

AR/CDM及びREDDに関する国際議論の動向と日本の取組み

PROGRESS ON AR/CDM & REDD, AND JAPAN

武藤信之（林野庁 海外林業協力室）
Nobuyuki Muto (International Forestry Cooperation Off. Forestry Agency Japan)

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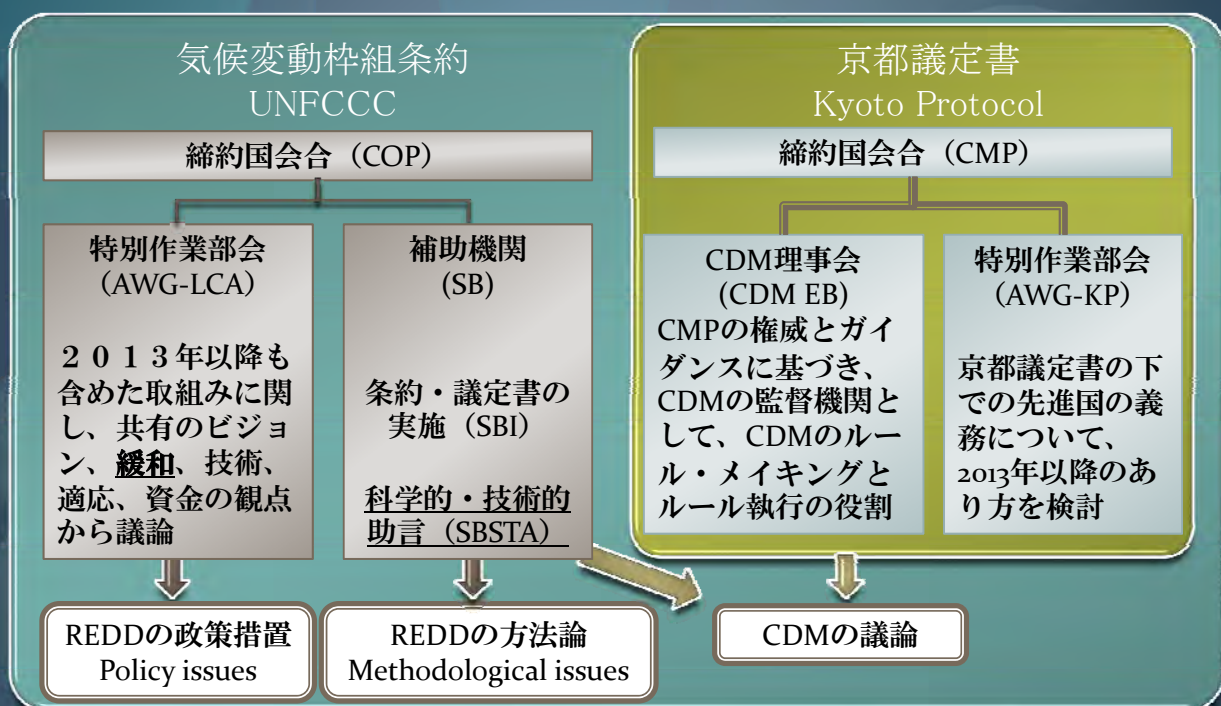
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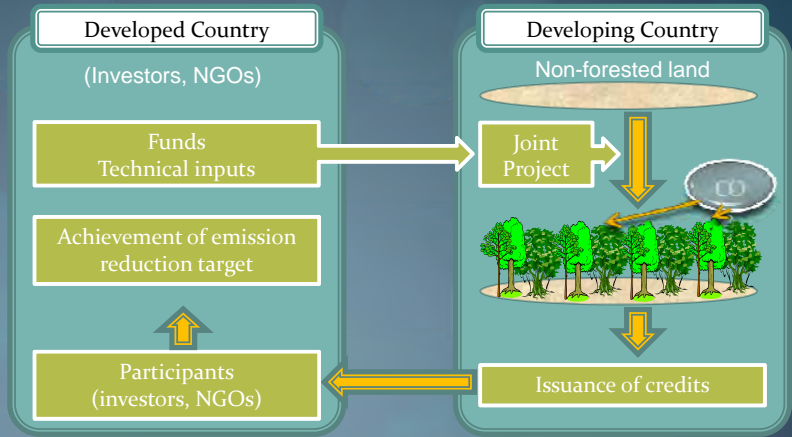
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1. 気候変動枠組条約の下での森林 Forests under the UNFCCC

- 温室効果ガスの吸収源及び貯蔵庫（特に、バイオマス、森林、海その他陸上、沿岸及び海洋の生態系）の持続可能な管理を促進すること並びにこのような吸収源及び貯蔵庫の保全（適当な場合には強化）を促進し並びにこれらについて協力すること（条約 第4条 1(d)）
- All Parties ... shall promote sustainable management, and promote and cooperate in the conservation and enhancement, as appropriate, of sinks and reservoirs of all greenhouse gases ... including biomass, **forests** and oceans as well as other terrestrial, coastal and marine ecosystems. (UNFCCC Article 4.1.(d))
- 京都議定書 第1約束期間 (2008 - 2012)
 - 京都メカニズム => CDM植林
 - 先進国の森林吸収源
- 1st commitment period (2008 - 2012) under the Kyoto Protocol
 - Kyoto Mechanisms => AR-CDM
 - Forest sink in developed countries
- 次期枠組 (2012年後)
 - REDD (途上国の森林減少・劣化に由来する排出の削減)
- Future framework beyond 2012
 - REDD (Reducing emissions from deforestation and forest degradation in developing countries)

2. 気候変動枠組条約の下での検討 Consideration under the UNFCCC

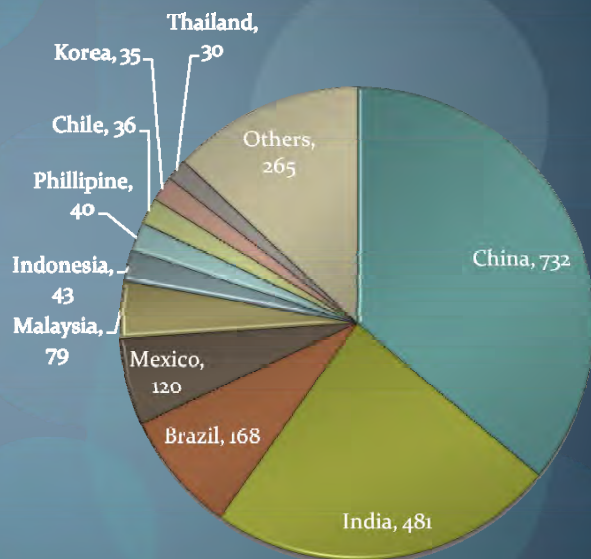




CDM植林 AR-CDM

3. CDMの現状 Current status of CDM

- 総プロジェクト数(No. of registered projects): 2029
- 総排出削減予測(Estimated reductions): 343 mil. t-CO₂/yr
(as of 3 Feb. 2010)
- プロジェクト数では中国、インド、ブラジル、メキシコで約7割
- China, India, Brazil and Mexico occupy large portion of percentage (approx. 70%) in the number of projects.



No. of registered projects by host country
(source: www.kyomecha.org)

4. CDM植林の現状 Current status of AR-CDM

- CDM植林のプロジェクト数: 13
(No. of registered AR-CDM projects)
 - Registered in 2006: 1, 2009: 10 and 2010: 2
 - プロジェクト数で0.54%
(in the total number)
- CDM植林の排出削減予測: 413 k t-CO₂/yr
(Estimated reductions from AR-CDM)
 - 排出削減予測で0.11%
(in estimated reductions)
- 排出源プロジェクトとの大きな違いは非永続性等
Differences from emission reduction projects include "non-permanence"
 - 森林によるCO₂の吸収・固定が枯死等により一定の期間後にはなくなる（放出される）可能性
 - Risk that removals by sinks are reversed because of death etc.



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国連に登録されたプロジェクト Registered AR-CDM projects

year	Title	Host Parties	Other Parties	Reductions (t-CO ₂)	Scale
2006	Facilitating reforestation for Guangxi watershed management in Pearl River Basin	China	Italy, Spain	25795	
2009	Moldova soil conservation project	Rep. of Moldova	Sweden, Netherlands	179242	
2009	Small scale cooperative afforestation CDM pilot project activity on private lands affected by shifting sand dunes in Sirsa, Haryana	India		11596	Small
2009	Cao Phong reforestation project	Viet Nam		2665	Small
2009	Reforestation of severely degraded landmass in Khammam District of Andhra Pradesh, India under ITC Social Forestry Project	India		57792	
2009	Carbon sequestration through reforestation in the Bolivian tropics by smallholders of "The Federación de Comunidades Agropecuarias de Rurrenabaque (FECAR)"	Bolivia	Belgium	4341	Small
2009	Uganda Nile Basin reforestation project No.3	Uganda	Italy	5564	Small
2009	Reforestation of croplands and grasslands in low income communities of Paraguarí Department, Paraguay	Paraguay	Japan	1523	Small
2009	Afforestation and reforestation on degraded lands in Northwest Sichuan, China	China		23030	
2009	Reforestation, sustainable production and carbon sequestration project in José Ignacio Távara's dry forest, Piura, Peru	Peru		48689	
2009	Humbo Ethiopia assisted natural regeneration project	Ethiopia	Canada	29343	
2010	Assisted natural regeneration of degraded lands in Albania	Albania	Italy	22964	
2010	The international small group and tree planting program (TIST), Tamil Nadu, India	India	UK	3594	Small

As of 23 Feb. 2010

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4. CDM植林の現状

Current status of AR-CDM

- LULUCFプロジェクトは新規植林・再植林プロジェクトに限定
- 基準年における国内の温室効果ガス総排出量の1%を上限としてCDM植林による吸収量を目標達成に用いることを認めている
- 将来の約束期間におけるLULUCFプロジェクトの取り扱いは、第2約束期間の交渉事項
- The eligibility of LULUCF project activities under Article 12 is limited to afforestation and reforestation.
- For the first commitment period, the total of additions to a Party's assigned amount resulting from eligible land use, land-use change and forestry project activities under Article 12 shall not exceed one per cent of base year emissions of that Party, times five.
- The treatment of LULUCF project activities under Article 12 in future commitment periods shall be decided as part of the negotiations on the second commitment period.

5. CDM植林に関する議論

Consideration on AR-CDM (beyond CP₁)

- 2008年5月、AWG-KPとしては、CDMを約束達成の補完的手段として用いることについて一致(para.18, FCCC/KP/AWG/2008/2)
- In May, 2008, the "AWG agreed that emissions trading and the project-based mechanisms under the Kyoto Protocol should continue to be available to Annex I Parties as means to meet their emission reduction targets and could be appropriately improved. ... It further noted that the use of such mechanisms should be supplemental to the implementation of domestic actions at the disposal of Annex I Parties." (para.18, FCCC/KP/AWG/2008/2)
- AWG-KP 10 (2009年12月)では、各国意見等を検討し、CDMの改訂案を整理(FCCC/KP/AWG/2009/L.15)
- The AWG-KP agreed to forward the report on its tenth session,¹ including the draft text ... to the CMP for consideration at its fifth session. (FCCC/KP/AWG/2009/L.15)

5. CDM植林に関する議論 Consideration on AR-CDM (beyond CP₁)

- 新規植林、再植林は、第2約束期間もCDM活動として有効。他の活動は将来合意されれば有効
- 新規植林、再植林のモダリティ等は、第2約束期間も第1約束期間どおりに適用。非永続性の取扱いは将来のCOP/MOP決定による
- 新規植林、再植林の算入は1%×[x]を上限
- AR are eligible projects activities under the CDM in the CP₂. Activities additional to AR will be eligible if agreed by any future decision of the CMP.
- The modalities and procedures contained in decision 5/CMP.1 for AR project activities under the CDM, and in decision 6/CMP.1 for small-scale AR project activities under the CDM, shall apply, mutatis mutandis, to the CP₂. Alternative approaches to addressing the risk of non-permanence may apply in accordance with any future decisions of the CMP.
- For the CP₂, the total of additions to a Party's assigned amount resulting from AR project activities under Article 12 shall not exceed one per cent of base year emissions of that Party, times [X].

5. AR-CDM植林に関する議論 Consideration on AR-CDM (beyond CP₁)

- 検討中のオプション
 - 新規植林、再植林は、第2約束期間もCDM活動として有効。他の活動は将来合意されれば有効
 - 新規植林、再植林のモダリティ等は、第2約束期間も第1約束期間どおりに適用。非永続性の取扱いは将来のCOP/MOP決定による
 - 新規植林、再植林の算入は1%×[x]を上限
- Options for consideration
 - AR are eligible projects activities under the CDM in the CP₂. Activities additional to AR will be eligible if agreed by any future decision of the CMP.
 - The modalities and procedures contained in decision 5/CMP.1 for AR project activities under the CDM, and in decision 6/CMP.1 for small-scale AR project activities under the CDM, shall apply, mutatis mutandis, to the CP₂. Alternative approaches to addressing the risk of non-permanence may apply in accordance with any future decisions of the CMP.
 - For the CP₂, the total of additions to a Party's assigned amount resulting from AR project activities under Article 12 shall not exceed one per cent of base year emissions of that Party, times [X].

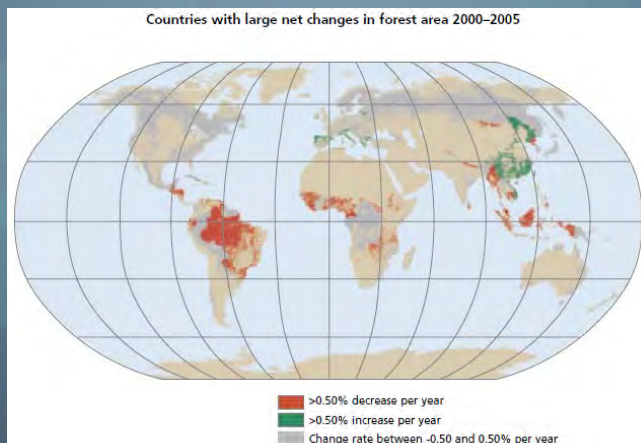
5. CDM植林に関する議論 (第1約束期間) Consideration on AR-CDM (CP1)

- 「Forests in exhaustion」の検討
 - COP/MOP₄(2008)はCDM理事会に対して植林CDMの対象地として「forests in exhaustion」を含めることについて検討し、COP/MOP₅(2009)に報告するよう要請 (決定2/CMP.4、パラ42)
 - CDM理事会は「forests in exhaustion」の定義や、これを第1約束期間の再植林対象地とする場合に必要改訂案等をCOP/MOP₅に報告 (FCCC/KP/CMP/2009/16, para.65)
 - FEは、1989年末かつ/又はプロジェクト開始時点で森林を含む土地
 - プロジェクト開始時点で森林の場合、プロジェクトがなければ、[5]年以内の最後の収穫により非森林地に転換
 - プロジェクト開始時点で非森林地の場合、プロジェクトがなければ、非森林地のまま
 - CMP 5はSBSTAにてさらに検討することを決定 (FCCC/KP/CMP/2009/L.10 パラ28)
- Consideration of “forests in exhaustion”
 - CMP 4 requests the EB to assess the implications of the possible inclusion of lands with forests in exhaustion as AR-CDM project activities, taking into account technical, methodological and legal issues, and report back to the CMP 5 (decision 2/CMP.4, para. 42)
 - The EB conducted a study on the implications of the possible inclusion of reforestation of lands with forests in exhaustion as CDM project activities and agreed to the recommendation contained in annex I to this report. (FCCC/KP/CMP/2009/16, para.65)
 - “forest in exhaustion” is an area of land that contained forest – established through planting, seeding and/or the human-induced promotion of natural seed sources – on 31 December 1989 and/or at the starting date of the project activity. If the land at the starting date of the project activity is forest then, in the absence of the project activity, it would be converted to non-forested land through final harvesting within [5] years of the proposed starting date of the project activity. If the land at the starting date of the project activity is non-forested land then, in the absence of the project activity, it is expected to remain as non-forested land.
 - CMP requests the SBSTA to assess the implications of the recommendation regarding forests in exhaustion, as contained in annex I to the annual report of the EB (FCCC/KP/CMP/2009/L.10, para.28)

REDD

6. 世界の森林 Forests in the world

- 世界の森林面積は39億5千万ha（陸地の3割）
- World forest area: 3.95 bil. ha (or 30% of land area)
- 熱帯地域を中心に森林の減少面積は1290万ha/年（2000～2005年）
- Deforestation continues at some 13 million ha/yr. (2000 – 2005)
- 植林面積（約560万ha/年）との差は約730万ha/年
- Net global change in forest area in the period 2000–2005 is estimated at -7.3 million hectares per year.

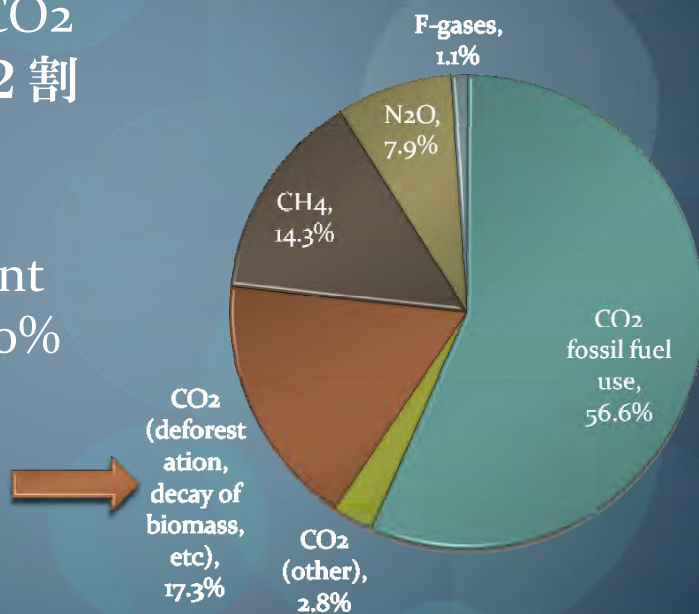


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7. 世界の人為的な温室効果ガスの排出 Global anthropogenic GHG emissions in 2004

- 森林減少等からのCO₂の排出は全体の約2割を占めている
- Emissions from deforestation account for approximately 20% of total emissions



(source: IPCC AR4, 2007)

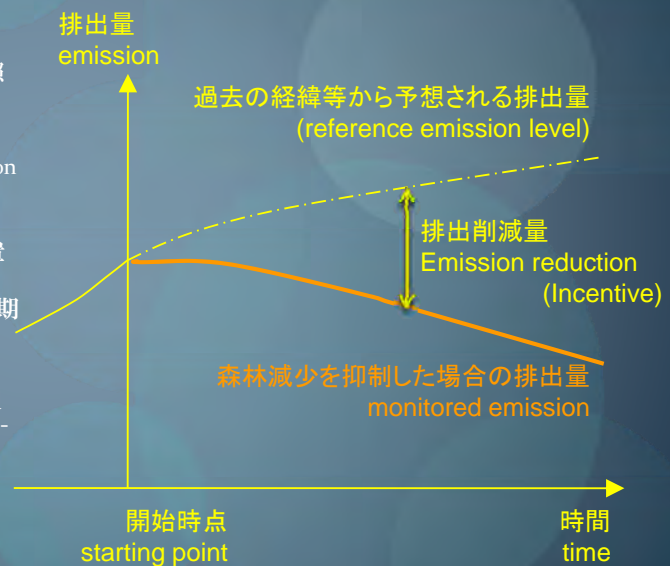
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8. REDDに関する議論－考え方 Consideration of REDD - Concept

- 気候変動枠組条約第11回締約国会議（2005年）にてPNGとコスタリカが共同提案
Proposed by PNG and Costa Rica at the COP11(2005)
 - これまでの森林減少による排出量等により参照排出レベル（ベースライン）を設定
Establishing reference emission level
 - 森林減少対策を実施
Implementing activities for avoiding deforestation
 - 排出量をモニタリング
Monitoring emission
 - 排出削減量に応じ資金等のインセンティブ措置
Providing positive incentive
- COP13（2007）で2009年までにREDDを含め次期枠組みについて検討することに合意

The COP14 decides to launch a comprehensive process to enable the full, effective and sustained implementation of the Convention through long-term cooperative action, now, up to and beyond 2012, in order to reach an agreed outcome and adopt a decision at its fifteenth session

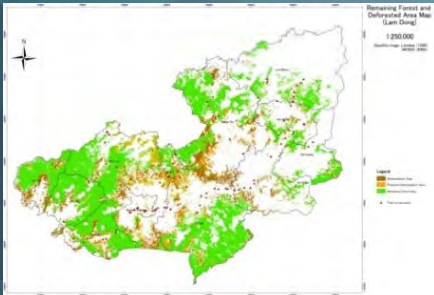


8. REDDに関する議論－COP15等 Consideration of REDD at the COP15

- REDDに関しては、これまで、資金メカニズムをはじめとする政策論の検討と、森林からの吸収・排出量の推計やモニタリング等、方法論に関する検討が行われてきた
- 今次会合で、首脳レベルの協議・交渉の結果、作成された「コペンハーゲン合意」において、森林減少・劣化からの排出の削減や吸収の役割の重要性や、取組みに必要な資金等について盛り込まれた
- また、SBSTAにおいて、森林からの吸収・排出量の推計やモニタリング等、方法論に関する検討が行われ、指針が決定された
- なお、REDDの政策論については、今次会合では決定に至らず、COP決定に基づいて、引き続きAWG-LCAにて検討が行われる見込み
- Policy issues at the AWG-LCA and methodological issues at the SBSTA have been considered
- “Copenhagen Accord” refers to the crucial role of REDD-plus and financial issues
- Methodological guidance was prepared by the SBSTA 31
- The work on political issues has not been completed, and would be continued

9. 取組みの推進 Promoting relating activities

- 実証活動等の重要性



最新の衛星情報を基に森林の状態を判読する技術によって森林減少・劣化を把握（インドネシア、ラオス等）

Technical cooperation in Lao people's democratic republic

- 二国間、多国間の取組み
 - FCPF(我が国も拠出)、UN-REDD等
- 我が国においても、途上国における取組みを支援する技術者等の養成や、技術開発等を継続的に実施する体制整備も重要

- Noting the range of ongoing activities and cooperative efforts being undertaken by Parties and international organizations, in accordance with decision 2/C.13, paragraphs 1, 2, 3 and 5 (decision-/CP.15)

- Parties to explore a range of actions, identify options and undertake efforts, including demonstration activities, to address the drivers of deforestation relevant to their national circumstances, with a view to reducing emissions from deforestation and forest degradation and thus enhancing forest carbon stocks due to sustainable management of forests (decision 2/CP.13, para.3)

- Bilateral and multilateral
 - including the FCPF (Japan's contribution), UN-REDD and so on...
- Importance of training and developments of technology for related activities in Japan

9. 取組みの推進 Promoting relating activities

- 途上国の森林減少・劣化対策に関する国際セミナー
- 平成22年3月10日（水）～11日（木）
- 全国都市会館 ホールA
 - 途上国における森林減少・劣化に由来する排出の削減については、COP15における議論を経て、支援の具体化・強化の必要性が高まっています。このため、途上国政府や国際機関等から参加者を迎え、途上国における取組の現状や今後の課題等についての情報交換を行います。

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