



EUROPEAN COMMISSION
EUROSTAT



Directorate E: Agriculture and environment statistics; Statistical Cooperation
Unit E-1: Farms, Agro-Environment and Rural Development

LUCAS 2009 (Land Use / Cover Area Frame Survey)

Technical reference document C-2:

Field form



LUCAS 2009 - LAND USE / COVER AREA FRAME STATISTICAL SURVEY

Identification

A	Surveyor ID: _____	B	Point ID: _____	C	Soil sample number: _____
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Observation

1	Date: ____/____/____ DD MM	5	Type of observation: 1 <input type="checkbox"/> Field survey, point visible, 0-100m to pt 2 <input type="checkbox"/> Field survey point visible, >100 m to pt 3 <input type="checkbox"/> Photo-interpretation, point not visible 4 <input type="checkbox"/> The point is not observed	11	Elevation: _____ m
2	Start time: ____:____ HH mm				
3	End time: ____:____ HH mm	6	GPS projection system: _____	12	Distance to the point: _____ m
4	Observed: 1 <input type="checkbox"/> The point is observed 2 <input type="checkbox"/> Point is not visible 3 <input type="checkbox"/> Marine sea 4 <input type="checkbox"/> Out of national territory	7	Precision: _____ m	13	Direction: 1 <input type="checkbox"/> on the point 2 <input type="checkbox"/> north 3 <input type="checkbox"/> east 8 <input type="checkbox"/> not relevant
		8	Latitude: _____,_____ DD,dddddd		
		9/10	Longitude: <input type="checkbox"/> W/E _____,_____ DD,dddddd		

Comments

14 Description of the way to the point	15 Remarks about special circumstances (why observation not at the point, ground document not clear, etc.)
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Land cover and land use

16	LC1 _____	17	LC2 _____		Radius: 1 <input type="checkbox"/> 1.5 m 2 <input type="checkbox"/> 20 m		Area size (in ha): 1 <input type="checkbox"/> area < 0.5 2 <input type="checkbox"/> 0.5 ≤ area < 1 3 <input type="checkbox"/> 1 ≤ area < 10 4 <input type="checkbox"/> area ≥ 10
22	C1 plant species: _____	23	LC2 plant species: _____	18		19	
24	Percentage of land coverage (%) LC1: 1 <input type="checkbox"/> <10 2 <input type="checkbox"/> 10 ≤ LC < 25 3 <input type="checkbox"/> 25 ≤ LC < 50 4 <input type="checkbox"/> 50 ≤ LC < 75 5 <input type="checkbox"/> LC ≥ 75	25	Percentage of land coverage (%) LC2: 1 <input type="checkbox"/> <10 2 <input type="checkbox"/> 10 ≤ LC < 25 3 <input type="checkbox"/> 25 ≤ LC < 50 4 <input type="checkbox"/> 50 ≤ LC < 75 5 <input type="checkbox"/> LC ≥ 75	20	Only if LC CX0, or D10 or E10 and area size ≥ 0.5 ha Height of trees at maturity: 1 <input type="checkbox"/> < 5 m 2 <input type="checkbox"/> ≥ 5 m	21	Only if LC CX0, or D10 or E10 and height of tree above 5 m and area size ≥ 0.5 ha Width of feature: 1 <input type="checkbox"/> < 20 m 2 <input type="checkbox"/> ≥ 20 m
26	LU1 _____	27	LU2 _____	28	Land management: 1 <input type="checkbox"/> grazed 2 <input type="checkbox"/> not grazed 8 <input type="checkbox"/> not relevant		

Charts on area estimations (percentages)



B Point ID: _____

Water management

29	Presence of water management: <i>(Only if LU = U111 or U112)</i>	<input type="checkbox"/> Irrigation <input type="checkbox"/> Potential irrigation <input type="checkbox"/> Drainage <input type="checkbox"/> Irrigation and drainage <input type="checkbox"/> No visible water management <input type="checkbox"/> not relevant	30	Source of irrigation:	<input type="checkbox"/> Well <input type="checkbox"/> Pond/Lake/Reservoir <input type="checkbox"/> Stream/Canal/Ditch <input type="checkbox"/> Lagoon/Wastewater <input type="checkbox"/> Other/not identifiable <input type="checkbox"/> not relevant
31	Type of irrigation:	<input type="checkbox"/> Gravity <input type="checkbox"/> Pressure: Sprinkler irrigation <input type="checkbox"/> Pressure: Micro-irrigation <input type="checkbox"/> Gravity/Pressure <input type="checkbox"/> Other/not identifiable <input type="checkbox"/> not relevant	32	Delivery System:	<input type="checkbox"/> Canal <input type="checkbox"/> Ditch <input type="checkbox"/> Pipeline <input type="checkbox"/> Other/not identifiable <input type="checkbox"/> not relevant

Soil

33	Is the soil sample taken?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not in the sample	34	Can you see any sign of ploughing in the plot?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> not relevant
35	Percentage of residual crops on the surface:	<input type="checkbox"/> RC < 10 <input type="checkbox"/> 10 ≤ RC < 25 <input type="checkbox"/> 25 ≤ RC < 50 <input type="checkbox"/> RC ≥ 50 <input type="checkbox"/> not relevant	36	Percentage of stones on the surface:	<input type="checkbox"/> S < 10 <input type="checkbox"/> 10 ≤ S < 25 <input type="checkbox"/> 25 ≤ S < 50 <input type="checkbox"/> S ≥ 50 <input type="checkbox"/> not relevant
37	Remarks about the soil sample: <i>(e.g. why it could not be taken, or special cir)</i>				

Transect

38	Transect																			
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Structural, mostly linear element types	For all land cover areas ≥ 3 m, use relevant LC codification Except: <u>for urban areas: A without numbers</u> <u>For B classes: if Photointerpreted, use BX1 (Arable land) and Bx2 (Permanent crops). Note that these codes are accepted only for parts of the transect which are photointerpreted.</u>																							
	<p>All structural, mostly linear elements have to be listed according to their code below, irrespective their width (if not stated otherwise)</p> <table> <tr> <td>01 Grass margins < 3 m</td> <td>31 Ditches, channels < 3 m</td> </tr> <tr> <td>02 Heath/Shrub, tall herb fringes < 3 m</td> <td>32 Rivers, streams < 3 m</td> </tr> <tr> <td>10 Single bushes, single tree</td> <td>41 Ponds, wetlands < 3 m</td> </tr> <tr> <td>11 Avenue trees</td> <td>51 Rock outcrops with some natural vegetation</td> </tr> <tr> <td>12 Conifer hedges < 3 m</td> <td>61 Tracks</td> </tr> <tr> <td>13 Bush/tree hedges/coppices, visibly managed (e.g. pollarded) < 3 m</td> <td>62 Roads</td> </tr> <tr> <td>14 Bush/tree hedges, not managed, with single trees, or shrubland deriving from abandonment < 3 m</td> <td>63 Railways</td> </tr> <tr> <td>15 Grove/Woodland margins (if no hedgerow) < 3 m</td> <td>71 Other linear elements</td> </tr> <tr> <td>21 Dry stone walls</td> <td>(PI Photo-Interpretation starts</td> </tr> <tr> <td>22 Artificial constructions (other than dry stone walls)</td> <td>PI) Photo-Interpretation ends</td> </tr> <tr> <td>23 Fences</td> <td>X Premature end of transect field assessment</td> </tr> <tr> <td>24 Electric lines</td> <td>8 No transect mapped</td> </tr> </table>	01 Grass margins < 3 m	31 Ditches, channels < 3 m	02 Heath/Shrub, tall herb fringes < 3 m	32 Rivers, streams < 3 m	10 Single bushes, single tree	41 Ponds, wetlands < 3 m	11 Avenue trees	51 Rock outcrops with some natural vegetation	12 Conifer hedges < 3 m	61 Tracks	13 Bush/tree hedges/coppices, visibly managed (e.g. pollarded) < 3 m	62 Roads	14 Bush/tree hedges, not managed, with single trees, or shrubland deriving from abandonment < 3 m	63 Railways	15 Grove/Woodland margins (if no hedgerow) < 3 m	71 Other linear elements	21 Dry stone walls	(PI Photo-Interpretation starts	22 Artificial constructions (other than dry stone walls)	PI) Photo-Interpretation ends	23 Fences	X Premature end of transect field assessment	24 Electric lines
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39	Remarks about the transect: <i>(e.g. reasons for prematurely end of transect interpretation, PI circumstances)</i>																							

B Point ID: _____

Photos

	Taken	Not taken	Not relevant	Photo ID	To be anonymised
40 Point	1 <input type="checkbox"/>	2 <input type="checkbox"/>	8 <input type="checkbox"/>	_____	<input type="checkbox"/>
41 Crop – Cover	1 <input type="checkbox"/>	2 <input type="checkbox"/>	8 <input type="checkbox"/>	_____	<input type="checkbox"/>
42 North	1 <input type="checkbox"/>	2 <input type="checkbox"/>	8 <input type="checkbox"/>	_____	<input type="checkbox"/>
43 East	1 <input type="checkbox"/>	2 <input type="checkbox"/>	8 <input type="checkbox"/>	_____	<input type="checkbox"/>
44 South	1 <input type="checkbox"/>	2 <input type="checkbox"/>	8 <input type="checkbox"/>	_____	<input type="checkbox"/>
45 West	1 <input type="checkbox"/>	2 <input type="checkbox"/>	8 <input type="checkbox"/>	_____	<input type="checkbox"/>
46 Irrigation	1 <input type="checkbox"/>	2 <input type="checkbox"/>	8 <input type="checkbox"/>	_____	<input type="checkbox"/>
47 Transect	1 <input type="checkbox"/>	2 <input type="checkbox"/>	8 <input type="checkbox"/>	_____	<input type="checkbox"/>
48 Soil	1 <input type="checkbox"/>	2 <input type="checkbox"/>	8 <input type="checkbox"/>	_____	<input type="checkbox"/>
49 Conflict case	1 <input type="checkbox"/>	2 <input type="checkbox"/>	8 <input type="checkbox"/>	_____	<input type="checkbox"/>

Do not forget to take the soil, irrigation and transect end pictures!

Do not forget to note End time of the survey!