

Editing features

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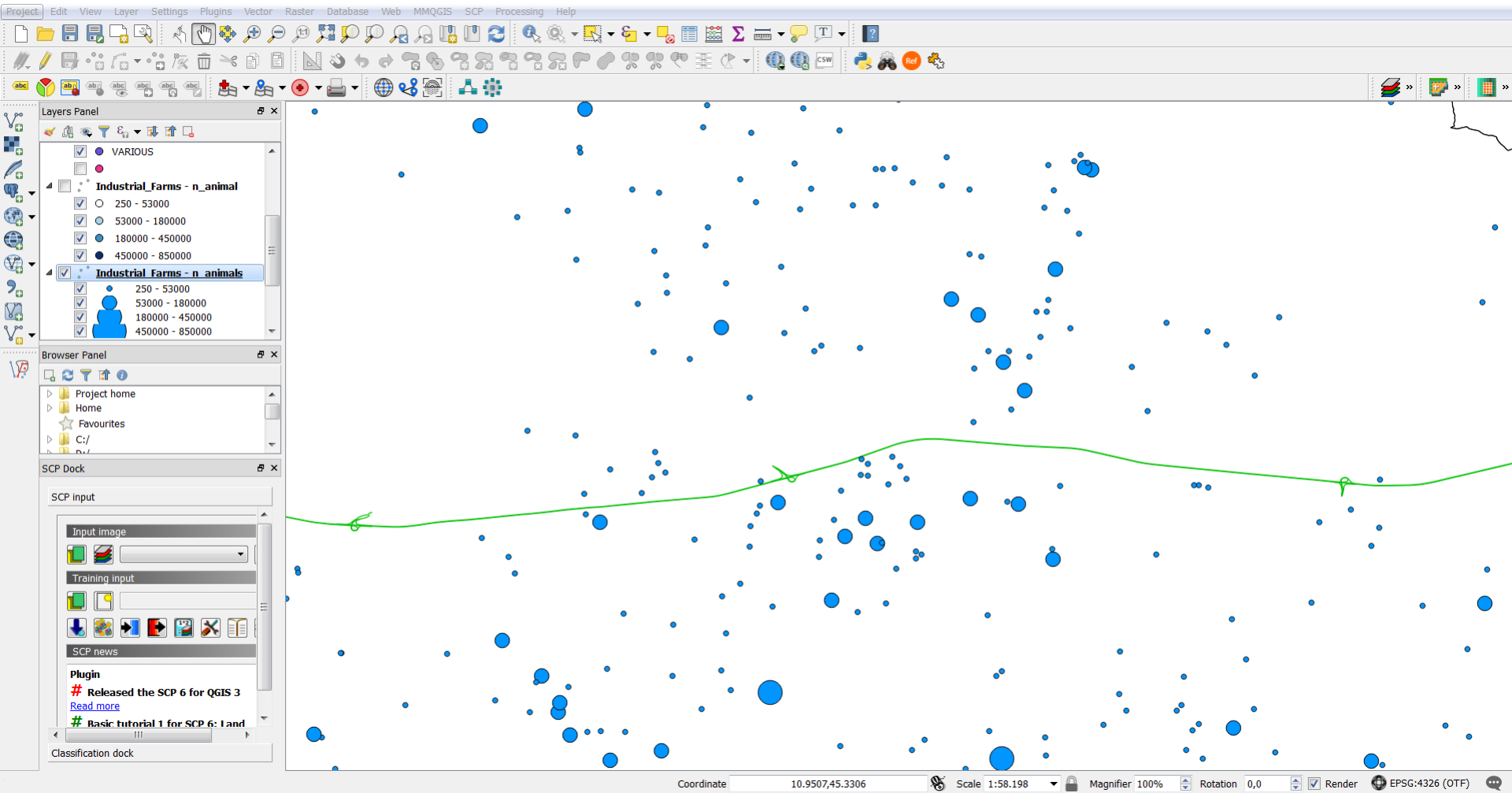
OIE Headquarters



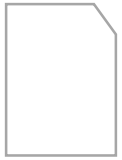
Overview

- *Practical exercise results, Working with GIS and Shapefiles*
- Creating vector data
- Editing geometry of vector data
- Editing attributes of vector data
- Type of data in spatial epidemiology
 - Points, polygons, lines or raster data
- How to visualize epidemiological data on a map

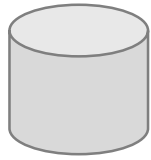
Practical exercise results



Working with data in GIS



csv



database



shp

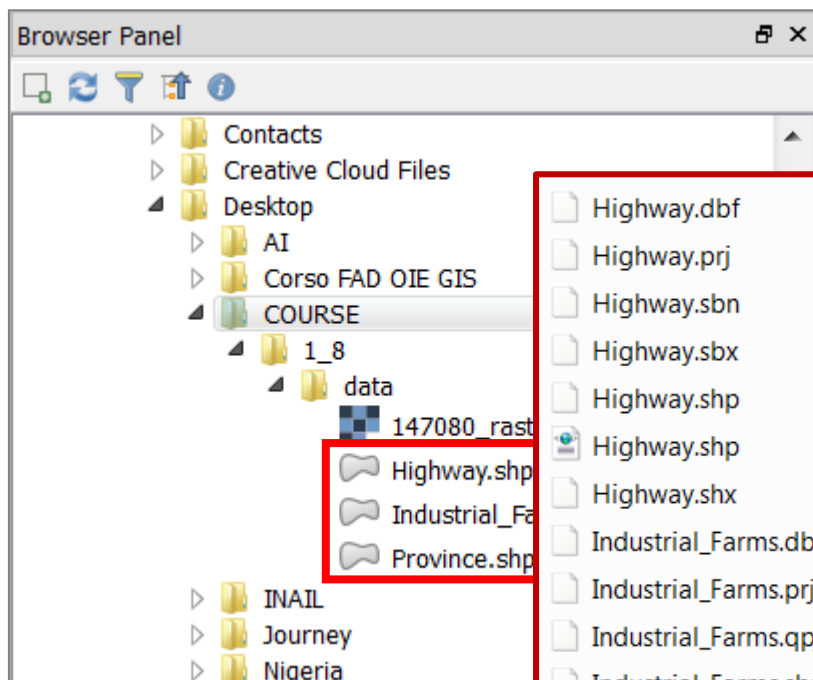


web
services

GIS

Works with different data format

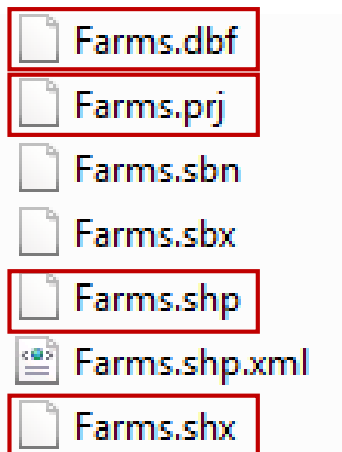
Shapefile



Highway.dbf	18/08/2009 11:00	File DBF	2 KB
Highway.prj	18/08/2009 11:00	File PRJ	1 KB
Highway.sbn	18/08/2009 11:00	File SBN	1 KB
Highway.sbx	18/08/2009 11:00	File SBX	1 KB
Highway.shp	18/08/2009 11:00	File SHP	288 KB
Highway.shp	18/08/2009 11:01	Documento XML	167 KB
Highway.shx	18/08/2009 11:00	File SHX	1 KB
Industrial_Farms.dbf	29/08/2016 13:16	File DBF	435 KB
Industrial_Farms.prj	29/08/2016 13:13	File PRJ	1 KB
Industrial_Farms.qpj	24/08/2016 14:46	File QPJ	1 KB
Industrial_Farms.sbn	29/08/2016 13:14	File SBN	18 KB
Industrial_Farms.sbx	29/08/2016 13:14	File SBX	2 KB
Industrial_Farms.shp	29/08/2016 13:14	File SHP	51 KB
Industrial_Farms.shx	29/08/2016 13:14	File SHX	15 KB
Province.dbf	18/08/2009 10:51	File DBF	2 KB
Province.prj	18/08/2009 10:51	File PRJ	1 KB
Province.sbn	18/08/2009 10:51	File SBN	1 KB
Province.sbx	18/08/2009 10:51	File SBX	1 KB
Province.shp	18/08/2009 10:51	File SHP	1.310 KB
Province.shp	18/08/2009 10:51	Documento XML	120 KB
Province.shx	18/08/2009 10:51	File SHX	1 KB

Shapefile

Shapefile



Different files

- dbf Attributes (database)
- shp Spatial data (geometry)
- shx Spatial indexes
- prj Spatial Coordinate System



Practical exercise location



General info for editing in QGIS

Enabled Toolbars

- Digitizing tools
- Advanced digitizing tools

1. Select which layer to edit (or create it)
2. Start editing tool
3. Editing data
 - o Spatial data (geometry)
 - o No-spatial data (attributes)
4. Save edits
5. Stop editing tool

Creating vector data (shapefile)

Layer > Create layer > **New shape file**

Type

Point Line Polygon

File encoding: System

Selected CRS (EPSG:4326, WGS 84)

New field

Name:

Type: Text data

Length: 80 Precision:

Add to fields list

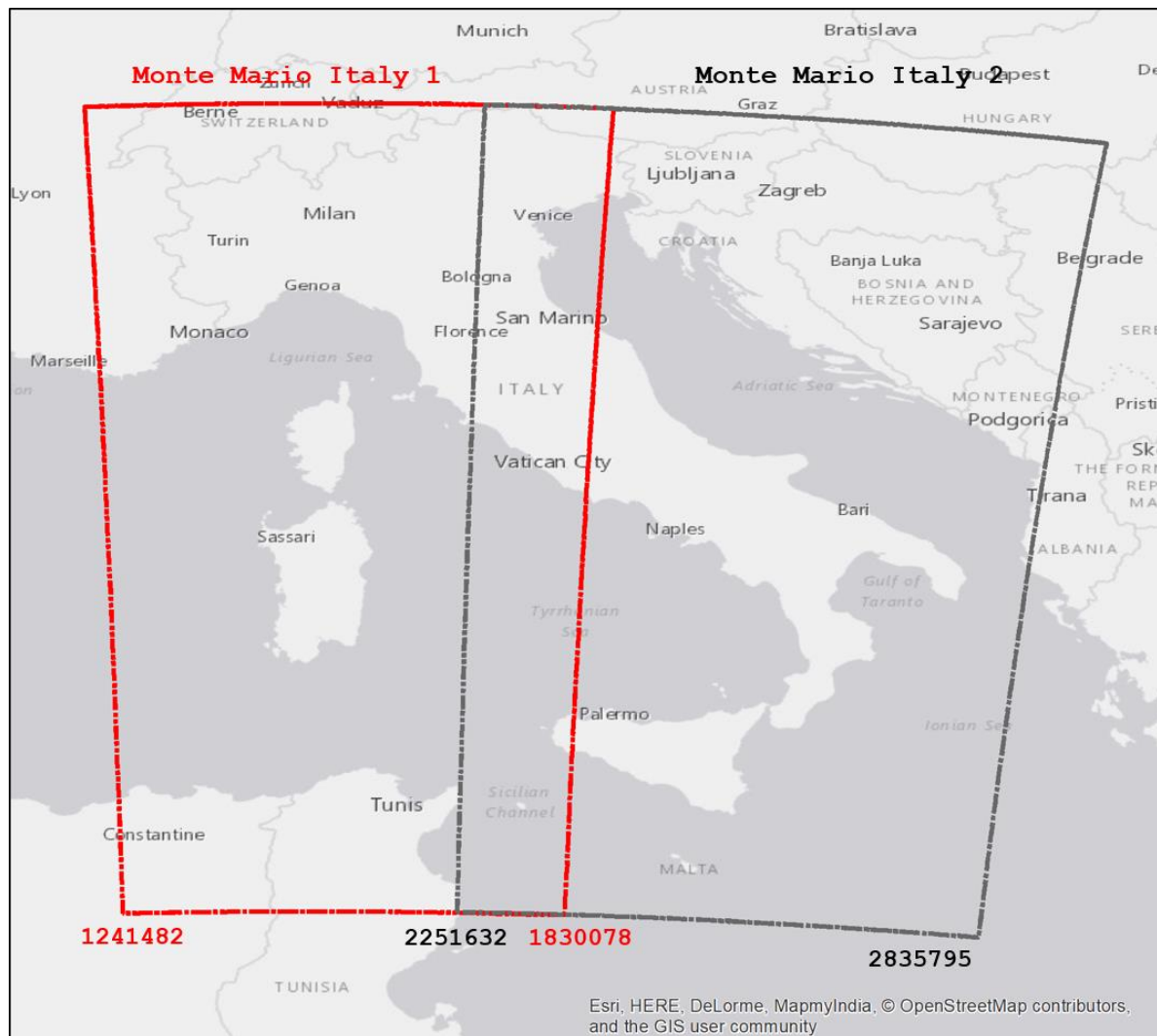
Fields list

Name	Type	Length	Precision
id	Integer	10	

Remove field

OK Cancel Help

CRS example – Monte Mario Italy 1

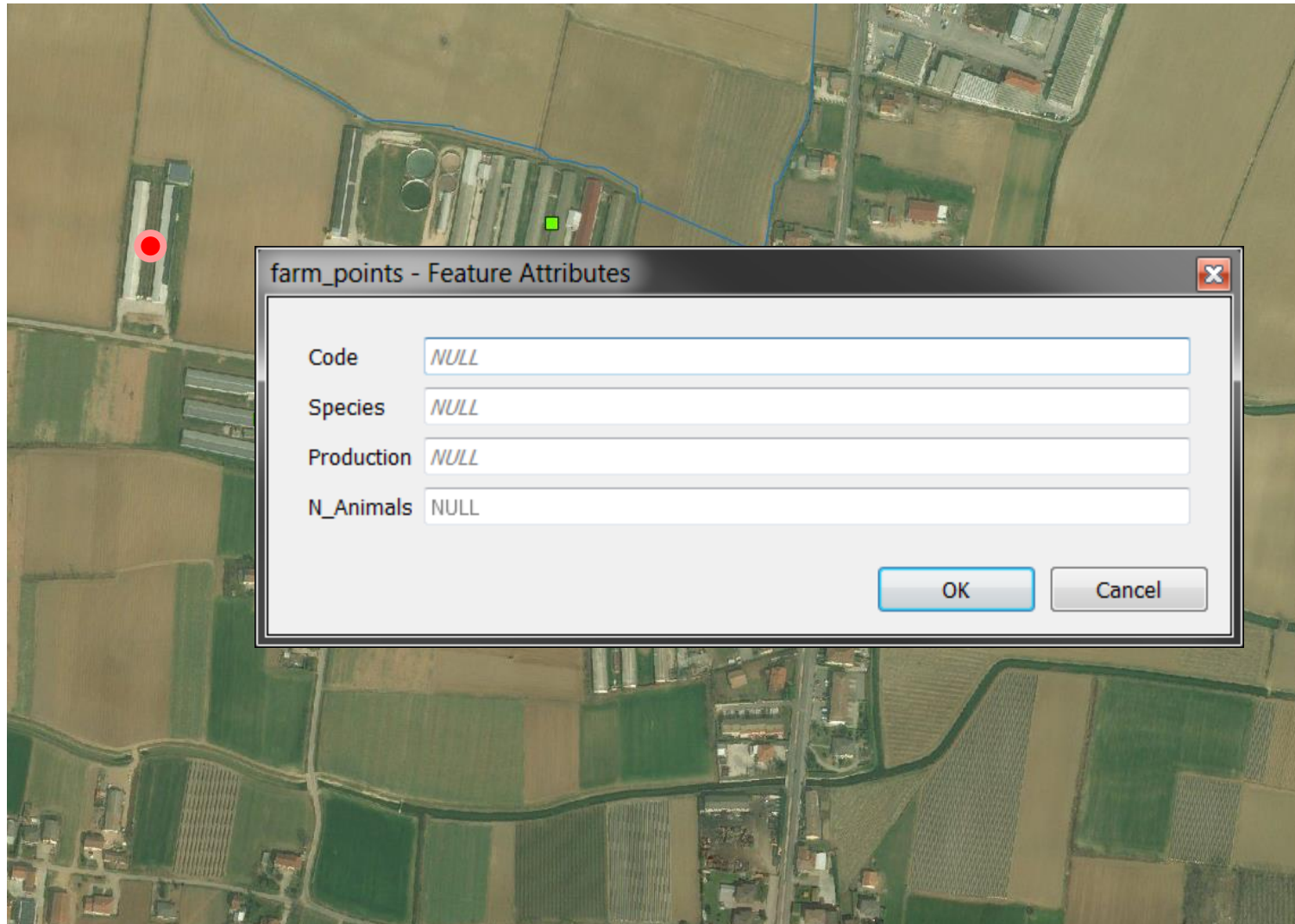


CRS example – WGS84



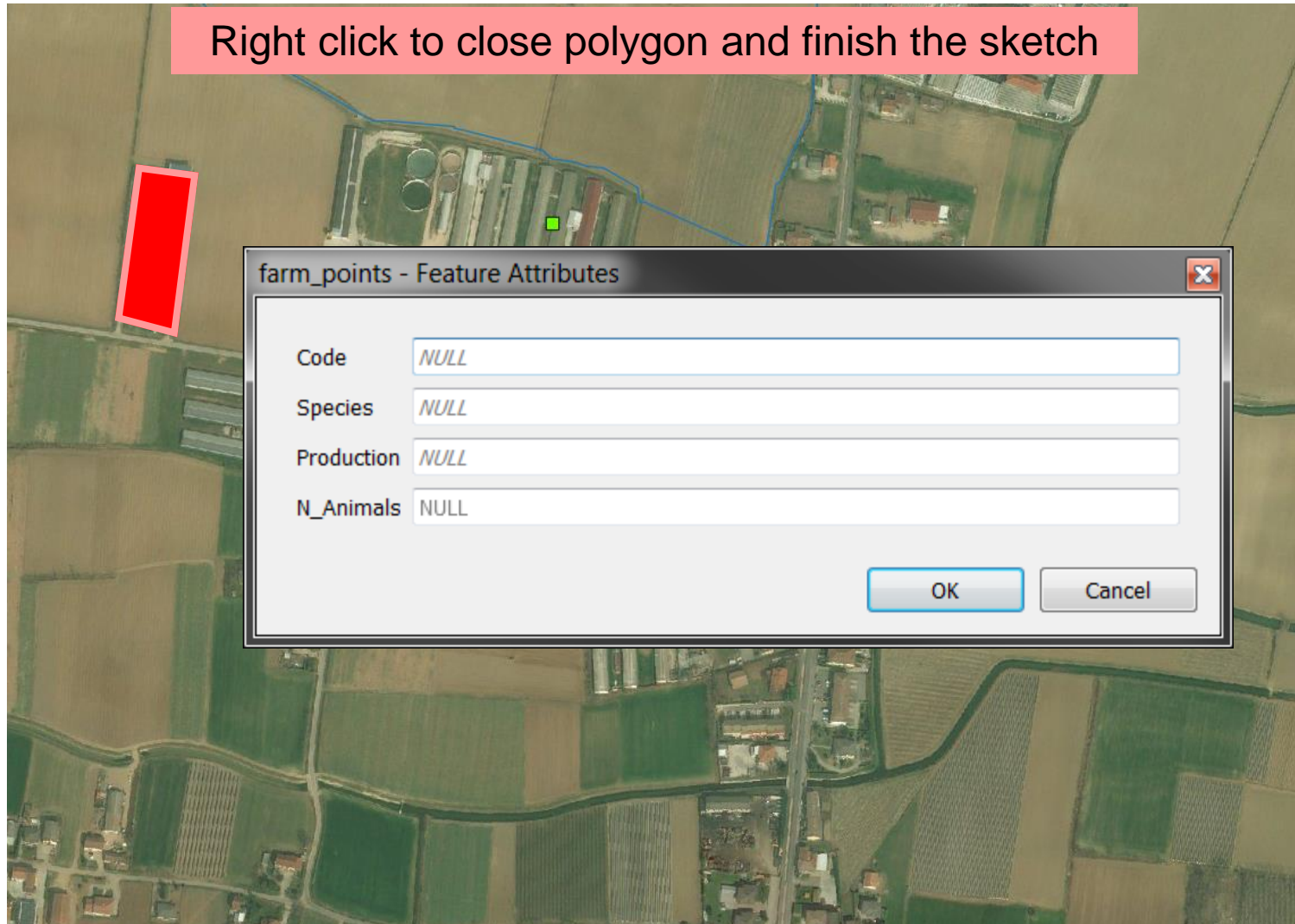
Adding vector data

Add geometry and edit feature attributes (points)

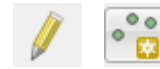


Adding vector data (polygon)

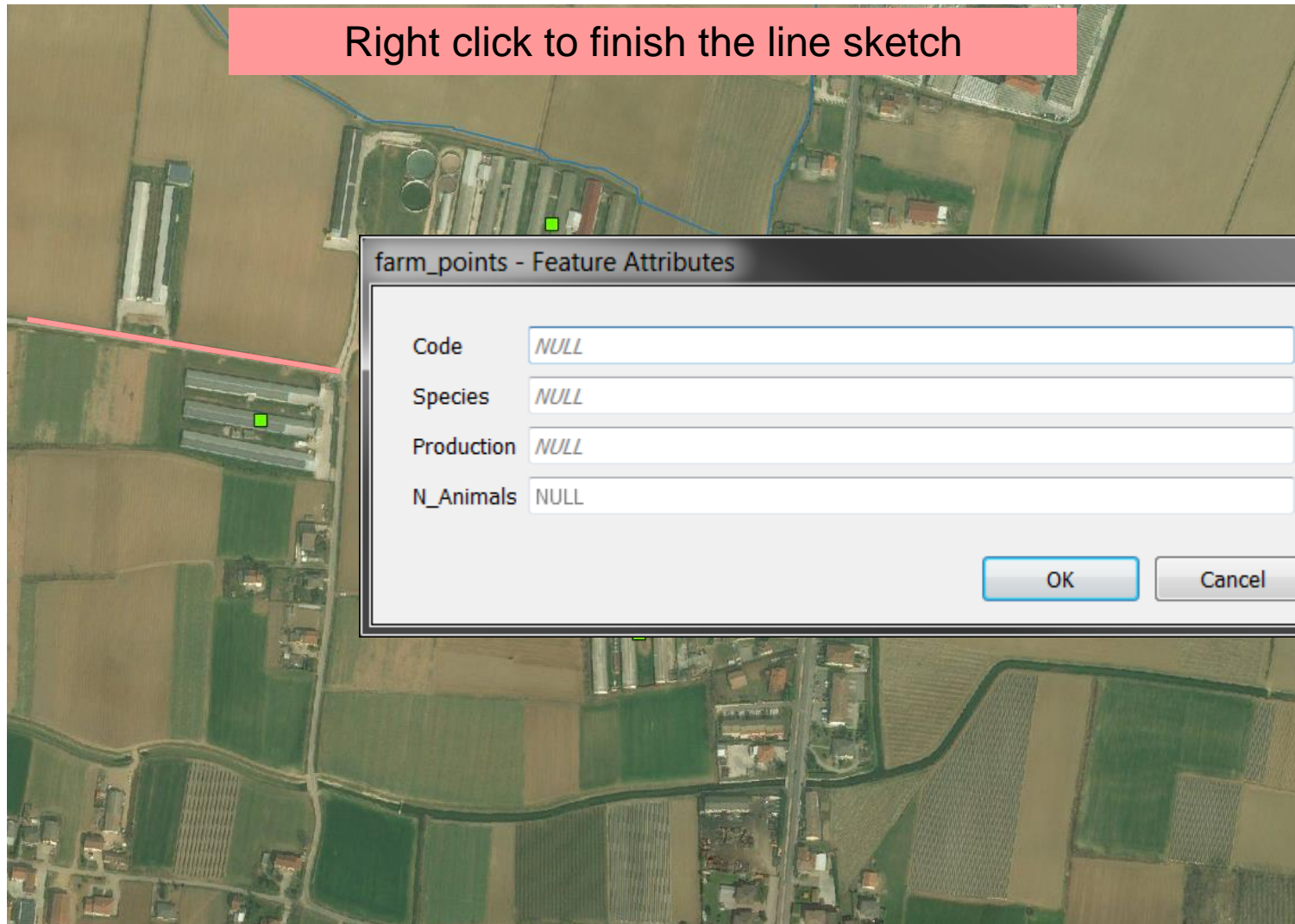
Add geometry and edit feature attributes



Adding vector data (line)



Add geometry and edit feature attributes



Right click to finish the line sketch

farm_points - Feature Attributes

Code

Species

Production



N_Animals

OK

Cancel

Modifying vector data

Modify feature geometry

- Move features 
- Node tool 

Delete feature (both geometry and attributes)

- Select feature > Delete feature  

Remember to save edits



Modifying attributes

Modify feature attributes

- Select feature > Open attribute table > Edit data in the table



Remember to save edits

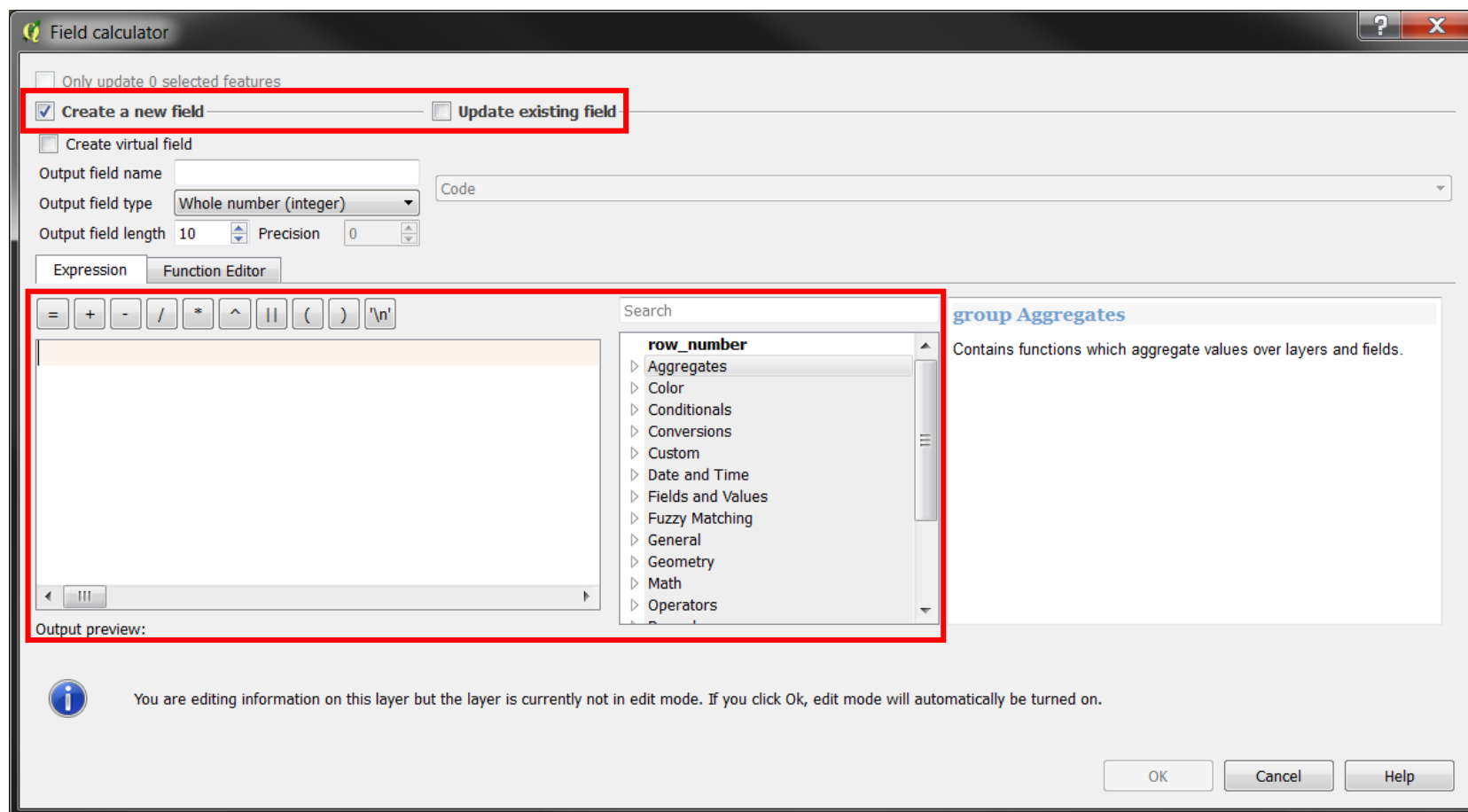


Editing attributes using Field calculator



Allows you to set a single attribute value for all records.

- Simple value
- Derived by calculation (*using functions*)



Editing attributes using Field calculator

Allows you to set a attribute values on **specific records**.

- Conditional

```
CASE
  WHEN      <field> <operator> <valueA> THEN <value1>
  WHEN      <field> <operator> <valueB> THEN <value2>
  ELSE      <value3>
END
```

i.e. classify the Farm dimension by number of animal

```
CASE
  WHEN      nanim >= 0   and nanim <= 250 THEN 'rural'
  WHEN      nanim > 250 THEN 'industrial'
  ELSE      NULL
END
```

Practical exercise (2.6)

2_6_ex_editing spatial information.doc

Objectives:

- Create new vector layers
- Use *editing tool* to edit features