

Introduction to GPS and GIS Workshop

Institute for Social and Environmental Research – Nepal

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Day 2 Outline

1. How to collect data with GPS
2. Practice collecting GPS data (outside)
3. Transfer GPS data to Quantum GIS
4. Learn how to make polygons from GPS data
5. Make a finished map (PDF or jpg)

Collecting Data with GPS

Types of GPS Data

- A Garmin GPS unit, can do two things:
 - Waypoints
 - Tracks
- Waypoint = Point
- Track = Line
- Garmin GPS cannot directly collect polygon
 - BUT: we can collect a line and convert it to a polygon in Quantum GIS

Using a GPS: Collecting a Point

1. Stand on the point you want to collect
2. Make sure the GPS accuracy is under 10 m
3. Start collecting point

- Carry a notebook to record attributes for each point

Using a GPS: Collecting a Line

1. Stand at the beginning of the line
2. Make sure the GPS accuracy is under 10 m
3. Clear track log
4. Turn on track log
 1. Start walking
 2. At end of line, stop walking and stand still.
5. Turn off track log
6. Save track

- Carry a notebook to record attributes for each line

Using a GPS: Collecting a Polygon

1. Stand at the beginning of the polygon
 2. Make sure the GPS accuracy is under 10 m
 3. Clear track log
 4. Turn on track log
 1. Start walking
 2. Walk around the polygon
 3. Pause for 3 seconds at each corner
 4. Finish standing in the same place you started. Stop walking and stand still.
 5. Turn off track log
 6. Save track
- Carry a notebook to record attributes for each polygon

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GPS Practice

- We will collect data to make a map of the DDC offices
- Each team will collect GPS data for:
 - 4 points
 - A point mapping the gate to the DDC parking area
 - A point mapping the main door to the DDC building
 - 2 other points (you decide, and label them)
 - 2 lines
 - 1 line for each of the two roads outside the DDC
 - 1 polygon mapping the DDC parking area
- Bring a notebook to record attributes

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