

## Supplementary Material (SM)

For article: **How to Achieve Effective Participation of Communities in the Monitoring of REDD+ Projects: A Case Study in the Democratic Republic of Congo (DRC)** (Christine B. Schmitt and Joëlle Mukungu)

### **SM1: First round questionnaire**

**How to achieve effective participation of communities in the monitoring of REDD+ projects: A case study of the Democratic Republic of Congo (DRC)**

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This Delphi study seeks to reach a consensus on the current and potential role of local community and indigenous peoples in the monitoring of REDD+ projects in the Democratic Republic of Congo, based on experts' points of view. Your personal thoughts, based on your own experience and knowledge, will help us in the development of a baseline of indicators for the implementation of Community-Based Monitoring (CBM) of REDD+ projects, and the way they can contribute to the national MRV system in DRC.

**I. Personal information: (Your personal information will be used only for our own analysis. Be assured that none of your personal data will appear in the report as the study is based on anonymity)**

1. Name: .....
2. Gender: Male  Female
3. Age: 20-40  40-60  60-80
4. Nationality: .....
5. Educational background: Bachelor degree  Master degree  Dr.  Prof.  Non-academic background
6. Area of study: .....
7. Institution/ Organization: .....
8. Position in the organization: .....
9. Years of experience with REDD+: .....
10. Experience or knowledge about the forest management system in the Democratic Republic of Congo (DRC): a) Very high  b) High  c) Sufficient  Basic  None
11. Experience or knowledge about the national REDD+ process in the DRC:  
a) Very high  b) High  c) Sufficient  d) Basic  e) None
12. Experience or knowledge on the development of a national Monitoring Reporting and Verifying system(MRV) in the context of the REDD+ mechanism:  
a) Very high  b) High  c) Sufficient  d) Basic  e) None
13. Please rate from 1(very high) 2 (high) 3 (sufficient) 4 (low) to 5(None) the level of your experience or knowledge regarding the monitoring of following benefits of REDD+

Carbon  Biodiversity  socio-economic benefits  other non- carbon benefit (Please, specify)

14. Experience or knowledge on community-based monitoring (CBM) in the context of the implementation of REDD+ projects: Very high  High  Sufficient  Basic  None

15. In which country/countries is your experience of REDD+ or CBM very high?

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**II. Engaging community members in the monitoring of REDD+ projects in DRC**

The UNFCCC encourages effective engagement of local community and indigenous peoples in REDD+ activities on the ground, including the monitoring. Yet, no guidelines have been provided to make it operational.

1. In your opinion, when implementing REDD+ projects what does *“effective engagement”* of local community and indigenous peoples refer to when it comes to the monitoring?
2. Looking at the literature, it seems productive to engage community members in monitoring forests in countries with a long history and experience in community forest management, such as community forestry.

**In your opinion, should there be prerequisites to engage community members in the monitoring of REDD+ projects in a country with a low level of experience in community forest management like DRC? If yes, which are they? If not please explain?**

3. Danielsen et al. (2009) ( Danielsen F, Mendoza MM, Tagtag A, Alviola PA, Balete DS, Jensen AE, Enghoff M and Poulsen MK et al. 2009. Local participation in natural resource monitoring: a characterization of approaches. Conservation Biology 23:31–42.), define five categories of monitoring schemes with regard to participation of local communities. **Considering the fact that in DRC, engaging community members in the management of forest resources is still a process in discussion and under construction, which of the following options could be appropriate in the perspective of implementing CBM of REDD+ projects? Please rate from 1 (highly recommended) 2 (recommended) 3 (fair) 4 (not recommended)**

a) Externally driven, professionally executed monitoring. (No involvement of communities’ members at all)

b) Externally driven monitoring. (Local people participating only in data collection)

c) Collaborative monitoring with external data interpretation. (This scheme involves local people in data collection and decision making, but the design of the scheme, data analysis and interpretation are done externally)

d) Collaborative monitoring with local data interpretation. (Local people participate in data collection, analysis or interpretation, as well as decision making about the management of the resources. Scientists provide advice and training)

e) Autonomous local monitoring. (Local people carry out the whole monitoring process without direct involvement of external agencies)

f) Please add more specific comments and observations

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- .....
- .....
4. Based on your own experience and knowledge, at which step of the REDD+ project development and implementation should community members be involved in the monitoring process in DRC?
  5. Which kind of REDD+ projects are more suitable for CBM?
    - a) Only governmental REDD+ pilot projects implemented either by national or international NGOs
    - b) Only private REDD+ initiatives
    - c) Both
    - d) Please add more specific comments or observations relating to your choice above

### III. Indicators for CBM

1. While Forest area and carbon stock are the two variables required for MRV, there is also a focus on monitoring biodiversity and other non-carbon benefits, because by protecting forest, REDD+ can also contribute to the conservation of biodiversity and ecosystem services. **In your opinion, what are the non-carbon benefits that can be monitored by community members**
2. **Among benefits from REDD+ projects, which ones are suitable to be monitored through CBM in DRC?** Please rank from 1(very suitable) 2 (suitable) 3(more and less suitable) 4 (not suitable at all) and justify your response
  - a) Carbon  b) biodiversity  c) socio-economic benefit  d) other non-carbon benefits  e) Please, include any other comments.
3. What could the appropriate methodology be for CBM in DRC? (tick all applicable options):
  - a) Training local monitors in conventional scientific methods
  - b) The use of advanced technology using GPS or any other technical tools,
  - c) Emphasis on local knowledge on monitoring
  - d) Please add any other comments based on your experience

### IV. Incentives

1. In your opinion, should community members engagement in CBM be:
  - a) Voluntary
  - b) Based on certain payment
  - c) Based on other incentives . If so, which are they?
2. If money is to be used as an incentive for the engagement of community members in the monitoring of REDD+ projects, in your opinion, where should the money come from? (tick all applicable options)
  - a) Community members themselves
  - b) Local, national, or international NGOs
  - c) REDD+ project developers'
  - d) National REDD+ program found
  - e) Please add more specific comments or observations relating to your choice (s) above

### V. CBM and national REDD+ program

1. Some studies have shown that data collected through CBM at project level can complement data collected through remote sensing for the purpose of the national MRV. **Which mechanism should be put in place to allow for the recognition of data from CBM in the national MRV system in DRC?**
2. In your opinion, which of the data from the CBM could be for the interest of the national REDD+ program?

#### VI. **Success of CBM of REDD+ projects in DRC**

1. In your opinion, what can be the drivers of a successful CBM of REDD+ projects in DRC?
2. In your opinion what can be the limitations to the implementation of CBM in REDD+ projects in DRC?

## **SM2: Second round questionnaire**

### **How to achieve effective participation of community members in the monitoring of REDD+ projects: A case study of the Democratic Republic of Congo (DRC)**

#### **In the context of this questionnaire**

- community refers to local community and indigenous people
- “Project developers” refer to organizations or institutions implementing REDD+ projects or initiatives on the ground (from private sector, local, national or international NGO)
- “Local, national and international NGO” refer to organization that are not developing REDD+ projects, but they accompany communities affected by REDD+ activities, with development or educational programs.

#### **PS: Please fill free to add any comment to these questions**

1. In the first round we asked your opinion about the definition of “full and effective participation” of communities in the monitoring of REDD+ projects, in the case of the DRC. Please tell us to what extent you agree with the following statements from the panelist’s opinion (1 (strongly disagree), 2 (disagree), 3 (neither agree nor disagree), 4 (agree) 5 (strongly agree)):
 

Based on analysis and consideration of the panelists’ opinions, we define “full and effective participation of communities in the monitoring of REDD+ projects in the DRC” as a process characterized by:

  - a) The involvement of community members in all steps of the monitoring process: designing of the monitoring program, data collection, data analysis and interpretation, as well as in the decision-making process of forest management
  - b) The recognition and consideration of traditional knowledge in the monitoring of forest area and forest change as well as community rights
  - c) A free, prior and informed consent (FPIC) of community members : important to establish a clear information system for a better understanding by community members of the REDD+ project itself (opportunities and challenges) and all steps of the monitoring process; opportunity for communities to freely express themselves on their interests in participating in a suitable monitoring scheme, taking in account the heterogeneity that can exist among communities affected by REDD+ projects or initiatives
  - d) An appropriate training of community members in the monitoring methodologies (capacity building)
  - e) A systematic engagement with local authorities (customary and administrative) and all different groups in the community, including gender aspects
  
2. In the first round we asked your opinion about the relevance of prerequisites to the effective participation of community members in the monitoring process. Some panelists identified certain elements as a prerequisite for the participation of community members in the monitoring process in order to build their confidence and accuracy in data collection and other steps of the monitoring process. Other panelists considered the identified elements as an intrinsic part of setting up the whole monitoring process and not as prerequisite for

starting the process. To what extent do you agree with the consideration of the following elements as prerequisites (1 (strongly disagree), 2 (disagree), 3 (neither agree nor disagree), 4 (agree), 5 (strongly agree)):

- a) A local institutional arrangement is in place to support the participation of community members in the monitoring process
  - b) Clear information system through free, prior and informed consent (FPIC)
  - c) Capacity building (training) system for monitoring technologies
  - d) Community land use planning and secure tenure
  - e) I consider the elements identified above as part of the whole monitoring process and not as a prerequisite
3. Based on analysis and consideration of the panelists' opinions regarding the appropriate monitoring scheme to apply in the context of REDD+ projects in the DRC, to what extent will you agree with the following statements from the panelists (1 (strongly disagree), 2 (disagree), 3 (neither agree nor disagree), 4 (agree), 5 (strongly agree)):
- a) A totally externally driven and professionally executed monitoring scheme is not recommended, except when communities have nothing to do with the project, or are not affected
  - b) The autonomous local monitoring scheme without direct intervention of external agencies is not recommended. However, it could be an ideal scheme in the future if community members have all the required skills
  - c) Collaborative monitoring scheme with local people participating in all the steps of the monitoring, including using those data for decision making about the management of forest resources while external experts are there to give advices, is highly recommended
  - d) Collaborative monitoring with local people participating only in data collection and using those data for decision making about the management of forest resources while the analysis and interpretation process are done by external experts, is recommended but not completely ideal
  - e) Externally driven monitoring with local people participating only in data collection is not recommended
4. Based on analysis and consideration of the panelists' opinion regarding what could be monitored by community members, we found that, community members are able to monitor carbon and non-carbon (NCB) benefits, such as governance issues, biodiversity, socio-economic benefits, and safeguards implementation. However, it seems that some benefits are more suitable for CBM than others. Please tell us to what extent you agree with the ranking below in terms of suitability (1 (strongly disagree), 2 (disagree), 3 (neither agree nor disagree), 4 (agree), 5 (strongly agree)):
- a) First most suitable benefits: socio-economic benefits, as they are more concrete benefits that can reach the interest of communities
  - b) Second: Biodiversity as communities rely on this for their survival
  - c) Third: Other NCB (governance, safeguards, benefit sharing process...)
  - d) Last: Carbon: carbon is very abstract and not easy to be monitored by community members, and there is not yet reliable monitoring of carbon stocks even by well-trained external experts

5. Based on analysis and consideration of the panelists' opinion regarding what could be the basis of the participation of community members in the monitoring process, to what extent will you agree with the following statements from the panelists (1 (strongly disagree), 2 (disagree), 3 (neither agree nor disagree), 4 (agree), 5 (strongly agree)):
- Community member involvement in the monitoring of REDD+ projects should be based on payment (salary) for the individual directly involved in the monitoring process, such as per diems for their travel cost
  - Community member involvement in the monitoring of REDD+ projects should be based on other form of incentives that will benefit the whole community, such as social infrastructures development projects (electricity, clean drinking water...), secure land tenure, scholarships for children, etc.
  - Community member involvement in the monitoring of REDD+ projects should ideally be voluntary
  - Community member involvement in the monitoring of REDD+ projects should be adapted to the local context and customs. For instance, if, members in a community are used to being paid for their participation in a project's activities, then they must be paid for their participation to the monitoring process
6. In the first round we asked your opinion about the funding sources to run a CBM or REDD+ project in DRC. Please tell us to what extent you agree with the following statements from the panelists (1 (strongly disagree), 2 (disagree), 3 (neither agree nor disagree), 4 (agree), 5 (strongly agree)):
- Funding from all sources (REDD+ project developers, local, national and international NGOs, the national REDD+ program funds and), is appropriate for CBM depending on who is implementing the REDD+ project in the field and the way it is set up
  - Only funding from the national REDD+ program funds is appropriate: as REDD+ is a national process, funding for CBM should ideally come from the national REDD+ program fund which has more political legitimacy, and could be a sustainable source of funding if well managed to avoid corruption, and if a clear benefit-sharing mechanism making provisions for the money to go directly to communities is set up
  - Only front-up funding from REDD+ project developers is appropriate, especially in the short run
  - Funding from REDD+ payments is appropriate for operational cost of CBM, and ideal for the long running projects
7. Based on analysis and consideration of the panelists' opinions, we understood that the accuracy of the CBM will depend on the clarity of indicators. In your opinion, what are suitable indicators for CBM of each of the following REDD+ benefits
- Biodiversity
  - Socio-economic benefits
  - Safeguards
  - Carbon

### SM3: Third round questionnaire

Dear panelists, this third questionnaire will be closing the series of questionnaires for our Delphi study on ‘*how to achieve full and effective participation of local community in the monitoring process of REDD+ projects in the DRC*’. The following questions resulted from the analysis of the second round feedback. As we are seeking a consensus, for the third round we returned to elements that reached only a weak level of consensus, or where there was a lack of consensus. As this is the last questionnaire, please add your comments on each response in addition to rating the statements. [For all questions please use the following rating system in the boxes, addition to your comments in the space provides: 1 (strongly disagree), 2 (disagree), 3 (neither agree nor disagree) 4 (agree), 5 (strongly agree)]

#### 1. The definition of full and effective participation of community members in the monitoring process of REDD+ projects in DRC

‘A systematic engagement with local authorities (customary and administrative) and all different groups composing the community, including gender aspects’ is the point of the definition that had a **weak consensus (53%)**. A significant percentage of the panelists (**29%**) were not able to agree or disagree, while **18%** clearly disagreed with this statement to be part of the definition. Please confirm or revise your point of view:

To what extent do you agree or disagree with the following statement?

- A systematic engagement with local authorities (customary and administrative) and all different groups composing the community,’ is an important element that defines full and effective participation of community members in the monitoring process of REDD+ projects in the DRC

#### Comments:

#### 2. The appropriate and recommended monitoring scheme for community-based monitoring of REDD+ projects in DRC

There was a **weak consensus** around the statement ‘an externally driven monitoring with local people participating only in data collection while the analysis and interpretation are done externally by experts was not recommended’ (**59%**), and a **lack of consensus** around the statement a collaborative monitoring process with local people participating only in data collection and use of the analyzed data for decision making about the management of forest resources, while the analysis and interpretation process are done by external experts was recommended’ (**47%**). Please confirm or revise your point of view.

To what extent do you agree or disagree with the following statement?

- a) An externally driven monitoring scheme, with local people participating only in data collection, while the analysis and interpretation are done externally experts, is recommended.
- b) A collaborative monitoring process with local people participating only in data collection, and the use of the analyzed data for decision making about the management of forest resources, while the analysis and interpretation process are done by external experts is recommended.
- c) Referring to the previous question on the definition of full and effective participation, **we got a strong consensus (71%)** about the fact that community members should be involved in all the steps of the monitoring process (see report). Hence, we were quite surprised to see **only 65% of participants in**



**agreement** about whether the recommended monitoring scheme should be a collaborative scheme with community members participating in all the steps of the monitoring process. In your opinion what can justify this difference?

**Comments:**

**3. Relevance of prerequisites to the participation of community members in the monitoring process of REDD+ projects in DRC**

There was a **weak consensus** about ‘considering community land use planning and secure tenure’ (**53%**) as a prerequisite to the effective participation of community members in the monitoring process of REDD+ projects in DRC, and a **lack of consensus** about the statements that posited that ‘there should not be prerequisites to the participation of community members to the monitoring process of REDD+ projects in DRC’ (**29%**). Please confirm or revise your point of view:

To what extent do you agree or disagree with the following statement?

- a) Community land use planning and secure tenure are prerequisites to a successful participation of community members in the monitoring of REDD+ projects in DRC
- b) There should not be prerequisites to the participation of community members in the monitoring of REDD+ projects (as opposed to those elements being part of the whole monitoring process).

**Comments:**

**4. Which aspects of a REDD+ project can be monitored by community members in DRC**

A **weak consensus** was noticed around having the monitoring of biodiversity as a second priority, and other non-carbon benefits (NCB) ranked third (**59%**), while there was a **lack of consensus** around having the monitoring of carbon ranked last in terms of suitability (**47%**). Taking into account the fact that a minority of the panelists (**6%**) did not agree at all with this ranking, seeing in it a source of potential conflicts, would you agree or disagree with the following statements:

- a) Since community members are able to monitor all different aspects of a REDD+ project, there should not be a pre-established ranking of what is most suitable for CBM. Instead, analysis should be done considering the real situation on the ground according to what specific information is needed in the context of each REDD+ project.
- b) Ranking socio-economic benefits as most suitable, followed by biodiversity, other NCB, and with carbon in the last position in terms of benefits suitable for CBM at project level make sense, and can help in the planning of the monitoring activities with community members.

**Comments:**

**5. Incentives to engage community members in the monitoring process of REDD+ projects DRC**

A **weak consensus** emerged around the idea that ‘the participation of community members in the monitoring process should be based on a payment (salary) or on an adapted scheme of incentives to the local context’ (**53%**). However,

there was **a lack of consensus** around the practice of engaging community members in the monitoring process on the basis of other forms of incentives such as socio-economic benefits (**47%**), or on the basis of volunteering (**41%**). ***We assume that the different opinions on this particular question are related to the fact that experts have had differing personal experience on the ground.*** Please confirm or revise your point of view: To what extent do you agree or disagree with the following statement?

Engaging community members in the monitoring of REDD+ project in DRC should be:

- a) Based on individual payments
- b) Adapted to the local context
- c) Done with other forms of incentives, such as socio-economic benefits for the entire community
- d) Based on volunteering

**Comments:**

**6. Suitable indicators for each element of the monitoring process**

In the second round, it became clear that it was difficult for many of the panelists to identify suitable indicators for the community-based monitoring of REDD+ projects in DRC. One of the reasons was the lack of sufficient knowledge of the reality on the ground. Could you please share with us any information you have on successful experiences of the implementation of CBM indicators in the context of REDD+ projects (web URL to projects, articles, reports, or personal experience)?

- a) In DRC
- b) In other countries

**Comments:**

**7. What are your feelings about this Delphi study? Did it raise any important issues or create any interesting opportunities?**

**Comments:**