IN THE HONBLE COURT OF THE NATIONAL GREEN TRIBUNAL, SOUTHERN ZONE, CENNAI.

Application No.131/2016(SZ)

B.R.Lakshmanan. ,....,..... Applicant.

V/s

The District Collector,
Nilgiri District. & 13 others. .....Respondents.

Objections Filed by the Applicant against the joint Committee report filed by the Collector of Nilgiris as Nodal officer of the Joint Committee.

OBJECTION No.1

Tapping up of huge amount of ground water causes land Subsidence, land slides and Earth Quakes. Nilgiri District is the India's most vulnerable land slide zones. Before a decade the landslide vulnerable hot spots were 101 and now it has been increased to 233 due to the over extraction of underground water for commercial purposes. The Respondents No-7 to Respondents No-14 are tapping huge amount of underground water in the Kagguchi panchayat,Thuneri Firka, Ooty Taluk,Nilgiri District. There are 8 landslide vulnerable zones in Kagguchi panchayat, 38 landslide vulnerable zones in Thuneri Firka, 64 landslide vulnerable zones in Ooty taluk, 233 landslide vulnerable zones in the Nilgiri District. The Respondent No.7 to Respondent No.14 are extracting huge amount of water very closer to the vulnerable hot spots in the Kagguchi Panchayat of Nilgiri District and are listed below.

List of landslide vulnerable hotspots Near the leaf sheds, Wells and borewells of the Respondent No.R-7 to Respondent No.14 in Kagguchi panchayat of Nilgiri District is given below.

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Total - 38 Pages.

LIST OF LANDSLIDE VULNERABLE ZONES NEAR THE RESPONDENTS LEAF SHED/WELL	Distance between the corresponding landslide hot spots and respondent-7 leaf shed/water source in metres	Distance between the corresponding landslide hot spots and respondent-8 leaf shed/water source in metres	Distance between the corresponding landslide hot spots and respondent-9 leaf shed/water source in metres	Distance between the corresponding landslide hot spots and respondent-10, 13 leaf shed/water source in metres	Distance between the corresponding landslide hot spots and respondent-11 leaf shed/water source in metres	Distance between the corresponding landslide hot spots and respondent-12,14 leaf shed/water source in metres
Manavoroi 76°48'37.813"E 11°25'39.719"N	**970 metres**	1279 metres	1337metres	2573 metres	1500 metres	2754 metres
Kovilmedu 76°48'5.48765"E 11°25'26.953"N	**651 metres**	**823 metres**	**956 metres**	2515 metres	**569 metres**	2771 metres
Honnathalai 76°47'51.173"E 11°25'35.00492"N	1052 metres	**1095 metres**	**1234 metres**	2775 metres	**113 metres**	3054 metres
Ambedkar Nagar 76°47'46.301"E 11°24'51.18"N	2146 metres	2533 metres	2383 metres	3938 metres	1056 metres	4220 metres
Bhagyanagar 76°47'59.264"E 11°24'50.804"N	2042 metres	2183 metres	2327 metres	3901 metres	1067 metres	4161 metres
Ghandhinagar 76°47'14.181"E 11°28'5.016"N	4317 metres	4058 metres	3944 metres	2600 metres	5076 metres	2502 metres
Kudumanai 76°48'17.369"E 11°25'15.688"N	1261 metres	1499 metres	1618 metres	3136 metres	**853 metres**	3377 metres

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Giribetta 76°47'57.111"E 11°27'15.763"N	2467 metres	2266 metres	2136	**607 metres**	3430 metres	**500 metres**

Please note:

1) Respondent No.7 is extractiong water from wells which is **970 metres** away from Manavoroi landslide Hotspots and **651 metres** away from kovilmedu landslide Hotspot.

2) Respondent No.8 is extractiong water from wells which is **1095 metres** away from Honnathalai landslide Hotspots and **823 metres** away from kovilmedu landslide Hotspot.

3) Respondent No.9 is extractiong water from wells which is **1234 metres** away from Honnathalai landslide Hotspots and **956 metres** away from kovilmedu landslide Hotspot.

4)Respondent No.10 and Respondent No.13 are extractiong water from wells which is **607 metres** away from Giribetta landslide Hotspots.

5) Respondent No.11 is extractiong water from wells which is **113 metres** away from Honnathalai landslide Hotspots , **569 metres** away from kovilmedu landslide Hotspot and **853 metres** away from the kudumanai landslide hotspots.

These kind of extraction of huge amount of underground water near the Landslides Vulnerable Zones will cause very devastating landslides. The District authorities and the government have failed to evacuate the people living near the landslide vulnerable hotspots, the distrct Authorities have failed to give them an alternative house sites for construction of houses in safer areas so that the people living near the landslide hotspots can shift to the safer places and the District Authorities have failed to stop the illegal extraction of underground water near these vulnerable Landslide Hotspots by the Respondents No.7 to Respondents No.14.

OBJECTION No.2

Neither the District Administration nor the Tea Board of India has recognised or authorized any green tea leaf agents for the procurement of tea leaves. So their Business itself is illegal.

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In page 2 of the joint Committee report states that **"Neither the District Administration nor the Tea Board has recognised any green tea leaf agent for procurement of tea leaves from the small tea growers in the District.**

For the Benefit of small Tea Growers, The Tea Board has formed more than 182 Self Help Groups of Small Tea Growers who collect green tea leaves from their members and supply to adjacent industrial Cooperative Tea Factories and other Bought leaf factories in the District". But these leaf agents (Respondents No.7 to 14) are purchasing green tea leaves a few kilometres away from the list of tea factories below and without selling the tea leaves to these industries they are transporting it to valparai which is 250 kilometres away from the Nilgiri District which is illegal and Against law. In this process of Transportation of green tea leaves to Valparai both the ground water and also huge amount of diesel is depleted. When there is an instant remedy these kind of transportation of green tea leaves should be stopped immediately.

OBJECTION No.3.

As per the Details provided by the Second Respondent , The Tea Board of India through the Reply Statement it is evident that there are 177 bought leaf tea factories in Nilgiri Districts which are very very close to the tea estates and the leaf sheds of the Respondents No.7 to Respondent No.14. But these Respondents without selling to the Near by factories instead they are selling the green tea leaves for higher prices that too for their self profit to the far away factories located in valparai which is 250 kilometres away from the Nilgiri District. For the alleged transportation huge amount of underground water and diesel is consumed.

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List of Tea Factories located near the Respondents leaf Shed.

S. No	**LIST OF TEA FACTORIES WHICH ARE LOCATED NEAR THE RESPONDENTS LEAF SHEDS.**	Distance between nandhakumar, R-7 Leaf shed and corresponding tea factory in kilometre	Distance between senthilkumar, R-8Leaf shed and corresponding tea factory	Distance between G.krishnamoorthy, R-9 Leaf shed and corresponding tea factory	Distance between santhosh kumar& Dharmaraj R-10,13 Leaf shed and corresponding tea factory	Distance between Subramani R-11 Leaf shed and corresponding tea factory	Distance between L.Sreenivasan & L.Krishnamoorthy R-12,14. Leaf shed and corresponding tea factory
1	.Banacombai Tea Factory.	0.2 km	0.4 km	0.5 km	2.0 km	0.8 km	2.3
2	Mac Wood Tea Factory	0.5 km	0.7 km	0.8 km	2.4 km	0.6 km	2.6
3	I.B.S Tea Factory	1.2 km	1.4 km	1.6 km	3.1 km	0.6 km	3.4
4	Siva Tea Factory	2.0 km	2.2 km	2.3 km	3.8 km	1.5 km	4.0
5	Hubbada Tea Factory	0.8 km	0.5 km	0.5 km	1.3 km	1.5 km	1.6
6	J.P.R Tea Factory	1.1 km	0.8 km	0.7 km	1.3 km	1.7 km	1.6
7	Tea Studio Tea Factory	0.9 km	0.7 km	0.7 km	1.6 km	1.4 km	1.9
8	S.V.T Tea Factory	2.6 km	2.5 km	2.4 km	1.0 km	3.7 km	0.7
9	Thai Matha Tea Factory	2.5 km	2.4 km	2.3 km	1.3 km	3.6 km	1.1
10	Manjubetta Tea Factory	2.4 km	2.3 km	2.2 km	1.2 km	3.5 km	1.0
11	Bhagwan Tea Factory	3.2 km	2.9 km	2.8 km	1.9 km	3.8 km	1.9

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12	Namkemp Tea Factory	3.0 km	3.0 km	2.9 km	1.8 km	4.9 km	1.6
13	Rasi Tea Factory	3.1 km	3.1 km	3.0 km	1.9 km	4.2 km	1.6
14	Indco Tea Factory	2.5 km	2.8 km	2.9 km	4.3 km	2.1 km	4.5
15	Classic Tea Factory	2.3 km	2.5 km	2.6 km	4.0 km	2.1 km	4.2
16	NMT Tea Factory	2.7 km	3.0 km	3.0 km	3.8 km	3.1 km	3.9
17	Shanthi Tea Factory	4.2 km	4.4 km	4.4 km	4.9 km	4.7 km	4.9
18	Ellithorai Tea Factory	4.7 km	5.0 km	5.1 km	6.6 km	4.0 km	6.8
19	Selva Ganapathy Tea Factory	4.8 km	5.0 km	5.1 km	6.6 km	4.1 km	6.8
20	Preethi Tea Factory	2.9 km	2.6 km	2.5 km	1.5 km	3.6 km	1.6

OBJECTIONS No.4

The Reply statement filed by the Respondent No.2, The Executive Engineer,Tea Board of India is completely against the Transportation of the green tea leaves from Nilgiri District to Valparai as follows.

a) in para-3 of sub-para-h , the Respondent R-2 states that there are totally 177 tea factories in the Nilgiri District which cleary proves that there are sufficient tea factories to process all the green tea leaves which are manufactured in the Nilgiri District.

b) in para-3 of sub para-i of his Reply statement the Respondent R-2 states **that" The Board does not encourage transportation of green tea leaves which takes long hour of journey to reach the tea processing units and as such leaves may affect the ultimate Quality of made tea"** It is true because the cash crops like

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sugarcane and green tea leaves should reach the tea factory within a short period of time to get good quality and also good quantity of the product. But the Respondents R-7 to R-14 are transporting the green tea leaves from the Nilgiri District to Valparai which is more than 250 kilometres away from the Nilgiri District and which takes long hours of transportation which is agaibst the Guidelines of the Tea Board of India(R-2).

c) IN para-3 of sub para-j of his Reply statement The Respondent R-2 states that **"such mini factories itself would show that tea leaves of Nilgiris are used for manufacturing made tea in the Nilgiri District Itself" .** It is true but the Respondents R-7 To R-14 are transporting the green tea leaves from the Nilgiri District to Valparai which are against the guidelines of the Tea Board of India(R-2).

d) In para-4 of sub para-2 of his Reply statement the Respondent R-2 states that **"It is respectfully states that the board has no information about the working of leaf agents as such agents are neither recognised nor allowed under the TMCO (Tea Marketing Control Order) as such the applicant is put to strict proof of the same".** It is true because the R-7 to R-14 has not got permission from R-2 for purchasing and selling of the green tea leaves to the tea industries at valparai. The Respondents R-7 to R-14 are transporting green tea leaves from the nilgiri district to valparai illegally without getting permission from the Tea Board of India(R-2). So i kindly request this Hon'ble Tribunal to stop the illegal transportaion of the green tea leaves from nilgiri district to valparai which inturn depletes the underground water resources as mentioned above.

e) in para-4 of sub para-3 of his Reply statement the Respondent R-2 states that **"with regard to the averments made in paragraph-3 , it is humbly submitted that the board has no such information of green tea leaves being transported 250 kilometres from the Nilgiri District to Valparai. It is the policy of the Board to allow setting up of tea factories where there is availability of sufficient green**

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tea leaves. The Board does not encourage any such practices which will have adverse impact on the quality of made tea".

It is true because transporting green tea leaves for 250 kilometres affects the quality of the made tea and hence ate Respondent R-2 does not encourage R-7 to R-14 to transport green tea leaves Nilgiri District to Valparai. The transportation of the green tea leaves by the Respondents R-7 to R-14 from Nilgiri District to valparai are against the guidelines of the Tea Board of India.(R-2).

f) in para-4 of sub para-4 the Respondent R-2 states that " **under the said scheme many tea factories in the Nilgiri District have availed the benefit and have upgraded their manufacturing facilities through capacity enhancement. As such all such factories are able to handle the green tea leaves produced in the District**".

It is true but when the tea factories in the Nilgiri District are able to handle all the green tea leaves manufactured in the Nilgiri District the Respondents R-7 to R-14 are transporting green tea leaves from the Nilgiri District to Valparai which are against the guide lines of the Tea Board of India(R-2).

g) in para-4 of sub para-5 of the Reply statement the Respondent R-2 states that" **The present Applicant has never approached the Board regarding the purpoted transportation of green tea leaves from Nilgiris to valparai".** is false beacause the applicant before filing this Application have sent notices to the Rspondents R-1 to R-6 . The Respondent R-2 have also sent a reply letter dated 03.02.2016 informing the apllicant that there is no provision to stop the transportation of the green tea leaves from Nilgiri District to Valparai and also they have forwarded this notice to their head office at calcutta for taking actions.

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OBJECTION No.5

Violations of the Standard Operation Procedures(SOP) framed by the Tea Board of India.

Standard Operating Procedures framed by the Tea Board says that the green tea leaves should reach the Tea Industries within four hours of Plucking. But, The Transportation of the green tea leaves within the stipulated four hours of Plucking is possible only when the leaves are transported to the near by Tea Factories in Nilgiri District and on the other hand it takes more than 12 hours to reach the Tea Industries in valparai of coimbatore District which is 250 kilometres away from the Nilgiri District. This violations of the Standard Operating Procedures by the Respondent No.7 to Respondent No.14 is illegal and Against law.

OBJECTION No.6

Illegal means of Transportation of green tea leaves to larger distances by using huge amount of water when there is a Alternative and legal means of transportation of green tea leaves without using water by the **Cold chain Logistics(Transportation of the tea leaves by Air Conditioned Trucks).**

Usual and Legal means of Transportation of Green Tea Leaves.	Unusual and illegal means of Transportation of the Green Tea Leaves.	Legal and Alternative means of Transportation of the green tea leaves.
Usually the green tea leaves are transported to the near by Tea Factories in the Nilgiri District within four hours of Plucking in its natural form without using water.	Only a few Leaf Agents including the Respondent No.7 to Respondent No.14 are transporting the several tonnes of green tea leaves in ordinary trucks by using huge amount of water to keep the leaves in cool and fresh untill it reaches the tea industries in Valparai 250 kilometres away from Nilgiri District which is illegal and Against law.	Green Tea Leaves can be transported to Valparai and other larger distances through **Air Conditioned Trucks(Cold chain Logistics)** without using water. Even Apples are Transported from Himachal to kanyakumari safely travelling a distance of nearly 2500 kilometres through Cold chain Logistics.

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OBJECTION No.7

Illegal Declaration of Commercial Activity as Horticultural Activity by the District Collector of Nilgiris through the joint Committee report is misleading this Honourable Tribunal.

The District Collector of Nilgiris through the joint Committee Report has declared the purchasing, processing it with huge Quantity of water and Selling it to the Tea Industries in Valparai which is 250 kilometres away from the Nilgiri District to be Horticultural Activity when it is Originally a Commercial Activity. This is a misleading declaration in order to spare and safe guard the Respondent No.7 to Respondent No.14. This is a Commercial Activity and not an Horticultural Activity and is explained as below.

Respondent No.	Respondents	Classification of leaf shed by panchayat Board	Classification of Leaf Shed by Electricity Board	Classification of Pump Rooms By Electricity Board.
R-7	Nandhakumar	Leaf shed Approval is Commercial & commercial property tax is collected per year.	Leaf Shed is classified as Commercial by the Electricity Board and Electricity Consumption charges are collected at the commercial Tariff of Rs.7.75/- per unit.	Pump Rooms for extracting water for leaf sheds are classified by the Electricity Board to be Commercial and electricity charges are collected at the commercial Tariff at the rate of Rs.7.75/- per unit.
R-8	B.C.Senthilkumar	Leaf shed Approval is Commercial & commercial property tax is collected per year.	Leaf Shed is classified as Commercial by the Electricity Board and Electricity	Pump Rooms for extracting water for leaf sheds are classified by the Electricity Board to be Commercial

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			Consumption charges are collected at the commercial Tariff of Rs.7.75/- per unit.	and electricity charges are collected at the commercial Tariff at the rate of Rs.7.75/- per unit.
R-9	G.Krishnamoorthy	Leaf shed Approval is Commercial & commercial property tax is collected per year.	Leaf Shed is classified as Commercial by the Electricity Board and Electricity Consumption charges are collected at the commercial Tariff of Rs.7.75/- per unit.	Pump Rooms for extracting water for leaf sheds are classified by the Electricity Board to be Commercial and electricity charges are collected at the commercial Tariff at the rate of Rs.7.75/- per unit.
R-10 & R-13	S.Santhosh Kumar & Dharmaraj. Please Note: Santhosh kumar and Dharmaraj are business partners.	Leaf shed Approval is Commercial & commercial property tax is collected per year.	Leaf Shed is classified as Commercial by the Electricity Board and Electricity Consumption charges are collected at the commercial Tariff of Rs.7.75/- per unit.	Pump Rooms for extracting water for leaf sheds are classified by the Electricity Board to be Commercial and electricity charges are collected at the commercial Tariff at the rate of Rs.7.75/- per unit.
R-11	H.Subramani	Leaf shed Approval is Commercial & commercial property tax is collected per year	Leaf Shed is classified as Commercial by the Electricity Board and Electricity Consumption	Pump Rooms for extracting water for leaf sheds are classified by the Electricity Board to be Commercial and electricity

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			charges are collected at the commercial Tariff of Rs.7.75/- per unit.	charges are collected at the commercial Tariff at the rate of Rs.7.75/- per unit.
R-12 & R-14	L.Sreenivasan & L.Krishnamoorthy Please note: L.Sreenivasan and L.Krishnamoorthy are Brothers and now L.Sreenivasan is deceased.	Leaf shed Approval is Commercial & commercial property tax is collected per year	Leaf Shed is classified as Commercial by the Electricity Board and Electricity Consumption charges are collected at the commercial Tariff of Rs.7.75/- per unit.	Pump Rooms for extracting water for leaf sheds are classified by the Electricity Board to be Commercial and electricity charges are collected at the commercial Tariff at the rate of Rs.7.75/- per unit.

Hence, as evidenced above 1) The Leaf Shed is Commercial, 2) The Electricity charges for Leaf Shed is Commercial, 3) The Electricity charges for the Pump room is Commercial, 4) Purchase of Green Tea leaves is Commercial, 5) Processing of the Green tea leaves with water is Commercial, 6) Transporting the Green tea leaves to Valparai is Commercial and finally selling the leaves to the tea factories in Valparai is Commercial. But the District Collector has declared the above mentioned activities to be Horticultural Activity which is misleading this Hon'ble Tribunal which is illegal and Against law.

OBJECTION No.8

Violations of the Government orders 1) G.O(Ms) No.52, Public works Department, dated 2.3.2012 and 2) From the chief Engineer, water Resources Department, State Ground and Surface water Resources Data center, Letter No.OTA/AG-4/2013, dated 5.9.2013 and 13.9.2013.

Para-6 of the above mentioned order states that.

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GENERAL CONDITIONS

1) Since water Ground water is a state subject, The Tamilnadu Pollution Control Board and ISI should issue the permission only after obtaining the licence from the State. Ground and Surface water Resources centre.

2) The chief Engineer, State Ground and Surface water Resources Data center, will Examine the proposals case by case, in accordance with the guidelines issued by the Government and the chief Engineer, State Ground and Surface water Resources Data centre is empowered to issue technical circulars then and there warranted.

3) The chief Engineer, State Ground and Surface water Resources Data centre should ensure that due to the drawal of ground water based on the issue of No Objection Certificate/Licence for drawal of ground water, the categorisation in the Block/Revenue Firka should not alter it's position downwards. Necessary conditions should be imposed to construct adequate Artificial Recharge Structures to recharge quantity of water with respect to drawal of ground water.

4) The No Objection Certificate/Licence for drawal of ground water should be compulsorily renewed every year for the water based industries and to be renewed once in three years for the non-water based industries.

5) All the existing guidelines imposed by the chief Engineer, State Ground and Surface water Resources Data Centre and guidelines issued then and there by the Government are to be followed by the existing and also proposed users.

But the Respondents No.4 to Respondent No.14 are extracting huge amount of ground water for transporting green tea leaves to Valparai without getting any No Objection certificates/Licences and permissions from the water Resources Department, Tamilnadu Pollution Board etc which is illegal and in the violations of the above mentioned government orders.

OBJECTION No.9

During the Transportation of Green tea leaves from Nilgiri District to Valparai huge amount of water is splashed on the trucks with loaded tea leaves at location of Ooty taluk, Mettupalayam taluk and Pollachi taluk in Which Mettupalayam Taluk and Pollachi taluk are under over exploited zones and using huge amount of water from these zones are illegal and Against law and also in violations of the Government orders passed by the Public works Department.

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S.No	Taluk.	District.	Zones
1	Ooty.	Nilgiris	safe
2	Mettupalayam.	Coimbatore	Over exploited
3	Pollachi	Coimbatore	Over exploited

Transportation of green tea leaves from Nilgiri District to Valparai will cause depletion of underground water even in the over exploited zones of Mettupalayam and Pollachi and hence the transportation of green tea leaves to Valparai from Nilgiri District should be stopped immediately.

OBJECTION No.11

The Joint Committe and the water Resources Department failed to assess the Quantity of underground water extracted and used by the Respondent No.7 to Respondent No.14 for the alleged illegal Transportation of green tea leaves from Nilgiri District to Valparai.

The quantity of water used by the Respondents are assessed by the Applicant and are as follows.

The alleged Respondents are transporting and selling the green tea leaves to Valparai for the past 15 years. The Respondent No.11, G.Krishnamoorthy S/o Gundan, residing at Billicombai village is still transporting the tea leaves to Valparai on a daily basis and the rest of the alleged Respondents have stopped sending green tea leaves on 2017 and 2018. All the alleged Respondents No.7 to 14 have transported green tea leaves atleast for 15 years.

Total kilogrammes of tea leaves transported to Valparai by each of the agents is 15,000 kilogrammes per day.

For Nearly for 8 months a year the respondents are transporting the the green tea leaves to Valparai except Sundays.

The alleged leaf agents Respondents No.7 to 14 are using 20,000/- of fresh underground water for processing and transporting 15,000 kilogrammes of tea leaves to Valparai.

Then for 200 days per year they are using 200 days x 20,000 litres = 40 lakhs litres per year. Then for 15 years the alleged Respondents induvidually have used 40 lakhs litres x 15 years = 6 crore litres of water by each of the Respondents.

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From the above calculations it is clear that the Respondents No.7 to 14 have independently have consumed 6 crore litres for 15 years and they have jointly consumed
6 crore litres x 8 Respondents= 48 crore litres for the past 15 years.

OBJECTION No.12

The joint Committee and the water Resources Department had failed to assess the Environmental Compensation which has to be collected from the alleged Respondents No.7 to Respondent No.14. Each of the Respondent No.7 to 14 has consumed 6 crore litres for the past 15 years.

So, The Applicant humbly prays that this Honourable Tribunal may be pleased to Direct each of the Respondents No.7 to 14 to pay an Environmental compensation of Rupees one crore severally on the basis of the Polluter Pays Principle.

OBJECTION No.13

An illegal money of Rs.60,000/- per day is gained by each of the Respondents No.7 to Respondent No.14 by illegally transporting 15,000 kilogrammes of green tea leaves to Valparai independently and severally. When the Price of green tea leaves is away video/- per kilogrammes in Nilgiri District.

OBJECTION No.14

The joint Committee and the water Resources Department had failed to produce any material evidence before this Hon'ble Tribunal. The list of the material evidence ought have to be produced by the joint Committee is as follows.

a) The invoices/ Bills or the Transaction summary between the Tea industries at Valparai and the Respondent No.7 to Respondent No.14 ought have been received from the tea industries in Valparai by the joint Committee for assessing the quantity of water used.

b) The video footages of the trucks with carrying the green tea leaves to Valparai with thousand of litres of water spilling on the Roads ought has been collected by the joint Committee from the tea industries in Nilgiri District namely Banacombai Tea factory, Mac Wood Tea factory, I.B.S Tea factory, Siva Tea Factory, Indco Tea factory, Classic tea Factory, NMT Tea factory and Shanthi Tea Factory through their Surveillance cameras which is focusing and video recording the roads and the veichles passed passed by 24 hours a day.

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C) Regarding the video footages this Hon'ble Tribunal has Directed the joint Committee to consider my email dated 19.8.2020 and to take actions accordingly but my email mentioned above was not considered by the joint Committee thereby the joint Committee has Failed to comply with the order dated .....of This Honourable Tribunal.

OBJECTION NO.15

Each of the Respondents No.7 to 14 has earned nearly Rs.50,000/- to Rs.60,000/- per day by transporting 15,000 kilogrammes of green tea leaves to valparai for better pices and has earned multiple crores of money. This Hon'ble Tribunal is please to consider their huge amount of money gained when directing them to compensate for the damages caused to the Environment.

It is respectfully prayed that this Hon'ble Tribunal may be pleased to;

1) Stop the Transportation of green tea leaves to valparai and also to restrict the Respondents to extraction huge amount of water from their wells for commercial purposes which is very near the landslide hotspots in order to prevent the landslides in future.

Or

2) Direct the Respondent No.7 to Respondent No.14 to transport the green tea leaves from Nilgiri District to Valparai through Air Conditioned Trucks**(Cold Chain Logistics)** in order to prevent the over exploitation of huge amount of ground water near the landslide vulnerable areas of the Nilgiri District.

And

3) Direct the Respondents to pay a compensation of Rupees One Crore each for extracting huge amount of water in the vulnerable landslide zones that too without even getting necessary permissions from the Government on the basis of polluter pays Principle and thus render justice.

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Enclosures;

1) Print out of The times of india newspaper published on October 20,2017 in the heading " 233 areas vulnerable to landslides,quakes. Total 2 pages
2) List of 233 landslide vulnerable hotspots in THE NILGIRI DISTRICT. TOTAL-17 pages.
3) Report of scientific & industrial research regarding frequent earthquakes around Delhi linked to ground water pumping.

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Printed from
THE TIMES OF INDIA

233 areas vulnerable to landslides, quakes

tnn | Oct 20, 2017, 12.51 AM IST

Udhagamandalam: The number of vulnerable locations in the Nilgiris has doubled in the past decade, according to the Geological Survey of India (GSI).

From 101 a decade ago, the locations identified as vulnerable to landslide and earthquake in the Nilgiri hills have gone up to 233.

"We have submitted a mapping identifying the 233 locations," Lakshmipriya, assistant director, Department of Geological Survey and Mines, told TOI. The mapping is based on a study conducted by the GSI on the soil stability of the Western Ghats, which included the Nilgiris.

N Meganathan, AD, Panchayats, told TOI, "The GSI mapping was further reconciled with research done by Bharathidasan University students and field level officials." He said that besides forest and tea estate areas, many human habitats fall under the identified vulnerable spots. These include Marapalam, Chinnakarumbalam and Keddai areas, among several colonies in the district. "Considering its terrain, the mapping has been prepared with an accuracy of 3 metres," said the official.

The previous mapping done by GSI after the 2009 deluge indicated 101 vulnerable locations in the Nilgiris. The in-depth survey conducted in Ooty and Coonoor found that nearly 70% of the original forest land had been cleared and cultivated and 10% used for residential purposes.

In November 2009, mountains in the region experienced several landslides due to unprecedented rainfall in which 45 people died. The Nilgiris had witnessed similar landslides in 1978, 1990, 1993 and 2001 on the Mettupalayam-Coonoor-Ooty highway.

Soon after the devastating deluge in 1978, the GSI had said the stage of preventing environmental degradation in the Nilgiris had crossed. Put simply, the damage had been done.

"The present stage is one of repairing and the cure is always costlier than prevention. We hope the magnitude of the problem in the Nilgiris is realised - fully and immediately," it added.

वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद
COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCH
(विज्ञान एवं प्रौद्योगिकी मंत्रालय, भारत सरकार)
MINISTRY OF SCIENCE & TECHNOLOGY, GOVT. OF INDIA

Frequent earthquakes around Delhi linked to groundwater pumping

Earthquakes along the Aravalli-Delhi Fold Belt (ADFB) – spanning north of Delhi to Udaipur in India's northwest – appear to be more frequent around the national capital, a region that extracts maximum groundwater for agricultural and domestic use. A team of geophysicists now suggest a link between the increased seismic activity and the 'alarming' increase in groundwater pumping in the Delhi region1.

Simulating data around space-based gravity change, earthquake frequency, GPS, rainfall and well-level groundwater, Vineet Gahalaut, chief scientist at the National Geophysical Research Institute (NGRI) in Hyderabad, and his colleagues suggest that the pressure on groundwater aquifers may be the trigger for increased seismic activity in the region.

"Groundwater pumping leads to reduction in water load in the aquifers causing subsurface faults to unclamp, thereby promoting failure," Gahalaut told Nature India. This means that earthquakes in this region are either triggered or their frequency is modulated by the groundwater withdrawal patterns, he said. The combined effect of aquifer contraction and basement rock expansion modulate the effective stress regime and seismicity on the faults of the region, he added.

The 'low magnitude but moderate seismicity rate' of Delhi region correlates with groundwater pumping for extensive irrigation, urban activities, and seasonal loading of freshwater aquifers. To understand how much groundwater was being extracted in northwest India and the region surrounding Delhi, the researchers explored 156 months of NASA's Gravity Recovery and Earth Climate Experiment (GRACE) data and Global Land Data Assimilation System (GLDAS), from January 2003 to December 2015.

They estimated that groundwater storage in the region was changing at an 'alarming' rate of around 1.6 cm per year. Although the entire Aravalli-Delhi Fold Belt experiences earthquakes, the Delhi region appears to be more active seismically, having witnessed several moderate and strong historical earthquakes in 1720, 1831, 1956 and 1960. Most of these earthquakes occurred in the upper 25 km of the Earth's crust. The study suggests that

recent earthquakes in the region have good correlation with the timing of the seasonal hydrological loading cycle. "During the water loading period – June to September monsoon time – seismicity is the lowest, whereas it is relatively high during the unloading period."

"Such hydrological processes may trigger earthquakes, but what causes them in the intraplate region (away from the plate boundary regions like the Himalayan arc) still needs to be explored," Gahalaut said. It is also a good prompt for future explorations into the seismogenic potential of the region and to determine the maximum magnitude of an earthquake which may occur here, he said. With hydrological modeling, in-situ and satellite-based observations, the researchers also indicate alarming groundwater extraction rates across the Indo-Gangetic Basin in north-western India.

'Induced seismicity' is of concern to scientists observing a direct link between water withdrawal rates and earthquakes. They suggest that this may be a promising tool to mitigate the occurrence of induced earthquakes. Delhi could represent other mountain valley regions in the world that experience similar overexploitation of aquifers and suffer from ground subsidence and seismicity, the authors suggest. "The two-way coupling between fluid flow and mechanical deformation processes also holds promise for uncovering hidden basement faults and effective forecasting of human-induced earthquakes," Gahalaut pointed out.

Earlier, another NGRI study found links between the heavy extraction of groundwater in the Indo-Gangetic basin for over five decades to the devastating magnitude 7.8 earthquake in Nepal in April 20152.

Similar studies are underway in other regions of India. In Maharashtra, scientists are trying to understand the phenomenon of induced earthquakes in a reservoir of the Koyna Dam. 'There too, water loading seems to be the primary driver," said Madhavan Rajeevan Nair, secretary in India's Ministry of Earth Sciences.

Globally, earthquakes have been associated with extraction of water, oil and gas3. Ramesh Singh, a geophysicist at Chapman University in California said the Indian government must think of rotation of crops to minimise use of groundwater in agriculture. "Dedicated water wells that can be monitored will provide good information about the changes in stress possibly leading to earthquakes," he told Nature India.

The NGRI study adds to the growing body of evidence on how modest stress changes from non-tectonic loads can influence the activity of small earthquakes. "They are still tectonic earthquakes, but apparently influenced by changing amounts of water at the Earth's surface and in the ground," said Roland Burgmann, Professor in the Department of Earth and Planetary Science at the University of California, Berkeley.

With improved seismicity records and continuous studies, it should be possible to solidify these linkages, he said.

LIST OF LANDSLIDE VUNERABLE HOTSPOTS – THE NILGIRIS DISTRICT

OOTY TALUK

Sl. No.	Location Name	Taluk Name	Village Name	Vulnerability	Firka	Name of the VP/TP/ Municipality	Latitude and Longitude (DMS)	Elevation (in mts)
				OOTY TOWN				
1	Muttorai	Udhagai	Nanjanad	VHV	Ooty Town	Nanjanad (VP)	76°40'7.529"E 11°22'53.302"N	2077
2	Colonies in Elk-Hill	Udhagai	Udhagai	VHV	Ooty Town	Udhagai Municipality	76°42'18.663"E 11°23'51.958"N	2317
3	Nondimedu	Udhagai	Udhagai	VHV	Ooty Town	Udhagai Municipality	76°42'53.88"E 11°24'1.35"N	2284
4	Thalayathimund	Udhagai	Udhagai	VHV	Ooty Town	Udhagai Municipality	76°43'23.2"E 11°24'15.421"N	2394
5	Valley View Annanagar	Udhagai	Udhagai	VHV	Ooty Town	Udhagai Municipality	76°40'42.669"E 11°24'47.943"N	2223
6	Pudumund	Udhagai	Udhagai	VHV	Ooty Town	Udhagai Municipality	76°42'12.444"E 11°25'8.34"N	2295
7	Royal Castle	Udhagai	Udhagai	VHV	Ooty Town	Udhagai Municipality	76°42'42.908"E 11°23'40.939"N	2315
8	St. Mary Hill	Udhagai	Udhagai	HV	Ooty Town	Udhagai Municipality	76°41'39.719"E 11°24'30.428"N	2249
9	Kodapamund	Udhagai	Udhagai	HV	Ooty Town	Udhagai Municipality	76°42'57.413"E 11°24'52.065"N	2230
10	Parson valley colony	Udhagai	Nanjanad	HV	Ooty Town	Nanjanad (VP)	76°36'7.699"E 11°24'7.661"N	2260
11	Mullikorai	Udhagai	Udhagai	HV	Ooty Town	Udhagai Municipality	76°40'41.683"E 11°23'50.939"N	2147
12	Nanjanad	Udhagai	Nanjanad	MV	Ooty Town	Nanjanad (VP)	76°38'30.329"E 11°22'0.29"N	2139
13	Anbu Anna Colony	Udhagai	Udhagai	MV	Ooty Town	Udhagai Municipality	76°41'33.913"E 11°22'59.157"N	2178
14	Parrttutalamund	Udhagai	Nanjanad	LV	Ooty Town	Nanjanad (VP)	76°36'31.78"E 11°26'42.778"N	2178
15	Pavalakkodumund	Udhagai	Nanjanad	LV	Ooty Town	Nanjanad (VP)	76°36'46.418"E 11°26'35.482"N	2124

Sl. No.	Location Name	Taluk Name	Village Name	Vulnerability	Firka	Name of the VP/TP/ Municipality	Latitude and Longitude (DMS)	Elevation (in mts)
SHOLUR								
16	Hadamund	Udhagai	Naduvattum	HV	Sholur	Naduvattam (TP)	76°32'17.559"E 11°25'22.173"N	2228
17	IndraNagar	Udhagai	Naduvattum	HV	Sholur	Naduvattam (TP)	76°34'24.169"E 11°27'53.966"N	2108
18	Mothacambai	Udhagai	Kadanad	HV	Sholur	Kadanad (VP)	76°43'48.792"E 11°29'4.074"N	1678
19	Bentatti	Udhagai	Kadanad	HV	Sholur	Kadanad (VP)	76°43'48.597"E 11°28'52.005"N	1631
20	Swaminathanagar	Udhagai	Kadanad	HV	Sholur	Kadanad (VP)	76°44'44.045"E 11°29'4.032"N	1776
21	Huallathi	Udhagai	Hullathi	MV	Sholur	Hullathi (VP)	76°41'45.917"E 11°28'36.292"N	1825
22	Sholurkokkal	Udhagai	Sholur	MV	Sholur	Sholur (TP)	76°38'36.717"E 11°29'10.059"N	1885
23	Kallatty	Udhagai	Hullathi	MV	Sholur	Hullathi (VP)	76*40'58.72"E 11*27'39.05'N	2209
24	Karapillu	Udhagai	Hullathi	LV	Sholur	Hullathi (VP)	76°41'33.16"E 11°28'13.056"N	1807
25	Pykara	Udhagai	Naduvattum	LV	Sholur	Naduvattam (TP)	76°36'10.227"E 11°28'14.517"N	2054
26	Kappumund	Udhagai	Sholur	LV	Sholur	Sholur (TP)	76°36'26.767"E 11°28'45.115"N	2120
THUNERI								
27	Gandhinagar	Udhagai	Thummanatti	VHV	Thuneri	Thummanatti (VP)	76°45'50.294"E 11°25'14.133"N	2177
28	Ambetkar Nagar	Udhagai	Kagguchi	VHV	Thuneri	Kagguchi (VP)	76°47'46.301"E 11°24'51.18"N	2009
29	Bhagyanagar	Udhagai	Kagguchi	VHV	Thuneri	Kagguchi (VP)	76°47'59.264"E 11°24'50.804"N	2021
30	Gandhinagar	Udhagai	Kagguchi	VHV	Thuneri	Kagguchi (VP)	76°47'14.181"E 11°28'5.016"N	1948
31	Kudumanai	Udhagai	Kagguchi	VHV	Thuneri	Kagguchi (VP)	76°48'17.369"E 11°25'15.688"N	1903

Sl. No.	Location Name	Taluk Name	Village Name	Vulnerability	Firka	Name of the VP/TP/ Municipality	Latitude and Longitude (DMS)	Elevation (in mts)
32	Ranganathapuram	Udhagai	Thummanatti	HV	Thuneri	Thummanatti (VP)	76°45'51.533"E 11°25'9.234"N	2207
33	Giri Betta	Udhagai	Kagguchi	HV	Thuneri	Kagguchi (VP)	76°47'57.111"E 11°27'15.763"N	1988
34	Manavoroi	Udhagai	Kagguchi	HV	Thuneri	Kagguchi (VP)	76°48'37.813"E 11°25'39.719"N	1894
35	Kukalturai	Udhagai	Kukkal	HV	Thuneri	Kokkal (VP)	76°49'39.206"E 11°29'20.285"N	1481
36	Annanagar	Udhagai	Kukkal	HV	Thuneri	Kokkal (VP)	76°50'3.79"E 11°29'14.79"N	1471
37	Kornur	Udhagai	Ebbanad	HV	Thuneri	Ebbanad (V P)	76°46'52.803"E 11°29'8.236"N	1859
38	Swaminathapuram	Udhagai	Thuneri	HV	Thuneri	Thuneri (VP)	76°44'44.045"E 11°29'4.032"N	1966
39	Kovilmedu	Udhagai	Kagguchi	HV	Thuneri	Kagguchi (VP)	76°42'51.667"E 11°26'35.692"N	2066
40	Madithorai	Udhagai	Thummanatti	MV	Thuneri	Thummanatti (VP)	76°46'21.485"E 11°24'44.206"N	2133
41	Kappachi	Udhagai	Thummanatti	MV	Thuneri	Thummanatti (VP)	76°45'51.744"E 11°26'9.672"N	1992
42	Kanakambai	Udhagai	Thummanatti	MV	Thuneri	Thummanatti (VP)	76°46'10.37"E 11°26'38.711"N	1938
43	Thekadudurai	Udhagai	Thuneri	MV	Thuneri	Thuneri (VP)	76°44'26.454"E 11°26'46.848"N	1995
44	Nehruji Nagar	Udhagai	Thummanatti	MV	Thuneri	Thummanatti (VP)	76°44'29.995"E 11°25'50.981"N	2222
45	Ambetkarnagar	Udhagai	Thuneri	MV	Thuneri	Thuneri (VP)	76°45'5.431"E 11°26'49.338"N	2006
46	Honnathalai	Udhagai	Kagguchi	LV	Thuneri	Kagguchi (V P)	76°47'51.173"E 11°25'26.953"N	1866
47	Thumanatti	Udhagai	Thummanatti	LV	Thuneri	Thummanatti (VP)	76°45'36.594"E 11°25'47.992"N	2050
48	Agalar	Udhagai	Ebbanad	LV	Thuneri	Ebbanad (VP)	76°45'30.671"E 11°27'33.339"N	1875

COONOOR TALUK

Sl.No.	Location Name	TalukName	Village Name	Vulnerability	Firka	Name of the VP/TP/ Municipality	Latitude and Longitude (DMS)	Elevation (in mts)
COONOOR								
1	Coonoor, Mettupalayam Road	Coonoor	Burliyar	VHV	Coonoor Town	Coonoor Municipality and Burliar VP	76°49'2.878"E 11°20'6.99"N	1256
2	Coonoor Town Limit	Coonoor	Coonoor	VHV	Coonoor Town	Coonoor Municipality	76°47'52.66"E 11°21'0.501"N	1812
3	Nanjapurai Chattram	Coonoor	Coonoor	VHV	Coonoor Town	Bandishola VP	76°48'3.413"E 11°19'51.301"N	1432
4	Providence College	Coonoor	Coonoor	VHV	Coonoor Town	Bandishola VP	76°49'7.133"E 11°22'9.062"N	1973
5	Amman Nagar	Coonoor	Yedappalli	VHV	Coonoor Town	Bandishola VP	75*49'50.19*E 11*23'17.919*N	1768
6	Colonies around Runneymedu	Coonoor	Coonoor	HV	Coonoor Town	Bandishola VP	76°48'20.981"E 11°19'43.007"N	1382
7	Ottupattaratarai	Coonoor	Coonoor	HV	Coonoor Town	Coonoor Municipality	76°46'43.16"E 11°20'51.993"N	1816
8	Bellattimattam	Coonoor	Yedappalli	HV	Coonoor Town	Yedapalli VP	76°49'48.356"E 11°22'28.382"N	1907
9	Dranella	Coonoor	Yedappalli	HV	Coonoor Town	Yedapalli VP	76°50'2.217"E 11°22'20.835"N	1944
10	Lambs Rock	Coonoor	Burliyar	HV	Coonoor Town	Burliar VP	76°49'58.502"E 11°21'6.865"N	1771
11	Kodamalai	Coonoor	Burliyar	HV	Coonoor Town	Burliar VP	76°49'58.43"E 11°21'38.092"N	1815
12	Gurency	Coonoor	Burliyar	HV	Coonoor Town	Burliar VP	76°50'19.12"E 11°21'50.309"N	1855
13	Adderley	Coonoor	Burliyar	HV	Coonoor Town	Burliar VP	76°51'12.304"E 11°21'28.877"N	1551

Sl.No.	Location Name	TalukName	Village Name	Vulnerability	Firka	Name of the VP/TP/ Municipality	Latitude and Longitude (DMS)	Elevation (in mts)
14	Singara	Coonoor	Burliyar	HV	Coonoor Town	Burliar VP	76°49'31.856"E 11°20'45.42"N	1566
15	Pudukadu	Coonoor	Burliyar	HV	Coonoor Town	Burliar VP	76°50'50.179"E 11°20'33.748"N	779
16	Babu Village	Coonoor	Wellington (CB)	MV	Coonoor Town	Wellington (cantonment B)	76°46'46.531"E 11°22'32.377"N	1845
17	Illithorai	Coonoor	Yedappalli	MV	Coonoor Town	Yedapalli VP	76°48'50.19"E 11°23'17.919"N	2027
18	Chandra Colony	Coonoor	Coonoor	LV	Coonoor Town	Coonoor Municipality	76°47'10.463"E 11°20'36.662"N	1756
19	Karadipallam	Coonoor	Coonoor	LV	Coonoor Town	Coonoor Municipality	76°46'46.795"E 11°20'57.386"N	1795
20	Beratti	Coonoor	Coonoor	LV	Coonoor Town	Beratty VP	76°46'58.439"E 11°22'59.207"N	1953
21	Alakarai	Coonoor	Yedappalli	LV	Coonoor Town	Yedapalli VP	76°50'32.856"E 11°23'0.736"N	1620
KETTI								
22	Bharathinagar - Above Railway Station	Coonoor	Kethi	VHV	Ketti	Ketti TP	76°42'40.382"E 11°22'52.177"N	2162
23	Mel Manthada	Coonoor	Kethi	VHV	Ketti	Ketti TP	76°43'35.258"E 11°23'19.089"N	2215
24	Mittai Board	Coonoor	Kethi	VHV	Ketti	Ketti TP	76°44'16.256"E 11°23'0.131"N	2148
25	Maniyapuram	Coonoor	Adikaratti	VHV	Ketti	Adigaratty TP	76°42'40.783"E 11°18'58.373"N	1853
26	Alada Valley	Coonoor	Adikaratti	VHV	Ketti	Adigaratty TP	76°43'33.337"E 11°18'11.09"N	1690

Sl.No.	Location Name	TalukName	Village Name	Vulnerability	Firka	Name of the VP/TP/ Municipality	Latitude and Longitude (DMS)	Elevation (in mts)
27	Coonoor Road-Adigaratti	Coonoor	Adikaratti	VHV	Ketti	Adigaratty TP	76°43'57.805"E 11°17'56.229"N	1599
28	Aravankadu	Coonoor	Hubbathala	VHV	Kotagiri	Partly Hubathalai VP	76°45'17.246"E 11°22'12.98"N	1909
29	Koderi	Coonoor	Adikaratti	HV	Ketti	Adigaratty TP	76°42'56.087"E 11°19'8.242"N	1779
30	Kenthala	Coonoor	Adikaratti	HV	Ketti	Adigaratty TP	76°44'7.123"E 11°19'40.095"N	1754
31	Alada	Coonoor	Kethi	HV	Ketti	Ketti TP	76°42'30.788"E 11°22'30.006"N	2194
32	Achanakal	Coonoor	Kethi	HV	Ketti	Ketti TP	76°43'0.614"E 11°22'42.772"N	1975
33	Kilinjada	Coonoor	Adikaratti	LV	Ketti	Adigaratty TP	76°44'11.602"E 11°18'47.545"N	1550
34	Sakkalatti	Coonoor	Kethi	LV	Ketti	Ketti TP	76°44'41.865"E 11°20'36.17"N	1786
35	Denalai	Coonoor	Kethi	LV	Ketti	Ketti TP	76°44'6.754"E 11°21'0.456"N	1906
36	Kollimalai	Coonoor	Adikaratti	LV	Ketti	Adigaratty TP	76°42'48.469"E 11°21'7.874"N	1985
37	Thambatti	Coonoor	Adikaratti	LV	Ketti	Adigaratty TP	76°41'47.326"E 11°21'13.834"N	2017
38	Kil Odayaratti	Coonoor	Kethi	LV	Ketti	Ketti TP	76°44'27.174"E 11°21'29.956"N	1959
39	Hullada	Coonoor	Kethi	LV	Ketti	Ketti TP	76°43'50.968"E 11°22'40.493"N	2004
40	Selvippa Nagar	Coonoor	Adikaratti	LV	Ketti	Adigaratty TP	76°43'2.369"E 11°20'20.902"N	1939

Sl.No.	Location Name	TalukName	Village Name	Vulnerability	Firka	Name of the VP/TP/ Municipality	Latitude and Longitude (DMS)	Elevation (in mts)
MELUR								
41	Alatanai	Coonoor	Melur	VHV	Melur	Melur VP	76°41'49.398"E 11°17'13.628"N	1701
42	Taimalai	Coonoor	Melur	VHV	Melur	Melur VP	76°43'34.371"E 11°15'54.458"N	1631
43	Musaburi	Coonoor	Melur	VHV	Melur	Melur VP	76°44'24.069"E 11°16'27.1"N	1592
44	Sholarock Tea Estate	Coonoor	Huligal (TP)	VHV	Melur	Hullical TP	76°45'5.588"E 11°18'41.074"N	1653
45	Kavalkombai	Coonoor	Huligal (TP)	VHV	Melur	Hullical TP	76°51'16.482"E 11°18'53.845"N	1012
46	Periyar Nagar - Karimarahatti	Coonoor	Hubbathala	VHV	Melur	Hubathalai VP	76°46'46.062"E 11°20'26.538"N	1725
47	Chinna Karumbalam	Coonoor	Hubbathala	VHV	Melur	Hubathalai VP	76°46'16.53"E 11°20'5.911"N	1634
48	Karumbalam	Coonoor	Hubbathala	HV	Melur	Hubathalai VP	76°45'40.424"E 11°20'5.114"N	1626
49	Ambigapuram	Coonoor	Hubbathala	HV	Melur	Hubathalai VP	76°46'8.95"E 11°21'26.491"N	1898
50	Keradalease	Coonoor	Melur	HV	Melur	Melur VP	76°43'10.771"E 11°17'22.561"N	1678
51	Bhavani Tea Estate	Coonoor	Huligal (TP)	HV	Melur	Hullical TP	76°46'11.799"E 11°17'53.485"N	1532
52	Chengalkombai	Coonoor	Huligal (TP)	HV	Melur	Hullical TP	76°49'25.063"E 11°17'40.901"N	1048
53	Chulli -Droog	Coonoor	Huligal (TP)	HV	Melur	Hullical TP	76°48'55.237"E 11°18'53.378"N	1866
54	Annaipallam	Coonoor	Huligal (TP)	HV	Melur	Hullical TP	76°47'12.119"E 11°18'22.305"N	1825

Sl.No.	Location Name	TalukName	Village Name	Vulnerability	Firka	Name of the VP/TP/ Municipality	Latitude and Longitude (DMS)	Elevation (in mts)
55	Nerunagar-Selas	Coonoor	Huligal (TP)	HV	Melur	Hullical TP	76°44'43.733"E 11°19'27.75"N	1696
56	Kakkan Nagar	Coonoor	Hubbathala	HV	Melur	Hubathalai VP	76°45'57.566"E 11°21'27.925"N	1897
57	Pazhathottam	Coonoor	Hubbathala	MV	Melur	Hubathalai VP	76°45'42.86"E 11°21'11.644"N	1896
58	Bharatinagar - Kakkachi	Coonoor	Huligal (TP)	MV	Melur	Hullical TP	76°44'25.376"E 11°19'9.664"N	1633
59	Thuthurmattam Musbari	Coonoor	Melur	LV	Melur	Melur VP	76°42'51.917"E 11°26'35.353"N	1515
60	Arayati	Coonoor	Melur	LV	Melur	Melur VP	76°43'5.215"E 11°17'29.829"N	1737
61	Hullical	Coonoor	Huligal (TP)	LV	Melur	Hullical TP	76°44'25.952"E 11°18'56.196"N	1572
62	Billimalai	Coonoor	Huligal (TP)	LV	Melur	Hullical TP	76°45'19.896"E 11°19'32.009"N	1863
63	Hubbathala	Coonoor	Hubbathala	LV	Melur	Hubathalai VP	76°45'45.599"E 11°21'4.435"N	1899
64	Mahalinga Nagar Colony	Coonoor	Melur	LV	Melur	Melur VP	76°43'46.08"E 11°17'24.292"N	1529

KOTAGIRI TALUK

Sl. No.	Location Name	TalukName	Village Name	Vulnerability	Firka	Name of the VP/TP/ Municipality	Latitude and Longitude (DMS)	Elevation (in mts)
KIL-KOTAGIRI								
1	Konavakarai	Kotagiri	Konavakarai	VHV	Kil Kothagiri	Konavakarai (VP)	76°53'34.898"E 11°24'26.973"N	1722
2	Om Nagar	Kotagiri	Denad	VHV	Kil Kothagiri	Denad (Vp)	76°53'52.726"E 11°27'45.696"N	1859
3	Sambravu	Kotagiri	Kengarai	VHV	Kilkotagiri	Kengarai (VP)	76°57'1.761"E 11°25'34.581"N	1498
4	Nettakkal	Kotagiri	Kengarai	VHV	Kilkotagiri	Kengarai (VP)	76°56'58.835"E 11°24'51.761"N	1556
5	Bangala Padugai	Kotagiri	Arocode	VHV	Kilkotagiri	Arocode (VP)	76°59'47.309"E 11°27'3.22"N	1074
6	Kumaramudi	Kotagiri	Arocode	VHV	Kilkotagiri	Arocode (VP)	76°59'38.03"E 11°27'24.162"N	1260
7	Bomman	Kotagiri	Denad	VHV	Kilkotagiri	Denad (VP)	76°57'22.945"E 11°26'24.364"N	1563
8	Kottimokai	Kotagiri	Kadinamala	VHV	Kilkotagiri	Kadinamala (VP)	76°58'29.704"E 11°26'34.59"N	1319
9	Goppayur	Kotagiri	Kadinamala	VHV	Kilkotagiri	Kadinamala (VP)	76°58'40.748"E 11°25'53.662"N	1198
10	Kullangarai	Kotagiri	Kadinamala	VHV	Kilkotagiri	Kadinamala (VP)	76°58'54.035"E 11°27'3.361"N	1333
11	Dobbakombai	Kotagiri	Konavakarai	HV	Kilkotagiri	Konavakarai (VP)	76°53'52.956"E 11°23'51.128"N	1612
12	Karukudumattam	Kotagiri	Denad	HV	Kilkotagiri	Denad (VP)	76°57'53.803"E 11°27'10.899"N	1540
13	Neerkandi	Kotagiri	Denad	HV	Kilkotagiri	Denad (VP)	76°57'5.227"E 11°26'31.61"N	1682
14	Andhiarai	Kotagiri	Kadinamala	HV	Kilkotagiri	Kadinamala (VP)	76°58'39.848"E 11°26'33.089"N	1301
15	Kengarai	Kotagiri	Kengarai	MV	Kil Kothagiri	Kengarai (VP)	76°55'43.247"E 11°25'13.953"N	1721
16	Pudukalani	Kotagiri	Denad	MV	Kilkotagiri	Denad (VP)	76°57'3.708"E 11°26'46.878"N	1749

Sl. No.	Location Name	TalukName	Village Name	Vulnerability	Firka	Name of the VP/TP/ Municipality	Latitude and Longitude (DMS)	Elevation (in mts)
KOTAGIRI								
17	Bharathunagar - Kattabettu	Kotagiri	Naduhatty	VHV	Kotagiri	Naduhatty (VP)	76°48'29.964"E 11°24'49.955"N	1943
18	Jegathala	Kotagiri	Jagathala	VHV	Kotagiri	Jagathala (TP)	76°45'59.533"E 11°22'47.53"N	1851
19	Kattabettu	Kotagiri	Naduhatty	VHV	Kotagiri	Naduhatty (VP)	76°49'1.749"E 11°24'27.178"N	1958
20	Thavittu medu	Kotagiri	Kotagiri	VHV	Kotagiri	Kotagiri (TP)	76°52'17.131"E 11°24'46.954"N	1838
21	Kambisholai	Kotagiri	Jagathala	VHV	Kotagiri	Jagathala (TP)	76°47'17.376"E 11°23'1.013"N	2050
22	Kannigadevi Colony	Kotagiri	Kotagiri	VHV	Kotagiri	Kotagiri (TP)	76°51'15.682"E 11°25'7.649"N	1855
23	Thogalatty to Onnorai Road	Kotagiri	Naduhatty	VHV	Kotagiri	Naduhatty (vp)	76°49'43.391"E 11°24'48.657"N	1781
24	Sakthi Nagar	Kotagiri	Jackanarai	VHV	Kotagiri	Jackanarai (VP)	76°51'33.112"E 11°23'10.793"N	1510
25	Kallur	Kotagiri	Jackanarai	VHV	Kotagiri	Jackanarai (VP)	76°52'8.135"E 11°22'42.113"N	1026
26	Ariyur Mattam - Kakakundu	Kotagiri	Jackanarai	VHV	Kotagiri	Jackanarai (VP)	76°52'48.322"E 11°22'23.775"N	1122
27	Vellarikombai	Kotagiri	Jackanarai	VHV	Kotagiri	Jackanarai (VP)	76°54'21.176"E 11°21'16.787"N	919
28	Keerakkal	Kotagiri	Kotagiri	VHV	Kotagiri	Kotagiri (TP)	76°51'11.418"E 11°23'55.938"N	1564
29	Gopalapuram	Kotagiri	Jagathala	HV	Kotagiri	Jagathala (TP)	76°46'18.563"E 11°22'10.604"N	1845
30	Mallikorai	Kotagiri	Jagathala	HV	Kotagiri	Jagathala (TP)	76°46'58.832"E 11°23'6.185"N	1972
31	J Kolakkombai	Kotagiri	Jagathala	HV	Kotagiri	Jagathala (TP)	76°45'40.235"E 11°23'48.152"N	2115

Sl. No.	Location Name	TalukName	Village Name	Vulnerability	Firka	Name of the VP/TP/ Municipality	Latitude and Longitude (DMS)	Elevation (in mts)
32	Haruva Osahatti	Kotagiri	Jagathala	HV	Kotagiri	Jagathala (TP)	76°48'24.51"E 11°24'8.814"N	2083
33	Pudur	Kotagiri	Kotagiri	HV	Kotagiri	Kotagiri (TP)	76°52'51.387"E 11°26'7.899"N	1872
34	Kamrajnagar	Kotagiri	Kotagiri	HV	Kotagiri	Kotagiri (TP)	76°50'25.1"E 11°25'26.039"N	1880
35	Gundu Bettu Colony	Kotagiri	Naduhatty	HV	Kotagiri	Naduhatty (vp)	76°50'2.665"E 11°26'36.987"N	1969
36	Kavattai	Kotagiri	Jackanarai	HV	Kotagiri	Jackanarai (VP)	76°52'47.232"E 11°23'19.833"N	1750
37	Mantharai - Thudhyari- Kunjappanai	Kotagiri	Jackanarai	HV	Kotagiri	Jackanarai (VP)	76°56'1.378"E 11°21'42.402"N	1026
38	Annanagar- Kottakombai	Kotagiri	Jackanarai	HV	Kotagiri	Jackanarai (VP)	76°53'13.252"E 11°23'27.212"N	1562
39	Jakkanare Melkerry	Kotagiri	Kotagiri	HV	Kotagiri	Kotagiri (TP)	76°52'19.444"E 11°23'58.757"N	1798
40	Valluvan Colony	Kotagiri	Kotagiri	HV	Kotagiri	Kotagiri (TP)	76°50'46.071"E 11°24'30.244"N	1796
41	Kallatty	Kotagiri	Kotagiri	HV	Kotagiri	Kotagiri (TP)	76°51'26.659"E 11°24'0.569"N	1594
42	Kil Kaithala	Kotagiri	Kotagiri	HV	Kotagiri	Kotagiri (TP)	76°52'27.516"E 11°24'30.999"N	1734
43	Kumaran Colony	Kotagiri	Kotagiri	MV	Kotagiri	Kotagiri (TP)	76°51'12.79"E 11°24'49.109"N	1897
44	Krishnaputhur	Kotagiri	Kotagiri	MV	Kotagiri	Kotagiri (TP)	76°51'5.973"E 11°25'11.613"N	1895
45	Aggal	Kotagiri	Kotagiri	MV	Kotagiri	Kotagiri (TP)	76°51'25.001"E 11°24'40.244"N	1762
46	Kalpana Cattage	Kotagiri	Kotagiri	MV	Kotagiri	Kotagiri (TP)	76°52'4.421"E 11°25'41.86"N	1927
47	Donnington - Gandhi Nagar	Kotagiri	Kotagiri	MV	Kotagiri	Kotagiri (TP)	76°52'28.785"E 11°25'17.201"N	1899

Sl. No.	Location Name	TalukName	Village Name	Vulnerability	Firka	Name of the VP/TP/ Municipality	Latitude and Longitude (DMS)	Elevation (in mts)
48	Bharathi Nagar - Attavali	Kotagiri	Naduhatty	MV	Kotagiri	Naduhatty (vp)	76°49'50.027"E 11°25'33.001"N	2017
49	Mullur	Kotagiri	Jackanarai	MV	Kotagiri	Jackanarai (VP)	76°53'49.675"E 11°22'0.418"N	1248
50	Sakkatta	Kotagiri	Kotagiri	MV	Kotagiri	Kotagiri (VP)	76°52'22.124"E 11°24'14.057"N	1715
51	Naduhatti	Kotagiri	Naduhatty	LV	Kotagiri	Naduhatty (VP)	76°48'57.037"E 11°24'14.54"N	1926
52	Gathuguli	Kotagiri	Kotagiri	LV	Kotagiri	Kotagiri (TP)	76°50'55.251"E 11°24'49.114"N	1918
53	Kerbetta	Kotagiri	Kotagiri	LV	Kotagiri	Kotagiri (TP)	76°52'31.226"E 11°25'48.706"N	1941
54	Akkit	Kotagiri	Kotagiri	LV	Kotagiri	Kotagiri (TP)	76°52'9.516"E 11°24'4.244"N	1672
NEDUGULA								
55	Bharathi Nagar	Kotagiri	Kodanad	VHV	Nedugula	Kodanad (VP)	76°54'31.75"E 11°28'57.599"N	1960
56	Indranagar	Kotagiri	Nedugula	VHV	Nedugula	Nedugula (vp)	76°52'26.928"E 11°27'23.873"N	1885
57	Kunnihatti	Kotagiri	Nedugula	VHV	Nedugula	Nedugula (vp)	76°50'18.777"E 11°28'1.332"N	1745
58	Naregiri	Kotagiri	Nedugula	VHV	Nedugula	Nedugula (vp)	76°51'6.785"E 11°28'12.048"N	1762
59	Kuttimani Nagar	Kotagiri	Nedugula	VHV	Nedugula	Nedugula (vp)	76°51'19.357"E 11°27'48.903"N	1730
60	Jakkakombai	Kotagiri	Nedugula	HV	Nedugula	Nedugula (vp)	76°52'40.828"E 11°29'18.716"N	1863
61	Kakkasholai	Kotagiri	Nedugula	HV	Nedugula	Nedugula (vp)	76°52'55.067"E 11°28'0.58"N	1793
62	Vettri Nagar	Kotagiri	Kodanad	MV	Nedugula	Kodanad (VP)	76°53'59.151"E 11°29'40.911"N	1971
63	Kodanad View point	Kotagiri	Kodanad	MV	Nedugula	Kodanad (VP)	76°55'13.951"E 11°31'13.287"N	1734
64	Neriguda	Kotagiri	Nedugula	MV	Nedugula	Nedugula (vp)	76°50'56.061"E 11°27'42.262"N	1861

KUNDAH TALUK

Sl. No.	Location Name	TalukName	Village Name	Vulnerability	Firka	Name of the VP/TP/ Municipality	Latitude and Longitude (DMS)	Elevation (in mts)
ITHALAR								
1	Shiva Sakthi Nagar	Kundah	Bikketti	VHV	Ithalar	Bikkatti (TP)	76°37'58.791"E 11°16'26.786"N	1849
2	Mukkimalai	Kundah	Bikketti	VHV	Ithalar	Bikkatti (TP)	76°39'6.594"E 11°17'23.048"N	1693
3	Emerald	Kundah	Mulligoor	VHV	Ithalar	Mulligoor (VP)	76°37'23.966"E 11°19'16.266"N	1948
4	Devar Betta	Kundah	Mulligoor	VHV	Ithalar	Mulligoor (VP)	76°34'55.625"E 11°15'45.314"N	2407
5	Vinobaji Nagar	Kundah	Ithalar	HV	Ithalar	Ithalar (VP)	76°38'34.741"E 11°18'40.412"N	1931
6	Thakker Baba Nagar	Kundah	Bikketti	MV	Ithalar	Bikkatti (TP)	76°37'53.63"E 11°18'44.089"N	1942
7	Bembatti	Kundah	Ithalar	MV	Ithalar	Ithalar (VP)	76°38'55.928"E 11°19'31.716"N	1990
8	Kallakorai	Kundah	Ithalar	MV	Ithalar	Ithalar (VP)	76°40'2.829"E 11°21'32.597"N	2027
9	Indra Nagar	Kundah	Ithalar	MV	Ithalar	Ithalar (VP)	76°38'47.052"E 11°19'25.002"N	1996
10	Mulligoor	Kundah	Mulligoor	MV	Ithalar	Mulligoor (VP)	76°37'11.286"E 11°16'46.303"N	1884
11	Bharathiyar Podhur	Kundah	Bikketti	LV	Ithalar	Bikkatti (TP)	76°38'4.196"E 11°16'44.491"N	1825
12	Koundampalayam - Yedakad	Kundah	Bikketti	LV	Ithalar	Bikkatti (TP)	76°38'53.254"E 11°17'33.261"N	1827
13	ThullithaliMund	Kundah	Ithalar	LV	Ithalar	Ithalar (VP)	76°39'47.839"E 11°20'23.764"N	2032
14	Ithalar	Kundah	Ithalar	LV	Ithalar	Ithalar (VP)	76°38'25.942"E 11°20'29.728"N	2105
15	Kannakimund	Kundah	Ithalar	LV	Ithalar	Ithalar (VP)	76°39'12.638"E 11°20'59.057"N	2105

Sl. No.	Location Name	TalukName	Village Name	Vulnerability	Firka	Name of the VP/TP/ Municipality	Latitude and Longitude (DMS)	Elevation (in mts)
KUNDAH								
16	Baramoola	Kundah	Balacola	VHV	Kundha	Balacola (VP)	76°40'56.156"E 11°19'46.739"N	2018
17	Charan Nagar	Kundah	Balacola	VHV	Kundha	Balacola (VP)	76°40'48.251"E 11°19'11.659"N	2066
18	Geddai	Kundah	Kilkunda	VHV	Kundha	Kil-kundah(TP)	76°40'22.091"E 11°14'57.769"N	930
19	Chamraj Leace	Kundah	Balacola	HV	Kundha	Balacola (VP)	76°41'17.586"E 11°18'0.721"N	1878
20	Gandhipudu Nagar	Kundah	Ithalar	HV	Kundha	Ithalar (VP)	76°40'27.435"E 11°21'2.338"N	2049
21	Kariyamalai	Kundah	Kilkunda	HV	Kundha	Kil-kundah(TP)	76°38'33.319"E 11°15'47.606"N	1754
22	Belhatti	Kundah	Kilkunda	HV	Kundha	Kil-kundah(TP)	76°39'37.557"E 11°16'29.715"N	1643
23	Onakandi- Anna Nagar	Kundah	Kilkunda	HV	Kundha	Kil-kundah(TP)	76°39'26.293"E 11°15'54.074"N	1743
24	Periyar Nagar-Kariyamalai	Kundah	Kilkunda	HV	Kundha	Kil-kundah(TP)	76°38'37.877"E 11°15'34.271"N	1651
25	Backorai	Kundah	Kilkunda	HV	Kundha	Kil-kundah(TP)	76°38'55.527"E 11°16'44.489"N	1713
26	Kinnakkorai	Kundah	Kinnakkorai	HV	Kundha	Mel-kundah (VP)	76°39'50.077"E 11°13'12.277"N	1669
27	Kundahpalam	Kundah	Kilkundah	MV	Kundha	Kil-kundah(TP)	76°38'26.943"E 11°16'49.237"N	1698
28	Kokkalada	Kundah	Balacola	MV	Kundha	Balacola (VP)	76°40'42.184"E 11°17'2.66"N	1762
29	Kanneri	Kundah	Balacola	MV	Kundha	Balacola (VP)	76°39'25.366"E 11°18'49.633"N	2001
30	Thangadu	Kundah	Balacola	MV	Kundha	Balacola (VP)	76°39'36.571"E 11°19'8.042"N	2044
31	Bengalmattam	Kundah	Balacola	MV	Kundha	Balacola (VP)	76°40'40.077"E 11°17'35.535"N	1840

Sl. No.	Location Name	TalukName	Village Name	Vulnerability	Firka	Name of the VP/TP/ Municipality	Latitude and Longitude (DMS)	Elevation (in mts)
32	Mullimalai	Kundah	Kilkunda	MV	Kundha	Kil-kundah(TP)	76°40'22.091"E 11°14'57.769"N	1850
33	Kilkundha	Kundah	Kilkunda	MV	Kundha	Kil-kundah(TP)	76°39'22.175"E 11°15'42.135"N	1740
34	Charnoor-Doddakambe	Kundah	Kilkunda	MV	Kundha	Kil-kundah(TP)	76°37'32.384"E 11°15'18.163"N	1809
35	Maniyatti	Kundah	Balacola	LV	Kundha	Balacola (VP)	76°39'40.202"E 11°19'51"N	1990
36	Sastri Nagar	Kundah	Balacola	LV	Kundha	Balacola (VP)	76°40'26.808"E 11°18'21.513"N	2065
37	T.Oranalli	Kundah	Balacola	LV	Kundha	Balacola (VP)	76°39'54.027"E 11°18'54.897"N	2027
38	Kathadimattam	Kundah	Balacola	LV	Kundha	Balacola (VP)	76°41'14.05"E 11°19'36.642"N	2064
39	Meekkeri	Kundah	Balacola	LV	Kundha	Balacola (VP)	76°40'14.606"E 11°19'54.562"N	2038
40	Balacola	Kundah	Balacola	LV	Kundha	Balacola (VP)	76°40'34.068"E 11°20'21.335"N	2042
41	Manjur	Kundah	Kilkunda	LV	Kundha	Kil-kundah(TP)	76°38'43.577"E 11°16'17.086"N	1831
42	Indra Nagar - Kinnakkorai	Kundah	Kinnakkorai	LV	Kundha	Mel-kundah (VP)	76°40'27.19"E 11°13'28.314"N	1646

GUDALUR TALUK

Sl. No.	Location Name	Taluk Name	Village Name	Vulnerability	Firka	Name of the VP/TP/ Municipality	Latitude and Longitude (DMS)	Elevation (in mts)
GUDALUR								
1	Moolaikad Tea Estate	Gudalur	O Valley	VHV	Gudalur	O'Valley TP	76°28'20.296"E 11°24'16.421"N	1331
2	Periyachoodi	Gudalur	O Valley	VHV	Gudalur	O'Valley TP	76°28'49.898"E 11°27'10.395"N	999
3	Seaforth Tea Estate	Gudalur	O Valley	HV	Gudalur	O'Valley TP	76°26'51.147"E 11°25'31.001"N	987
4	Upper Gudalur	Gudalur	Gudalur	MV	Gudalur	Gudalur Municipality	76°29'57.55"E 11°29'34.66"N	1072
5	Rajagopalapuram	Gudalur	Gudalur	LV	Gudalur	Gudalur Municipality	76°29'38.122"E 11°29'52.726"N	954

PANDALUR TALUK

Sl. No.	Location Name	TalukName	Village Name	Vulnerability	Firka	Name of the VP/TP/ Municipality	Latitude and Longitude (DMS)	Elevation (in mts)
CHERAMBADI								
1	Koranchal	Pandalur	Cherangode	MV	Cherambadi	Cherangode (VP)	76°15'56.702"E 11°31'28.225"N	845
2	Adidiraviar Colony cherambady	Pandalur	Cherangode	MV	Cherambadi	Cherangode (VP)	76°16'10.502"E 11°30'52.285"N	857
3	Chandanamma Kunnu	Pandalur	Cherangode	MV	Cherambadi	Cherangode (VP)	76°15'41.477"E 11°29'53.871"N	862
4	Nallikunum	Pandalur	Cherangode	MV	Cherambadi	Cherangode (VP)	76°15'10.928"E 11°31'7.462"N	844
5	Kulikadavu Ayyankolli	Pandalur	Cherangode	MV	Cherambadi	Cherangode (VP)	76°18'59.315"E 11°33'27.062"N	916
6	Factory Mattam Kolapalli	Pandalur	Cherangode	LV	Cherambadi	Cherangode (VP)	76°19'49.73"E 11°31'24.679"N	944
PANDALUR								
7	Koovasholai	Pandalur	Nellialam	VHV	Pandalur	Nellakottai (VP)	76°25'33.617"E 11°33'6.996"N	989
8	Nellakotta Colony	Pandalur	Nellialam	MV	Pandalur	Nellakottai (VP)	76°25'3.637"E 11°33'12.727"N	1073
9	Kamaraj Nagar	Pandalur	Nellialam	MV	Pandalur	Nellakottai (VP)	76°22'24.864"E 11°34'26.118"N	945
10	Velleri	Pandalur	Munnanad	MV	Pandalur	Nellakottai (VP)	76°20'27.061"E 11°35'5.55"N	843