Tool Name: Transect Walk								
What is it?	A transect walk is a tool for describing and showing the location and distribution of resources, features, landscape, main land uses along a given transect.							
What can it be used for?	<ul> <li>identifying and explaining the cause and effect relationships among topography, soils, natural vegetation, cultivation, and other production activities and human settlement patterns</li> <li>identifying major problems and possibilities perceived by different groups of local analysts in relation to features or areas along the transect</li> <li>learning about local technology and practices</li> <li>contributing as a tool for site selection</li> <li>triangulating data collected through other tools</li> </ul>							
What does it tell you?	Natural resources, present land use, vegetation, changes in the physical features and cropping systems, and so on in villages Public resources, land use, social differentiation and mobility in urban communities							
Complementary tools	Community resource map, social mapping, time line, seasonal calendar							
Key elements	This simple tool is easily adopted and replicated at the community level. It involves outdoor activities, on-field observation, discussions, and diagramming.							
Requirements								
Data/information	The transect walk is an information-gathering exercise; the only prior information required is key informant advice on identifying the transect line routes and to purposively select local analysts.							
Time	2 to 3 hours							
Skills	Good participatory facilitation skills and knowledge							
Supporting software	No software needed							
Financial cost	This tool will cost \$30,000 to \$100,000 as part of a participatory study, depending on the number of communities sampled and the geographical scope of the study.							
Limitations	This tool only takes into account the currently "observable" situation and features, serving as an entry point for more in-depth analysis.							
References and applications	CARE. 2002. Household Livelihood Security Assessments: A Toolkit for Practitioners.							
	FAO. The Forest Manager's Guide to Participatory Forest Management. Module 3. The Participatory Process in Forest Management. Forestry Policy and Institutions Branch, Forestry Department.							
	module3.pdf.							
	de Zeeuw, H. and J. Wilbers. 2004. <i>PRA Tools for Studying Urban Agriculture and Gender</i> . Resource Centre on Urban Agriculture and Forestry (RUAF). <u>http://www.ruaf.org/ruafpublications/gender_tools.pdf</u> .							
	Integrated Approaches to Participatory Development (IAPAD) website focuses on sharing information on participatory mapping methodologies and processes: <a href="http://www.iapad.org/transect_mapping.htm">www.iapad.org</a> . Transect mapping: <a href="http://www.iapad.org/transect_mapping.htm">http://www.iapad.org/transect_mapping.htm</a> .							
	Rock, F., ed. 2001. <i>Participatory Land Use Planning (PLUP) in Rural Cambodia</i> . Annex 11. Ministry of Land Management, Urban Planning and Construction (MLMUPC), Cambodia. <u>http://www.mekonginfo.org/mrc_en/doclib.nsf/0/BA7AA16ECF97B14247256BC9</u> 0030DFF1/\$FILE/Annex11.html.							

# **Transect Walk and Diagramming: Procedures and Examples**

#### Time, Materials, and Skills Needed

Two to three hours should be allowed to do a transect walk, produce and analyze a transect diagram, and ensure that a full discussion occurs with local analysts. In large areas where a transect walk would take longer to produce (for example, four or more hours), it might be sensible to divide it up into smaller transect segments that can be combined later. Ask the local analysts their views on this schedule.

Large sheets of paper and markers are required. Notebooks/paper and pens are needed to make a copy of the diagram and also for the note-taker to record the discussion generated during the diagram development. If the diagram is drawn on the ground, then a large area will be needed, as well as a range of objects such as sticks, stone, leaves, seeds, and so on that the analysts can use to represent features on the diagram.

The group will include a facilitator, observer/note-taker, and selected local analysts. The facilitator and observer/note-taker should be experienced in both the principles behind the use of participatory tools and methods in addition to their practical use.

#### Possible Approach

The following approach is a general example that can be adapted to suit the local context, views of local analysts, and the research objectives.

**Step 1: Select Local Analysts.** Identify the groups of people to talk to about their perceptions of their community and its resources. These decisions will be based on the objectives and depth of information required for the research. For example, separate groups of men and women might be useful because women and men might use different resources: women will show the resources and features they think are important (such as water sources, firewood sources, and so on) and men will show those they think are important (such as grazing land, infrastructure, and so on). However, it might be necessary to break down the population into further categories (such as ethnicity, well-being category, or caste). Groups of five to ten local analysts should reflect any relevant and important social divisions.

**Step 2: Provide Introductions and Explanations.** When working with each group, the facilitator and observer/note-taker should begin by introducing themselves and explaining carefully and clearly the objectives of the walk and discussion. Check that the local analysts understand and feel comfortable with what will be discussed.

**Step 3: Do a Transect Walk and Producing a Transect Diagram.** Discuss with the local analysts the route they would like to follow on the walk. This decision could be based on the community resource map if one has already been produced. Ask the analysts to think carefully and plan a route that covers the main variations in topography and other features they want to see and show during the walk. Explain that the route does not have to be straight, but can meander if necessary.

With the local analysts, start at the edge of the area and begin the walk. As the walk progresses, stop at key features or borders of a new zone (such as residential, topographic, land usage, and so forth) and record the distance from the last zone. As an alternative, stop every 100 paces (or another suitable interval).

Ask the local analysts to discuss and describe everything encountered or noticed and to explain the key characteristics of areas/features they see. Facilitate this discussion by asking questions about the details (along the same lines as the community resource map) and by making observations. Observe and record the details that the local analysts encounter. Make notes of all vital information gathered and draw sketches where necessary.

It is not necessary to stick to the original planned route. Deviate when useful or interesting, or even at random, to observe the surrounding area and to gather relevant and useful information. Walk slowly with the local analysts and try to understand the physical features in the village from different perspectives. Interview people met along the way to obtain local perspectives from people who might not have been able, or felt able, to join the original local analysts (these interviews might provide interesting perspectives from people usually marginalized during formal activities).

After the transect walk has finished, sit down in a suitable place with the local analysts to discuss and record the information and data collected. Prepare an illustrative diagram of the transect walk using the information. Where more than one transect walk has been completed, prepare a combined chart and compare results.

The diagrams can be prepared on a large sheet of paper (or on the ground). On the top line, illustrate the different zones that the local analysts visited. Down the side, list headings of the areas of interest (plants, land use, problems, drainage system, and so on) and then fill in the details of what was observed in each zone.

**Step 4: Analyze a Transect Diagram.** It might be useful to have a list of key questions to guide a discussion about the information gathered during the transect walk. Key questions might include the following examples:

- What resources are abundant or scarce?
- How do these resources change through the area?
- Which resources have the most problems?
- Where do people obtain water and firewood?
- Where do livestock graze?
- What constraints or problems are in the different areas?
- What possibilities or opportunities are in the different areas?
- How will a proposed policy change or implementation affect the features and characteristics of different areas?
- Where do different population sub-groups live? Are they segregated or mixed? Do the poorest households live in certain areas (such as on the edge of an area/community)?

If local analysts have sufficient time, it might be useful to ask them to draw a series of diagrams to illustrate changes over time.

If there are several different groups, ask each group to present its diagram to the others for their reactions and comments. Are there serious disagreements? If so, note these and if a consensus is or is not reached.

**Step 5: Conclude the Activity.** Check again that the analysts know how the information will be used. Ask the analysts to reflect on the advantages, disadvantages, and the analytical potential of the tool. Thank the local analysts for their time and effort.

#### Points to Remember

Good facilitation skills are key. The approach outlined above is a general guide; be flexible and adapt the tool and approach to local contexts and needs.

## Case Study Example: Transect Diagram in Bangladesh

The transect diagram in figure 1 illustrates the resources, usage, problems, and recommendations in various zones of the area (such as road, homestead, home-garden, crop field, pond embankment, and pond) in a household's area.

# Figure 1. Transect Diagram from a Household Livelihood Security Assessment in Bangladesh, 2002

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Land use	Road	Homestead	Home-garden	Crop field	Pond embankment	Pond
Soil	Clay	Clay-loam	Clay-loam	Silty-loam	Clay	Clay
Trees and vegetables	-	Trees and vegetables, shop	Pumpkin, bean, cucumber, tomato, sugarcane, amaranth, data, radish, etc.	-	Pumpkin, bean	-
Стор	-	Pumpkin, beans, Betelmat, Coconut, Guava, Mango and others.	Pumpkin, bean, cucumber, tomato, amaranth, data, spinach, radish, etc.	BRRI-Dhan- 8,11,12,14,28,29, Amon, potato, jute, etc	Betel nut	
Livestock	-	Cow, goat, duck, chicken	Cow, goat, duck, chicken	Cow, goat (during winter season) rearing	-	-
Fish	-	-	-	Shol, gojar, taki, puti, khalisa, etc.	-	Rui, catla, mrigal, big head, silver carp, mirror carp, pangas.
Problems	Most of the roads are kancha	Unemployment and disease	Stealing, pest and disease incidence, lack of irrigation facility	Disease, lack of irrigation facility, high price of agricultural input, lack of agro- technical knowledge	Lack of landuse knowledge	Diseases, unavailability of good quality fry.
Recommendations	Activation of LGED	Need more nutritional awareness, activation of service centres	Motivation of farmer to adopt improved agricultural practice, Increased accountability of agricultural departments, Initiation of small scale irrigation project.	Need small-scale irrigation project and popularization of low price agricultural tools and technology, expansion of agricultural knowledge through concerted effort	Training	Needs aquaculture training with follow up mechanisms, establishment of hatchery for the availability of good quality fry. Ponds should be used for commercial fish production purpose.

Source: CARE 2002.

## Case Study Example: Transect Diagram in Philippines

Figure 2 shows a diagram produced from a transect walk led by female local analysts in Mt. Pulag National Park, Benguet, Philippines in 1997. This transect map shows land use, soil

color and texture, plants, animals, slope elevation, problems, and opportunities in three zones of the barangay (village).





Source: IAPAD n.d.