

<b>Tool Name: Livelihood Matrix Scoring</b>	
What is it?	This tool is a method of investigating preferred livelihood options of population subgroups against specified criteria.
What can it be used for?	<ul style="list-style-type: none"> <li>identifying livelihood options that are preferred and prioritized by local analysts</li> </ul>
What does it tell you?	<ul style="list-style-type: none"> <li>degree to which livelihoods are preferred or prioritized against specific criteria</li> <li>criteria and the “trade-offs” involved in choosing between alternatives</li> <li>the possible impacts of policy changes on livelihood options and preferences</li> </ul>
Complementary tools	Community resource map
Key elements	Emphasis should be on the identification of preferences from the point of view of local analysts rather than a description of current livelihood strategies.
<b>Requirements</b>	
Data/information	This tool generates data and information; the only prior information required is for sampling analysts.
Time	1.5 to 2 hours
Skills	Good participatory facilitation and social analytical skills; a natural resource disciplinary background is useful.
Supporting software	No software needed
Financial cost	This study will cost \$30,000 to \$100,000 when conducted as part of a participatory study, depending on the number of communities sampled and the geographical scope of the study.
Limitations	<p>Subjective criteria for making decisions and choices might not be clear or discussed.</p> <p>Investigation of livelihood issues might be highly sensitive in particular contexts (for example, where conflicts exist over livelihood resources).</p>
References and applications	<p>Brocklesbury, M.A. 2002. <i>Chars Livelihoods Programme, Diversity and Livelihoods Assessment</i>. “Fieldwork Guide: Annex One: Outline of Methods.” Swansea: Centre for Development Studies.</p> <p>Cramb, R. A., and T. D. Purcell. 2001. “How to Monitor and Evaluate Impacts of Participatory Research Projects: A Case Study of the Forages for Smallholders Project.” CIAT Working Document 185. Centro Internacional de Agricultura Tropical (CIAT), Cali, Colombia. <a href="http://www.ciat.cgiar.org/asia/how-to/WHOLE.PDF">http://www.ciat.cgiar.org/asia/how-to/WHOLE.PDF</a>.</p> <p>———Part B: Methods and Tools—Experiences with a range of M&amp;E Techniques. <a href="http://www.ciat.cgiar.org/asia/how-to/PART_B2.PDF">http://www.ciat.cgiar.org/asia/how-to/PART_B2.PDF</a>.</p>

## Livelihood Matrix Scoring: Procedures and Examples

Matrix scoring has advantages over preference scoring because it enables the relative importance (strength of preference) of the different options to be determined in addition to the rank/order of preference. In addition to demonstrating the magnitude or size of differences between a set of preferences, matrix ranking also enables the identification of criteria and of the “trade-offs” involved in choosing between alternatives.

### Time, Materials, and Skills Needed

Allow one hour to produce and analyze a livelihood matrix and to ensure that a full discussion occurs with local analysts.

Markers and large sheets of paper are required. Notebooks/paper and pens will be needed to make a copy of the diagram and for the note-taker to record the discussion generated during the diagram development. The livelihood matrix can also be drawn on the ground; if this is the case, then a large area will be needed as well as a large supply of objects such as stones or beans.

The discussion 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 as well as in 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 livelihoods. 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 and prioritize different assets. However, it might also 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 discussion. Livelihood matrix scoring should provide an understanding of how the analysts perceive the major contributions made by different livelihood options (occupations) and can also be used to show the potential for livelihood diversification. It can also be used as a starting point for a discussion with local analysts on the possible impacts of policies on livelihood options and preferences. Check that the local analysts understand and feel comfortable with what will be discussed.

**Step 3: Produce a Livelihood Matrix.** Ask the local analysts to draw a matrix on a large sheet of paper or on the ground. Start with six rows and four columns, but explain that more can be added if necessary.

Ask the local analysts to list all of their main livelihood options and write these in the first column (see figure 1). Symbols can be used as well as, or instead of, words if necessary or if the analysts prefer. This option might help to ensure that all of the group members can follow the matrix, which is a necessity.

The criteria in the example in figure 1 are income generation, security during crisis, and preferred option for development intervention. However, in the context of a poverty and social impact assessment, other appropriate criteria could be used/added.

**Figure 1. Sample Matrix for Participatory Assessments of Livelihood Options and Development Interventions in Bangladesh**

Livelihood options	Criteria		
	Income generation	Security during crisis	Preferred option for development intervention
Sell labor (locally)			
Sell labor (migrate)			
Crop production (own or share)			
Livestock production (own or share)			
Homestead gardening			
Fishing			
Collecting grass ( <i>Kash</i> )			
<i>Dhanchia</i> production			
Making/selling <i>ghoshi</i>			
Other (such as petty trade, hawking, buying and selling agric. produce/milk and so on)			

Source: Brocklesby 2002.

Ask the analysts to assess each livelihood option they have listed against the criteria in the three columns and, based on the consensus of the analysts, allocate a fixed number of stones or beans between the various livelihood options/criteria to show the relative preference weighting for each option and criteria.

**Step 4: Analyze a Livelihood Matrix.** The completed matrix will enable an assessment of priorities from the viewpoint of the local analysts. Start a discussion to ensure that any inconsistencies are resolved and that there is consensus among the group of local analysts regarding the matrix.

Use a checklist if necessary to guide the discussion and probe into issues such as, for example, reasons why one livelihood option is scored higher than others against particular criteria. Ask about the likely impact of a proposed policy change on livelihood options and preferences. Make a record of the discussion as the information is provided.

It is also possible to use statistical analysis to identify commonalities and differences between population subgroups, for example by using multivariate analysis of variance (MANOVA).

**Step 5: Conclude the Activity.** Ensure that the matrix results have been recorded and that the local analysts have a copy if they wish. Check again that the local analysts know how the information they have discussed and provided will be used. Ask them 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: Income and Livelihood in Malitbog, Philippines**

The matrix in figure 2 shows how a female small-holder farmer in Malitbog, an upland area of the Southern Philippines, allocated 100 tokens to show her preference for a range of livelihood and farm activities/produce in terms of cash income and home consumption (subsistence income).

**Figure 2. Income and Livelihood Matrix Produced by a Female Small-Holder Farmer in Malitbog, Philippines**

Activity	Income and savings	Home consumption	Total
Maize	●●●●●●●●●●●●		12
Banana	●●	●●●●●●●●●●●●	12
Fruit	●●●●	●●●●●●●●●●●●●●	18
Vegetables	●●●●	●●●●●●	10
Livestock	●●●●	●●●●●●	10
Forage	●●●●	●●●●	8
Kapok		●●●●	4
Sweet potato	●●●●	●●●●●●	10
Weaving	●●●●●●	●●●●●●	12
Laboring		●●●●	4
<i>Total</i>	<i>40</i>	<i>60</i>	<i>100</i>

Source: Adapted from Cramb and Purcell 2001.