

**Practical guide for community organizations,  
(or "self help" text on) how to Assess the Role of ICT's in Community  
Development**

**This "practical manual" was created to illustrate an application in the process of the design of a the framework "Assessing ICT's Role in Development. IDRC Guidelines toward a participatory and transparent process of continuous learning" <http://bellanet.org/evaltica>**

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## **The purpose of this document:**

The purpose of this text is to offer some practical guidelines, in plain language, to members of community organizations, to help them in building self assessment methods and learning paths to enhance the effectiveness of ICT projects in support of social and community development.

It include hints, tricks, inspirations, ideas and elements for thinking. These guidelines are suggestions. You may choose to use all, none or part, depending on your own needs.

They aim to show an example of what can be done following the ethical principles and theoretical basis developed and described in the document: *"LEARNING ABOUT ICT's ROLE IN DEVELOPMENT: A framework toward a participatory, transparent and continuous process"* by Klaus Stoll, Fundación Chasquinet Michel J. Menou, The City University, London, U.K. Kemly Camacho, Fundación Acceso, Yacine Khelladi independent. (<http://bellanet.org/evaltica>). This later document has been created collaboratively through ongoing exchanges and discussions of a task force and working group.

Every context and each project is unique in some way. ICT for development includes such projects as developing a software for educating adults in the context of oral cultures, developing applications for medical use as pandemic surveys, experimenting with e-commerce with micro businesses, etc.

Our challenge is how to build practical instrument, guidelines without being too general. These guidelines need to be understood by different stakeholders, they could be from a founding agency, a governmental bureau, an NGO, an academic researcher, a sociocultural animator, or a member of a grassroots community organization. Stakeholder involvement in the project will also vary, including such functions as day-to-day operation, overall management, policy formulation, etc.

These guidelines show ONE - among many - example of a practical application, illustrating how things can be done according to the principles and ethics developed in the document: "Assessing ICT's Role in Development. IDRC

Guidelines toward a participatory and transparent process of continuous learning".

It uses an ICT community project as its example. This is partially because most of our (the task force writing this document) recent work is in this area and so we can test it while developing it, and partially because we feel it is where the possible "impacts" of ICTs on development are most important, visible or needed.

## **Some practical definitions**

### **What are the ICTs and why ICTs for development?**

See document: *"LEARNING ABOUT ICT's ROLE IN DEVELOPMENT: A framework toward a participatory, transparent and continuous process"* (<http://bellanet.org/evaltica>).

### **What is Assessment, Evaluation, Monitoring, etc.?**

See document: *"LEARNING ABOUT ICT's ROLE IN DEVELOPMENT: A framework toward a participatory, transparent and continuous process"* (<http://bellanet.org/evaltica>).

### **What and Who are the stakeholders?**

Copied from document: *"LEARNING ABOUT ICT's ROLE IN DEVELOPMENT: A framework toward a participatory, transparent and continuous process"* (<http://bellanet.org/evaltica>).

The actors, the direct stakeholders and the indirect stakeholders.

Actors include:

- the officers of the organizations that implement the activity
- the officers of the units in the sponsor or donor organizations that are directly responsible for the activity
- the officers of the local organizations that are actively participating in the project (public, private sector, NGO and OCS)
- members of the communities that are actively participating in the activities

Direct stakeholders include

- other officers and units of the organizations in charge of the activity
- other officers and units of the sponsor or donor organizations
- other officers and units of the local organizations involved in the activity
- beneficiaries: those social groups and individuals whose daily lives are directly influenced by the activity

Indirect stakeholders include:

- local social groups at the place where activities are implemented (neighborhood, extended communities, etc.)
- local organizations (local and central government agencies, private sector, NGO, OCS) that have an overall responsibility for the type of activities undertaken or issues considered
- central government
- other organizations at the national regional or international level that have an overall responsibility for, or interest in, the type of activities undertaken or issues considered
- scholars, educators and students who want to learn about the issues and activities

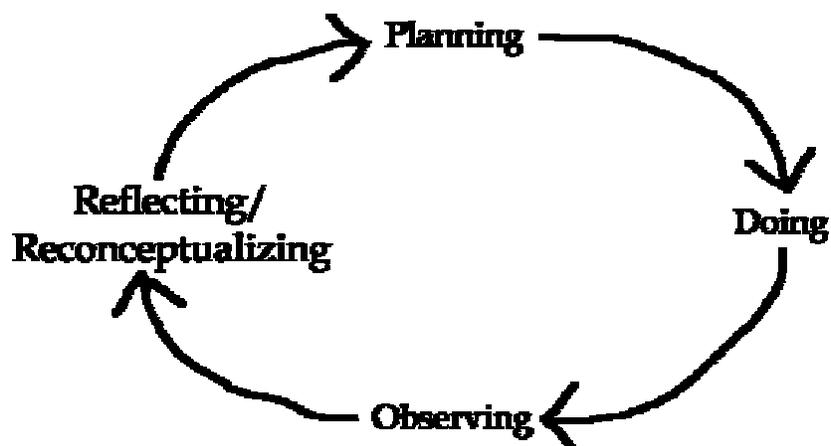
## **Why this is different from traditional evaluation patterns?**

Common characteristics of traditional community project evaluations or assessments include:

- they are decided by donors, founders or for them by the executing NGO;
- they are founded and motivated by a vision, and needs and interests different from those of the community where the activities take place and look for specific elements that may not be related to the social transformation actually occurring in the community;
- the way they frame their questions limits or biases the answers they are likely to get;
- they look only for quick or short term "results" corresponding to specific interest
- they are conducted by third parties or intermediaries
- they look at the assessment as a laboratory experiment, without caring about the becoming of the "studied object"

We consider an alternative approach to evaluating community ICT projects based on the following ethics and premises:

- The focus of evaluation is to measure the changes in the environment and community well-being (e.g. better living conditions, environment, education, health, women's situation etc.) and enabling conditions or factors. It is not to measure technical project results (how many people did this, how many were trained, etc.).
- The expected outputs of the assessment will be used to permanently better the impacts of the assessed actions or project.
- There is no ready-to-use product or mechanical formula to apply. The process is lead by stakeholders, based upon guidelines described in this document (ingredients, conditions, principles, check lists, examples).
- Evaluation should be self-evaluation, by all as much as possible stakeholders, or facilitated self evaluation if there's no local capacity available.
- Assessment is an ongoing process, Not something done only at the end of a project or before the next phase. The following graph illustrates the different phases of the ongoing learning cycle.



- The assessment will depend upon the particular context and needs of project.

- The "evaluation results" are going to help the stakeholders make decisions by helping them better understand the consequences of what they are doing.
- Findings from assessments can also be shared with others.

## **Step 1 : Ethics and stakeholders**

1. The starting point of the process, independently of who starts it, should include:
  - identifying all the stakeholders (see list in definitions in first pages)
  - checking who would like to be involved in the assessment process
  - gathering all stakeholders interested and collectively identifying for each:
    - why they are interested in evaluation, monitoring, and assessment
    - what they want from it, including their expectations, needs and what they wish to learn
    - what they will commit to put in the process
  - build up an agreement on the assessment principles, including:
    - the main objectives of the assessment process
    - how and by who the process will be conducted (methods and responsibilities)
    - how the process will be sustained
    - expected main outputs and how they will be used

*From now on "you" in this document will designate the stakeholders having agreed on what to assess and how to proceed*

## **Step 2 Mapping the community issues, and linking them to the project outcomes**

Assessment can be complex and difficult. Select what is really important for the community and stakeholders.

### ***2.1 Identify priorities in community issues and wishes for change***

For that you need to identify the situations you want to change in your community.

You need to draw the big picture, the context in which the project is operating.

2. You might first check if you already have some studies, surveys, workshops or any other documentation to identify the community situation. If you do so, you can use them as a base or try to update them.
3. Then you can organize (eventually with external facilitation/help) a workshop meeting with the members and leaders of your community, or conduct a community consultation to identify the main concerns and problems that the community faces.
4. You should also identify potential opportunities and existing assets that your community can take advantage of to help overcome the problems (identified in step 3) affecting your community.
5. Analyze each situation which requires change. Research the reasons, the causes, and the obstacles towards a change. Be careful and try to find the real issues. Do not just say it does not work. Try to see why. If the answer is that someone does not his duty in the right way, ask yourself why, don't blame the person. For example, it may be due to the criterion used to select this person.
6. You can compare yourselves with other communities similar to yours to see how they go about the same issues.
7. Try to map how these issues and situations are interrelated (e.g. because of bad/low education we have poor health care or/and low income, and bad health induces bad school results for children). Search for the real links between all elements.
8. Then, get the best consensus possible to set the priorities calling for change in your community: which are the most urgent, which are most central, and need to be solved first.
9. Once you know the issues and have priorities, you need to identify how you want the situation to change. Set goals and targets.
10. Think about including in your drawing all the actors, participants in the process, close or far, even people who are not directly related to the project, such as local and national authorities.

11. The next step is making sure that all the groups of the community agree with the scheme. You should validate this by presenting it to separate and different community groups as youth, women, elders, etc. Integrate their comments, views and priorities.

***Now you know the issues that are a priority for the community and how these should change.***

## ***2.2 Link the project and the community goals***

You need to know what issues this project/program/process should address, so you need to determine the relationship between your community concerns and the project: how the project is supporting (or not) the community's goals.

For this you need to know what the project is expected to bring.

12. In a more detailed way check what information and communication use is (or is going to be) implemented.
13. What is expected from this information use, what the information will be useful for, and what would be the result
14. Check what the communication component is for, what uses are expected, and what outcome of these uses are expected.
15. Relate the information and communication use to the previous community needs/issues. Try to identify the relationship clearly.
16. Clearly state the relationship between project outcomes and community situations you want to change
17. Identify all external elements that are necessary or that could be obstacles for this relationship between project outcomes and community needs to work properly.
18. Include all the internal and external persons who could play a role.

19. Your final outcome should look like a map. You can draw it on a board or on a big sheet of paper. Looking at it you should be able to understand how this ICT project can have an effect on your community.

*Comment: The relationship might not be linear. Many elements can intervene and influence one arrow (link or relation between elements).*

20. If it becomes too complicated, or too many elements are present, limit to 1 or 2 issues. Choose most designated by different community groups. Take into account that the more you want to know about how the ICT project is affecting your community, the more resources you will have to invest (mainly people and time).

21. Again, revalidate the map by presenting it to separate and different community groups as youth, women, elder, etc. Integrate their comments, views and priorities.

22. The women of the community may need to have a special, women only meeting to discuss issues relative to their place, role, and the possible impact of the project on gender power relations and on women's private and personal spaces. Such a meeting will also ensure that their specific views and needs are integrated. They may decide to participate as a separate group in the identification and prioritization of community issues and the validation of the mapping.

23. After certain periods, for example each year, or as elements might come naturally, as events come, (e.g. change of community leaders) you may have to update the mapping. Each time, you should incorporate new elements and lessons learned in the process. This can be done in community/organizational meetings, general assemblies, or workshops.

24. Get information on the actual use of technologies in the community and how community members communicate, obtain and send information. This is an element for comparison for after and during the project implementation.

***Now that you have identified how you want the project outcomes to impact your community, you can build up the***

*tools to assess if and how this happens, so you can take appropriate decisions.*

### ***Evaluation or monitoring?***

Evaluation is when you look to answer research questions. Monitoring is when you follow up on how the behavior of the variables and/or indicators varies over the short term. Your needs and available resources will play a role in determining the frequency and priorities in evaluating and monitoring. Both can be conducted within the same assessment framework.

## **Step 3 Instruments and research questions, one way to interpret data and conduct assessment**

*The following steps present one way, not the only one, of collecting data and organizing its interpretation. It is closer to traditional methods of evaluation, and can be replaced totally or partially by other methods that all stakeholders agree on.*

### **3.1 Formulating the research questions**

The research questions are what you are going to look at more precisely. To identify them, you need to look again at our mapping. Identify the links between the ICT project uses, the results of this use, and later the expected impacts to monitor. You may select all or some of the critical issues and formulate questions related to those links.

For example: the stakeholders and the community selected bettering the education level as an important issue for the community. The ICT facility, the telecentre, is going to be used by students, non-students, teachers, etc. How is it going to enhance education level in the community?

There now are several options:

- you can start collecting data, through stories, and identify what are the elements that make sense to you (the stakeholders) and answer your questions

- set variables and indicators after collecting data
- or follow a more traditional process identifying variables and indicators, described below

Don't forget you can always come back during the ongoing assessment process, and in light of the findings reformulate the research questions, variables and indicators.

### **3.2 Defining groups of variables, variables and indicators**

25. The variables and indicators should relate to, and help to answer, the research questions. But if you don't find them, you can try to change the questions, or after implementing part of the evaluation and monitoring system add them from the stories you will collect.

26. Out of the research question you can define the variables: the elements that can change and that can answer our research question.

For example for the community education problem, the variables that we want to see changed are:

- the community's literacy level,
- grades attained by school students
- quality of education delivered
- etc.

27. For each variable you can define a set of indicators: these are the measurable elements, referring to either quantity or quality, that will tell you how the variable is changing.

For our example those could be, for the community's literacy level:

- number of people who read
- number of people who write
- number of people who read and write in their job
- quantity of newspapers sold/bought in the community
- number of books in the public library, if any
- number of people attending class
- number of people who go to school
- grades attained by students
- quality of education delivered
- average age per school level
- average school results

- number of diplomas delivered
- age of people leaving the school before terminating
- level attained by the people exiting the school system before terminating
- number of people who go far further in their schooling
- types of jobs obtained by the people after they leave school
- etc.

This is one example of how variables and indicators can be related. It is not to use as is. This example uses mostly quantitative indicators that are more context and project sensitive .

Reusing our example, other, more qualitative indicators could be:

- do the students feel they are getting better education
- do the teachers feel the students are better prepared
- does the community feel the results of the change in education
- are people more aware of education as a basic community problem
- etc.

Note that indicators can change - you have to be flexible - adapt them to time and evolution, but try to be as consistent as possible

***A this stage you should have, depending upon the process you have chosen:***

- ***a mapping of the issues and their relationship to the project***
- ***formulated research questions***
- ***identified variable and indicators to answer the research questions***

### **3.3 How to select informants: who are you going to collect data from?**

This method bases the evaluation and monitoring of ICT project impact upon stories. You have now to chose the persons who are going to inform you.

28. You may need to look at the mapping and the research questions you have designed. Identify the following groups of people:

- groups directly involved in the project

- beneficiaries and participants
  - other stakeholders who are indirectly concerned, who will be affected by the project or are witnesses to it
  - special social groups in your community: women, youth, disabled persons, the elderly, etc.
  - eventually, groups in similar conditions who are not involved and can function as control groups. These other people or communities must have similar conditions and must not be influenced by what happens to (the stakeholders of) your project.
29. Now you can choose a sample (a smaller number of people within the group that can represent the characteristics of the whole) within each group a small number of people. For that, you might first have to identify characteristics of the large group, and then choose a sample of persons corresponding. For example in the group you choose according to sex, age, social role in the group or place/role the project, etc.
30. It's a good idea to alternate your informants over time. You have to make sure that the persons chosen are willing and able to participate in the evaluation process. They have to understand what it is about and how it works, and not bias the results with distorted reports.

### **3.4 Design data collection tools**

This assessment method is based on the use of 2 data collection tools: calibrated stories and baseline surveys.

#### **Tools for collecting calibrated Stories**

Calibrated stories are told by persons from different groups, following similar guidelines to ensure the data collected is in a standard format.

31. For each sample (see previous section) you may design a format to gather stories that are suitable to your evaluation purposes.

This format or story guide should help the teller to develop their story.

It should contain at least:

- Who is telling the story
- Name / Role in the project or the community
- Some few open questions based on the research question and variables defined

These questions have to open the story, and guide the teller in his telling.

For example:

- how you do perceive this project did/is/will affect you?
- what changes can you see in the last x weeks/days/months in that aspect?,
- tell us something important that happened in relation to this,
- if you had to redo it, what would you change?
- what are your expectations with this now? etc.

32. You can choose one of several methods for collecting the stories, corresponding to your community culture and habits:

- individual face to face exchange, which can be written down, recorded on audio tape or on video
- have the storyteller write or record their story and mail it to you. Before you do this, you will need to work with those persons, so their story answers the format and can be useful.
- organize collective (3 or 4 people) meetings around a coffee or a tea or any culturally appropriate usual social gathering environment

33. You can also mix these techniques to fit with different contexts and people.

### Design survey tools

34. Using the same process (problem mapping, research question, variables and indicators) you may want to design a survey questionnaire that will help you gather most of the quantitative data (for example: the community's socioeconomic characteristics - income, ages, education levels, health indicators, etc, or ICT facility: number, age, sex and type of users, time of day, payments, tools used, etc.). It should consist of at least 70% closed end questions. A broad survey could be

applied once at the beginning of the project, and then data updated periodically. At some point you also have to review your survey forms and their content and, as all the other tools, adapt them to new conditions or problem.

35. You should consider the use of ICT in data collection, it will be helpful to systematize the collection of data and indicators, For example you can install the software that will collect Web navigation logs, time spent online , information on the sites visited, and the tools used. You could implement a login form, so the users have to identify themselves each time they connect. This form can also ask them their level of satisfaction with the service.

## **Step 4 Organizing and planning the work**

*Now you know what you want to know, learn, monitor, and evaluate. You also have identified how to do it and designed tools for gathering the information. The next step is to plan and organize the data collection.*

36. You need to plan for human resources. How many people and how much time is needed for each task: initial mapping, preparation and validation workshops, tools design, data collections, surveying, interviews, story telling, data processing, analysis and publications, feedback workshops, etc.
37. You have to take special care in designing and organizing processes that will allow for broad-based community participation. That means carefully preparing the workshops and other community meetings to guarantee real and effective (meaningful) participation. You may have to organize separate sessions with separate groups (women, elder, youth, etc..). One important part of the process is to have the entire community cross check (validate) the outcomes of the assessment.
38. You will then have to organize one or several specific training session for the participants in the evaluation, from the facilitators to the story tellers, to:
- make sure that the active participants understand the process, it's the reasons behind it, its expected outcomes and context,

- train on how to manipulate, use and adapt the tools for data collection, and all the rules of the game,
  - and motivate them
39. You should be ready now to set a work plan and time table. This will include initial workshops, time for preparation and designing, validation sessions, participant training, data collection activities etc. It should also include the following steps as data processing and analysis. Consider that the data processing and analysis for monitoring is short intervals of time, and that the analysis for evaluation, although somehow continuous could be in longer time frames (once a year or every 2 years). A bimonthly monitoring may be integrated built in process evaluation
40. The next step is setting up the budget. For this, you need to estimate and calculate all costs, including materials and time spent by all facilitators and persons involved in the process. You will need to find financial and human resources to allocate. You may find that it is high cost, but think about that the overall benefits expected as results, a mastering of the project towards bettering the social and human living conditions of your community. If still you cannot allocate all the resources needed, focus the evaluation on the most important and critical issues for your community.

## **Step 5 Conducting the assessments**

You should now have all the elements set to conduct the work. i.e. collect the data and the stories.

41. Someone has to be in charge of monitoring all these activities and verifying that all data collected is done, as much as possible, in the conditions required.
42. This same person must make sure, prior to each data collection (survey or story collection) that the required conditions are present.
43. A "diary book" should be used to register all the events, actions and elements of the data collection process and further of the monitoring and evaluation activities.

44. Also for collected stories you can have conversations with the storytellers then at the end, complete forms summarizing the answers to research questions.

## **Step 6 Data Processing: what to do with the DATA**

### **6.1 Organize data**

45. All the data collected has to be stored and archived in order to be able know at every moment what (format, informer, content) is available. Try to store the data in a secure place, safe from water, sun, humidity, children, etc., especially if it is on magnetic tape. It's always a good idea to back-up the data.
46. You have to level the "format" of the data sources: for example, if you have both tape conversations and paper reports you have to make all available in paper or in tape. Data transcribed to computer files is much easier to work with and analyze.
47. Make a summary of each data collection item (interviews, surveys, stories), so you can quickly browse through your collection and identify format, informer, content , etc.

### **6.2 Analyze data**

48. Analyzing the data may begin with having a close look at the data you have collected and trying to find what makes sense, what real phenomenon and processes are behind what people have said, in relation to your research questions and variables.
49. Rethink project goals, check the accuracy of the obstacles, problems and the opportunities you identified earlier.
50. Analyze factors within the project and from elsewhere, that are helping to overcome obstacles and take advantage of opportunities identified in the community mapping process.

51. Try to determine lines of causality between the use of ICTs in the project and the factors identified. Determine how did each variable behaved and its effects on other variables.
52. Use your common sense to analyze what is happening and changing in the community.
53. To validate your finding, cross check the results, and play with several scenarios, changing causality lines.

### ***6.3 Community validation of the findings***

54. The analysis and the results are to be validated by the community (or its representatives). For that you have to prepare materials presenting the initial results of your evaluation or the monitoring activity, organize a working session or a workshop. Then include all the feedback and amendments from the feedback with your final results.
55. If possible compare the evolution of the issues that your community consider important with an external community that was not exposed to the ICT project. How did their situation change or not in regard to the same issues.

### ***6.4 Document assessment outcomes and its presentation***

56. After the results are validated you may now want to prepare the presentation of the final results of your evaluation or monitoring. The reports should contain, the research questions or lines of impact expected by the project, the results of the use of ICTs and (but not for monitoring reports), the evaluated impact in the community, and the body of evidence, the hard facts, that support your findings.
57. This should be first documented in text documents (including tables, graphics, pictures, audio visual annexes, etc.).
58. Then, depending upon the targeted audiences, prepare several formats with the same or similar contents/results of the evaluation. For example you can consider:

- audiovisual reports in video to present the results to the different stakeholders not acquainted with reading (or community sessions).
- a "press release" and news article style report for the media, your website, or the development organization's communication websites
- a report for the local government highlighting the problems and solutions related to their area of competence, and your recommendations for their support or participation
- for the donors and supporting agents prepare special reports addressing their concerns and role

## **Step 7 What to do with the results - Organize consolidation and learning**

The whole sense of the evaluation and monitoring process relies on your ability to translate the findings and results in lessons and tools for bettering project management, outcome and the impacts upon your community. This process is a permanent loop. The proposed evaluation method is not meant to demonstrate facts and impacts under certain fixed conditions. You should instead try to understand which factors are changing the situation and which to act upon. The goal is to understand the process in order to improve it. Because it is a continuing process, you do not have to prove anything, and you have to accept the bias that you will inevitably change the conditions of the project through the process of evaluation.

59. While implementing the project the monitoring will help change activities and some methods (or confirm them), and help stakeholders know how to make desired changes efficiently. Always record of the changes you can monitor - don't try keep intact the evaluation conditions.
60. Consolidate your evaluation results, compare with other works, studies or snapshots, if any. Or compare with other places, projects, communities, etc.
61. After the evaluation results are ready and consolidated you should organize a workshop (or use the same one that validates the evaluation findings) to disseminate the results. During this meeting, discuss the results and draw lessons with the stakeholders, that will help you redesign, reorient (or confirm) the whole project, and

implement changes for both more effective evaluation and better impact of projects.

62. Always try to publish and share the results, eventually on your website. Invite external comments, share your experience of the project and the assessment process, learn from others, and let others learn from you.

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