

# ***NGO-IDEAS***

[www.ngo-ideas.net](http://www.ngo-ideas.net)

**„Tiny Tools“**

## **Measuring Change in Communities and Groups**

### **An Overview**

v 1.2.1, January 2012

**IMPACT PLUS TEAM:**  
**Bernward Causemann**  
**Eberhard Gohl**  
**Verena Brenner**

Planckstrasse 6, D-70184 Stuttgart, Germany  
[www.impact-plus.de](http://www.impact-plus.de)

**In Cooperation with**  
**George Cottina**  
**Godofredo Limotlimot**  
**C. Rajathi**

The logo for Impact+ features the word "Impact" in a blue, cursive script font, followed by a green plus sign (+).

## Table of Contents

<b>Introduction to the Overview: Tiny Tools</b> .....	<b>3</b>
<b>A. Analysing trends</b> .....	<b>4</b>
A.1. Lifeline / Quality of Life Curve .....	4
A.2. Trend Analysis .....	5
A.3. Road Journey Diagram .....	6
A.4. Kasese Tool .....	6
A.5. Gender Role Transformation .....	7
<b>B. Causes for Change</b> .....	<b>7</b>
B.1. Activity List .....	7
B.2. Influence Matrix .....	8
B.3. Causal Diagrams .....	10
<b>C. Narratives</b> .....	<b>11</b>
C.1. MSC light .....	11
C.2. Tree of Change .....	11
C.3. Government and Opposition .....	12
<b>D. Some Consequences</b> .....	<b>12</b>
D.1 A Combination of Tools: MAPP and others .....	12
D.2 Participatory Rural Appraisal Tools .....	13
D.3 Words of Caution .....	13
The NGO-IDEAs Publications .....	14

## Introduction to the Overview: Tiny Tools

Why “Tiny Tools” for assessing change? Currently, change is mostly assessed by NGO staff or external experts. The vision of this paper is that communities assess and reflect change themselves and make use of that reflection with appropriate tools. All the tools presented here are relatively quick and easy to learn (therefore “tiny”). With Tiny Tools we can assess change in one session. They can therefore be used where there are not baselines.

They are structured and systematic, and they are all widely tested: Experience shows that these tools lead to new insights, mobilise enthusiasm and increase the capacity of communities to bring about further change. The Tiny Tools are in line with what Participatory Rural Appraisal (PRA) wanted to achieve. Many are slight variations of PRA tools. For a detailed description of concepts, see the NGO-IDEAs Impact Toolbox ([www.ngo-ideas.net/impact\\_toolbox](http://www.ngo-ideas.net/impact_toolbox)) and the NGO-IDEAs Manual Self-Effectiveness ([www.ngo-ideas.net/monitoring\\_self\\_effectiveness](http://www.ngo-ideas.net/monitoring_self_effectiveness)).

### Our Vision for the Tiny Tools

Communities assess the change that happens around them. Through structured reflection with tools like these, they

- realise what change happened,
- come to understand what led to this change,
- become aware of how they can influence developments, and act on that.

This happens initially with the facilitation from NGOs or other outsiders. This process also provides NGOs with a better understanding of the dynamics and priorities in a community.

The tools are designed to visualise change, but also enable communities to reflect on the reasons of change or verify assessments. They may be implemented once or continuously over time. We know that the time of community members is precious, and limited. Therefore all Tiny Tools can be performed in a relatively short session, provided facilitators (it could be field staff or project officers) are experienced – and the community knows and trusts them. The amount of time spent on the application of the tools may however be prolonged according to the needs of a community or NGO. All of these tools are easy to learn for a facilitator experienced in participatory processes.

Which tool should be introduced to which community? It is typically the decision of a development organisation (or external experts) which tools they want to introduce into a community. The staff need to assess which tool will lead to learning and action. It could also be that the staff realise aspects of change that they do not understand well enough. These tools are good for exploring change that we have not planned for and not anticipated. They are also good for exploring change in a context where we have no prior information. Communities are the best experts for their situation, but we emphasise that the tools should be used in ways that benefit and empower the communities or individuals participating. The tool implementations should lead to consequences on the grassroots as well as the NGO level.

### Manuals

For some of these tools, NGO-IDEAs has developed short step-by-step guides how to facilitate the tools in communities. See [www.ngo-ideas.net/tiny\\_tools](http://www.ngo-ideas.net/tiny_tools).

All Tiny Tools can be integrated into PIAR, the Analysis tool in the NGO-IDEAs Impact Toolbox. Also, the Tiny Tools can help to prepare for the application of the Toolbox tools. They help to make people aware of changes that can be observed. The following box gives some hints how Tiny Tools relate to the Impact Toolbox tools, and to what extent they help to attribute change to development interventions.

Tool	PWR	SAGE	PAG	PIAR	Attribution
Lifeline / Quality of Live Curve	---	Preparation	Preparation	Yes	+
Trend Analysis	---	Preparation	Preparation	Yes	+
Road Journey	---	Preparation	Preparation	Yes	±
Kasese Tool	---	Preparation	Preparation	Yes	±
Gender Disaggregation	---	---	---	Yes	---
Activity List	---	Preparation	---	Yes	+
Influence Matrix	---	---	---	Yes	++
Interdependence Matrix	---	---	---	Yes	++
Causal Diagrams/Diagramming	---	Preparation	Preparation	Yes	++
Most Significant Changes light	---	Preparation	Preparation	Yes	±
Tree of Change	---	Preparation	Preparation	Yes	+
Government and Opposition	±	---	---	Yes	+

**This paper is just an appetizer.** It only gives a short overview of some tools that are available. It is not a guide for implementation. Some guidelines are available on [www.ngo-ideas.net/tiny\\_tools](http://www.ngo-ideas.net/tiny_tools). We will be grateful for suggestions of more tools, for more reference literature and especially for feedback on practical experience with the tools. Please contact [bc@causemann.org](mailto:bc@causemann.org) or [gohl@impact-plus.de](mailto:gohl@impact-plus.de).

The Tiny Tools are classified in three categories:

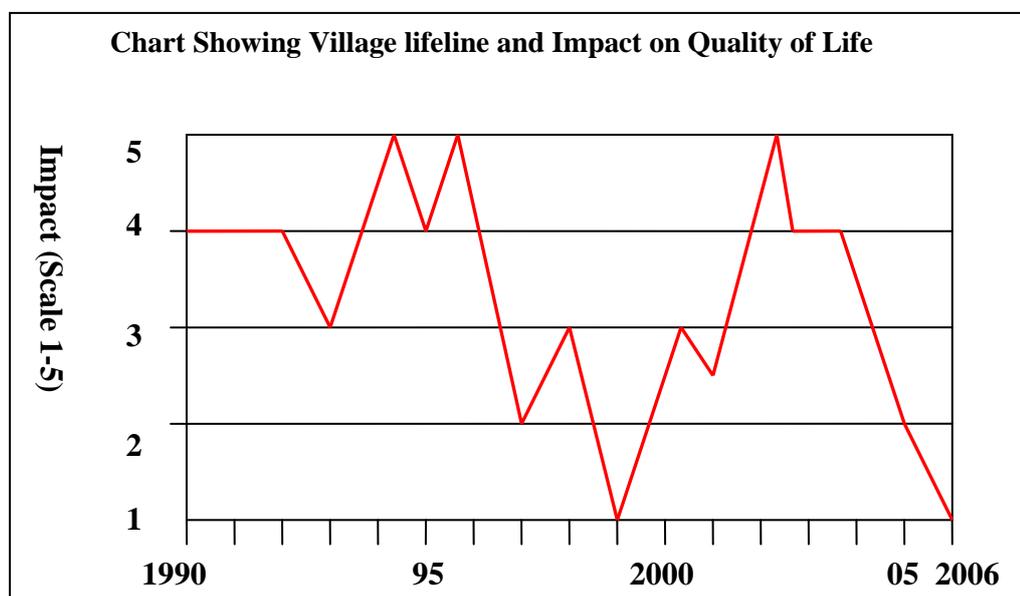
- A. Tools to analyse trends
- B. Tools to analyse causes of change
- C. Narrative tools

## A. Analysing trends

### A.1. Lifeline / Quality of Life Curve

How has life developed in a community? Lifeline gives the participants and the facilitators a good idea of the development in a community. Lifelines can also show experiences and the history of people, organisations or communities. Community members are asked in a meeting what time they can remember in their community. Often a significant event is taken as starting point (a drought, a bumper harvest, violent clashes, the building of a road etc.). People name those years that have been best and worst. The best are given 5 points: the highest rating. The worst get 1 point: the lowest rating. Then all other years are given between 1 and 5 points. A graphic description of developments is created. The rating is what makes it different from conventional time-lines. The discussion in the community generates much information (and reflection) on what caused the developments. Community members raise their level of awareness on the situation in the community. The explanations they give are as important to note as the figures themselves.

The following example shows changes in the quality of life in a community. The NGO started working in the community in 1996. But diseases and poor harvests let the situation decline. Slow recovery through development efforts, the building of a dam in 2002 and better rains led to steep improvement. A fire and a disease led to the poor rating in 2005/6. In conclusion, very poor harvests, calamities and serious diseases are causes for the worst conditions in certain years, major development investments and very good harvests make very good years.



Source: Bernward Causemann/Sachin Mardikar: Impact Study Chetana Vikas, Tübingen 2007

**Manual**  
 The NGO-IDEAs "Guide to Lifeline" provides a detailed description as well as different examples on how to use Lifeline in different variations ([www.ngo-ideas.net/tiny\\_tools](http://www.ngo-ideas.net/tiny_tools)).

**Links**  
[www.intercooperation.ch/offers/download/ic-india/pme-1.pdf](http://www.intercooperation.ch/offers/download/ic-india/pme-1.pdf)  
 Susanne Neubert, Description and Examples of Mapp. Method for Impact Assessment of Programmes and Projects, DIE, Bonn/Lusaka 2010 ([www.ngo-ideas.net/tiny\\_tools](http://www.ngo-ideas.net/tiny_tools)).  
 International HIV/AIDS Alliance, Tools Together now! 100 participatory tools to mobilise communities for HIV/AIDS, Brighton, 2006, p. 74 ([http://www.aidsalliance.org/includes/Publication/Tools\\_Together\\_Now\\_2009.pdf](http://www.aidsalliance.org/includes/Publication/Tools_Together_Now_2009.pdf)).

There are many possible variations. Similar time lines (graphical time trends) can be obtained when asking for important changes in people’s lives: economic, social, cultural ..., even with regard to very specific aspects. They can be used to analyse contributions to change (why does the line go up or down?), they can be differentiated according to social groups (e.g. one line for women, one for men / one for old, one for young people), and it can be prolonged by some years (e.g. a line that ends in 2012 could be continued into 2015). This “look into the future” may help to identify how people see the sustainability of changes.

## A.2. Trend Analysis

Members of a community determine the most important criteria of social development, or quality of life in their community. For each criterion, the participants then rate this criterion for years in the past. That gives an idea about the trends that the community underwent in various aspects. Notes need to be taken of the explanations that people give for the ratings.

This tool gives a more differentiated, disaggregated view of developments than Lifeline. It can well be done after a Lifeline. In the discussion, the various causes of changes and trends are described. That leads to an increased understanding by the community and by facilitators. It can help the community to understand on which activities they will put their priorities. The future trend can also be assessed.

### Resources

The NGO-IDEAs “Guide to Trend Analysis” provides a detailed description as well as different examples on how to use Trend Analysis in different variations ([www.ngo-ideas.net/tiny\\_tools](http://www.ngo-ideas.net/tiny_tools)).

### Links

Susanne Neubert, Description and Examples of Mapp. Method for Impact Assessment of Programmes and Projects, DIE, Bonn/Lusaka 2010 ([www.ngo-ideas.net/tiny\\_tools](http://www.ngo-ideas.net/tiny_tools)).

Table: Trend analysis for Kalé										
Criteria	Year								Trend '92 - '97	
	1990	'91	'92	'93	'94	'95	'96	'97		
Project begins ↓										
<b>Improvement or impoverishment of livelihoods</b>										
Agricultural yields	••••	••••	•••••	••••	•••	••••	••••	•••	-	
Family incomes	••	••	••	•••	••••	••••	••••	••••	++	
Consumer prices of cereals	••••	••••	••••	••••	••••	••••	•	•••••	+	
Health status of children	••••	••••	••••	••••	••••	•••	•	••	--	
<b>Access or exclusion from resources</b>										
Access to firewood	•••	•••	•••	•••	•••	•••••	•••••	•••••	++	
Access to drinking water	•	•	•	•	•	•••	•••	•••	++	
Access to the market	•	•	•	•	•	••••	••••	••••	++	
Access to means of transport	•	•	•	•	•	••••	••••	••••	++	
Access to productive land	••••	••••	••••	•	••	•••	•••••	•••••	++	
<b>Expansion or reduction of knowledge</b>										
School enrolment rate	•	•	•	•	•	•••••	•••••	•••••	++	
Knowledge of sustainable land use	••	••	••	•••••	•••••	•••••	•••••	•••••	++	
<b>Participation in or alienation from rights</b>										
Conflicts between farmers and herders <sup>a</sup>	•••	•••	•••	•••	•	•	•	•	--	
Migration <sup>b</sup>	•	••	•	••••	••••	••••	••••	••••	++	
<b>Key:</b>	••••• = very positive	<b>Remarks</b>								
	•••• = positive	a The higher the number of points, the fewer the conflicts.								
	••• = fair	b The higher the number of points, the less migration.								
	•• = negative									
	• = very negative									

Source: Susanne Neubert, MAPP - A New Method for Impact Assessment of Poverty Alleviation Projects, Bonn 1999, see section C.1 in this paper.

### **A.3. Road Journey Diagram**

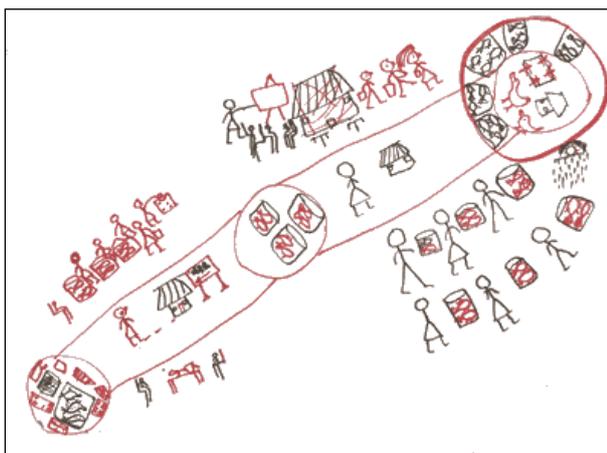
Road journey diagrams are useful for charting a group or individual’s aims and to see how original aims relate to the actual developments in a community. Workshop participants draw a common road map that describes change over time. The road may be straight or winded, diagonally upwards or downwards. Buildings, bridges or other symbols are drawn to symbolize key events, opportunities, achievements, problems, obstacles, shocks or support received along the way. It may be necessary at some stage to redraw the map if ideas change during the discussion. Separate sheets may be drafted to go into further detail regarding the key symbols on the Road Map.

Forward looking maps can be used for strategic planning, whereas backward looking Road Journey Diagrams may be used for assessing what major changes happened and what successes or failures have been perceived. They can be qualitatively and quantitatively analysed.

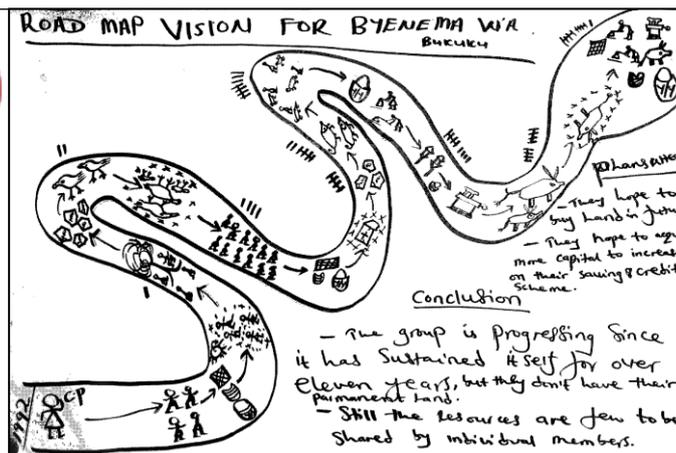
Questions could be:

- “Do we feel, we have succeeded?”
- “Have we changed along the way?”
- “What were the main achievements and challenges?”
- “Were the original objectives too ambitious or too limited?”
- “What are implications for the future?”

**Resources**  
 A Manual on Road Journeys can be found at:  
[www.lindaswebs.org.uk/Page3\\_Orglearning/PALS/PALS\\_Docs/PALS\\_%20RoadJourneys\\_Draft2005.doc](http://www.lindaswebs.org.uk/Page3_Orglearning/PALS/PALS_Docs/PALS_%20RoadJourneys_Draft2005.doc)  
 More pictorial diagrams at:  
[http://www.lindaswebs.org.uk/Page3\\_Orglearning/PALS/PALSIntro.htm](http://www.lindaswebs.org.uk/Page3_Orglearning/PALS/PALSIntro.htm)



Enterprise Road Journey, Green Home, Uganda  
 Source: Linda Mayoux 2005



Group Road Journey, KRC, Uganda  
 Source: Linda Mayoux 2005

### **A.4. Kasese Tool**

The Kasese tool was developed with a group of Persons with Disabilities in Kasese, a town in Western Uganda, who had formed a group to overcome their discrimination. Each member compared where s/he stood in terms of discrimination at the group’s start and where s/he wanted to get at. Then, s/he assessed on a scale from 1 to 10 where s/he was now. When all had scored, two questions followed: “What have you achieved that makes you be here?” and “Why do you say you are not at 10?”. This was documented and particularly the obstacles were discussed which led to plans for further action. The Kasese Tool is amongst the easiest, “tiniest” of the Tiny Tools. It was actually developed as an introduction into group and individual goal setting, which is the focus of the NGO-IDEAS Impact Toolbox where a similar but more complex procedure is described in detail.

**Resources**  
 The experience with the Kasese tool is described in more detail, step-by-step, in a documentation of NGO-IDEAS field experience ([www.ngo-ideas.net/tiny\\_tools](http://www.ngo-ideas.net/tiny_tools)).

## **A.5. Gender Role Transformation**

Have the roles of husband and wife changed over time? We need to ask both woman and man separately, and let them compare their assessments. This Tiny Tool lists a number of roles and asks how strong the position of wife and husband in each role was in the past, and how strong it is now. After conducting this exercise, it is possible to calculate the overall rate of role transformation. On each item, a scaling is done, like between 0 and 10. Criteria can be adapted according to context.

### **Links**

This tool may be combined with the tools “Gender Boxes”, “Gender Role Chart”, “Gender myths” described in: [http://www.aidsalliance.org/includes/Publication/Tools\\_Togther\\_Now\\_2009.pdf](http://www.aidsalliance.org/includes/Publication/Tools_Togther_Now_2009.pdf)

### **Matrix Assessing Gender Role Transformation**

	Woman		Man	
	Before	Now	Before	Now
<b>Attitude/Knowledge/Skills</b>				
Decision making ability				
Conflict resolution ability				
<b>Economic</b>				
Awareness on credit needs				
Increased income				
<b>Social</b>				
Equal treatment for daughters and sons				
Consciousness on self and family health				
<b>Political</b>				
Participation in village meetings				

## **B. Causes for Change**

### **B.1. Activity List**

Community members in a workshop list all project activities and project sponsors that had an influence on the community. Then they evaluate the importance of each activity for the everyday lives of the target groups, and identify those parts of the population benefiting from the activity. In the next step community members discuss and give scores for the amount of work that is needed for the implementation of these activities. Financial input could also be rated.

### **Resources**

The NGO-IDEAs “Guide Activity List” provides a detailed description as well as examples on how to use an Activity List in different variations ([www.ngo-ideas.net/tiny\\_tools](http://www.ngo-ideas.net/tiny_tools)).

In Activity Lists, the community compares different projects in a systematic way in terms of importance, that is the benefit for their daily lives. Community members can draw conclusions regarding the significance of the projects. As they tend to give points according to the actual change that comes out of the activities, the Activity List generates information on how change can be attributed to different activities and actors.

The example below is an Activity List for a village in West Africa where different organisations did a number of different development activities. These have been rated by community members. It can be seen that the health station and the school were rated highest in importance while other activities had the highest demand on their labour.

Activity	Organization	Importance for daily life	Beneficiary group <sup>a</sup>	Labour expended
Health station	OO <sup>b</sup>	•••••	M + W	•••
School	OO	•••••	M + W	•••
Nature reserves	PGRN	••••	M	•
Anti-erosion contour stone-lines	PGRN	••••	M	•••••
Composting facilities organic manuring	PGRN	••••	M	••••
Grain bank	PGRN	••••	M + W	•••
Wether fattening	PGRN	•••	M + W	••
Village savings bank	OO (?)	•••	M + W	••
Irrigated rice growing	PGRN	•••	M + W	•••••
Irrigation plant	PGRN	•••	W	•••••
Pump for well	OO	••	M + W	•
Tree plantations	PGRN	•	M	••
Bee-keeping	PGRN	•	M	•

a Where socio-professional groups are concerned, almost all the users are farmers.  
 b Other Organizations

**Key:** ••••• = very important / very considerable expenditure of labour      Women (W), Men (M)  
 •••• = important / considerable expenditure of labour  
 ••• = fairly important / medium expenditure of labour  
 •• = little importance / little expenditure of labour  
 • = no importance / no expenditure of labour

Source: Susanne Neubert, MAPP - A New Method for Impact Assessment of Poverty Alleviation Projects, Bonn 1999

## B.2. Influence Matrix

The Tiny Tools described above help to analyse impact or outcome either from the perspective of change observed, or from the perspective of the factors that may have contributed to change. The influence matrix combines the two previous perspectives: It looks both at the change, and at the causes for change, and allows for visualisation and quantification.

**Resources**  
 The NGO-IDEAS “Guide Influence Matrix” provides a detailed description as well as different examples on how to use an Influence Matrix in different variations ([www.ngo-ideas.net/tiny\\_tools](http://www.ngo-ideas.net/tiny_tools)).

**Links**  
 Susanne Neubert, Description and Examples of Mapp. Method for Impact Assessment of Programmes and Projects, DIE, Bonn/Lusaka 2010 ([www.ngo-ideas.net/tiny\\_tools](http://www.ngo-ideas.net/tiny_tools))

### Farmers Association in a village in Bangladesh

Interventions	Seed selection and development	Seed exchange	Vegetables	Organisation	Media exposure	Micro-credit	Passive sum (What has been influenced?)	
							Total positive	Total negative
Indicator for change								
1 Income	1	2	1	1	1	0	6	
2 Availability of seeds	1	2	1	2	0	0	6	
3 Skills	2	1	1	2	1	0	7	
4 Farmer-farmer relations	2	2	2	2	2	-2	10	-2
5 Food security	2	1	2	1	1	0	7	
Active sum (What has influenced?)	Total positive	8	8	7	8	5	0	
	Total negative					-2		

This example is about a program that introduced local food plant varieties in the village to replace high yield varieties. Other interventions were also rated. We gain the following insights: Farmer-to-farmer relations were most influenced by development interventions in this village. Seed selection, seed exchange and self-organisation were the most influential factors<sup>1</sup>.

<sup>1</sup> There is a methodological discussion if numbers may be added so easily. See the link on weighting in chapter C.

# NGO-IDEAS „Tiny Tools“: Measuring change in communities and groups

The influence matrix was designed to attribute observed changes to project activities, and to external influences, and to identify useful and not so useful activities. During a group discussion, the strength of the influence of every project output (or external contribution) on each social criterion is evaluated.

Step 1: Make a list of changes / criteria

Step 2: List important project activities

Step 3: Score the influence on a scale from 0 = no influence to 2 = high influence /positively or negatively

Step 4: Add up the different influences in the lines and in the columns

Step 3 gives important information on the various activities. Communities often find these reflections very relevant and enlightening. Once all the relevant influences have been included in the matrix, we form active and passive sums. These reflect how much influence each activity had (the one which reaches the highest active sum is the most influential), and they show which significant change has been influenced how much (the ones with the highest passive sums have improved the most). Positive and negative figures are summed separately. Here again it is important to also note the reasons that people give for their ratings.

## Interdependence Matrix

A variation of the influence matrix is the interdependence matrix which helps analysing to what extent the observed changes have been influencing each other.<sup>2</sup> The interdependence matrix can be used for further analysis, including graphic descriptions. That has been developed both in Cybernetics and in Social Network Analysis. In the example below, a study of a watershed project in Costa Rica, participants at a workshop have assessed which factors have what influence on each other. The factors on the left are the same as on top, the factors on the left influence those on the top. Here, 0.1 stands for no influence, 0.5 for weak influence, 1 for moderate, 2 for strong influence. Results: “Resistance to change” (no. 11) with an active sum of 20 has the highest influence. “Contamination of rivers and springs” (no. 1) with a passive sum of 16.3 is most influenced.

### Links

For more information, see: Herweg/Steiner: IMA Toolbox 2002, Part 2,

<http://www.cde.unibe.ch/Tools/pdf/imavol2en.pdf>

For Social Network Analysis, check Wikipedia, with links to software.

For an Excel template for the interdependence matrix, go to [www.ngo-ideas.net/tiny\\_tools](http://www.ngo-ideas.net/tiny_tools).

Elements / Issues		Contamination of rivers and springs	Excessive use of agrochemicals	Mismanagement of water within the farm	Bad management practices	Illegal Deforestation	Failing of management of solid garbage	High costs of agricultural and fish production	Access to the market	High costs of production due to mismanagement of inputs	Individuality and non existing group work	Resistance to change	Failing of awareness to conserve within the society	Active Sum (AS)	Degree of Interrelat. (AS*PS)
1	2	3	4	5	6	7	8	9	10	11	12				
1	Contamination of rivers and springs	2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1.1	18
2	Excessive use of agrochemicals	2	2	0.1	0.1	0.1	1	0.1	0.1	2	0.1	0.1	0.1	5.8	45
3	Mismanagement of water within the farm	2	0.1	2	2	0.1	0.1	0.1	0.1	2	0.1	0.1	0.1	6.8	65
4	Bad management practices	2	2	2	2	0.1	0.1	1	0.1	2	0.1	0.1	0.1	9.6	84
5	Illegal deforestation	2	0.1	1	0.1	2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	3.9	23
6	Failing of management of solid garbage	2	0.1	0.1	0.1	0.1	2	0.1	0.1	0.1	0.1	0.1	0.1	3	23
7	High costs of agricultural and fish production	0.1	0.1	0.1	0.1	0.1	0.1	2	0.1	1	0.1	0.1	0.1	2	8
8	Access to the market	0.1	0.1	0.1	0.1	0.1	0.1	0.1	2	0.1	0.1	0.1	0.1	1.1	4
9	High costs of production due to mismanagement of inputs	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	2	0.1	0.1	0.1	1.1	13
10	Individuality and non existing group work	2	1	2	2	1	2	1	2	1	2	2	2	18	88
11	Resistance to change	2	2	2	2	2	2	1	1	2	2	2	2	20	98
12	Failing of awareness to conserve within the society	2	2	2	2	2	2	0.5	0.1	1	2	2	2	17.6	86
Passive Sum (PS)		16.3	7.7	9.6	8.7	5.8	7.7	4.2	3.9	11.4	4.9	4.9	4.9		
Activity Ratio (AS/PS)		0.1	0.8	0.7	1.1	0.7	0.4	0.5	0.3	0.1	3.7	4.1	3.6		

Source: de Bruin, Annemarieke: Managing a watershed by managing a project, 2005. Erosion Soil & Water Conservation Group, Soil Science Centre, Wageningen University.

<sup>2</sup> The matrix is also known as „paper computer“ (Frederic Vester) or as “Participatory Systems Analysis” (Herweg/Steiner: IMA Toolbox 2002).

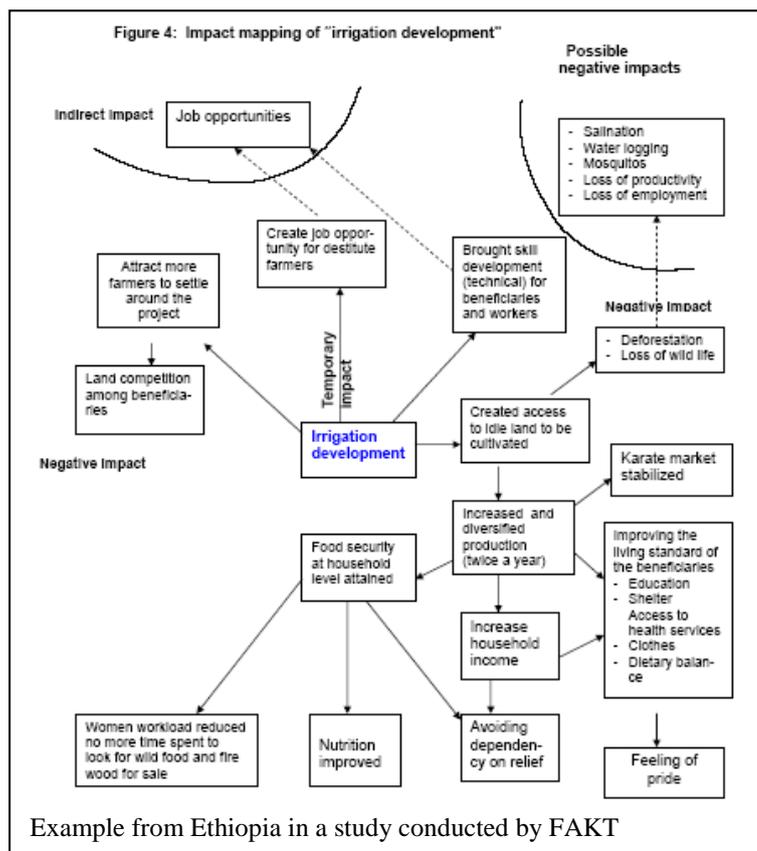
### B.3. Causal Diagrams

Causal diagrams (also called cause-effect-diagrams or linkage diagrams) are used to create a visual idea of the influences that led to change. Community members agree on what change they have observed and discuss reasons for this change. They draw or write them on paper or on the ground, and draw arrows: What caused the change? What were the consequences?

Causal diagrams are more commonly known in planning and situation analysis. In a problem tree, the causes and consequences of a problem are analysed in a chart. It is also possible to describe linked problems, no need to limit it to one. And it does not have to go from bottom to top – a chart can have loops, recursive effects and be divided into sections like in the example from Ethiopia.

One way to create a causal diagram is to start from the project outputs (the services or products of a development project, like new agricultural techniques or a self-help group) and ask a number of questions:

1. What are the important contributions or outputs of the project?
2. How did you make use of these products or services? How did you apply the new knowledge or skills?
3. What are the changes in your situation that resulted directly from this use of outputs? What were the benefits? What were the undesired changes, if any?
4. To which lasting and significant changes in your life and your environment did this outcome contribute?



#### Resources

The NGO-IDEAS "Guide Causal Diagrams" provides a detailed description ([www.ngo-ideas.net/tiny\\_tools](http://www.ngo-ideas.net/tiny_tools)) Different types of causal diagrams are described in the NGO-IDEAS Impact Toolbox, p68, and the Manual Monitoring Self-effectiveness, p 19, p 79.

#### Links

[http://www.aidsalliance.org/includes/Publication/Tools\\_Together\\_Now\\_2009.pdf](http://www.aidsalliance.org/includes/Publication/Tools_Together_Now_2009.pdf), p82

After answering these questions, community members are asked to give answers to these questions and put them in a logical sequence of what led to what (cause-effect-relationships). These answers are drawn or written in a diagram.

Usually, changes are caused not only by the use of the project's outputs. There are also significant external influences. Therefore we need to consider the questions:

- a) Which influences have contributed to the observed changes? (from inside and outside the project)
- b) Which influences have been obstacles to the observed changes? (from inside and outside the project)

In a next step, leading to action, it can make sense to add the following question:

5. To what extent will it be possible to sustain these changes, or to bring about more positive change?

## **C. Narratives**

### **C.1. MSC light**

If we ask, people can tell us about many changes in their lives and their communities. With MSC light (Most Significant Changes in a simplified form, applied only on community level), we ask people to tell stories of positive and negative change they experienced and considered very significant, i.e. very relevant for their lives. We ask each person in a group to tell one story. We ask them why this change is so significant. Then we ask all participants to select one of the stories told by the group as the most significant change, and we ask to explain why it is so significant. We help the group to understand their different criteria why they regard change as significant.

We can either ask people to talk about change that they link to the development intervention (project etc.) or just any change they experience. The more general we ask, the more unexpected changes and changes not linked to a project may be shared. It is important to also note and reflect on those stories that are not chosen as the most significant ones. The reasons why stories are regarded to be significant are as important as the stories.

#### **Links**

<http://groups.yahoo.com/group/MostSignificantChanges>  
[www.petersigsgaard.dk/PDFfiler/doing\\_away\\_with\\_%20pre\\_determined\\_indicators.pdf](http://www.petersigsgaard.dk/PDFfiler/doing_away_with_%20pre_determined_indicators.pdf)  
[www.mande.co.uk/docs/MSCGuide.pdf](http://www.mande.co.uk/docs/MSCGuide.pdf)  
[http://www.aidsalliance.org/includes/Publication/Tools\\_Togther\\_Now\\_2009.pdf](http://www.aidsalliance.org/includes/Publication/Tools_Togther_Now_2009.pdf)

MSC light focuses only on the application in communities. It is a small part of a broader M&E concept of Most Significant Changes that involves all hierarchies of a development organisation. MSC can be integrated into the general M&E system of an organisation. It is, however, not recommendable to apply MSC with the same group too often.

#### **MSC Variation: sub-group level**

In a group of 20-30 people, the participants are divided into sub-groups of about five. Each person is asked to tell one story of significant change. Each sub-group selects a story they regard as most significant and share it with the whole group. The reasons why stories are regarded to be significant are as important as the stories. Out of the selected sub-group stories, the whole group selects the most significant story of change. The stories that are not selected should not be forgotten. They might contain very important information.

#### **Example**

In Tanzania, a group of mothers of children with disabilities is asked to share stories of change. All mothers with their children are part of a community rehabilitation programme. The mothers tell stories of their children gaining skills, of some children going to school, how they gain confidence to go out into the community with their children. In the end, the group agrees to select the story of a mother who has been accepted again by her husband and her in-laws as most significant. Rehabilitation helps against the harsh discrimination that mothers of children with disability experience. That was most significant to this group of mothers.

### **C.2. Tree of Change**

Drawing a Tree of Change can help communities learn about the most significant positive changes in their village/neighbourhood, as well as who has contributed to them. In a meeting, community members tell each other about what they perceive to be significant positive changes having occurred during a given period of time (e.g. the past ten years). The group draws pictures representing each of these significant changes. Then, the group discusses how important these changes were, and who/how many people benefited from them. The group decides which of the pictures shows the most significant changes by allocating points/seeds (from 1 to 10) to each of the pictures according to the perceived relevance of the respective change. The group draws a picture of a tree. The pictures showing the three most significant changes are hung on the development tree as fruits. Then the group discusses questions, such as: What are the roots of the tree (i.e. causes for change)? Who waters the tree (i.e. contributors to the change)? Are there birds eating the fruit (i.e. possible risks)? The tree to which all participants have contributed shows their understanding of most significant changes.

Gisela Poole of World Vision Germany shared her experiences with this tool. World Vision uses it in transition processes, in which local organisations become independent of World Vision support. The tool helps to focus the transition planning on sustaining these most significant positive changes because they are perceived as valuable by the communities. Using the tree of change methodology with groups will help all stakeholders to better understand the current level of capacity and motivation/vision. Local stakeholders are more likely to take ownership in sustaining changes they consider to be very significant.

## **C.3. Government and Opposition**

This tool is a role play. Staff of an organisation is divided into three groups: one group of observers, one group of people whose task it is to defend and justify the organisation's work and its achievements ("the government") and one group whose task it is to criticise and emphasize short-comings and negative effects ("the opposition"). One person takes the role of a neutral "speaker", like in parliament, who facilitates the discussion. In the role play, government and opposition discuss of the organisation's work and achievements. "Government" emphasises the impact and its own contribution, "opposition" emphasises the short-comings and what other contributed to the change that has been observed. In the end, the observers talk about their impressions, and a general sharing can follow. Main points said during the role play can be analysed and documented. Observers, or a special person assigned can take notes. Note: The tool requires a high level of trust amongst the participants. It is advisable to have a leader of the organisation in the opposition group.

We have learned the tool from Gottfried Horneber, a German consultant of FAKT consult who occasionally uses it in evaluations. He has applied it so far only with staff of development organisations. Would a tool like this also work with community members? We would be interested in feedback.

## **D. Some Consequences**

There are more possibilities and more tools than described in this overview. More tools will be added later. There are also some limitations. This section reflects on opportunities and limitations.

### **PRA and PME-Links**

[www.fao.org/docrep/003/x5996e/x5996e06.htm](http://www.fao.org/docrep/003/x5996e/x5996e06.htm)  
[www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/1996/04/01/000009265\\_3980624143608/Rendered/PDF/multi0page.pdf](http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/1996/04/01/000009265_3980624143608/Rendered/PDF/multi0page.pdf)  
[www.intercooperation.ch/offers/download/ic-india/pme-1.pdf](http://www.intercooperation.ch/offers/download/ic-india/pme-1.pdf)  
[www.theglobalfund.org/documents/me/M\\_E\\_Toolkit.pdf](http://www.theglobalfund.org/documents/me/M_E_Toolkit.pdf)  
[www.rhrc.org/resources/general\\_fieldtools/toolkit/protocols.html](http://www.rhrc.org/resources/general_fieldtools/toolkit/protocols.html)

## **D.1 A Combination of Tools: MAPP and others**

The Tiny Tools can be combined to further enhance understanding and information. One example for that is MAPP, a collection of tools developed by Susanne Neubert that has been used to evaluate NGOs, as well as large government programmes.

MAPP combines the tools Lifeline, Trend Analysis, Activity List and Influence Matrix, plus two more tools, in a 2-day workshop with representatives of a community. It gives a very thorough understanding on the community's perception of change and its causes, including a number of steps of triangulation and validation. These are not only very informative, they are also great, elating learning experiences for the representatives of the community.

### **Resources**

Susanne Neubert, Description and Examples of Mapp. Method for Impact Assessment of Programmes and Projects, DIE, Bonn/Lusaka 2010 ([www.ngo-ideas.net/tiny\\_tools/](http://www.ngo-ideas.net/tiny_tools/))

### **Links**

A comment on MAPP by Robert Chambers can be found in his article "A Revolution Whose Time Has Come? The Win-Win of Quantitative Participatory Approaches and Methods, IDS Bulletin 41/6, Nov 2010, <http://onlinelibrary.wiley.com/doi/10.1111/j.1759-5436.2010.00181.x/abstract>

Another combination of such tools is **PALSA**: Participatory Livelihood Systems Analysis. PALSA starts with participatory assessment of the livelihood situation. Furthermore, the livelihood system is analysed. Thirdly, the methodology assesses the effects, certain projects or project interventions have on the changes of

## NGO – IDEAS „Tiny Tools“: Measuring change in communities and groups

the livelihood situation. PALSAs allow for the comparison of different project interventions and their effectiveness and efficiency in triggering positive changes. The method was developed by the FAO and tested in eight villages in Cambodia.

### Links

Martin Strele, Kristin Höltge, Markus Fiebiger, Jaqueline Were, Anke Schulmeister: Participatory Livelihoods Monitoring: Linking Programmes and Poor Peoples's Interests to Policies, Experiences from Cambodia, LSP Working Paper 21, Rome, FAO, 2006 (<ftp://ftp.fao.org/docrep/fao/009/ah455e/ah455e00.pdf>)

Yet another combination is PADEV. Instead of looking at programmes and projects of only one external actor, the changes in a region over the past twenty to thirty years are assessed. The aim is to find out which interventions contributed to which changes ([www.padev.nl](http://www.padev.nl)).

### Tools for visualising results of other tools:

There are various good practices to visualise change. These have been adapted for the development work in PRA: Maps and transects, diagrams, seasonal calendars, flow diagrams and venn diagrams can be used. Two of these tools are particularly useful to visualise change: Spider Web and Scoring List, see box.

### Resources

More guidance on Spider Web and Scoring List can be found in Herweg/Steiner: IMA Toolbox 2002, Parts 1 and 2.

<http://www.cde.unibe.ch/Tools/pdf/imavol1en.pdf>

<http://www.cde.unibe.ch/Tools/pdf/imavol2en.pdf>

These are also available in languages other than English.

### Further sources:

<http://www.kstoolkit.org/Spider+Diagrams>

## D.2 Participatory Rural Appraisal Tools

Participatory Rural Appraisal (PRA), Participatory Rapid Appraisal, Rapid Rural Appraisal (RRA) or Participatory Learning and Action (PLA) offer lots of participatory and “tiny” tools for analysing situations in the past and in the present. Therefore, all the tools are appropriate for monitoring and for analysing outcome and impact. The following tools can be used for monitoring outcome and impact:

- Maps and transects
- Diagrams
- Seasonal calendars
- Flow diagrams
- Venn diagrams

All these tools – in most of the cases graphs for visualising change – have to be combined with an adequate approach of working with the group or the individuals, and with an adequate set of questions to find out precise information on the change and of the factors that contributed to this change. Only then can we obtain reliable information on outcome and impact. Many of the Tiny Tools, and all MAPP tools, come from PRA.

## D.3 Words of Caution

These Tiny Tools do not try to solve all problems that we experience in monitoring and evaluation, or in learning about development. A few points need to be noted:

- **Reliability and validity** are limited, as with all tools. The reflection of the communities on the results of the tools will generate information that helps to put the data into perspective. If tools are applied by sub-groups at the same time (women/men, migrants/indigenous, adult/youth etc.), and the participants then compare the different results, even more insights will be generated and reliability of information increase. Like all tools in social research, these tools will not generate absolute, valid truth but show very relevant perspectives that need to be triangulated with other perspectives. Very helpful will be here the views of professionals working in the community, including field staff of NGOs. These tools cannot substitute interviews with such professionals, but tremendously complement and enrich their perspectives.
- **Figures and Narratives:** Many Tiny Tools generate figures. But these can only be interpreted together with the reasons that people give for their rating, the narratives. The figures alone can be misleading.

## NGO-IDEAS „Tiny Tools“: Measuring change in communities and groups

- **Aggregation:** The data generated can be aggregated, for each tool in a specific way. Describing how to do that, and the limitations, would take this paper too far and needs to be described elsewhere.
- **Weighting:** Some tools compile a number of different indicators and add them. But indicators might have a different weight: some are more important than others. A good reflection on weighting with lots of resources can be found on [www.mande.co.uk](http://www.mande.co.uk).
- **Quantification of Reach:** An important question in assessing development efforts is: How many people benefited? These tools do not answer that question. NGOs should have data on how many people took part in the efforts, or live in a specific community. Different sources of information need to be combined to come to an assessment of the numbers of people whose lives changed.
- **Participation:** No tool is participatory in itself. But all tools in this paper can be used in a participatory manner. They can all be facilitated so that they empower communities. Much depends on the style of facilitation, the selection of participants and the general set-up. NGO-IDEAs encourages a more participatory application, giving the groups or communities much ownership over the process and focussing on their concerns. It is part of the NGO-IDEAs participation guidelines that each application of a tool should be concluded with two questions that should be put to participants:
  - 1) Did you benefit from this tool? How?
  - 2) What are the consequences? What do you want to do to improve the situation?

### The NGO-IDEAs Publications

The NGO-IDEAs publications deal with different aspects of Participatory Impact Monitoring, involving grassroots perspectives. They are all available on [www.ngo-ideas.net/publications](http://www.ngo-ideas.net/publications)

- **NGO-IDEAs Impact Toolbox**

The Impact Toolbox describes simple tools for participatory planning and monitoring of grassroots' projects. It is designed to enable NGOs, groups and group members to steer a project to enhance positive outcomes or impacts, and reduce negative ones. (VENRO and NGO-IDEAs)
- **“How do they do it? – Civil Society Monitoring Self-effectiveness”: An NGO-IDEAs documentation of field experience**

The publication presents descriptions of examples of outcome and impact analysis, which illustrate to staff of development organisations how outcome and impact assessment can be implemented and used in different ways. (VENRO and NGO-IDEAs)
- **“Monitoring Self-Effectiveness”: A Manual to Strengthen Outcome and Impact Oriented Project Management**

The Manual intends to support an organisation to focus its planning, monitoring and evaluation procedures towards increased outcome and impact orientation. (VENRO and NGO-IDEAs)
- **NGO-IDEAs GrafStat Guide**

GrafStat is a simple and helpful software which can be used by development organisations to prepare their monitoring data for analysis. This guide focuses on applications and examples of GrafStat relevant for NGO-IDEAs.
- **NGO-IDEAs Tiny Tools for Impact Assessment**

The “NGO-IDEAs Tiny Tools of Impact Assessment” present easily applicable tools, which help to assess changes (outcomes and impacts) and its causes with only one single application. They can be used for external evaluation as well as for self-assessment of projects.