut	Fronds	0.81	0.50	2.4	0.85	0.12
Coconut	Shell	2.1	4.3	0.95	0.76	0.11
Others	Others	0	0	0.40	0.14	0.020
Total		20.1	9.4	22.0	12.2	1.7

Taluk level Residue-wise Data for Tirur ; Season : Yearly						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Rubber	Primary Wood	15.5	0	46.6	37.3	5.2
Rubber	Secondary Wood	15.5	0	31.1	18.7	2.6
Coconut	Fronds	9.1	18.3	36.4	18.2	2.5
Coconut	Husk & Pith	9.1	18.3	9.7	4.9	0.63
Coconut	Shell	9.1	18.3	4.0	3.2	0.45
Arecanut	Fronds	1.7	1.1	5.2	1.8	0.26
Others	Others	0.76	0.22	0.98	0.37	0.051
Total		27.2	19.6	134.1	84.5	11.8

Taluk level Residue-wise Data for Alattur ; Season : Yearly						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Rubber	Primary Wood	29.2	0	87.6	70.0	9.8
Rubber	Secondary Wood	29.2	0	58.4	35.0	4.9
Coconut	Fronds	13.5	26.5	53.8	26.9	3.8
Coconut	Husk & Pith	13.5	26.5	14.0	7.0	0.91
Coconut	Shell	13.5	26.5	5.8	4.7	0.65
Others	Others	0.030	0.015	0.13	0.095	0.013
Total		42.7	26.5	219.7	143.8	20.1

Taluk level Residue-wise Data for Chittur ; Season : Yearly						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Coffee	Pruning & Wastes	4.7	2.3	18.7	15.0	2.1
Coconut	Fronds	2.6	5.1	10.5	5.2	0.73
Arecanut	Fronds	3.8	3.8	11.3	4.0	0.55
Coconut	Husk & Pith	2.6	5.1	2.7	1.4	0.18
Arecanut	Husk	3.8	3.8	3.0	1.1	0.15
Coconut	Shell	2.6	5.1	1.1	0.90	0.13
Others	Others	0	0	5.4	0.54	0.073
Cotton	Stalks	1.2	1.9	4.5	0.45	0.063
Sugarcane	Tops & Leaves	1.1	9.8	0.49	0.39	0.055
Total		13.4	22.9	57.7	28.9	4.0

Taluk level Residue-wise Data for Mannarkkad ; Season : Yearly						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Black Pepper	Stalks	19.9	5.7	2.8	1.7	0.22
Others	Others	0.41	1.3	1.2	0.43	0.060
Total		20.3	7.0	4.0	2.1	0.28

Taluk level Residue-wise Data for Ottappalam ; Season : Yearly						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Coconut	Fronds	33.4	65.6	133.5	66.8	9.3
Coconut	Husk & Pith	33.4	65.6	34.8	17.4	2.3
Coconut	Shell	33.4	65.6	14.4	11.5	1.6
Others	Others	3.4	0.98	7.2	0.97	0.13
Cotton	Stalks	1.9	3.1	7.2	0.72	0.10
Total		38.7	69.7	197.1	97.4	13.5

Taluk level Residue-wise Data for Palakkad ; Season : Yearly						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Coconut	Fronds	1.2	2.4	4.9	2.4	0.34
Others	Others	1.8	4.6	5.9	0.74	0.10
Coconut	Husk & Pith	1.2	2.4	1.3	0.64	0.083
Coconut	Shell	1.2	2.4	0.53	0.42	0.059
Total		3.0	7.0	12.5	4.2	0.59

Taluk level Residue-wise Data for Adur ; Season : Yearly						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Arecanut	Fronds	1.2	0.97	3.7	1.3	0.18
Coconut	Fronds	0.61	1.2	2.4	1.2	0.17
Others	Others	0	0	1.6	0.78	0.11
Total		1.8	2.1	7.7	3.3	0.46

Taluk level Residue-wise Data for Kozhanchery ; Season : Yearly						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Rubber	Primary Wood	48.7	0	146.0	116.8	16.4
Rubber	Secondary Wood	48.7	0	97.4	58.4	8.2
Others	Others	0.13	0.10	0.47	0.16	0.023
Total		48.8	0.10	243.9	175.4	24.6

Taluk level Residue-wise Data for Rani ; Season : Yearly						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Coconut	Fronds	13.1	25.0	52.2	26.1	3.7
Coconut	Husk & Pith	13.1	25.0	13.2	6.6	0.86
Coconut	Shell	13.1	25.0	5.5	4.4	0.62
Black Pepper	Stalks	13.2	3.8	1.9	1.1	0.15
Total		26.3	28.7	72.8	38.3	5.3

Taluk level Residue-wise Data for Tiruvalla ; Season : Yearly						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Coconut	Fronds	9.4	17.9	37.4	18.7	2.6
Coconut	Husk & Pith	9.4	17.9	9.5	4.7	0.62
Coconut	Shell	9.4	17.9	3.9	3.1	0.44
Others	Others	0.88	0.25	0.13	0.076	0.0099
Total		10.2	18.1	50.9	26.7	3.7

Taluk level Residue-wise Data for Chirayinkil ; Season : Yearly						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Rubber	Primary Wood	3.5	0	10.6	8.5	1.2
Coconut	Fronds	4.2	10.4	16.8	8.4	1.2
Rubber	Secondary Wood	3.5	0	7.1	4.2	0.59
Coconut	Husk & Pith	4.2	10.4	5.5	2.7	0.36
Coffee	Pruning & Wastes	0.69	0.43	2.8	2.2	0.31
Coconut	Shell	4.2	10.4	2.3	1.8	0.26
Others	Others	1.8	0.50	0.47	0.17	0.022
Total		10.2	11.3	45.4	28.0	3.9

Taluk level Residue-wise Data for Nedumangad ; Season : Yearly						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Coconut	Fronds	66.7	165.2	266.8	133.4	18.7
Coconut	Husk & Pith	66.7	165.2	87.6	43.8	5.7
Coconut	Shell	66.7	165.2	36.3	29.1	4.1
Rubber	Primary Wood	5.0	0	15.1	12.0	1.7
Rubber	Secondary Wood	5.0	0	10.0	6.0	0.84
Black Pepper	Stalks	6.2	1.8	0.89	0.53	0.070
Total		77.9	167.0	416.7	224.8	31.0

Taluk level Residue-wise Data for Neyyattinkara ; Season : Yearly						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Rubber	Primary Wood	18.9	0	56.7	45.4	6.4
Coffee	Pruning & Wastes	11.9	7.4	47.4	37.9	5.3
Coconut	Fronds	15.2	37.6	60.7	30.4	4.3
Rubber	Secondary Wood	18.9	0	37.8	22.7	3.2
Coconut	Husk & Pith	15.2	37.6	19.9	10.0	1.3
Coconut	Shell	15.2	37.6	8.3	6.6	0.93
Others	Others	1.1	0.30	3.9	0.46	0.056
Total		47.0	45.3	234.7	153.4	21.4

Taluk level Residue-wise Data for Thiruvananthapuram ; Season : Yearly						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Coconut	Fronds	4.2	10.5	16.9	8.5	1.2
Rubber	Primary Wood	1.3	0	3.8	3.1	0.43
Coconut	Husk & Pith	4.2	10.5	5.6	2.8	0.36
Coconut	Shell	4.2	10.5	2.3	1.8	0.26
Rubber	Secondary Wood	1.3	0	2.5	1.5	0.21
Others	Others	0.070	0.020	0.010	0.0060	0.00078
Total		5.6	10.5	31.2	17.7	2.4

Taluk level Residue-wise Data for Chavakkad ; Season : Yearly						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Coconut	Fronds	20.9	46.7	83.7	41.9	5.9
Coconut	Husk & Pith	20.9	46.7	24.8	12.4	1.6
Coconut	Shell	20.9	46.7	10.3	8.2	1.2
Rubber	Primary Wood	0.85	0	2.5	2.0	0.28
Rubber	Secondary Wood	0.85	0	1.7	1.0	0.14
Arecanut	Fronds	0.42	0.38	1.2	0.44	0.061
Others	Others	0.32	0.091	0.35	0.13	0.018
Total		22.5	47.2	124.6	66.1	9.1

Taluk level Residue-wise Data for Kodungallur ; Season : Yearly						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Rubber	Primary Wood	2.2	0	6.7	5.3	0.75
Arecanut	Fronds	3.0	2.7	9.0	3.1	0.44
Rubber	Secondary Wood	2.2	0	4.4	2.7	0.37
Arecanut	Husk	3.0	2.7	2.2	0.76	0.11
Black Pepper	Stalks	5.1	1.5	0.73	0.44	0.057
Total		10.3	4.2	23.0	12.3	1.7

Taluk level Residue-wise Data for Mukundapuram ; Season : Yearly						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Coconut	Fronds	64.5	144.0	258.1	129.1	18.1
Coconut	Husk & Pith	64.5	144.0	76.3	38.2	5.0
Coconut	Shell	64.5	144.0	31.7	25.4	3.5
Rubber	Primary Wood	4.1	0	12.3	9.8	1.4
Rubber	Secondary Wood	4.1	0	8.2	4.9	0.69
Arecanut	Fronds	0.44	0.40	1.3	0.46	0.064
Others	Others	0.62	0.18	0.41	0.16	0.023
Total		69.7	144.6	388.3	207.9	28.7

Taluk level Residue-wise Data for Talappalli ; Season : Yearly						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Rubber	Primary Wood	6.1	0	18.2	14.6	2.0
Rubber	Secondary Wood	6.1	0	12.2	7.3	1.0
Others	Others	1.3	0.46	0.66	0.27	0.037
Total		7.4	0.46	31.1	22.2	3.1

Taluk level Residue-wise Data for Thrissur ; Season : Yearly						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Arecanut	Fronds	3.2	3.0	9.7	3.4	0.48
Arecanut	Husk	3.2	3.0	2.4	0.83	0.12
Coconut	Fronds	0.37	0.83	1.5	0.75	0.10
Black Pepper	Stalks	8.9	2.5	1.3	0.76	0.099
Others	Others	0	0	1.1	0.68	0.093
Rubber	Primary Wood	0.26	0	0.77	0.62	0.087
Total		12.7	6.3	16.8	7.0	0.98

Taluk level Residue-wise Data for Manantavadi ; Season : Yearly						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Coffee	Pruning & Wastes	21.7	15.0	86.8	69.4	9.7
Arecanut	Fronds	5.6	2.3	16.9	5.9	0.83
Others	Others	1.2	0.45	1.2	0.66	0.091
Coffee	Husk	21.7	15.0	7.5	0.75	0.090
Arecanut	Husk	5.6	2.3	1.8	0.64	0.089
Rubber	Primary Wood	0.22	0	0.66	0.53	0.074
Total		28.7	17.8	114.9	77.9	10.9

Taluk level Residue-wise Data for Sultans Battery ; Season : Yearly						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Coffee	Pruning & Wastes	25.2	17.5	101.0	80.8	11.3
Coconut	Fronds	10.4	12.4	41.5	20.7	2.9
Coconut	Husk & Pith	10.4	12.4	6.6	3.3	0.43
Coconut	Shell	10.4	12.4	2.7	2.2	0.31
Coffee	Husk	25.2	17.5	8.7	0.87	0.10
Rubber	Primary Wood	0.29	0	0.87	0.69	0.097
Arecanut	Fronds	0.57	0.23	1.7	0.60	0.084
Black Pepper	Stalks	7.2	2.1	1.0	0.62	0.080
Others	Others	0	0	0.76	0.41	0.058
Total		43.7	32.2	164.9	110.2	15.4

Taluk level Residue-wise Data for Vayittiri ; Season : Yearly						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Coffee	Pruning & Wastes	18.7	13.0	75.0	60.0	8.4
Rubber	Primary Wood	6.0	0	17.9	14.3	2.0
Rubber	Secondary Wood	6.0	0	11.9	7.2	1.0
Coconut	Fronds	0.92	1.1	3.7	1.8	0.26
Others	Others	3.1	0.89	1.4	0.80	0.11
Coffee	Husk	18.7	13.0	6.5	0.65	0.078
Arecanut	Fronds	0.45	0.18	1.3	0.47	0.066
Total		29.2	15.2	117.8	85.3	11.9

Agro

State Level Residue Wise

State level Residue-wise Data for Kerala; Biomass Class : Agro						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Coconut	FronDs	913.1	1933.7	3652.6	1826.3	255.7
Tapioca	Stalks	111.9	2466.6	1775.9	1243.2	161.6
Rubber	Primary Wood	479.7	0	1439.1	1151.3	161.2
Rubber	Secondary Wood	479.7	0	959.4	575.6	80.6
Coconut	Husk & Pith	913.1	1933.7	1024.9	512.4	66.6
Coconut	Shell	913.1	1933.7	425.4	340.3	47.6
Coffee	Pruning & Wastes	82.9	55.7	331.8	265.4	37.2
Paddy	Straw	324.5	885.1	1327.6	132.8	15.9
Paddy	Husk	324.5	885.1	177.0	141.6	15.6
Arecanut	FronDs	90.1	83.0	270.3	94.6	13.2
Arecanut	Husk	90.1	83.0	66.4	23.3	3.3
Black Pepper	Stalks	203.8	58.3	29.1	17.5	2.3
Cashewnut	Stalks	86.8	42.8	77.0	15.4	2.0
Cashewnut	Shell	86.8	42.8	21.4	4.3	0.56
Coffee	Husk	82.9	55.7	27.8	2.8	0.33
Cotton	Stalks	3.8	6.2	14.6	1.5	0.20
Others	Others	4.9	3.1	6.2	1.1	0.14
Sugarcane	Tops & Leaves	2.9	24.9	1.2	1.00	0.14
Cotton	Husk	3.8	6.2	6.8	0.68	0.095
Cotton	Bollshell	3.8	6.2	6.8	0.68	0.095
Groundnut	Stalks	2.4	1.8	3.6	0.73	0.094
Total		2307.0	5561.1	11645.1	6352.4	864.4

State Level District Wise

State level District-wise Data for Kerala ; Biomass Class : Agro					
District	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Thiruvananthapuram	175.2	712.5	1092.4	661.4	89.5
Kollam	171.2	754.4	1078.0	652.1	87.8
Kottayam	189.0	313.5	994.5	629.6	86.6
Malappuram	210.0	455.5	1010.1	534.4	72.9
Kozhikode	187.3	418.4	971.8	523.4	72.0
Ernakulam	177.4	349.1	881.8	488.9	66.8
Kannur	200.5	342.0	893.8	478.8	65.8
Palakkad	252.6	611.4	1176.4	451.4	59.6
Thrissur	164.8	338.1	787.4	363.2	49.4
Pathanamthitta	102.5	268.1	549.8	350.9	47.8
Idukki	110.1	331.6	553.0	349.5	47.4
Kasaragod	134.5	239.5	601.7	313.8	43.2
Wayanad	117.9	156.0	504.9	311.1	42.9
Alappuzha	113.9	271.0	549.7	244.0	32.8
Total	2307.0	5561.1	11645.1	6352.4	864.4

State Level Taluk Wise

State level Taluk-wise Data for Kerala ; Biomass Class : Agro						
District	Taluk	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Kannur	Talipparamba	144.6	295.9	709.7	372.7	51.1
Malappuram	Ernad	132.4	253.1	661.4	335.5	46.1
Kollam	Pattanapuram	97.3	202.5	522.4	291.4	40.0
Thiruvananthapuram	Nedumangad	89.2	284.4	516.0	281.1	38.3
Thiruvananthapuram	Neyyattinkara	61.6	291.3	412.6	277.3	37.5
Pathanamthitta	Kozhanchery	61.4	189.7	395.0	268.1	36.5
Kottayam	Minachil	73.2	7.6	363.7	255.6	35.7
Thrissur	Mukundapuram	101.3	231.4	531.1	236.3	32.0
Kozhikode	Kozhikode	83.6	163.5	407.6	232.2	32.0
Kasaragod	Kasaragod	78.1	149.2	397.4	204.9	28.3
Palakkad	Alattur	60.5	164.9	358.2	205.8	27.9
Idukki	Pirmed	56.4	67.9	300.3	194.2	26.9

District	Taluk	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Kozhikode	Quilandi	54.2	152.3	313.2	167.4	22.9
Kollam	Kottarakara	32.7	261.2	257.7	164.0	21.7
Malappuram	Tirur	48.5	175.9	278.5	157.4	21.1
Kottayam	Vaikam	38.6	198.5	255.0	155.8	20.8
Wayanad	Sultans Battery	57.3	114.5	257.7	145.3	19.8
Idukki	Udumbanchola	25.8	239.1	217.6	141.5	18.7
Palakkad	Ottappalam	89.4	212.3	440.2	141.6	18.5
Kollam	Kollam	20.0	240.4	201.2	137.5	18.0
Ernakulam	Kotamangalam	44.4	212.9	276.7	136.7	18.0
Kozhikode	Badagara	49.5	102.7	251.0	123.8	17.1
Ernakulam	Muvattupula	43.0	74.3	228.2	121.1	16.7
Ernakulam	Kunnatnad	37.6	27.2	176.2	105.7	14.6
Kasaragod	Hosdrug	55.9	78.9	196.0	103.2	14.1
Kottayam	Kanjirapalli	34.3	22.2	155.8	98.3	13.7
Kottayam	Kottayam	33.6	64.7	171.5	92.4	12.6
Wayanad	Vayittiri	30.3	18.6	123.7	86.3	12.0
Wayanad	Manantavadi	30.4	22.8	123.5	79.5	11.1
Thrissur	Chavakkad	23.9	54.4	133.1	69.0	9.5
Alappuzha	Mavelikara	34.2	81.6	173.2	66.6	8.9
Thiruvananthapuram	Chirayinkil	15.4	81.4	96.9	63.3	8.5
Kannur	Kannur	32.7	18.3	92.4	59.7	8.3
Ernakulam	Kanayannur	26.1	8.4	88.8	58.2	8.1
Alappuzha	Kartikapalli	22.4	70.3	94.7	54.3	7.3
Kannur	Tellicherry	23.1	27.8	91.7	46.4	6.4
Alappuzha	Kuttanad	22.8	40.8	108.1	47.1	6.4
Alappuzha	Shertallai	16.7	42.7	90.5	44.0	5.9
Palakkad	Chittur	33.9	67.9	135.9	43.2	5.7
Thiruvananthapuram	Thiruvananthapuram	9.1	55.5	66.9	39.7	5.3
Pathanamthitta	Rani	26.5	28.9	73.1	38.3	5.3
Kollam	Karunagapalli	12.2	46.5	58.7	34.8	4.6
Ernakulam	Alwaye	13.6	12.0	61.3	32.2	4.5
Palakkad	Mannarkkad	58.0	113.4	185.5	35.4	4.1
Pathanamthitta	Tiruvalla	11.4	19.8	54.0	27.2	3.8
Kottayam	Changanacheri	9.3	20.5	48.6	27.5	3.7
Alappuzha	Ambalapulai	15.0	29.8	69.3	26.5	3.5
Kollam	Kunnattur	9.0	3.7	38.0	24.3	3.4
Palakkad	Palakkad	10.9	53.0	56.5	25.3	3.3

District	Taluk	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Malappuram	Perintalmanna	8.5	5.3	39.6	23.3	3.3
Thrissur	Talappalli	7.4	0.46	31.1	22.2	3.1
Ernakulam	Cochin	8.7	1.6	31.1	21.5	3.0
Thrissur	Kodungallur	15.1	26.2	50.4	21.1	2.8
Malappuram	Ponnani	20.6	21.3	30.5	18.2	2.5
Pathanamthitta	Adur	3.1	29.8	27.7	17.2	2.3
Thrissur	Thrissur	17.1	25.7	41.8	14.6	1.9
Ernakulam	Parur	3.9	12.7	19.4	13.4	1.8
Idukki	Devikolam	7.9	17.1	31.2	11.4	1.5
Alappuzha	Chengannur	2.9	5.8	13.9	5.6	0.75
Kasaragod	Tellicherry	0.50	11.4	8.2	5.7	0.75
Idukki	Todupulai	20.0	7.5	3.9	2.4	0.31
Total		2307.0	5561.1	11645.1	6352.4	864.4

District Level Residue Wise

District level Residue-wise Data for Alappuzha; Biomass Class : Agro						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Coconut	FronDs	57.8	99.4	231.4	115.7	16.2
Tapioca	Stalks	4.5	74.1	53.4	37.4	4.9
Coconut	Husk & Pith	57.8	99.4	52.7	26.3	3.4
Coconut	Shell	57.8	99.4	21.9	17.5	2.4
Paddy	Straw	33.7	92.5	138.8	13.9	1.7
Paddy	Husk	33.7	92.5	18.5	14.8	1.6
Rubber	Primary Wood	3.9	0	11.7	9.4	1.3
Rubber	Secondary Wood	3.9	0	7.8	4.7	0.66
Arecanut	FronDs	2.4	0.81	7.3	2.6	0.36
Cashewnut	Stalks	4.0	2.0	3.5	0.71	0.092
Black Pepper	Stalks	7.6	2.2	1.1	0.65	0.085
Others	Others	0	0	1.6	0.42	0.057
Total		113.9	271.0	549.7	244.0	32.8

District level Residue-wise Data for Ernakulam; Biomass Class : Agro						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Rubber	Primary Wood	56.9	0	170.6	136.5	19.1
Coconut	Fronds	63.6	121.8	254.4	127.2	17.8
Rubber	Secondary Wood	56.9	0	113.7	68.2	9.6
Tapioca	Stalks	5.8	144.2	103.8	72.7	9.4
Coconut	Husk & Pith	63.6	121.8	64.5	32.3	4.2
Coconut	Shell	63.6	121.8	26.8	21.4	3.0
Paddy	Straw	33.4	75.7	113.6	11.4	1.4
Paddy	Husk	33.4	75.7	15.1	12.1	1.3
Arecanut	Fronds	4.7	3.7	14.2	5.0	0.70
Arecanut	Husk	4.7	3.7	2.9	1.0	0.14
Black Pepper	Stalks	12.8	3.7	1.8	1.1	0.14
Others	Others	0.17	0.082	0.19	0.038	0.0049
Total		177.4	349.1	881.8	488.9	66.8

District level Residue-wise Data for Idukki; Biomass Class : Agro						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Tapioca	Stalks	8.2	261.6	188.4	131.8	17.1
Rubber	Primary Wood	38.5	0	115.4	92.3	12.9
Coconut	Fronds	25.9	34.0	103.8	51.9	7.3
Rubber	Secondary Wood	38.5	0	76.9	46.2	6.5
Coconut	Husk & Pith	25.9	34.0	18.0	9.0	1.2
Coconut	Shell	25.9	34.0	7.5	6.0	0.84
Arecanut	Fronds	3.9	3.4	11.8	4.1	0.58
Black Pepper	Stalks	26.8	7.7	3.8	2.3	0.30
Paddy	Straw	4.4	13.4	20.1	2.0	0.24
Paddy	Husk	4.4	13.4	2.7	2.1	0.24
Arecanut	Husk	3.9	3.4	2.7	0.96	0.13
Sugarcane	Tops & Leaves	1.3	10.9	0.55	0.44	0.061
Others	Others	1.1	0.55	1.3	0.25	0.033
Total		110.1	331.6	553.0	349.5	47.4

District level Residue-wise Data for Kannur; Biomass Class : Agro						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Coconut	Fronds	95.7	211.4	382.9	191.4	26.8
Rubber	Primary Wood	34.1	0	102.2	81.8	11.4
Coconut	Husk & Pith	95.7	211.4	112.1	56.0	7.3
Rubber	Secondary Wood	34.1	0	68.1	40.9	5.7
Coconut	Shell	95.7	211.4	46.5	37.2	5.2
Tapioca	Stalks	3.5	74.3	53.5	37.4	4.9
Arecanut	Fronds	14.5	14.3	43.4	15.2	2.1
Cashewnut	Stalks	26.0	12.8	23.0	4.6	0.60
Arecanut	Husk	14.5	14.3	11.4	4.0	0.56
Paddy	Straw	11.2	24.8	37.1	3.7	0.45
Paddy	Husk	11.2	24.8	5.0	4.0	0.44
Black Pepper	Stalks	15.6	4.5	2.2	1.3	0.17
Cashewnut	Shell	26.0	12.8	6.4	1.3	0.17
Total		200.5	342.0	893.8	478.8	65.8

District level Residue-wise Data for Kasaragod; Biomass Class : Agro						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Coconut	Fronds	57.7	154.4	230.8	115.4	16.2
Rubber	Primary Wood	22.7	0	68.2	54.6	7.6
Coconut	Husk & Pith	57.7	154.4	81.8	40.9	5.3
Rubber	Secondary Wood	22.7	0	45.5	27.3	3.8
Coconut	Shell	57.7	154.4	34.0	27.2	3.8
Arecanut	Fronds	14.7	22.0	44.0	15.4	2.2
Tapioca	Stalks	1.3	30.5	22.0	15.4	2.0
Arecanut	Husk	14.7	22.0	17.6	6.1	0.86
Cashewnut	Stalks	20.2	9.9	17.9	3.6	0.47
Paddy	Straw	7.5	19.7	29.5	3.0	0.35
Paddy	Husk	7.5	19.7	3.9	3.1	0.35
Cashewnut	Shell	20.2	9.9	5.0	0.99	0.13
Black Pepper	Stalks	10.4	3.0	1.5	0.89	0.12
Total		134.5	239.5	601.7	313.8	43.2

District level Residue-wise Data for Kollam; Biomass Class : Agro						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Tapioca	Stalks	26.4	566.1	407.6	285.3	37.1
Coconut	Fronds	75.3	149.4	301.2	150.6	21.1
Rubber	Primary Wood	37.6	0	112.8	90.2	12.6
Rubber	Secondary Wood	37.6	0	75.2	45.1	6.3
Coconut	Husk & Pith	75.3	149.4	79.2	39.6	5.1
Coconut	Shell	75.3	149.4	32.9	26.3	3.7
Paddy	Straw	11.6	31.4	47.2	4.7	0.57
Paddy	Husk	11.6	31.4	6.3	5.0	0.55
Arecanut	Fronds	2.4	1.3	7.3	2.5	0.36
Black Pepper	Stalks	13.1	3.7	1.9	1.1	0.15
Cashewnut	Stalks	4.8	2.4	4.2	0.85	0.11
Arecanut	Husk	2.4	1.3	1.1	0.38	0.053
Others	Others	0	0	1.2	0.24	0.031
Total		171.2	754.4	1078.0	652.1	87.8

District level Residue-wise Data for Kottayam; Biomass Class : Agro						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Rubber	Primary Wood	112.3	0	336.8	269.4	37.7
Rubber	Secondary Wood	112.3	0	224.5	134.7	18.9
Tapioca	Stalks	7.8	202.3	145.6	101.9	13.3
Coconut	Fronds	39.5	63.1	158.0	79.0	11.1
Coconut	Husk & Pith	39.5	63.1	33.5	16.7	2.2
Coconut	Shell	39.5	63.1	13.9	11.1	1.6
Paddy	Straw	15.4	43.6	65.4	6.5	0.79
Paddy	Husk	15.4	43.6	8.7	7.0	0.77
Arecanut	Fronds	1.6	0.74	4.9	1.7	0.24
Black Pepper	Stalks	11.7	3.3	1.7	1.00	0.13
Others	Others	0.80	0.39	1.5	0.39	0.053
Total		189.0	313.5	994.5	629.6	86.6

District level Residue-wise Data for Kozhikode; Biomass Class : Agro						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Coconut	Fronds	131.4	316.5	525.7	262.8	36.8
Coconut	Husk & Pith	131.4	316.5	167.7	83.9	10.9
Coconut	Shell	131.4	316.5	69.6	55.7	7.8
Rubber	Primary Wood	17.6	0	52.9	42.3	5.9
Tapioca	Stalks	4.4	73.3	52.8	36.9	4.8
Rubber	Secondary Wood	17.6	0	35.3	21.2	3.0
Arecanut	Fronds	11.2	12.9	33.6	11.8	1.6
Arecanut	Husk	11.2	12.9	10.3	3.6	0.50
Paddy	Straw	6.4	10.4	15.5	1.6	0.19
Paddy	Husk	6.4	10.4	2.1	1.7	0.18
Black Pepper	Stalks	12.3	3.5	1.8	1.1	0.14
Cashewnut	Stalks	3.9	1.9	3.5	0.70	0.091
Others	Others	0	0	0.97	0.19	0.025
Total		187.3	418.4	971.8	523.4	72.0

District level Residue-wise Data for Malappuram; Biomass Class : Agro						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Coconut	Fronds	104.9	211.1	419.5	209.8	29.4
Tapioca	Stalks	7.3	168.7	121.4	85.0	11.1
Rubber	Primary Wood	29.6	0	88.7	71.0	9.9
Coconut	Husk & Pith	104.9	211.1	111.9	55.9	7.3
Coconut	Shell	104.9	211.1	46.4	37.2	5.2
Rubber	Secondary Wood	29.6	0	59.2	35.5	5.0
Arecanut	Fronds	15.3	9.6	45.9	16.1	2.2
Paddy	Straw	22.7	55.2	82.7	8.3	0.99
Paddy	Husk	22.7	55.2	11.0	8.8	0.97
Arecanut	Husk	15.3	9.6	7.6	2.7	0.37
Cashewnut	Stalks	11.4	5.6	10.1	2.0	0.26
Black Pepper	Stalks	19.0	5.4	2.7	1.6	0.21
Cashewnut	Shell	11.4	5.6	2.8	0.56	0.073
Total		210.0	455.5	1010.1	534.4	72.9

District level Residue-wise Data for Palakkad; Biomass Class : Agro						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Coconut	Fronds	50.7	99.6	202.7	101.3	14.2
Rubber	Primary Wood	29.2	0	87.6	70.0	9.8
Tapioca	Stalks	5.7	133.8	96.3	67.4	8.8
Paddy	Straw	116.0	337.0	505.4	50.5	6.1
Paddy	Husk	116.0	337.0	67.4	53.9	5.9
Rubber	Secondary Wood	29.2	0	58.4	35.0	4.9
Coconut	Husk & Pith	50.7	99.6	52.8	26.4	3.4
Coconut	Shell	50.7	99.6	21.9	17.5	2.5
Coffee	Pruning & Wastes	4.7	2.4	18.9	15.1	2.1
Arecanut	Fronds	4.1	4.0	12.2	4.3	0.60
Black Pepper	Stalks	24.0	6.9	3.4	2.1	0.27
Cotton	Stalks	3.8	6.2	14.6	1.5	0.20
Others	Others	4.9	3.1	8.7	1.5	0.19
Arecanut	Husk	4.1	4.0	3.2	1.1	0.16
Cashewnut	Stalks	5.5	2.7	4.9	0.98	0.13
Cotton	Bollshell	3.8	6.2	6.8	0.68	0.095
Cotton	Husk	3.8	6.2	6.8	0.68	0.095
Groundnut	Stalks	2.4	1.8	3.6	0.73	0.094
Sugarcane	Tops & Leaves	1.6	14.0	0.70	0.56	0.078
Total		252.6	611.4	1176.4	451.4	59.6

District level Residue-wise Data for Pathanamthitta; Biomass Class : Agro						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Rubber	Primary Wood	48.7	0	146.0	116.8	16.4
Tapioca	Stalks	9.0	202.3	145.7	102.0	13.3
Rubber	Secondary Wood	48.7	0	97.4	58.4	8.2
Coconut	FronDs	23.0	44.0	92.1	46.0	6.4
Coconut	Husk & Pith	23.0	44.0	23.3	11.7	1.5
Coconut	Shell	23.0	44.0	9.7	7.7	1.1
Paddy	Straw	5.2	16.1	24.2	2.4	0.29
Paddy	Husk	5.2	16.1	3.2	2.6	0.28
Arecanut	FronDs	1.4	1.1	4.1	1.4	0.20
Black Pepper	Stalks	14.1	4.0	2.0	1.2	0.16
Others	Others	1.1	0.56	2.2	0.56	0.076
Total		102.5	268.1	549.8	350.9	47.8

District level Residue-wise Data for Thiruvananthapuram; Biomass Class : Agro						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Tapioca	Stalks	25.3	458.8	330.3	231.2	30.1
Coconut	FronDs	90.3	223.7	361.2	180.6	25.3
Rubber	Primary Wood	28.7	0	86.1	68.9	9.6
Coconut	Husk & Pith	90.3	223.7	118.5	59.3	7.7
Coffee	Pruning & Wastes	12.5	7.8	50.2	40.2	5.6
Coconut	Shell	90.3	223.7	49.2	39.4	5.5
Rubber	Secondary Wood	28.7	0	57.4	34.5	4.8
Paddy	Straw	6.8	18.4	27.7	2.8	0.33
Paddy	Husk	6.8	18.4	3.7	3.0	0.32
Black Pepper	Stalks	9.1	2.6	1.3	0.78	0.10
Others	Others	0	0	4.5	0.51	0.063
Cashewnut	Stalks	2.5	1.2	2.2	0.44	0.057
Total		175.2	712.5	1092.4	661.4	89.5

District level Residue-wise Data for Thrissur; Biomass Class : Agro						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Coconut	Fronds	85.8	191.6	343.3	171.7	24.0
Coconut	Husk & Pith	85.8	191.6	101.5	50.8	6.6
Coconut	Shell	85.8	191.6	42.1	33.7	4.7
Rubber	Primary Wood	13.5	0	40.5	32.4	4.5
Rubber	Secondary Wood	13.5	0	27.0	16.2	2.3
Paddy	Straw	37.0	105.4	158.1	15.8	1.9
Paddy	Husk	37.0	105.4	21.1	16.9	1.9
Tapioca	Stalks	1.4	28.1	20.2	14.2	1.8
Arecanut	Fronds	7.2	6.6	21.6	7.6	1.1
Arecanut	Husk	7.2	6.6	5.3	1.8	0.26
Black Pepper	Stalks	16.1	4.6	2.3	1.4	0.18
Cashewnut	Stalks	3.8	1.9	3.3	0.67	0.087
Others	Others	0	0	0.93	0.19	0.024
Total		164.8	338.1	787.4	363.2	49.4

District level Residue-wise Data for Wayanad; Biomass Class : Agro						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Coffee	Pruning & Wastes	65.7	45.5	262.7	210.2	29.4
Coconut	Fronds	11.4	13.7	45.6	22.8	3.2
Tapioca	Stalks	1.4	48.6	35.0	24.5	3.2
Rubber	Primary Wood	6.5	0	19.4	15.6	2.2
Rubber	Secondary Wood	6.5	0	13.0	7.8	1.1
Arecanut	Fronds	6.7	2.7	20.0	7.0	0.98
Paddy	Straw	13.3	41.5	62.2	6.2	0.75
Paddy	Husk	13.3	41.5	8.3	6.6	0.73
Coconut	Husk & Pith	11.4	13.7	7.3	3.6	0.47
Coconut	Shell	11.4	13.7	3.0	2.4	0.34
Coffee	Husk	65.7	45.5	22.7	2.3	0.27
Black Pepper	Stalks	11.4	3.3	1.6	0.98	0.13
Arecanut	Husk	6.7	2.7	2.2	0.75	0.11
Others	Others	1.6	0.79	1.8	0.36	0.047
Total		117.9	156.0	504.9	311.1	42.9

District Level Taluk Wise

DistrictLevel Taluk-wise Data for Alappuzha ; Biomass Class : Agro					
Taluk	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Mavelikara	34.2	81.6	173.2	66.6	8.9
Kartikapalli	22.4	70.3	94.7	54.3	7.3
Kuttanad	22.8	40.8	108.1	47.1	6.4
Shertallai	16.7	42.7	90.5	44.0	5.9
Ambalapulai	15.0	29.8	69.3	26.5	3.5
Chengannur	2.9	5.8	13.9	5.6	0.75
Total	113.9	271.0	549.7	244.0	32.8

DistrictLevel Taluk-wise Data for Ernakulam ; Biomass Class : Agro					
Taluk	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Kotamangalam	44.4	212.9	276.7	136.7	18.0
Muvattupula	43.0	74.3	228.2	121.1	16.7
Kunnatnad	37.6	27.2	176.2	105.7	14.6
Kanayannur	26.1	8.4	88.8	58.2	8.1
Alwaye	13.6	12.0	61.3	32.2	4.5
Cochin	8.7	1.6	31.1	21.5	3.0
Parur	3.9	12.7	19.4	13.4	1.8
Total	177.4	349.1	881.8	488.9	66.8

DistrictLevel Taluk-wise Data for Idukki ; Biomass Class : Agro					
Taluk	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Pirmed	56.4	67.9	300.3	194.2	26.9
Udumbanchola	25.8	239.1	217.6	141.5	18.7
Devikolam	7.9	17.1	31.2	11.4	1.5
Todupulai	20.0	7.5	3.9	2.4	0.31
Total	110.1	331.6	553.0	349.5	47.4

DistrictLevel Taluk-wise Data for Kannur ; Biomass Class : Agro					
Taluk	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Talipparamba	144.6	295.9	709.7	372.7	51.1
Kannur	32.7	18.3	92.4	59.7	8.3
Tellicherry	23.1	27.8	91.7	46.4	6.4
Total	200.5	342.0	893.8	478.8	65.8

DistrictLevel Taluk-wise Data for Kasaragod ; Biomass Class : Agro					
Taluk	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Kasaragod	78.1	149.2	397.4	204.9	28.3
Hosdrug	55.9	78.9	196.0	103.2	14.1
Tellicherry	0.50	11.4	8.2	5.7	0.75
Total	134.5	239.5	601.7	313.8	43.2

DistrictLevel Taluk-wise Data for Kollam ; Biomass Class : Agro					
Taluk	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Pattanamparam	97.3	202.5	522.4	291.4	40.0
Kottarakara	32.7	261.2	257.7	164.0	21.7
Kollam	20.0	240.4	201.2	137.5	18.0
Karunagapalli	12.2	46.5	58.7	34.8	4.6
Kunnattur	9.0	3.7	38.0	24.3	3.4
Total	171.2	754.4	1078.0	652.1	87.8

DistrictLevel Taluk-wise Data for Kottayam ; Biomass Class : Agro					
Taluk	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Minachil	73.2	7.6	363.7	255.6	35.7
Vaikam	38.6	198.5	255.0	155.8	20.8
Kanjirapalli	34.3	22.2	155.8	98.3	13.7
Kottayam	33.6	64.7	171.5	92.4	12.6
Changanacheri	9.3	20.5	48.6	27.5	3.7
Total	189.0	313.5	994.5	629.6	86.6

DistrictLevel Taluk-wise Data for Kozhikode ; Biomass Class : Agro					
Taluk	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Kozhikode	83.6	163.5	407.6	232.2	32.0
Quilandi	54.2	152.3	313.2	167.4	22.9
Badagara	49.5	102.7	251.0	123.8	17.1
Total	187.3	418.4	971.8	523.4	72.0

DistrictLevel Taluk-wise Data for Malappuram ; Biomass Class : Agro					
Taluk	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Ernad	132.4	253.1	661.4	335.5	46.1
Tirur	48.5	175.9	278.5	157.4	21.1
Perintalmanna	8.5	5.3	39.6	23.3	3.3
Ponnani	20.6	21.3	30.5	18.2	2.5
Total	210.0	455.5	1010.1	534.4	72.9

DistrictLevel Taluk-wise Data for Palakkad ; Biomass Class : Agro					
Taluk	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Alattur	60.5	164.9	358.2	205.8	27.9
Ottappalam	89.4	212.3	440.2	141.6	18.5
Chittur	33.9	67.9	135.9	43.2	5.7
Mannarkkad	58.0	113.4	185.5	35.4	4.1
Palakkad	10.9	53.0	56.5	25.3	3.3
Total	252.6	611.4	1176.4	451.4	59.6

DistrictLevel Taluk-wise Data for Pathanamthitta ; Biomass Class : Agro					
Taluk	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Kozhanchery	61.4	189.7	395.0	268.1	36.5
Rani	26.5	28.9	73.1	38.3	5.3
Tiruvalla	11.4	19.8	54.0	27.2	3.8
Adur	3.1	29.8	27.7	17.2	2.3
Total	102.5	268.1	549.8	350.9	47.8

DistrictLevel Taluk-wise Data for Thiruvananthapuram ; Biomass Class : Agro					
Taluk	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Nedumangad	89.2	284.4	516.0	281.1	38.3
Neyyattinkara	61.6	291.3	412.6	277.3	37.5
Chirayinkil	15.4	81.4	96.9	63.3	8.5
Thiruvananthapuram	9.1	55.5	66.9	39.7	5.3
Total	175.2	712.5	1092.4	661.4	89.5

DistrictLevel Taluk-wise Data for Thrissur ; Biomass Class : Agro					
Taluk	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Mukundapuram	101.3	231.4	531.1	236.3	32.0
Chavakkad	23.9	54.4	133.1	69.0	9.5
Talappalli	7.4	0.46	31.1	22.2	3.1
Kodungallur	15.1	26.2	50.4	21.1	2.8
Thrissur	17.1	25.7	41.8	14.6	1.9
Total	164.8	338.1	787.4	363.2	49.4

DistrictLevel Taluk-wise Data for Wayanad ; Biomass Class : Agro					
Taluk	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Sultans Battery	57.3	114.5	257.7	145.3	19.8
Vayittiri	30.3	18.6	123.7	86.3	12.0
Manantavadi	30.4	22.8	123.5	79.5	11.1
Total	117.9	156.0	504.9	311.1	42.9

Taluk Level Residue Wise

Taluk level Residue-wise Data for Ambalapulai ; Biomass Class : Agro						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Coconut	Fronds	7.7	13.2	30.8	15.4	2.2
Coconut	Husk & Pith	7.7	13.2	7.0	3.5	0.46
Coconut	Shell	7.7	13.2	2.9	2.3	0.33
Paddy	Straw	5.7	15.8	23.7	2.4	0.28
Paddy	Husk	5.7	15.8	3.2	2.5	0.28
Others	Others	1.5	0.76	1.8	0.35	0.046
Total		15.0	29.8	69.3	26.5	3.5

Taluk level Residue-wise Data for Chengannur ; Biomass Class : Agro						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Coconut	Fronds	1.7	2.9	6.8	3.4	0.48
Coconut	Husk & Pith	1.7	2.9	1.5	0.77	0.10
Coconut	Shell	1.7	2.9	0.64	0.51	0.072
Paddy	Straw	1.1	2.9	4.3	0.43	0.052
Paddy	Husk	1.1	2.9	0.58	0.46	0.051
Others	Others	0.15	0.042	0.021	0.013	0.0016
Total		2.9	5.8	13.9	5.6	0.75

Taluk level Residue-wise Data for Kartikapalli ; Biomass Class : Agro						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Tapioca	Stalks	3.0	50.3	36.2	25.3	3.3
Coconut	Fronds	7.6	13.0	30.3	15.1	2.1
Rubber	Primary Wood	1.6	0	4.8	3.8	0.53
Coconut	Husk & Pith	7.6	13.0	6.9	3.4	0.45
Coconut	Shell	7.6	13.0	2.9	2.3	0.32
Rubber	Secondary Wood	1.6	0	3.2	1.9	0.27
Paddy	Straw	1.5	4.0	6.0	0.60	0.072
Paddy	Husk	1.5	4.0	0.80	0.64	0.070
Black Pepper	Stalks	6.3	1.8	0.90	0.54	0.070
Cashewnut	Stalks	2.4	1.2	2.2	0.43	0.056
Others	Others	0	0	0.60	0.12	0.016
Total		22.4	70.3	94.7	54.3	7.3

Taluk level Residue-wise Data for Kuttanad ; Biomass Class : Agro						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Coconut	Fronds	14.8	25.4	59.0	29.5	4.1
Coconut	Husk & Pith	14.8	25.4	13.4	6.7	0.87
Coconut	Shell	14.8	25.4	5.6	4.5	0.62
Paddy	Straw	5.3	14.6	21.8	2.2	0.26
Paddy	Husk	5.3	14.6	2.9	2.3	0.26
Arecanut	Fronds	1.6	0.52	4.7	1.6	0.23
Others	Others	1.2	0.33	0.58	0.24	0.033
Total		22.8	40.8	108.1	47.1	6.4

Taluk level Residue-wise Data for Mavelikara ; Biomass Class : Agro						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Coconut	Fronds	16.6	28.5	66.3	33.1	4.6
Coconut	Husk & Pith	16.6	28.5	15.1	7.5	0.98
Paddy	Straw	15.8	43.4	65.1	6.5	0.78
Paddy	Husk	15.8	43.4	8.7	6.9	0.76
Coconut	Shell	16.6	28.5	6.3	5.0	0.70
Tapioca	Stalks	0.57	9.4	6.8	4.8	0.62
Rubber	Primary Wood	0.49	0	1.5	1.2	0.16
Arecanut	Fronds	0.79	0.26	2.4	0.83	0.12
Rubber	Secondary Wood	0.49	0	0.98	0.59	0.082
Others	Others	0	0	0.21	0.073	0.010
Total		34.2	81.6	173.2	66.6	8.9

Taluk level Residue-wise Data for Shertallai ; Biomass Class : Agro						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Coconut	Fronds	9.5	16.4	38.2	19.1	2.7
Tapioca	Stalks	0.86	14.4	10.4	7.3	0.94
Rubber	Primary Wood	1.8	0	5.5	4.4	0.62
Coconut	Husk & Pith	9.5	16.4	8.7	4.3	0.56
Coconut	Shell	9.5	16.4	3.6	2.9	0.40
Rubber	Secondary Wood	1.8	0	3.7	2.2	0.31
Paddy	Straw	4.3	11.9	17.9	1.8	0.21
Paddy	Husk	4.3	11.9	2.4	1.9	0.21
Others	Others	0.079	0.026	0.26	0.090	0.013
Total		16.7	42.7	90.5	44.0	5.9

Taluk level Residue-wise Data for Alwaye ; Biomass Class : Agro						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Rubber	Primary Wood	5.5	0	16.4	13.2	1.8
Rubber	Secondary Wood	5.5	0	11.0	6.6	0.92
Coconut	Fronds	2.2	4.1	8.7	4.3	0.61
Arecanut	Fronds	3.8	2.9	11.4	4.0	0.56
Coconut	Husk & Pith	2.2	4.1	2.2	1.1	0.14
Arecanut	Husk	3.8	2.9	2.4	0.82	0.12
Coconut	Shell	2.2	4.1	0.91	0.73	0.10
Paddy	Straw	2.2	4.9	7.4	0.74	0.089
Paddy	Husk	2.2	4.9	0.98	0.79	0.087
Total		13.6	12.0	61.3	32.2	4.5

Taluk level Residue-wise Data for Cochin ; Biomass Class : Agro						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Rubber	Primary Wood	5.8	0	17.5	14.0	2.0
Rubber	Secondary Wood	5.8	0	11.7	7.0	0.98
Others	Others	2.8	1.6	1.9	0.50	0.061
Total		8.7	1.6	31.1	21.5	3.0

Taluk level Residue-wise Data for Kanayannur ; Biomass Class : Agro						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Rubber	Primary Wood	15.5	0	46.4	37.1	5.2
Rubber	Secondary Wood	15.5	0	30.9	18.6	2.6
Paddy	Straw	2.7	6.1	9.1	0.91	0.11
Paddy	Husk	2.7	6.1	1.2	0.97	0.11
Black Pepper	Stalks	8.0	2.3	1.1	0.69	0.089
Total		26.1	8.4	88.8	58.2	8.1

Taluk level Residue-wise Data for Kotamangalam ; Biomass Class : Agro						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Tapioca	Stalks	5.3	132.2	95.2	66.6	8.7
Coconut	Fronds	19.3	36.9	77.2	38.6	5.4
Coconut	Husk & Pith	19.3	36.9	19.6	9.8	1.3
Coconut	Shell	19.3	36.9	8.1	6.5	0.91
Paddy	Straw	19.3	43.8	65.6	6.6	0.79
Paddy	Husk	19.3	43.8	8.8	7.0	0.77
Rubber	Primary Wood	0.45	0	1.4	1.1	0.15
Rubber	Secondary Wood	0.45	0	0.91	0.55	0.076
Total		44.4	212.9	276.7	136.7	18.0

Taluk level Residue-wise Data for Kunnatnad ; Biomass Class : Agro						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Rubber	Primary Wood	23.8	0	71.5	57.2	8.0
Rubber	Secondary Wood	23.8	0	47.7	28.6	4.0
Coconut	Fronds	5.1	9.8	20.4	10.2	1.4
Coconut	Husk & Pith	5.1	9.8	5.2	2.6	0.34
Paddy	Straw	7.6	17.1	25.7	2.6	0.31
Paddy	Husk	7.6	17.1	3.4	2.7	0.30
Coconut	Shell	5.1	9.8	2.2	1.7	0.24
Others	Others	1.2	0.33	0.17	0.100	0.013
Total		37.6	27.2	176.2	105.7	14.6

Taluk level Residue-wise Data for Muvattupula ; Biomass Class : Agro						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Coconut	Fronds	37.0	70.9	148.1	74.1	10.4
Coconut	Husk & Pith	37.0	70.9	37.6	18.8	2.4
Coconut	Shell	37.0	70.9	15.6	12.5	1.7
Rubber	Primary Wood	3.8	0	11.5	9.2	1.3
Rubber	Secondary Wood	3.8	0	7.7	4.6	0.65
Others	Others	1.3	2.7	5.1	1.0	0.12
Arecanut	Fronds	0.84	0.65	2.5	0.88	0.12
Total		43.0	74.3	228.2	121.1	16.7

Taluk level Residue-wise Data for Parur ; Biomass Class : Agro						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Tapioca	Stalks	0.48	12.0	8.6	6.0	0.78
Rubber	Primary Wood	2.0	0	5.9	4.7	0.66
Rubber	Secondary Wood	2.0	0	3.9	2.4	0.33
Others	Others	1.4	0.71	1.0	0.32	0.042
Total		3.9	12.7	19.4	13.4	1.8

Taluk level Residue-wise Data for Devikolam ; Biomass Class : Agro						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Arecanut	Fronds	3.8	3.3	11.5	4.0	0.56
Rubber	Primary Wood	1.1	0	3.3	2.7	0.37
Rubber	Secondary Wood	1.1	0	2.2	1.3	0.19
Arecanut	Husk	3.8	3.3	2.7	0.94	0.13
Paddy	Straw	2.1	6.4	9.6	0.96	0.11
Paddy	Husk	2.1	6.4	1.3	1.0	0.11
Others	Others	0.84	7.4	0.59	0.45	0.061
Total		7.9	17.1	31.2	11.4	1.5

Taluk level Residue-wise Data for Pirmed ; Biomass Class : Agro						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Rubber	Primary Wood	37.4	0	112.1	89.7	12.6
Rubber	Secondary Wood	37.4	0	74.7	44.8	6.3
Coconut	Fronds	14.2	18.6	56.7	28.3	4.0
Tapioca	Stalks	1.3	40.9	29.5	20.6	2.7
Coconut	Husk & Pith	14.2	18.6	9.9	4.9	0.64
Coconut	Shell	14.2	18.6	4.1	3.3	0.46
Paddy	Straw	2.3	7.0	10.5	1.1	0.13
Paddy	Husk	2.3	7.0	1.4	1.1	0.12
Others	Others	1.3	1.3	1.5	0.35	0.047
Total		56.4	67.9	300.3	194.2	26.9

Taluk level Residue-wise Data for Todupulai ; Biomass Class : Agro						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Black Pepper	Stalks	19.9	5.7	2.9	1.7	0.22
Tapioca	Stalks	0.043	1.4	0.98	0.68	0.089
Others	Others	0.053	0.40	0.049	0.023	0.0031
Total		20.0	7.5	3.9	2.4	0.31

Taluk level Residue-wise Data for Udumbanchola ; Biomass Class : Agro						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Tapioca	Stalks	6.9	219.0	157.7	110.4	14.3
Coconut	Fronds	11.8	15.4	47.1	23.5	3.3
Coconut	Husk & Pith	11.8	15.4	8.2	4.1	0.53
Coconut	Shell	11.8	15.4	3.4	2.7	0.38
Black Pepper	Stalks	6.8	1.9	0.97	0.58	0.076
Others	Others	0.38	2.8	0.34	0.18	0.025
Total		25.8	239.1	217.6	141.5	18.7

Taluk level Residue-wise Data for Kannur ; Biomass Class : Agro						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Rubber	Primary Wood	13.0	0	38.9	31.1	4.4
Rubber	Secondary Wood	13.0	0	25.9	15.5	2.2
Tapioca	Stalks	0.37	7.9	5.7	4.0	0.52
Coconut	Fronds	1.4	3.0	5.5	2.7	0.38
Arecanut	Fronds	2.5	2.5	7.5	2.6	0.37
Black Pepper	Stalks	13.0	3.7	1.9	1.1	0.15
Coconut	Husk & Pith	1.4	3.0	1.6	0.80	0.10
Arecanut	Husk	2.5	2.5	2.0	0.69	0.096
Coconut	Shell	1.4	3.0	0.67	0.53	0.075
Cashewnut	Stalks	2.5	1.2	2.2	0.44	0.058
Others	Others	0	0	0.61	0.12	0.016
Total		32.7	18.3	92.4	59.7	8.3

Taluk level Residue-wise Data for Talipparamba ; Biomass Class : Agro						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Coconut	Fronds	85.1	188.0	340.4	170.2	23.8
Coconut	Husk & Pith	85.1	188.0	99.6	49.8	6.5
Rubber	Primary Wood	17.9	0	53.8	43.0	6.0
Coconut	Shell	85.1	188.0	41.4	33.1	4.6
Tapioca	Stalks	3.1	66.4	47.8	33.5	4.3
Rubber	Secondary Wood	17.9	0	35.9	21.5	3.0
Arecanut	Fronds	7.2	7.1	21.7	7.6	1.1
Paddy	Straw	11.2	24.8	37.1	3.7	0.45
Paddy	Husk	11.2	24.8	5.0	4.0	0.44
Cashewnut	Stalks	18.7	9.2	16.6	3.3	0.43
Arecanut	Husk	7.2	7.1	5.7	2.0	0.28
Cashewnut	Shell	18.7	9.2	4.6	0.92	0.12
Others	Others	1.4	0.40	0.20	0.12	0.016
Total		144.6	295.9	709.7	372.7	51.1

Taluk level Residue-wise Data for Tellicherry ; Biomass Class : Agro						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Coconut	Fronds	9.2	20.4	37.0	18.5	2.6
Rubber	Primary Wood	3.2	0	9.5	7.6	1.1
Coconut	Husk & Pith	9.2	20.4	10.8	5.4	0.70
Arecanut	Fronds	4.7	4.7	14.2	5.0	0.70
Rubber	Secondary Wood	3.2	0	6.4	3.8	0.53
Coconut	Shell	9.2	20.4	4.5	3.6	0.50
Arecanut	Husk	4.7	4.7	3.7	1.3	0.18
Cashewnut	Stalks	4.8	2.3	4.2	0.84	0.11
Others	Others	1.2	0.35	1.3	0.34	0.044
Total		23.1	27.8	91.7	46.4	6.4

Taluk level Residue-wise Data for Hosdrug ; Biomass Class : Agro						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Coconut	Fronds	13.8	36.9	55.2	27.6	3.9
Rubber	Primary Wood	10.6	0	31.8	25.5	3.6
Rubber	Secondary Wood	10.6	0	21.2	12.7	1.8
Coconut	Husk & Pith	13.8	36.9	19.6	9.8	1.3
Tapioca	Stalks	0.84	19.1	13.8	9.6	1.3
Coconut	Shell	13.8	36.9	8.1	6.5	0.91
Arecanut	Fronds	3.1	4.7	9.4	3.3	0.46
Cashewnut	Stalks	16.7	8.2	14.8	3.0	0.38
Arecanut	Husk	3.1	4.7	3.8	1.3	0.18
Paddy	Straw	2.9	7.7	11.5	1.2	0.14
Paddy	Husk	2.9	7.7	1.5	1.2	0.14
Cashewnut	Shell	16.7	8.2	4.1	0.82	0.11
Black Pepper	Stalks	7.9	2.3	1.1	0.68	0.088
Total		55.9	78.9	196.0	103.2	14.1

Taluk level Residue-wise Data for Kasaragod ; Biomass Class : Agro						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Coconut	Fronds	43.9	117.5	175.6	87.8	12.3
Rubber	Primary Wood	12.1	0	36.4	29.1	4.1
Coconut	Husk & Pith	43.9	117.5	62.3	31.1	4.0
Coconut	Shell	43.9	117.5	25.8	20.7	2.9
Rubber	Secondary Wood	12.1	0	24.2	14.5	2.0
Arecanut	Fronds	11.5	17.3	34.6	12.1	1.7
Arecanut	Husk	11.5	17.3	13.8	4.8	0.68
Paddy	Straw	4.6	12.0	18.0	1.8	0.22
Paddy	Husk	4.6	12.0	2.4	1.9	0.21
Cashewnut	Stalks	3.5	1.7	3.1	0.62	0.081
Others	Others	2.5	0.70	1.2	0.38	0.050
Total		78.1	149.2	397.4	204.9	28.3

Taluk level Residue-wise Data for Tellicherry ; Biomass Class : Agro						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Tapioca	Stalks	0.50	11.4	8.2	5.7	0.75
Total		0.50	11.4	8.2	5.7	0.75

Taluk level Residue-wise Data for Karunagapalli ; Biomass Class : Agro						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Tapioca	Stalks	1.8	38.3	27.6	19.3	2.5
Rubber	Primary Wood	2.3	0	6.8	5.4	0.76
Coconut	Fronds	1.4	2.7	5.5	2.8	0.39
Rubber	Secondary Wood	2.3	0	4.5	2.7	0.38
Arecanut	Fronds	1.7	0.95	5.1	1.8	0.25
Coconut	Husk & Pith	1.4	2.7	1.5	0.73	0.095
Others	Others	3.8	1.1	1.3	0.59	0.079
Coconut	Shell	1.4	2.7	0.60	0.48	0.068
Paddy	Straw	1.3	3.5	5.2	0.52	0.062
Paddy	Husk	1.3	3.5	0.69	0.55	0.061
Total		12.2	46.5	58.7	34.8	4.6

Taluk level Residue-wise Data for Kollam ; Biomass Class : Agro						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Tapioca	Stalks	10.9	233.8	168.3	117.8	15.3
Rubber	Primary Wood	3.1	0	9.4	7.6	1.1
Coconut	Fronds	2.7	5.3	10.6	5.3	0.75
Rubber	Secondary Wood	3.1	0	6.3	3.8	0.53
Coconut	Husk & Pith	2.7	5.3	2.8	1.4	0.18
Coconut	Shell	2.7	5.3	1.2	0.93	0.13
Others	Others	3.3	1.3	2.5	0.66	0.087
Total		20.0	240.4	201.2	137.5	18.0

Taluk level Residue-wise Data for Kottarakara ; Biomass Class : Agro						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Tapioca	Stalks	11.0	236.1	170.0	119.0	15.5
Rubber	Primary Wood	5.8	0	17.5	14.0	2.0
Coconut	Fronds	6.8	13.6	27.4	13.7	1.9
Rubber	Secondary Wood	5.8	0	11.7	7.0	0.98
Coconut	Husk & Pith	6.8	13.6	7.2	3.6	0.47
Coconut	Shell	6.8	13.6	3.0	2.4	0.33
Paddy	Straw	3.4	9.2	13.8	1.4	0.17
Paddy	Husk	3.4	9.2	1.8	1.5	0.16
Arecanut	Fronds	0.59	0.33	1.8	0.62	0.087
Cashewnut	Stalks	2.6	1.3	2.3	0.47	0.061
Others	Others	2.4	0.68	1.2	0.42	0.056
Total		32.7	261.2	257.7	164.0	21.7

Taluk level Residue-wise Data for Kunnattur ; Biomass Class : Agro						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Rubber	Primary Wood	6.4	0	19.3	15.4	2.2
Rubber	Secondary Wood	6.4	0	12.9	7.7	1.1
Paddy	Straw	1.2	3.3	5.0	0.50	0.060
Paddy	Husk	1.2	3.3	0.66	0.53	0.058
Others	Others	1.4	0.40	0.20	0.12	0.016
Total		9.0	3.7	38.0	24.3	3.4

Taluk level Residue-wise Data for Pattanapuram ; Biomass Class : Agro						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Coconut	Fronds	64.4	127.8	257.7	128.8	18.0
Rubber	Primary Wood	19.9	0	59.8	47.9	6.7
Coconut	Husk & Pith	64.4	127.8	67.7	33.9	4.4
Tapioca	Stalks	2.7	57.9	41.7	29.2	3.8
Rubber	Secondary Wood	19.9	0	39.9	23.9	3.4
Coconut	Shell	64.4	127.8	28.1	22.5	3.1
Paddy	Straw	5.7	15.5	23.2	2.3	0.28
Paddy	Husk	5.7	15.5	3.1	2.5	0.27
Others	Others	4.5	1.4	1.2	0.46	0.060
Total		97.3	202.5	522.4	291.4	40.0

Taluk level Residue-wise Data for Changanacheri ; Biomass Class : Agro						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Rubber	Primary Wood	3.6	0	10.7	8.6	1.2
Coconut	Fronds	2.7	4.3	10.8	5.4	0.76
Tapioca	Stalks	0.43	11.2	8.0	5.6	0.73
Rubber	Secondary Wood	3.6	0	7.2	4.3	0.60
Coconut	Husk & Pith	2.7	4.3	2.3	1.1	0.15
Coconut	Shell	2.7	4.3	0.95	0.76	0.11
Paddy	Straw	1.7	4.7	7.1	0.71	0.085
Paddy	Husk	1.7	4.7	0.95	0.76	0.083
Others	Others	0.90	0.28	0.57	0.23	0.031
Total		9.3	20.5	48.6	27.5	3.7

Taluk level Residue-wise Data for Kanjirapalli ; Biomass Class : Agro						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Rubber	Primary Wood	17.3	0	51.8	41.4	5.8
Coconut	Fronds	13.2	21.1	52.8	26.4	3.7
Rubber	Secondary Wood	17.3	0	34.5	20.7	2.9
Coconut	Husk & Pith	13.2	21.1	11.2	5.6	0.73
Coconut	Shell	13.2	21.1	4.6	3.7	0.52
Others	Others	3.9	1.1	0.85	0.43	0.057
Total		34.3	22.2	155.8	98.3	13.7

Taluk level Residue-wise Data for Kottayam ; Biomass Class : Agro						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Rubber	Primary Wood	14.4	0	43.1	34.5	4.8
Rubber	Secondary Wood	14.4	0	28.7	17.2	2.4
Tapioca	Stalks	1.1	28.3	20.4	14.3	1.9
Coconut	Fronds	6.6	10.5	26.2	13.1	1.8
Paddy	Straw	8.8	24.9	37.3	3.7	0.45
Paddy	Husk	8.8	24.9	5.0	4.0	0.44
Coconut	Husk & Pith	6.6	10.5	5.6	2.8	0.36
Coconut	Shell	6.6	10.5	2.3	1.8	0.26
Arecanut	Fronds	0.63	0.29	1.9	0.66	0.092
Others	Others	2.2	0.74	1.1	0.34	0.045
Total		33.6	64.7	171.5	92.4	12.6

Taluk level Residue-wise Data for Minachil ; Biomass Class : Agro						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Rubber	Primary Wood	69.2	0	207.6	166.1	23.2
Rubber	Secondary Wood	69.2	0	138.4	83.0	11.6
Coconut	Fronds	1.8	2.9	7.2	3.6	0.51
Coconut	Husk & Pith	1.8	2.9	1.5	0.77	0.100
Paddy	Straw	1.6	4.4	6.6	0.66	0.080
Paddy	Husk	1.6	4.4	0.88	0.71	0.078
Coconut	Shell	1.8	2.9	0.64	0.51	0.071
Others	Others	0.64	0.26	0.84	0.26	0.036
Total		73.2	7.6	363.7	255.6	35.7

Taluk level Residue-wise Data for Vaikam ; Biomass Class : Agro						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Tapioca	Stalks	6.3	162.8	117.2	82.1	10.7
Coconut	Fronds	15.2	24.3	60.9	30.5	4.3
Rubber	Primary Wood	7.9	0	23.7	18.9	2.7
Rubber	Secondary Wood	7.9	0	15.8	9.5	1.3
Coconut	Husk & Pith	15.2	24.3	12.9	6.5	0.84
Coconut	Shell	15.2	24.3	5.4	4.3	0.60
Paddy	Straw	3.4	9.6	14.3	1.4	0.17
Paddy	Husk	3.4	9.6	1.9	1.5	0.17
Arecanut	Fronds	0.60	0.27	1.8	0.63	0.088
Black Pepper	Stalks	5.2	1.5	0.74	0.45	0.058
Others	Others	0.056	0.028	0.28	0.089	0.012
Total		38.6	198.5	255.0	155.8	20.8

Taluk level Residue-wise Data for Badagara ; Biomass Class : Agro						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Coconut	Fronds	34.8	83.9	139.3	69.7	9.8
Coconut	Husk & Pith	34.8	83.9	44.4	22.2	2.9
Coconut	Shell	34.8	83.9	18.4	14.8	2.1
Arecanut	Fronds	9.2	10.5	27.5	9.6	1.3
Arecanut	Husk	9.2	10.5	8.4	2.9	0.41
Tapioca	Stalks	0.21	3.5	2.5	1.8	0.23
Rubber	Primary Wood	0.34	0	1.0	0.80	0.11
Others	Others	2.7	1.2	2.5	0.54	0.070
Paddy	Straw	2.2	3.6	5.5	0.55	0.066
Paddy	Husk	2.2	3.6	0.73	0.58	0.064
Rubber	Secondary Wood	0.34	0	0.67	0.40	0.056
Total		49.5	102.7	251.0	123.8	17.1

Taluk level Residue-wise Data for Kozhikode ; Biomass Class : Agro						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Coconut	Fronds	48.9	117.8	195.6	97.8	13.7
Rubber	Primary Wood	16.8	0	50.3	40.2	5.6
Coconut	Husk & Pith	48.9	117.8	62.4	31.2	4.1
Coconut	Shell	48.9	117.8	25.9	20.7	2.9
Rubber	Secondary Wood	16.8	0	33.5	20.1	2.8
Tapioca	Stalks	2.2	36.3	26.1	18.3	2.4
Black Pepper	Stalks	11.7	3.4	1.7	1.0	0.13
Arecanut	Fronds	0.86	0.98	2.6	0.90	0.13
Paddy	Straw	3.1	5.1	7.6	0.76	0.092
Paddy	Husk	3.1	5.1	1.0	0.81	0.090
Others	Others	0	0	0.78	0.27	0.038
Total		83.6	163.5	407.6	232.2	32.0

Taluk level Residue-wise Data for Quilandi ; Biomass Class : Agro						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Coconut	Fronds	47.7	114.8	190.7	95.4	13.4
Coconut	Husk & Pith	47.7	114.8	60.9	30.4	4.0
Coconut	Shell	47.7	114.8	25.3	20.2	2.8
Tapioca	Stalks	2.0	33.6	24.2	16.9	2.2
Rubber	Primary Wood	0.54	0	1.6	1.3	0.18
Arecanut	Fronds	1.2	1.4	3.6	1.3	0.18
Others	Others	2.8	2.5	4.8	0.91	0.11
Rubber	Secondary Wood	0.54	0	1.1	0.65	0.090
Arecanut	Husk	1.2	1.4	1.1	0.39	0.054
Total		54.2	152.3	313.2	167.4	22.9

Taluk level Residue-wise Data for Ernad ; Biomass Class : Agro						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Coconut	Fronds	91.8	184.7	367.1	183.5	25.7
Coconut	Husk & Pith	91.8	184.7	97.9	49.0	6.4
Coconut	Shell	91.8	184.7	40.6	32.5	4.6
Rubber	Primary Wood	8.9	0	26.6	21.3	3.0
Tapioca	Stalks	1.4	32.0	23.1	16.2	2.1
Arecanut	Fronds	10.3	6.4	30.9	10.8	1.5
Rubber	Secondary Wood	8.9	0	17.8	10.7	1.5
Paddy	Straw	10.5	25.5	38.3	3.8	0.46
Paddy	Husk	10.5	25.5	5.1	4.1	0.45
Arecanut	Husk	10.3	6.4	5.2	1.8	0.25
Cashewnut	Stalks	7.6	3.7	6.7	1.3	0.17
Others	Others	2.0	0.58	2.2	0.55	0.071
Total		132.4	253.1	661.4	335.5	46.1

Taluk level Residue-wise Data for Perintalmanna ; Biomass Class : Agro						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Rubber	Primary Wood	4.1	0	12.4	10.0	1.4
Rubber	Secondary Wood	4.1	0	8.3	5.0	0.70
Coconut	Fronds	1.9	3.8	7.5	3.7	0.52
Arecanut	Fronds	2.4	1.5	7.3	2.6	0.36
Coconut	Husk & Pith	1.9	3.8	2.0	1.00	0.13
Coconut	Shell	1.9	3.8	0.83	0.66	0.093
Arecanut	Husk	2.4	1.5	1.2	0.43	0.060
Others	Others	0.061	0.017	0.0087	0.0052	0.00068
Total		8.5	5.3	39.6	23.3	3.3

Taluk level Residue-wise Data for Ponnani ; Biomass Class : Agro						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Tapioca	Stalks	0.51	11.9	8.6	6.0	0.78
Coconut	Fronds	2.1	4.3	8.6	4.3	0.60
Rubber	Primary Wood	1.0	0	3.0	2.4	0.34
Black Pepper	Stalks	16.1	4.6	2.3	1.4	0.18
Rubber	Secondary Wood	1.0	0	2.0	1.2	0.17
Coconut	Husk & Pith	2.1	4.3	2.3	1.1	0.15
Arecanut	Fronds	0.81	0.50	2.4	0.85	0.12
Coconut	Shell	2.1	4.3	0.95	0.76	0.11
Others	Others	0	0	0.40	0.14	0.020
Total		20.6	21.3	30.5	18.2	2.5

Taluk level Residue-wise Data for Tirur ; Biomass Class : Agro						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Tapioca	Stalks	5.4	124.7	89.8	62.9	8.2
Rubber	Primary Wood	15.5	0	46.6	37.3	5.2
Rubber	Secondary Wood	15.5	0	31.1	18.7	2.6
Coconut	Fronds	9.1	18.3	36.4	18.2	2.5
Coconut	Husk & Pith	9.1	18.3	9.7	4.9	0.63
Paddy	Straw	12.2	29.6	44.4	4.4	0.53
Paddy	Husk	12.2	29.6	5.9	4.7	0.52
Coconut	Shell	9.1	18.3	4.0	3.2	0.45
Arecanut	Fronds	1.7	1.1	5.2	1.8	0.26
Cashewnut	Stalks	3.8	1.9	3.4	0.67	0.087
Others	Others	0.76	0.22	1.9	0.56	0.075
Total		48.5	175.9	278.5	157.4	21.1

Taluk level Residue-wise Data for Alattur ; Biomass Class : Agro						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Rubber	Primary Wood	29.2	0	87.6	70.0	9.8
Tapioca	Stalks	4.2	98.8	71.2	49.8	6.5
Rubber	Secondary Wood	29.2	0	58.4	35.0	4.9
Coconut	Fronds	13.5	26.5	53.8	26.9	3.8
Coconut	Husk & Pith	13.5	26.5	14.0	7.0	0.91
Paddy	Straw	13.6	39.6	59.4	5.9	0.71
Paddy	Husk	13.6	39.6	7.9	6.3	0.70
Coconut	Shell	13.5	26.5	5.8	4.7	0.65
Others	Others	0.059	0.029	0.16	0.10	0.014
Total		60.5	164.9	358.2	205.8	27.9

Taluk level Residue-wise Data for Chittur ; Biomass Class : Agro						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Coffee	Pruning & Wastes	4.7	2.3	18.7	15.0	2.1
Paddy	Straw	14.4	41.9	62.9	6.3	0.75
Paddy	Husk	14.4	41.9	8.4	6.7	0.74
Coconut	Fronds	2.6	5.1	10.5	5.2	0.73
Arecanut	Fronds	3.8	3.8	11.3	4.0	0.55
Coconut	Husk & Pith	2.6	5.1	2.7	1.4	0.18
Arecanut	Husk	3.8	3.8	3.0	1.1	0.15
Cashewnut	Stalks	5.5	2.7	4.9	0.98	0.13
Coconut	Shell	2.6	5.1	1.1	0.90	0.13
Others	Others	0.58	0.33	7.4	0.91	0.12
Cotton	Stalks	1.2	1.9	4.5	0.45	0.063
Sugarcane	Tops & Leaves	1.1	9.8	0.49	0.39	0.055
Total		33.9	67.9	135.9	43.2	5.7

Taluk level Residue-wise Data for Mannarkkad ; Biomass Class : Agro						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Paddy	Straw	36.3	105.4	158.1	15.8	1.9
Paddy	Husk	36.3	105.4	21.1	16.9	1.9
Black Pepper	Stalks	19.9	5.7	2.8	1.7	0.22
Others	Others	1.8	2.3	3.4	1.0	0.13
Total		58.0	113.4	185.5	35.4	4.1

Taluk level Residue-wise Data for Ottappalam ; Biomass Class : Agro						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Coconut	Fronds	33.4	65.6	133.5	66.8	9.3
Paddy	Straw	48.8	141.6	212.5	21.2	2.5
Paddy	Husk	48.8	141.6	28.3	22.7	2.5
Coconut	Husk & Pith	33.4	65.6	34.8	17.4	2.3
Coconut	Shell	33.4	65.6	14.4	11.5	1.6
Others	Others	5.3	1.9	9.5	1.3	0.18
Cotton	Stalks	1.9	3.1	7.2	0.72	0.10
Total		89.4	212.3	440.2	141.6	18.5

Taluk level Residue-wise Data for Palakkad ; Biomass Class : Agro						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Tapioca	Stalks	1.5	34.9	25.2	17.6	2.3
Coconut	Fronds	1.2	2.4	4.9	2.4	0.34
Others	Others	5.3	7.2	10.4	1.6	0.21
Paddy	Straw	2.9	8.4	12.6	1.3	0.15
Paddy	Husk	2.9	8.4	1.7	1.3	0.15
Coconut	Husk & Pith	1.2	2.4	1.3	0.64	0.083
Coconut	Shell	1.2	2.4	0.53	0.42	0.059
Total		10.9	53.0	56.5	25.3	3.3

Taluk level Residue-wise Data for Adur ; Biomass Class : Agro						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Tapioca	Stalks	1.2	27.6	19.9	13.9	1.8
Arecanut	Fronds	1.2	0.97	3.7	1.3	0.18
Coconut	Fronds	0.61	1.2	2.4	1.2	0.17
Others	Others	0.085	0.042	1.7	0.80	0.11
Total		3.1	29.8	27.7	17.2	2.3

Taluk level Residue-wise Data for Kozhanchery ; Biomass Class : Agro						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Rubber	Primary Wood	48.7	0	146.0	116.8	16.4
Tapioca	Stalks	7.7	174.7	125.8	88.1	11.4
Rubber	Secondary Wood	48.7	0	97.4	58.4	8.2
Paddy	Straw	4.8	14.8	22.2	2.2	0.27
Paddy	Husk	4.8	14.8	3.0	2.4	0.26
Others	Others	0.20	0.14	0.55	0.18	0.025
Total		61.4	189.7	395.0	268.1	36.5

Taluk level Residue-wise Data for Rani ; Biomass Class : Agro						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Coconut	Fronds	13.1	25.0	52.2	26.1	3.7
Coconut	Husk & Pith	13.1	25.0	13.2	6.6	0.86
Coconut	Shell	13.1	25.0	5.5	4.4	0.62
Black Pepper	Stalks	13.2	3.8	1.9	1.1	0.15
Others	Others	0.27	0.13	0.30	0.061	0.0079
Total		26.5	28.9	73.1	38.3	5.3

Taluk level Residue-wise Data for Tiruvalla ; Biomass Class : Agro						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Coconut	Fronds	9.4	17.9	37.4	18.7	2.6
Coconut	Husk & Pith	9.4	17.9	9.5	4.7	0.62
Coconut	Shell	9.4	17.9	3.9	3.1	0.44
Others	Others	2.0	1.9	3.2	0.65	0.078
Total		11.4	19.8	54.0	27.2	3.8

Taluk level Residue-wise Data for Chirayinkil ; Biomass Class : Agro						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Tapioca	Stalks	3.8	69.4	50.0	35.0	4.5
Rubber	Primary Wood	3.5	0	10.6	8.5	1.2
Coconut	Fronds	4.2	10.4	16.8	8.4	1.2
Rubber	Secondary Wood	3.5	0	7.1	4.2	0.59
Coconut	Husk & Pith	4.2	10.4	5.5	2.7	0.36
Coffee	Pruning & Wastes	0.69	0.43	2.8	2.2	0.31
Coconut	Shell	4.2	10.4	2.3	1.8	0.26
Others	Others	3.1	1.2	2.0	0.49	0.063
Total		15.4	81.4	96.9	63.3	8.5

Taluk level Residue-wise Data for Nedumangad ; Biomass Class : Agro						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Coconut	Fronds	66.7	165.2	266.8	133.4	18.7
Tapioca	Stalks	5.6	102.4	73.7	51.6	6.7
Coconut	Husk & Pith	66.7	165.2	87.6	43.8	5.7
Coconut	Shell	66.7	165.2	36.3	29.1	4.1
Rubber	Primary Wood	5.0	0	15.1	12.0	1.7
Rubber	Secondary Wood	5.0	0	10.0	6.0	0.84
Paddy	Straw	5.6	15.0	22.5	2.3	0.27
Paddy	Husk	5.6	15.0	3.0	2.4	0.26
Black Pepper	Stalks	6.2	1.8	0.89	0.53	0.070
Others	Others	0.035	0.017	0.039	0.0078	0.0010
Total		89.2	284.4	516.0	281.1	38.3

Taluk level Residue-wise Data for Neyyattinkara ; Biomass Class : Agro						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Tapioca	Stalks	13.5	245.4	176.7	123.7	16.1
Rubber	Primary Wood	18.9	0	56.7	45.4	6.4
Coffee	Pruning & Wastes	11.9	7.4	47.4	37.9	5.3
Coconut	FronDs	15.2	37.6	60.7	30.4	4.3
Rubber	Secondary Wood	18.9	0	37.8	22.7	3.2
Coconut	Husk & Pith	15.2	37.6	19.9	10.0	1.3
Coconut	Shell	15.2	37.6	8.3	6.6	0.93
Others	Others	2.1	0.82	5.0	0.70	0.087
Total		61.6	291.3	412.6	277.3	37.5

Taluk level Residue-wise Data for Thiruvananthapuram ; Biomass Class : Agro						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Tapioca	Stalks	2.3	41.5	29.9	20.9	2.7
Coconut	FronDs	4.2	10.5	16.9	8.5	1.2
Rubber	Primary Wood	1.3	0	3.8	3.1	0.43
Coconut	Husk & Pith	4.2	10.5	5.6	2.8	0.36
Coconut	Shell	4.2	10.5	2.3	1.8	0.26
Rubber	Secondary Wood	1.3	0	2.5	1.5	0.21
Paddy	Straw	1.3	3.4	5.1	0.51	0.062
Paddy	Husk	1.3	3.4	0.68	0.55	0.060
Others	Others	0.070	0.020	0.010	0.0060	0.00078
Total		9.1	55.5	66.9	39.7	5.3

Taluk level Residue-wise Data for Chavakkad ; Biomass Class : Agro						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Coconut	Fronds	20.9	46.7	83.7	41.9	5.9
Coconut	Husk & Pith	20.9	46.7	24.8	12.4	1.6
Coconut	Shell	20.9	46.7	10.3	8.2	1.2
Rubber	Primary Wood	0.85	0	2.5	2.0	0.28
Tapioca	Stalks	0.19	3.8	2.7	1.9	0.25
Rubber	Secondary Wood	0.85	0	1.7	1.0	0.14
Paddy	Straw	1.2	3.4	5.1	0.51	0.062
Arecanut	Fronds	0.42	0.38	1.2	0.44	0.061
Paddy	Husk	1.2	3.4	0.68	0.55	0.060
Others	Others	0.32	0.091	0.35	0.13	0.018
Total		23.9	54.4	133.1	69.0	9.5

Taluk level Residue-wise Data for Kodungallur ; Biomass Class : Agro						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Rubber	Primary Wood	2.2	0	6.7	5.3	0.75
Tapioca	Stalks	0.52	10.2	7.3	5.1	0.67
Arecanut	Fronds	3.0	2.7	9.0	3.1	0.44
Rubber	Secondary Wood	2.2	0	4.4	2.7	0.37
Paddy	Straw	4.1	11.6	17.5	1.7	0.21
Paddy	Husk	4.1	11.6	2.3	1.9	0.20
Arecanut	Husk	3.0	2.7	2.2	0.76	0.11
Black Pepper	Stalks	5.1	1.5	0.73	0.44	0.057
Others	Others	0.22	0.11	0.25	0.050	0.0065
Total		15.1	26.2	50.4	21.1	2.8

Taluk level Residue-wise Data for Mukundapuram ; Biomass Class : Agro						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Coconut	Fronds	64.5	144.0	258.1	129.1	18.1
Coconut	Husk & Pith	64.5	144.0	76.3	38.2	5.0
Coconut	Shell	64.5	144.0	31.7	25.4	3.5
Paddy	Straw	27.8	79.1	118.6	11.9	1.4
Paddy	Husk	27.8	79.1	15.8	12.7	1.4
Rubber	Primary Wood	4.1	0	12.3	9.8	1.4
Rubber	Secondary Wood	4.1	0	8.2	4.9	0.69
Tapioca	Stalks	0.30	5.9	4.3	3.0	0.39
Cashewnut	Stalks	3.5	1.7	3.1	0.63	0.082
Arecanut	Fronds	0.44	0.40	1.3	0.46	0.064
Others	Others	0.62	0.18	1.3	0.34	0.045
Total		101.3	231.4	531.1	236.3	32.0

Taluk level Residue-wise Data for Talappalli ; Biomass Class : Agro						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Rubber	Primary Wood	6.1	0	18.2	14.6	2.0
Rubber	Secondary Wood	6.1	0	12.2	7.3	1.0
Others	Others	1.3	0.46	0.66	0.27	0.037
Total		7.4	0.46	31.1	22.2	3.1

Taluk level Residue-wise Data for Thrissur ; Biomass Class : Agro						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Tapioca	Stalks	0.41	8.2	5.9	4.1	0.53
Arecanut	Fronds	3.2	3.0	9.7	3.4	0.48
Paddy	Straw	3.9	11.2	16.8	1.7	0.20
Paddy	Husk	3.9	11.2	2.2	1.8	0.20
Arecanut	Husk	3.2	3.0	2.4	0.83	0.12
Coconut	Fronds	0.37	0.83	1.5	0.75	0.10
Black Pepper	Stalks	8.9	2.5	1.3	0.76	0.099
Others	Others	0	0	1.1	0.68	0.093
Rubber	Primary Wood	0.26	0	0.77	0.62	0.087
Total		17.1	25.7	41.8	14.6	1.9

Taluk level Residue-wise Data for Manantavadi ; Biomass Class : Agro						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Coffee	Pruning & Wastes	21.7	15.0	86.8	69.4	9.7
Arecanut	Fronds	5.6	2.3	16.9	5.9	0.83
Paddy	Straw	1.6	5.1	7.6	0.76	0.091
Others	Others	1.2	0.45	1.2	0.66	0.091
Coffee	Husk	21.7	15.0	7.5	0.75	0.090
Paddy	Husk	1.6	5.1	1.0	0.81	0.089
Arecanut	Husk	5.6	2.3	1.8	0.64	0.089
Rubber	Primary Wood	0.22	0	0.66	0.53	0.074
Total		30.4	22.8	123.5	79.5	11.1

Taluk level Residue-wise Data for Sultans Battery ; Biomass Class : Agro						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Coffee	Pruning & Wastes	25.2	17.5	101.0	80.8	11.3
Tapioca	Stalks	1.4	48.6	35.0	24.5	3.2
Coconut	Fronds	10.4	12.4	41.5	20.7	2.9
Paddy	Straw	10.6	32.9	49.4	4.9	0.59
Paddy	Husk	10.6	32.9	6.6	5.3	0.58
Coconut	Husk & Pith	10.4	12.4	6.6	3.3	0.43
Coconut	Shell	10.4	12.4	2.7	2.2	0.31
Others	Others	1.6	0.79	2.6	0.78	0.10
Coffee	Husk	25.2	17.5	8.7	0.87	0.10
Rubber	Primary Wood	0.29	0	0.87	0.69	0.097
Arecanut	Fronds	0.57	0.23	1.7	0.60	0.084
Black Pepper	Stalks	7.2	2.1	1.0	0.62	0.080
Total		57.3	114.5	257.7	145.3	19.8

Taluk level Residue-wise Data for Vayittiri ; Biomass Class : Agro						
Crop	Residue	Area (kHa)	Crop Production (kT/Yr)	Biomass Generation (kT/Yr)	Biomass Surplus (kT/Yr)	Power Potential (MWe)
Coffee	Pruning & Wastes	18.7	13.0	75.0	60.0	8.4
Rubber	Primary Wood	6.0	0	17.9	14.3	2.0
Rubber	Secondary Wood	6.0	0	11.9	7.2	1.0
Coconut	Fronds	0.92	1.1	3.7	1.8	0.26
Others	Others	3.1	0.89	1.4	0.80	0.11
Coffee	Husk	18.7	13.0	6.5	0.65	0.078
Arecanut	Fronds	0.45	0.18	1.3	0.47	0.066
Paddy	Straw	1.1	3.5	5.2	0.52	0.063
Paddy	Husk	1.1	3.5	0.70	0.56	0.061
Total		30.3	18.6	123.7	86.3	12.0

Note:

Biomass Data for season 'Rabi' for 'Kerala' is not Available at CGPL.

Others' contributes to collection of crops whose Power Potential is less than 0.05MWyre. These residues will not be separately listed instead they are aggregated into 'Others'.

The Tolerance for the above data at Taluk level is about 25%. The residue-wise data at taluk level may have a tolerance of more than 25% depending on spatial availability of agro-area and spatial aggregation as compared to statistically reported crop area. District Survey instituted by MNRE [Ministry of New & Renewable Energy] was done and biomass was reported for period beyond 1999 of the States country wide. The updated crop data at the district level is used as an input to construct the Biomass Atlas Enabling spatial extraction of the biomass data tables above.