Extent Account: Step 1 - Calculate Opening and Closing Land Cover (hectares)

## **Opening Land Cover**

Μ	Μ	Μ	М	М	S	G	G	S	S
G	Μ	М	S	S	S	G	S	S	S
Т	G	S	G	G	G	G	S	S	S
Т	G	Α	Α	G	G	S	Т	Т	Т
Т	G	Α	Α	Α	Α	Т	Т	Т	Т
Т	Т	Т	Α	Α	Α	С	С	С	Т
E	Т	Α	Р	Р	Α	Α	С	С	Т
S	S	Α	Р	Р	Р	С	С	Т	Т
S	Α	Α	Р	R	R	R	G	Т	Т
S	S	Α	R	R	R	R	Т	Т	Т

Note: Each cell represents one hectare.

## **Closing Land Cover**

Р	Μ	М	Μ	Μ	S	G	G	S	S
G	Μ	Μ	S	S	S	G	S	S	S
С	G	S	G	G	G	G	С	С	S
С	С	Α	Α	G	G	S	С	С	Т
С	G	Α	Α	Α	Α	С	С	С	Т
Т	Т	Т	Α	Α	Α	С	С	С	Т
E	Т	Α	Α	Α	Α	Α	С	С	Т
S	S	Α	Α	Р	Р	С	С	Т	Т
S	Α	Α	Р	R	R	R	G	Т	Т
S	S	Α	R	R	R	R	Т	Т	Т

Note: Each cell represents one hectare.

		Count
Opening Land Cover	Code	(ha)
Artificial surfaces	Α	
Crops	C	
Grassland	G	
Tree covered area	Т	
Mangroves	М	
Shrub covered area	S	
Regularly flooded areas	R	
Sparse natural vegetated areas	Р	
Terrestrial barren land	E	
Permanent snow, glaciers and inland water bodies	Х	
Total		100

		Count
Closing Land Cover	Code	(ha)
Artificial surfaces	Α	
Crops	C	
Grassland	G	
Tree covered area	Т	
Mangroves	М	
Shrub covered area	S	
Regularly flooded areas	R	
Sparse natural vegetated areas	Р	
Terrestrial barren land	Ε	
Permanent snow, glaciers and inland water bodies	Х	
Total		100

Instructions: Count the number of cells (hectares) for each land cover type and record in the Land Cover table.

## Extent Account: Step 2 - Calculate Land Cover Change Matrix and Physical Account for Land Cover

 Table 1: Net Land Cover Change Matrix (hectares)

-	•	Closing Land Cover										
		Artificial surfaces	Crops	Grassland	Tree covered area	Mangroves	Shrub covered area	Regularly flooded areas	Sparse natural vegetated areas	Terrestrial barren land	Permanent snow, glaciers and inland water bodies	Opening
Opening Land Cover	Code	Ā	C	G	Τ	M	S	R	P	Ē	<u> </u>	
Artificial surfaces	A											
Crops	С											
Grassland	G											
Tree covered area	Т											
Mangroves	М											
Shrub covered area	S											
Regularly flooded areas	R											
Sparse natural vegetated areas	Р											
Terrestrial barren land	E											
Permanent snow, glaciers and inland water bodies	x											
Closing												

Note: Rows represent reductions in stock; columns represent deletions in stock

Instructions: (1) Transfer the Opening and Closing areas from the Land Cover Tables.

(2) Count areas with no change and record on the diagonal.

(3) Record changes from Opening to Closing in rows (e.g., 1ha grassland changed to Crop)

(4) Check: Rows add to Opening; Columns add to Closing.

## Extent Account: Step 2 - Calculate Land Cover Change Matrix and Physical Account for Land Cover

Table 2: Physical Account for Land Cover

	Artificial surfaces	Crops	Grassland	Tree covered area	Mangroves	Shrub covered area	Regularly flooded areas	Sparse natural vegetated areas	Terrestrial barren land	Permanent snow, glaciers and inland water bodies	Total
Opening Stock											
Additions to Stock											
Reductions in Stock											
Closing Stock											

Note: Reductions are sum of row, excluding areas that remained the same

Instructions: (1) Transfer Opening Land Cover to Opening Stock row

(2) Transfer Closing Land Cover to Closing Stock row

(3) Add columns (excluding areas that stayed the same) to obtain Additions to Stock

(4) Add rows (excluding areas that stayed the same) to obtain Reductions in Stock

(5) Check: Total Stock = 100; Additions = Reductions

Carbon Accounting: Step 3 - Calculate Carbon Stock Account and Carbon Sequestration Services