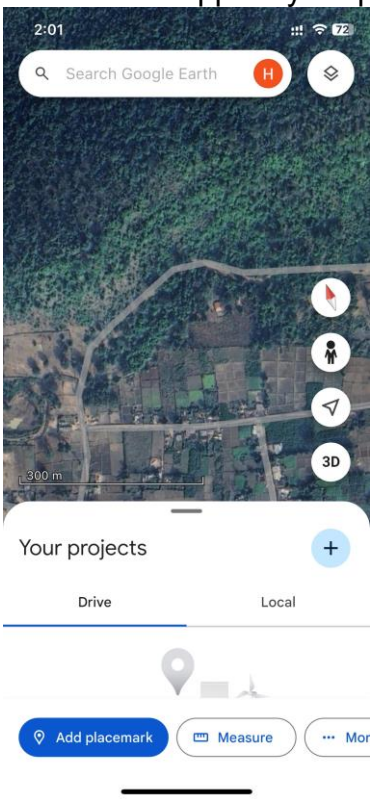
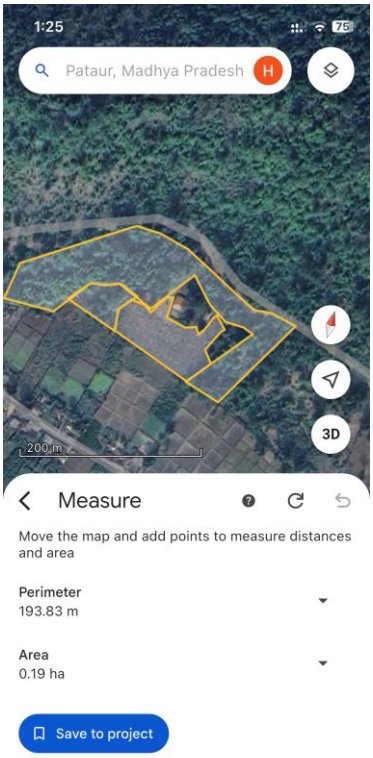
PATHWAYS TO SUSTAINABILITY MEASUREMENT TOOLKITS - 2

Calculating Carbon sequestration on your property.

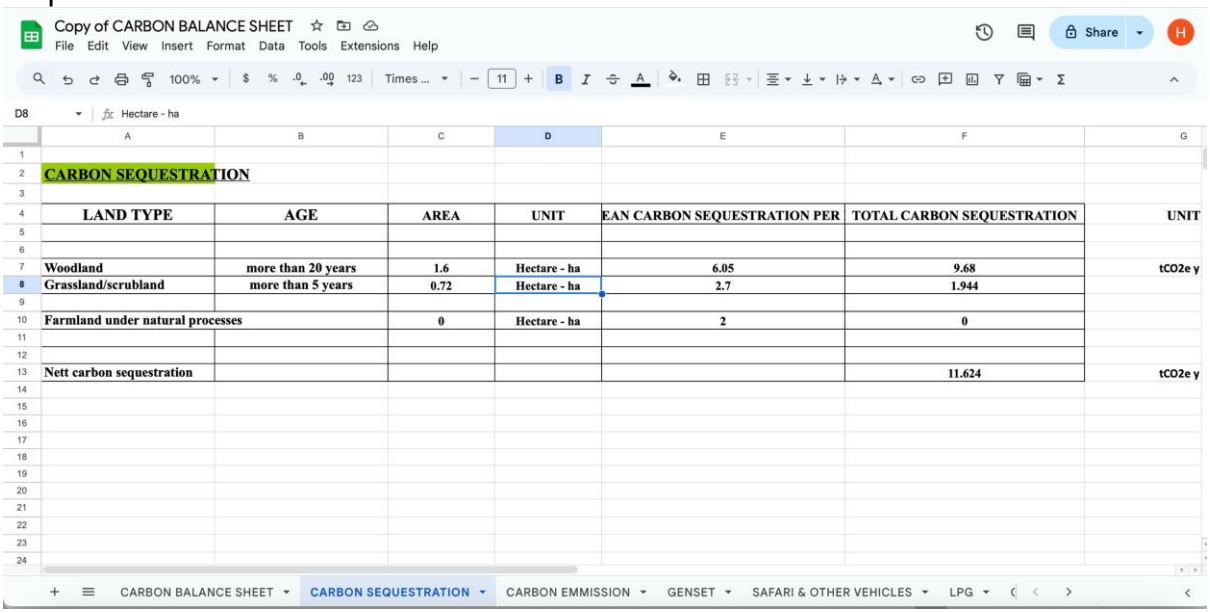
1. Once you have calculated carbon emissions, you can calculate the carbon that the vegetation on your property is absorbing annually (Sequestration). In order to do this, you will need to measure the area under different types of vegetation since each type absorbs carbon at differing rates.
2. The Best tool for this measurement is Google Earth. You can download the free version app on your phone. It will open like this



Once you find your plot using the search function, click **measure.** Keep adding markers along the boundary of the different vegetation types. The closer you add the markers the more accurate your measurement will be:

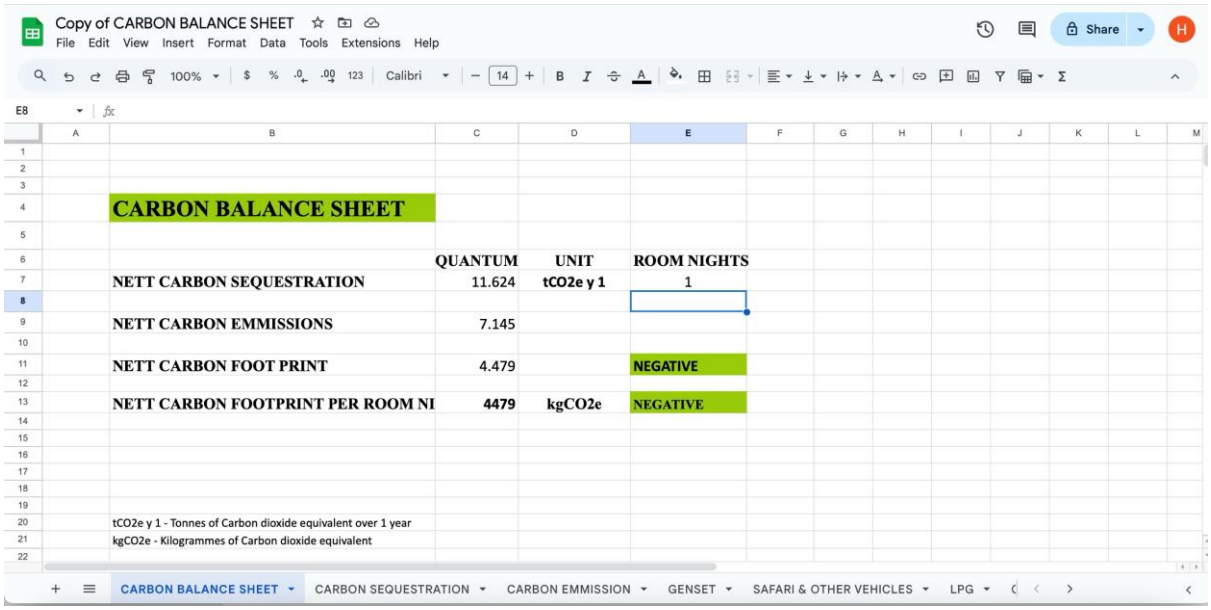


You can get the area in any type of unit. You will need to choose hectares as I have done. The area of 0.19 ha showing in the above picture reflects the area of the wild grassland on my property. You then input these numbers in the sequestration sheet as below



LAND TYPE	AGE	AREA	UNIT	EAN CARBON SEQUESTRATION PER	TOTAL CARBON SEQUESTRATION	UNIT
Woodland	more than 20 years	1.6	Hectare - ha	6.05	9.68	tCO2e y
Grassland/scrubland	more than 5 years	0.72	Hectare - ha	2.7	1.944	
Farmland under natural processes		0	Hectare - ha	2	0	
Nett carbon sequestration					11.624	tCO2e y

The total carbon sequestration will be shown. These numbers get updated in the Balance Sheet giving you an overall view of the emissions and sequestration numbers on your property. As below:

3. 

Copy of CARBON BALANCE SHEET

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E8

	A	B	C	D	E	F	G	H	I	J	K	L	M
1													
2													
3													
4		**CARBON BALANCE SHEET**											
5													
6			**QUANTUM**	**UNIT**	**ROOM NIGHTS**								
7		**NETT CARBON SEQUESTRATION**	11.624	**tCO2e y 1**	1								
8													
9		**NETT CARBON EMMISSIONS**	7.145										
10													
11		**NETT CARBON FOOT PRINT**	4.479		**NEGATIVE**								
12													
13		**NETT CARBON FOOTPRINT PER ROOM NI**	**4479**	**kgCO2e**	**NEGATIVE**								
14													
15													
16													
17													
18													
19													
20		tCO2e y 1 - Tonnes of Carbon dioxide equivalent over 1 year											
21		kgCO2e - Kilogrammes of Carbon dioxide equivalent											
22													

CARBON BALANCE SHEET | CARBON SEQUESTRATION | CARBON EMMISSION | GENSET | SAFARI & OTHER VEHICLES | LPG

Thus - we are sequestering 4.479 **more** tons of carbon than we are emitting. Hence we are climate change negative and have the ability to off-set