

# Participatory Impact Assessment by communities with the PRA-based MAPP Approach

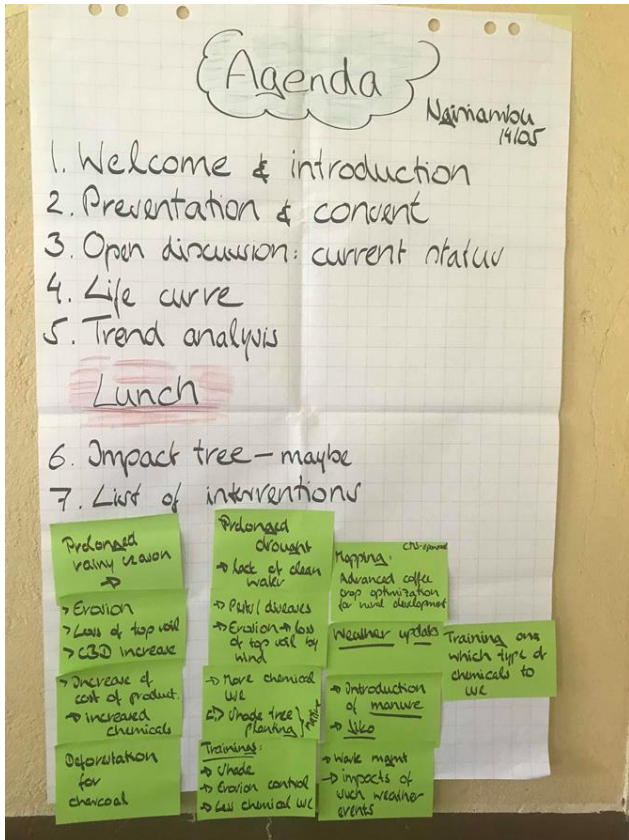
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Evaluation question:

**How do Fairtrade standards and tools, as well as programmes, capacity building and premium impact on**

- **environmental protection,**
- **biodiversity conservation,**
- **Climate change, adaptation/resilience?**

Underlying questions:

1. What are **perceived environmental challenges** from the Producer Organization's (PO) perspective?
2. How do Fairtrade interventions **address environmental issues across products and locations**? What are strengths and weaknesses?
3. Are there **non-intended economic or social impacts**?
4. Which gender is more important to target environmental interventions (**gender perspective**)?

For the case study of Coffee in Kenya our evaluator team learned from the project participants that:

- 1. Fairtrade indicators (interventions) such as reduced / correct chemical use increased coffee yields thanks to improved soil fertility and, thus, increased family income.**
- 2. Fairtrade indicators (interventions) such as new / strengthened buffer zones in combination with reduced / correct chemical use lead to stronger resilience against pest and diseases, as well as environmental degradation and changes in biodiversity.**
- 3. Trainings / exchange tours very strongly improved family knowledge. As a result of applied knowledge, soil fertility improved and coffee yield increased.**
- 4. Fairtrade certification required improved organizational structures among coffee producers, which made them more attractive to new international partners, hence providing them with more support.**
- 5. Fairtrade premium has been reinvested to improve working conditions for coffee producers.**
- 6. For some project activities, women were the main target group, but for most it was male and female producers.**

## How did our evaluator team get to these findings?

- They used MAPP: Method for Impact Assessment of Programmes and Projects
  
- Other methods to complement MAPP:
  - Review and analysis of secondary (internal monitoring and impact data (CODImpact))
  - Qualitative data from key informant interviews (KII)

# MAPP: Method for Impact Assessment of Programmes and Projects

## MAPP – what is it?

- MAPP is a **methodological approach** including a set of **participatory tools** for identifying and measuring changes that a project has caused.
- In a first step, the group takes a look at **changes in their lives** – regardless of whether they have been caused by the project or not.
- MAPP generates all data via **group discussions**.
- MAPP assesses impact along indicators agreed by the group.
- Subsequently, a **set of tools is used in methodological sequence that enables triangulation** and an **open-ended evaluation** to examine intended and non-intended negative and positive changes.
- The group lists and prioritizes the project's activities. Finally, the group **jointly evaluates the impact of activities on the identified changes**.

# MAPP: Method for Impact Assessment of Programmes and Projects

## MAPP: 7 participatory tools

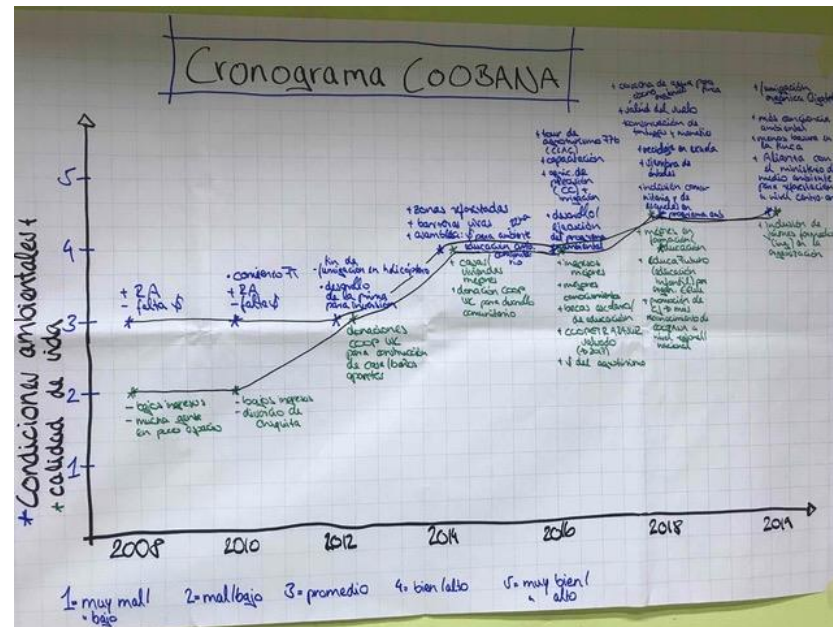
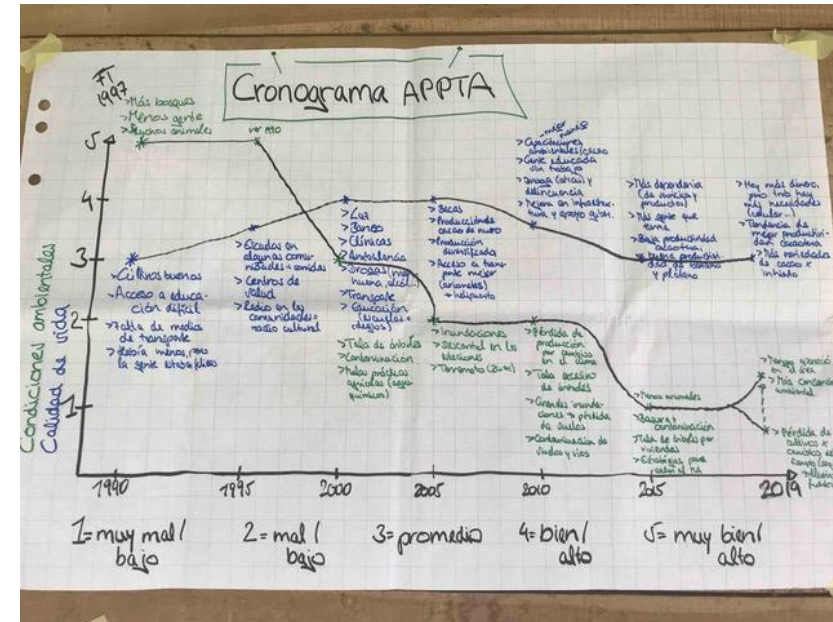
1. Life curve
2. Trend analysis
3. Cross-checking
4. List of interventions and activities
5. Influence matrix
6. Development and impact profile
7. Participatory development planning

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# Tool 1: Life curve

- As part of the group discussion, a **life curve** is being developed.
- The life curve begins prior to the introduction of fair trade standards and regulations.
- Enables a **comparison of before and after** as well as an identification of changes.
- In these examples, life curves indicate changes in quality of life and environmental conditions for cocoa production in Costa Rica.





## Tool 2: Trend analysis

- As part of the group discussion, a **matrix of detailed development trends** is being developed.
- Trends are being evaluated over the same period as the previously done life curve.
- Indicators can developed by the group. However, we recommend to **start with a set of given indicators and let the group verify, delete and add indicators.**

*\* 2011 contribution*

### Trend analysis Ngirimbou

5 = very positive  
4 = positive  
3 = average  
2 = negative  
1 = very negative

|                           | 2010         | 2011                      | 2012         | 2013         | 2014         | 2015         | 2016         | 2017         | 2018         |
|---------------------------|--------------|---------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Livelihoods               |              |                           |              |              |              |              |              |              |              |
| Agricultural yields       | 1 <u>3</u> 3 | 1 <u>1</u> 2 4 <u>3</u> 3 | 4 <u>4</u> 4 | 3 <u>3</u> 4 | 4 <u>2</u> 2 | 5 <u>4</u> 4 | 4 <u>4</u> 4 | 2 <u>4</u> 4 |              |
| Family income             | 1 <u>3</u> 3 | 1 <u>1</u> 2 4 <u>3</u> 3 | 4 <u>4</u> 4 | 3 <u>3</u> 4 | 4 <u>2</u> 2 | 5 <u>4</u> 4 | 4 <u>4</u> 4 | 2 <u>4</u> 4 |              |
| Production                |              |                           |              |              |              |              |              |              |              |
| Access to inputs          | 1 <u>2</u> 2 | 1 <u>1</u> 1              | 4 <u>2</u> 2 | 4 <u>4</u> 4 | 3 <u>4</u> 4 | 4 <u>4</u> 4 | 5 <u>4</u> 4 | 4 <u>4</u> 4 | 2 <u>4</u> 4 |
| Soil fertility            | 3 <u>2</u> 2 | 3 <u>2</u> 2              | 5 <u>2</u> 2 | 4 <u>3</u> 3 | 3 <u>3</u> 3 | 4 <u>3</u> 3 | 5 <u>4</u> 3 | 5 <u>4</u> 3 | 5 <u>4</u> 3 |
| Farming knowledge         | 2 <u>2</u> 1 | 3 <u>2</u> 1              | 3 <u>2</u> 1 | 5 <u>3</u> 3 | 5 <u>3</u> 3 | 5 <u>4</u> 4 | 5 <u>4</u> 4 | 5 <u>4</u> 4 | 5 <u>4</u> 4 |
| Resilience + biodiversity |              |                           |              |              |              |              |              |              |              |
| Impacts of ...            |              |                           |              |              |              |              |              |              |              |
| ... Climate change        | 3 <u>3</u> 2 | 3 <u>3</u> 2              | 4 <u>3</u> 2 | 4 <u>3</u> 3 | 4 <u>3</u> 3 | 5 <u>1</u> 1 | 5 <u>3</u> 3 | 5 <u>3</u> 3 | 5 <u>3</u> 3 |
| ... Pests & diseases      | 4 <u>2</u> 2 | 3 <u>3</u> 2              | 4 <u>2</u> 2 | 4 <u>3</u> 3 | 4 <u>3</u> 3 | 4 <u>1</u> 1 | 5 <u>3</u> 3 | 5 <u>3</u> 3 | 5 <u>3</u> 3 |
| ... Environmental degrad. | 3 <u>1</u> 1 | 3 <u>1</u> 1              | 4 <u>2</u> 1 | 4 <u>3</u> 3 | 4 <u>3</u> 3 | 4 <u>3</u> 3 | 3 <u>3</u> 3 | 3 <u>3</u> 3 | 3 <u>3</u> 3 |
| ... changes in biodiv.    | 4 <u>2</u> 2 | 4 <u>2</u> 2              | 3 <u>2</u> 2 | 3 <u>3</u> 3 | 3 <u>3</u> 3 | 5 <u>2</u> 3 | 5 <u>3</u> 3 | 5 <u>3</u> 3 | 1 <u>3</u> 3 |

## Tool 3: Cross-checking

- Practical cross-checking tools such as **transect walks** provide useful additional information about the **scale, relevance and sustainability of the project**.
- Transect walk can be done with a few key stakeholders to the project.



## Tool 4: List of interventions and activities

- **Project activities** (including those of donor and partner organisations in the community) are listed.
- In a group discussion, they are **ranked according to their day-to-day relevance**.
- The group identifies main contributors and main beneficiaries (gender-disaggregated).
- **The group evaluates their contributions by assigning labour- and finance points.**
- Based on analysis, the evaluator team can estimate the relative cost-benefit ratio and draw conclusions regarding the project's sustainability.

5 = Very relevant/high  
4 = Relevant/high  
3 = Average  
2 = Low  
1 = None

### List of interventions Ngiriambo

| Intervention            | Organization            | Relevance | Main Contributors <sup>M/W</sup> | Main Beneficiaries <sup>M/W</sup> | Work Burden | Finance Burden |
|-------------------------|-------------------------|-----------|----------------------------------|-----------------------------------|-------------|----------------|
| Buffer zones/rip.a.     | FT                      | 5         | M+W                              | M+W                               | 1           | 1              |
| Coffee nutrition        | Ngiriambo + Technoserve | 5         | M+W                              | M+W                               | 3           | 3              |
| Chemical use            | FT + Technoserve        | 5         | M                                | M+W                               | 3           | 4              |
| Chemical disposal       | " "                     | 5         | M+W                              | M+W                               | 1           | 1              |
| Internal trainings      | Ngiriambo               | 5         | M+W                              | M+W                               | 1           | 1              |
| External exchange tours | Ngiriambo               | 5         | M+W                              | M+W                               | 3           | 1              |
| Shading + mulching      | Technoserve             | 5         | M+W                              | M+W                               | 3           | 1              |
| ACCORD                  | CMS                     | ?         | M+W (CNS)                        | M+W                               | 1           | 1              |
| FT opp chem. use        | FT                      | ?         | M+W                              | M+W                               | 1           | 1              |
| Libos + briquets        | Envirofit (NGO)         | 5         | M (W)                            | W (M)                             | 1           | 1              |
| Tree nursery (shade)    | Technoserve             | 5         | M                                | M+W                               | 2           | 1              |

## Tool 5: Influence matrix

- As part of the group discussion an influence matrix is being developed.
- Lists the key dimensions of the trend analysis (tool 2).
- **The group evaluates the strength of influence of each activity (horizontal) on each of the key dimensions for development (vertical).**
- Finally, the passive and active sums are calculated:
  - Active sum = which intervention has had the strongest impact on the key dimensions of development?
  - Passive sum = which development indicators was most / less relevant to indicate change?

| Ratings:   |                                 |                                 |                           |                            |   |           |
|--|---------------------------------|---------------------------------|---------------------------|----------------------------|---|-----------|
| 0 = no influence   |                                 | 3 = strong influence            |                           |                            |   |           |
| 1 = slight influence   |                                 | 4 = very strong influence       |                           |                            |   |           |
| 2 = medium influence   |                                 | - negative influence same scale |                           |                            |   |           |
|  | New / strengthened buffer zones | Reduced / correct chemical use  | Correct chemical disposal | Organizational development | Trainings / exchange tours / input provision by FCS | Σ Passive |
| <b>Livelihoods</b>   |                                 |                                 |                           |                            |   |           |
| Coffee yields  | 1                               | 4                               | 2                         | 0                          | 3   | 10        |
| Family income  | 0                               | 4                               | 0                         | 0                          | 1   | 5         |
| <b>Production</b>  |                                 |                                 |                           |                            |   |           |
| Soil fertility   | 1                               | 4                               | 2                         | 0                          | 3   | 10        |
| Farming knowledge  | 0                               | 0                               | 0                         | 0                          | 4   | 4         |
| <b>Resilience (in how far does the intervention reduce the impact of...)</b> |                                 |                                 |                           |                            |   |           |
| Climate change   | 2                               | 0                               | 0                         | 0                          | 1   | 3         |
| Pests and diseases   | 2                               | 4                               | 0                         | 0                          | 1   | 7         |
| Environmental degradation  | 3                               | 4                               | 4                         | 0                          | 1   | 12        |
| Changes in biodiversity  | 3                               | 4                               | 1                         | 0                          | 1   | 9         |
| Σ Active   | 12                              | 24                              | 9                         | 0                          | 10  |           |

# Tool 6: Development and impact profile

- Similar to tool 5, this matrix includes the key dimension of development. It serves as an **interpretation tool and summarizes some results of MAPP thus far.**
- The group discusses each key dimension and ranks the relevance.
- Moreover, **main stakeholders** to the project (i.e. who are most responsible for certain changes) **are being identified.** It is a prerequisite for tool 7.
- **The development and impact profile provides a sense of robustness or vulnerability of the project’s development achievements.**

**Figure 5: Development and impact profile**

|  | Profile<br>- - +/- ++ | Remarks of beneficiaries   | Cross-Checking-Data,<br>Documents/ background<br>interviews  | Mainly<br>influenced<br>by which<br>actor/<br>factor |
|--|-----------------------|--|--|--|
| <b>Improvement or impoverishment of life standard</b>      |                       |  |  |  |
| Agricultural yields  | ○○○●○                 | The yields depend mainly on rainfall. Because of the soil management measures supported by PORO the fluctuations can be buffered better. | No yield statistics about the project region.  | External factors (Rainfall)/ PORO                    |
| Family incomes   | ○○○○●                 | The income increases mainly because of the anti-erosion measures and the irrigation scheme.  | Project staff agreed that income trends of people are positive.  | PORO   |
| Health of children   | ●○○○○                 | Many meningitis cases, which have cost many lives of children.   | Nurses from the health centre confirm the cases and complain that there is no vaccine available.                       | External factors/Other organisations                 |
| <b>Access to or exclusion from resources</b>               |                       |  |  |  |
| Fire wood  | ○○○○●                 | Through the donkey carts we can search in greater areas for fire wood.   | Evaluation team: This impact is only positive in the short run. In the longer run it aggravates degradation.           | PORO / External factors                              |
| Drinking water   | ○○○○●                 | Through the stone walls water tables went up again, so we can pump water again   | Staff from health centre also reported that water related diseases decrease because of that.                           | Other Organisations                                  |
| Markets  | ○○○○●                 | We can use the donkey carts as transport means.  | On the local markets more salesmen were seen than before.  | PORO   |
| Fertile lands  | ○○○○●                 | Biological measures near the stone walls (tree planting, hedges etc) improved soil fertility.  | Soil analyses from 10 plots confirm higher organic matter.   | PORO   |
| <b>Expansion or diminishing of Knowledge</b>               |                       |  |  |  |
| School enrolment   | ○○○○●                 | The ratio of enrolled children is 90 percent now.  | This reflects also the present national statistics.  | Government   |
| Knowledge about land use systems                           | ○○○○●                 | PORO initiated trainings and we could immediately put that knowledge into practise (construct stone walls, and other measures).          | Monitoring data from the programme can confirm that directly.  | PORO   |
| <b>Participation on or exclusion from rights and power</b> |                       |  |  |  |
| Peaceful living with herders                               | ●○○○○                 | Farmers: The rights of herders increased but the rights of farmers decreased because of our new government (farmers said this).          | Herders: The farmers didn't consider our pathways by building the stone walls and by declaring the nature reserve etc. | External factors / PORO                              |
| Avoided migration  | ○○○○●                 | Migration into cities decreased as we have new perspectives for our future again, many young men even came back into community.          | An additional reason for minimized migration is that migrants are often chased back from the recipient country.        | PORO   |

Source Neubert, Susanne, 2010: Description and Examples of MAPP. <https://zewo.ch/wp-content/uploads/2019/07/MAPP-Description.pdf> (accessed 18/6/23)

## Tool 7: Participatory development planning

- **Shortcoming / weaknesses of the project are being listed in the tool.**
- **A vision to resolve the problem as well as a strategy on how to resolve the issue and responsibilities to perform this are being identified as part of the group discussion.**

**Figure 6: Participatory development planning**

| <i>Setbacks identified</i>                                       | <i>Vision / resolved problem</i>   | <i>How to get there</i>   | <i>Who does the first step</i>  | <i>Next meeting on this issue</i>   |
|--|--|---|---|---|
| <b>Increasing health problems in children</b>                    | Children are not threatened anymore by virus diseases, all children are vaccinated | Reliable availability of vaccines in pharmacies in the community. Subsidies for vaccines are necessary.<br><br>Vaccination plan for all children in the health centre.  | Pharmacist asks neighbour community for advice in where all children are vaccinated.  | Parents meet:<br>After one week   |
| <b>Conflicts between farmers and herders over land use rules</b> | Herders accept land use rules  | Some herders should participate in land use planning. Their needs should be considered (corridors, pathways etc.). But herders should also contribute e.g. by improving their pastures.   | The chief will approach the herders and tries to initiate the meeting on this issue. Some volunteers prepare a proposal for a contract with the herders   | Farmers association and herders meet (envisaged):<br>After 4 weeks  |
| <b>Appearing gender conflicts over donkey carts</b>              | Women can benefit from donkey carts as men can                                     | Women can buy the subsidised carts directly from the programme. The existing condition that carts have to be used only for transport of stone should be abolished.<br><br>Women should undergo a short training in how to handle donkey carts.<br><br>Men promise to borrow their carts to their wives. | A delegation of women approaches the programme staff or management. The change of conditions for subsidies and the training will be proposed (and prepared)   | Women delegation and all interested women meet<br><br>4 weeks from now on this issue                      |
| <b>Increasing scarcity of fire wood</b>                          | Plenty of fire wood nearby   | Capacity of tree nursery must be increased<br><br>New stoves, with which fire wood can be economised should be bought   | Mrs. & Mr. Traore from the tree nursery approach programme PORO managers and NGO's active in this field and ask for support.<br><br>It is discussed, whether and how Micro-credits for stoves could be issued | Tomorrow<br>Mr. Mrs. Traore report on their findings.<br>Micro-credit group meets tomorrow on this issue. |

## MAPP: strengths

- Enables **collective sense-making and learning** among project participants and stakeholders and stimulates follow-on action.
- MAPP / a selection of MAPP tools is/are great for...
  - ... **participant-level data collection and triangulation,**
  - ... identifying **non-intended positive and negative impact of a project,**
  - ... Identifying **impact that is most relevant to project participants,**
  - ... allowing for **group validation** at several stages during the impact assessment process,
  - ... getting a good sense of a project's **sustainability,**
  - ... **comparing impact of individual activities with relevance of this impact from participants' perspective.**
- Well complements other data collection methods such as key informant interviews, surveys and field visit.
- In our experience, **MAPP motivates project participants to share their views and experience.**
- Is based on the PRA principles of 'optimal ignorance' and 'appropriate accuracy'.
- Primarily uses arguments, detailed descriptions used, participant's ranking for evaluation findings.

## MAPP: shortcomings / challenges

- It is essential to **select a diverse and representative group** for MAPP; this can be time-consuming and cumbersome.
- MAPP is **challenging** to apply in contexts where open discussion and trust are difficult (e.g. **post conflict settings**).
- Open-ended approach could find that the project had no positive impact.
- **Risk of biased findings** if project staff are involved in MAPP. On rare occasions, participants try to instrumentalize group discussion.
- MAPP is not suitable for initiatives that aim at changing markets or global structures, as impact experienced by individuals might be challenging to link back to intervention.
- Application of **MAPP takes time**: Our evaluator teams recommend **2-3 full days** to work with the complete set of 7 tools.
- MAPP findings require interpretation by the evaluator(s).
- **Aggregation of findings is difficult**, as data from various communities might not be comparable.



Thank you for your attention!

Do you have any questions or comments?

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## Questions to discuss

1. Do you think the level of participation in MAPP could be improved in any way?
2. Participation is also about ownership of the data collected. How can ownership of MAPP findings be achieved?