**Tool Name: Causal Flow Diagram**

| What is it? | This tool is a method of showing diagrammatically the causes, effects, and relationships between events or patterns of behavior. |
| What can it be used for? | - examining relationships among economic, political, social, and environmental factors  
- examining the effects of changes or innovations |
| What does it tell you? | - the often-complex causes and effects of an event, trend or pattern of behavior that is seen as significant by a particular social group  
- the likely chain of impacts of a proposed policy change |

**Complementary tools**  
Matrix ranking and scoring

**Key elements**  
This participatory data generating process uses local perceptions of cause-and-effect relationships.

**Requirements**

| 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**

Flow diagrams produced that show linear relationships might be oversimplifications of more complex realities. However, there is also a danger that diagrams can quickly become very complex and potentially confusing. Sensitive issues (such as causes of problems) might arise that impact on group dynamics and need good facilitation skills to handle effectively.

**References and applications**

Causal flow Diagram: Procedures and Examples

Time, Materials, and Skills Needed
Allow up to two hours to produce a causal flow diagram 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 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 views and analysis. These decisions will be based on the objectives and depth of information required for the research and on the local context. For example, can the population be divided along gender lines (men and women) or is it necessary to break down the population into further categories (such as young men/women, boys/girls, old men/women, wealthy/poor women, and children in female-headed households)? 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. Check that the local analysts understand and feel comfortable with what will be discussed.

Ask the local analysts to select an activity, event, or pattern of behavior, the causes and impacts of which they wish to explore. This selection could be done through facilitating a discussion with local analysts that leads to the identification of an issue (perhaps using matrix ranking or scoring) that is a priority for them. Alternatively, an event that has resulted from or which is associated with a proposed policy change could be pre-identified and the local analysts then asked if they are willing to discuss it.

Write the selected event or pattern of behavior on the paper and ask the local analysts to identify its causes and impacts. In the case of a proposed policy change, for example, the focus might be on impacts rather than causes. Ask the analysts to write down the causes/impacts and to use lines to establish the inter-linkages between events. Try to keep the diagrams simple by keeping the causes/impacts to less than 20. Ask the analysts to indicate the direction or “flow” on the lines between events and, where possible, indicate whether an impact is positive or negative.

Where appropriate, encourage the local analysts to think of primary, secondary, and tertiary effects, grouping these into different subsystems.
**Step 4: Analyze a Causal Flow Diagram.** While the group of analysts is producing the causal flow diagram, probe the reasoning behind their analysis. Ask them to differentiate the causes and effects they have identified between different social groups and different geographical communities. If the event or behavior pattern being analyzed is the result of a policy change (such as an increase in the cost of utilities or a reduction in price subsidies) try to link this analysis to other policy interventions or actions that might alter or improve outcomes. Cross-check and probe for possible inconsistencies within the diagram. Where possible, cross-check with other data sources. For example, does the data correspond with information and analysis from other participatory tools, key informants, or secondary data? If not, why not?

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 whether a consensus is reached.

**Step 5: Conclude the Activity.** Ask the analysts to make a copy of the diagram on paper for the research team. Check again that they 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: Urban Poverty Assessment in Jamaica**
A group of youth in a poor urban community produced the following causal flow analysis of the impact of reduced access to electricity (see figure 1). A lack of electricity (“light”) was perceived to lead quickly to restlessness, social unrest, and violence.
Figure 1. Impacts of light and No Light, Campbell Town

JPS demands old bills be cleared up. Least cost $69,895.00

- remove meter
- fear
- more violence
- restlessnes
- murder, war
- police harassment and beatings
- steal light
- corner youth together
- "To save life"
- "To live"

No light

Light

- nuff music
- cable
- TV
- youth entertained
- less frustrated
- less idle
- off the streets
- peaceful community
- steal light
- less war, crime
- more violence
- restlessnes
- "To save life"
- "To live"

Source: Moser and Holland 1997.