REDD+ JCM ガイドラインの解説

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背景と経緯

- JCMはすでに13カ国と合意
- 森林国ではJCMでのREDD+プロジェクトに期待
- REDD+プロジェクトの実施ガイドラインが必要

- 2013年度、森林総研が関係機関・企業の協力を得てガイドラインを開発
- それをもとに、JCM関係４省庁と森林総研（事務局）で方法論開発ガイドラインを開発
- 本年5月18日のインドネシアとの合同委員会で説明・意見交換

Draft JCM Guidelines for Developing Proposed Methodology for REDD-plus

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A Set of the JCM Guidelines

- Rules of Implementation for the JCM

- JCM Glossary of Term

- JCM Project Cycle Procedure

- JCM Guideline for Designation as a Third-Party Entity

- JCM Guidelines for Developing Proposed Methodology

- JCM Guidelines for Developing Project Design Document and Monitoring Report

- JCM Guidelines for Validation and Verification

Title

Joint Crediting Mechanism Guidelines for Developing Proposed Methodology for Reducing Emissions from Deforestation and Forest Degradation in developing countries; and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries (REDD-plus)

(JCM Guidelines for Developing Proposed Methodology for REDD-plus)

Contents

- 1. Scope and applicability
- 2. Terms and definitions
- 3. Key concepts
  - 3.1. Reference levels
  - 3.2. Eligibility criteria
  - 3.3 Specific guidelines for REDD-plus
- 4. General Guidelines
- 5. Instructions for completing the Proposed Methodology Form for REDD-plus
- 6. Instructions for completing the Proposed Methodology Spreadsheet for REDD-plus
- Annex I.   Guidance for establishment of reference levels
- Annex II.   Guidance for project boundary
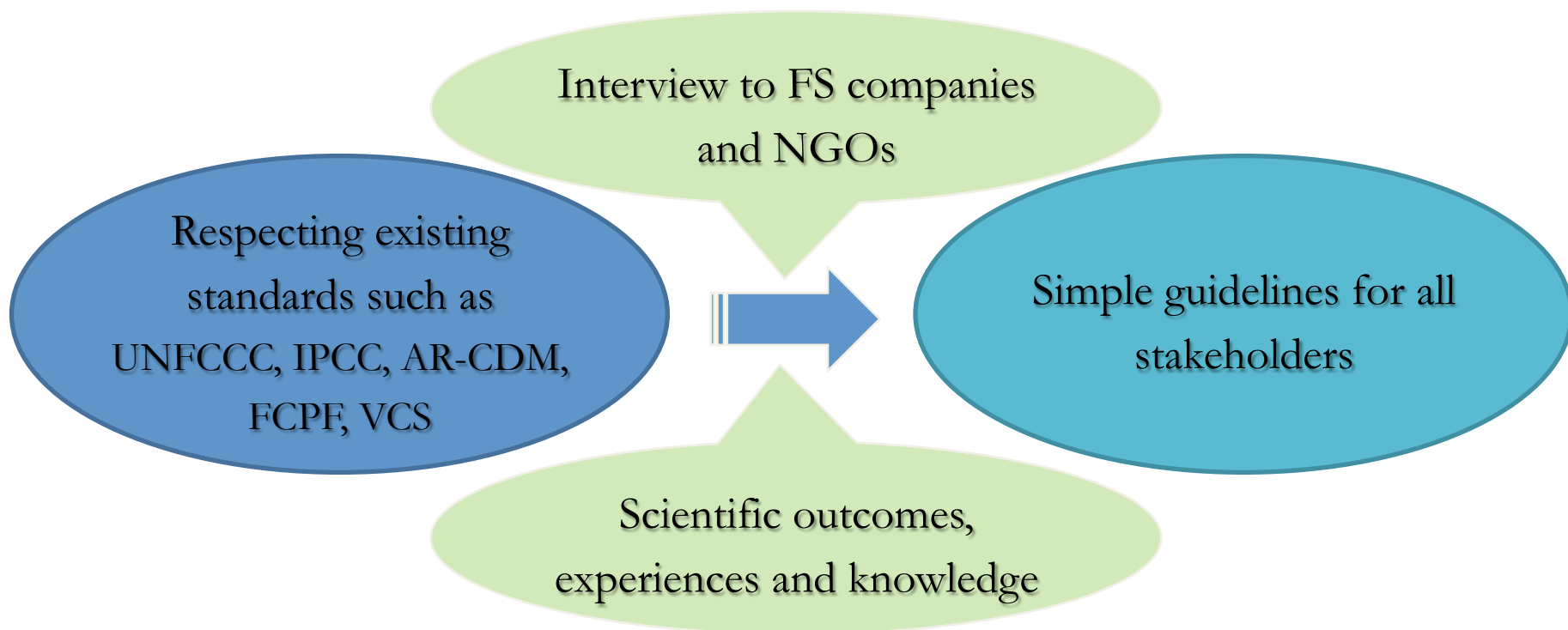- Annex III.   Guidance for monitoring of net GHG emissions

- Scope

- Project level activities

- Reference levels

- Boundaries

- Monitoring

- Discount factors

- Safeguards

Concept of the Guidelines

- Operational and transparent
- Promoting participation of multi stakeholders
- Scaling up from project levels to sub-national levels
- Continuous improvement of the guidelines

Interview to FS companies and NGOs

Respecting existing standards such as UNFCCC, IPCC, AR-CDM, FCPF, VCS

Simple guidelines for all stakeholders

Scientific outcomes, experiences and knowledge

Scope

- These Guidelines are to be referred to by the Joint Committee in developing and assessing proposed methodologies for REDD-plus.

- In line with the Cancun Agreements, REDD-plus activities are to contribute to: (a) reducing emissions from deforestation; (b) reducing emissions from forest degradation; (c) conservation of forest carbon stocks; (d) sustainable management of forests; and (e) enhancement of forest carbon stocks.

- These Guidelines for REDD-plus seek to assist developing the methodologies for REDD-plus to achieve reducing net emissions in forest land by these activities.

The draft guidelines are subject to a consultation and decision by each Joint Committee.

Project level activities

- JCM projects are not national/sub-national but project level.

- Eligibility criteria in proposed methodologies for REDD-plus contain the following:
  - (a) Requirements for the project in order to be registered as a JCM project.
  - (b) Requirements for the project to be able to apply the approved methodology for REDD-plus.

- In the JCM, emission reductions to be credited are defined as the difference between reference levels and project net emissions.

- The reference levels are calculated to be below business-as-usual (BaU) net emissions which represent plausible emissions in providing the same outputs or service level of the proposed JCM project in PARTNER COUNTRY.
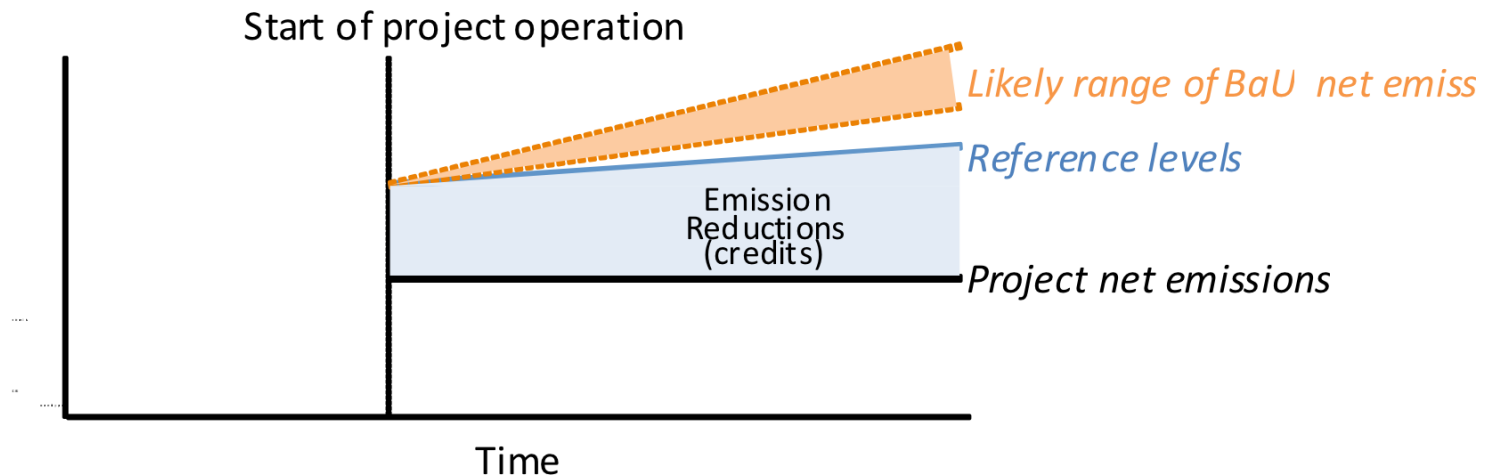
Indicative diagram of the relationship between the BaU net emissions, reference levels and project net emissions

- Reference levels should be established using carbon stock data from at least five points of time (which means four net emissions data) during reference period which dates back at least about 10 years from the start of the project.
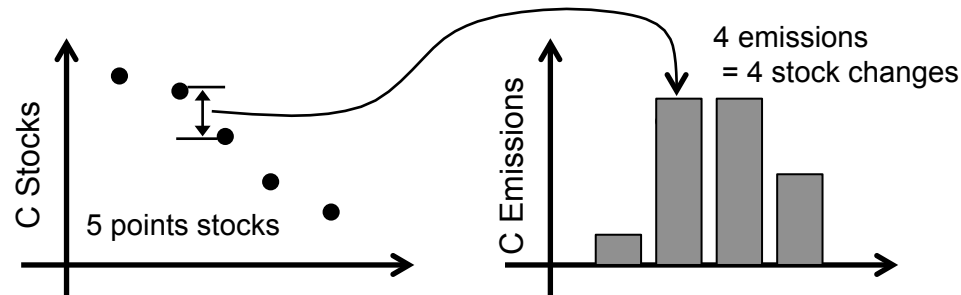
- The following three approaches are available:
  - (a) Based on <u>average</u> GHG net emissions in the past
  - (b) Using a <u>regression</u> formula based on historical trends
  - (c) Using <u>models</u>

- If a national or sub-national reference levels has already been established for an area that includes the project area, the relationship between the project's reference level and the national or sub-national reference level is explained.

- The reference levels are reassessed within five years intervals.

Boundaries

- The project area fulfills the internationally accepted national definitions of forest especially reported to the UNFCCC by the country.
  - The project area is to have been fulfilling the definitions for <u>a minimum 10 years before the project start</u>.
- The proposed methodology for REDD-plus is examined following four items when considering the project's boundaries,: project area, reference area, carbon pools and GHG types.
- Guidance:
  - At least <u>80 percent</u> of the project area is under the control <u>at validation</u>, and the entire project area comes to be under the control by first verification event.
  - Reference area: The reference area is <u>similar to a project area</u> regarding the drivers of deforestation and/or forest degradation, landscape configuration, socio-economic and cultural conditions.
  - Carbon pools and GHG sources: Five carbon pools: above-ground biomass; below-ground biomass; dead wood, litter and soil organic carbon. <u>Net GHG emissions may be excluded if</u> net GHG emissions associated with these carbon pools and GHG sources are <u>less than five percent</u> of total of net GHG emissions from the project.

Monitoring

- The monitoring of net GHG emissions should apply a combination of remote sensing and ground-based survey.

- Guidance

  - Remote sensing: no less than 30 meter resolution of satellite imagery is used for monitoring land use and land-use changes. The imagery analysis has a forest/non-forest classification accuracy of 80 percent or [above] [higher]. Analyses for each forest type have an accuracy of 80 percent or [above][higher], and it is encouraged that forest type is classified in consideration of the amount of carbon stock per area. Forest types should reflect each country's designated forest types.

  - Ground-based survey: measurements used for estimating carbon stocks per area should be based on data obtained from ground-based surveys. If it is not applicable, the IPCC's Emission Factor Database (EFDB), national forest inventories or other internationally recognized data may be used.

- Potential sources of reversal of net emission reductions are identified.

- As approaches for effectively dealing with reversals, the emission reductions to be credited are estimated using discount factor considering internal risks, external risks and natural risks.

- Discount factor, as default value, should be accounted as 30 percent.
    - Based on the results of feasibility studies so far, 30 percent discounts were required to cover the risks.

- When different approach is used to deal with risk of reversals, its accounting method and reasonable explanation are provided.

Safeguards

- Guidance for promoting and supporting REDD+ Safeguards under the JCM will be shown in the "JCM Guidelines for Developing Project Design Document and Monitoring Report".

- Guidance
  - According to Cancun safeguard items including national forest governance structures, the knowledge and rights of indigenous peoples and members of local communities, participation of relevant stakeholders and the conservation of natural forests and biological diversity, or promoting and supporting REDD+ Safeguards under the JCM are explained.
  - Respecting Cancun safeguard, criteria and general steps to ensure the criteria are explained.

From results of JCM FS in Central Kalimantan

(Source) Hiratsuka et al. (2014)
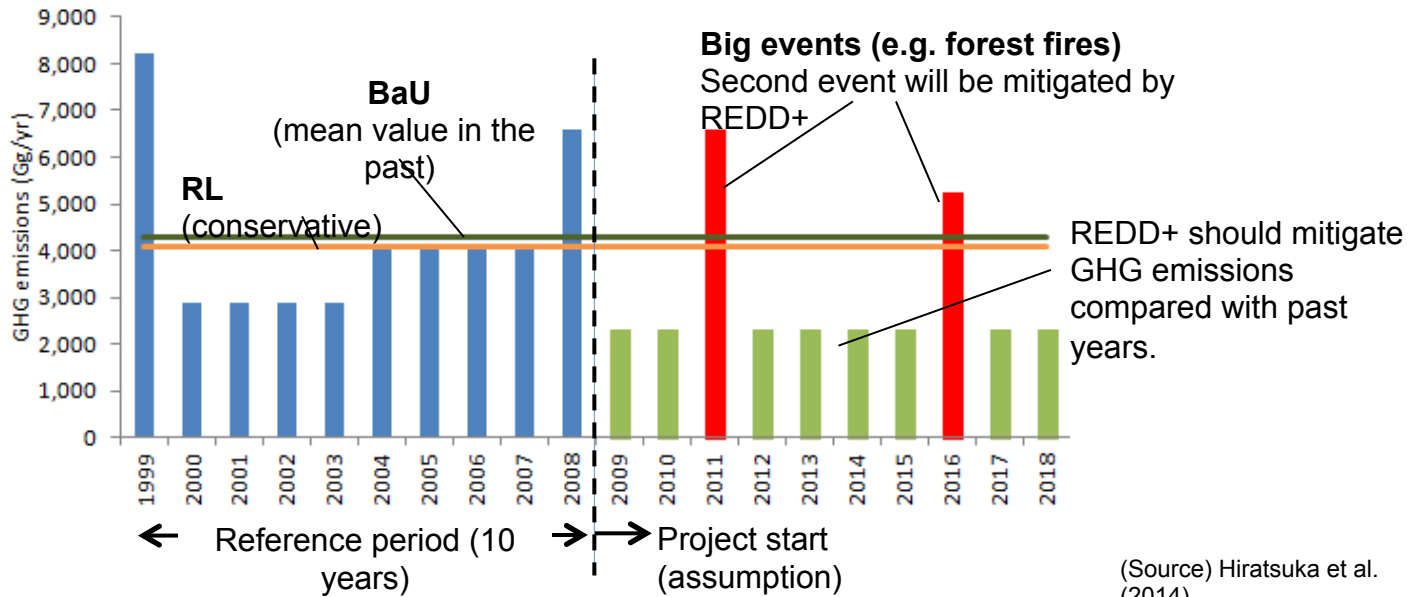
[Assumptions]

1. Reference period is for 10 years (1999 to 2008), and their mean value is set as Reference Level (RL) with conservative manner.

2. Big events (i.e. forest fires effected by ENSO) will happen on about five-year interval (one time per 5 years), and GHG emission will over RL (i.e. debit). Amount of debits are assumed that the first is same as past. While the second is 80% of recent debit, because the second debit will be mitigated by REDD+.

3. GHG emissions without big events are assumed same as 80% of past years without some events.

   From above assumption, Discount factor considering big events is calculated as follows;

> Discount factor is set as 30% by applying conservative manner.

インドネシアとの合同委員会

- 第4回合同委員会
  - 2015年5月18日、Bintaro, Indonesia

- 議題の一つとしてREDD+
  - ガイドラインの説明
  - 意見交換
  - 事前にインドネシア側からコメント・質問を受け取っていた
  - ネガティブなコメントは無く、むしろ科学的で厳密な方法を求めるものが多かった

- 8月にREDD+に関するSpecific meetingを開催することで合意

インドネシア政府と協議すべき主な論点

- ## 参照レベルの定義
  - UNFCCCにおいて参照レベルの定義が合意に至っていない中 、インドネシアは、独自の森林参照レベル（FRL）及び参照レベル（RL）の定義を有している（前者は土地被覆のトレンドから算出、後者は活動ベースで設定）。両者の定義及び現地における参照レベル設定の実態を把握したうえで、JCMで設定する参照レベルの位置づけを協議する必要がある。

- ## 森林火災等の自然災害の取扱い
  - インドネシアでは実態として、森林火災が頻繁に発生している。森林火災には、数年に1度エルニーニョによる土壌乾燥が由来で大規模に発生するものと、ほぼ毎年発生するものがある。前者については反転リスクに位置づけられ、後者は毎年のトレンドとして参照レベルに含まれると考えられるが、両者の切り分けが現実的に可能か等、実態を踏まえた議論が必要。

- ## より厳格な規定を求められている事項
  - インドネシアからのコメントでは、モニタリングの精度や頻度、提出する情報等について、日本版ドラフトよりも厳格な規定を求めている箇所が複数ある。これらについては、規定を満たす取組の実施に必要な労力と得られる精度の向上のバランスを考えた上で、わが国民間企業等による実施可能性を踏まえた協議が必要。