



MRV – CURRENT SITUATION AND ISSUES

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CURRENT MRV – GHG INVENTORY

National GHG Inventory

	Annex I parties	Non-Annex I parties
Frequency of reporting	Annually (prepared separately from the national communication)	Irregularly: roughly once every few years (prepared as one part of the national communication)
Format for reporting	Required to prepare a table for data reporting following the National Inventory Report (NIR) and the Common Reporting Format (CRF)	No requirement to prepare the NIR or CRF. Merely required to report results of calculations using a simple table found in the guidelines for non-Annex I party national communications (Annex of Decision 17/CP.8)
Target gases	CO ₂ , CH ₄ , N ₂ O, HFCs, PFCs, SF ₆ (+ CO, NO _x , NMVOCs, SO ₂)	CO ₂ , CH ₄ , and N ₂ O are compulsory HFCs, PFCs, SF ₆ , CO, NO _x , NMVOCs, and SO ₂ are encouraged
Target years	Required to report on emissions and sinks for all years from the base year (1990 as a rule) to the latest year (two years prior to the reporting year)	Initial national communication: reporting on 1994 (or 1990) Second national communication: reporting on the year 2000 only Third national communication: undecided

National GHG Inventory

	Annex I parties	Non-Annex I parties
Guidance	Required to use the Revised 1996 IPCC Guidelines and the IPCC Good Practice Guidance Report (2000, 2003)	Required to use the Revised 1996 IPCC Guidelines (Use of the IPCC Good Practice Guidance Reports (2000, 2003) is encouraged)
Use of GWP	Required to calculate total emissions amounts using the 100-year GWP values of the Second Assessment Report (SAR) of the IPCC	No requirements to calculate total emissions using GWP
Review	Required every year to undergo technical review under the Convention or review under Article 8 of the Kyoto Protocol. Both reviews are performed by review teams comprised of experts from other countries. Under the Kyoto Protocol, in some cases adjustment of estimate values by the review team may be applied according to Article 5, paragraph 2.	No requirement to undergo review

+ IAR...

+ ICA...

Verification (?) – Inventory review

- Review GHG inventory in terms of transparency of reporting, appropriateness of procedures taken to monitor, estimate and report GHG emissions and removals
- Not necessarily check the accuracy of estimates.
 - ◆ Are the methods used to estimate GHG emissions in conformity with the IPCC Guidelines?
 - ✓ In some cases, accuracy of data is closely checked by reviewers based on their own expertise and knowledge.
 - ◆ Are the estimates of GHG emissions and removals reported in accordance with the IPCC Guidelines and UNFCCC Reporting Guidelines?
- May be different from general "Verification".
 - ◆ Inventory reviewers actively give advice to the inventory compilers.

Current MRV – Strong points & weak points

➤ Annex I Parties

◆ Strong points

- ✓ “MR” based on detailed guidelines, Rigorous “V” (technical review)
- ✓ Stringent use of IPCC Guidelines by all Parties makes comparison between countries easy
- ✓ Synthesis report prepared by the secretariat enables overview of overall picture of GHG emissions from AI Parties
- ✓ Recommendations by Expert Review Teams (ERTs) greatly help the Parties improve inventories.

◆ Weak points

- ✓ Requires massive resources (time, money, human resources)
- ✓ Takes a lot of time
- ✓ Review by Multiple ad-hoc ERTs – very difficult to ensure high-level of consistency

➤ Non-Annex I Parties

◆ Strong points

- ✓ Reporting guidelines are flexible enough to cover a wide variety of national circumstances

◆ Weak points

- ✓ Flexible application of guidelines - makes comparison between countries not easy
- ✓ Absence of synthesis report – makes it difficult to overview of overall picture of GHG emissions from NAI Parties
- ✓ Absence of review process - losing opportunities to get advice/recommendation by expert reviewers

Concern about IAR/ICA processes

➤ Lack of human resources

- ❑ There are not many (high quality) experts available. (There are other “review” processes – GHG inventory review, NC review, etc!)
- ✓ Particularly, this issue will be serious in 2015 and onwards.
- ✓ This is already a problem in Annex I inventory review.

➤ Can big difference be made...?

❑ Annex I Parties:

- ✓ Stringent reviews are already in place (for GHG inventory and NCs)

❑ Non-Annex I Parties:

- ✓ ICA - ” Non-intrusive, non-punitive, respectful of national sovereignty”

Concern about IAR/ICA processes

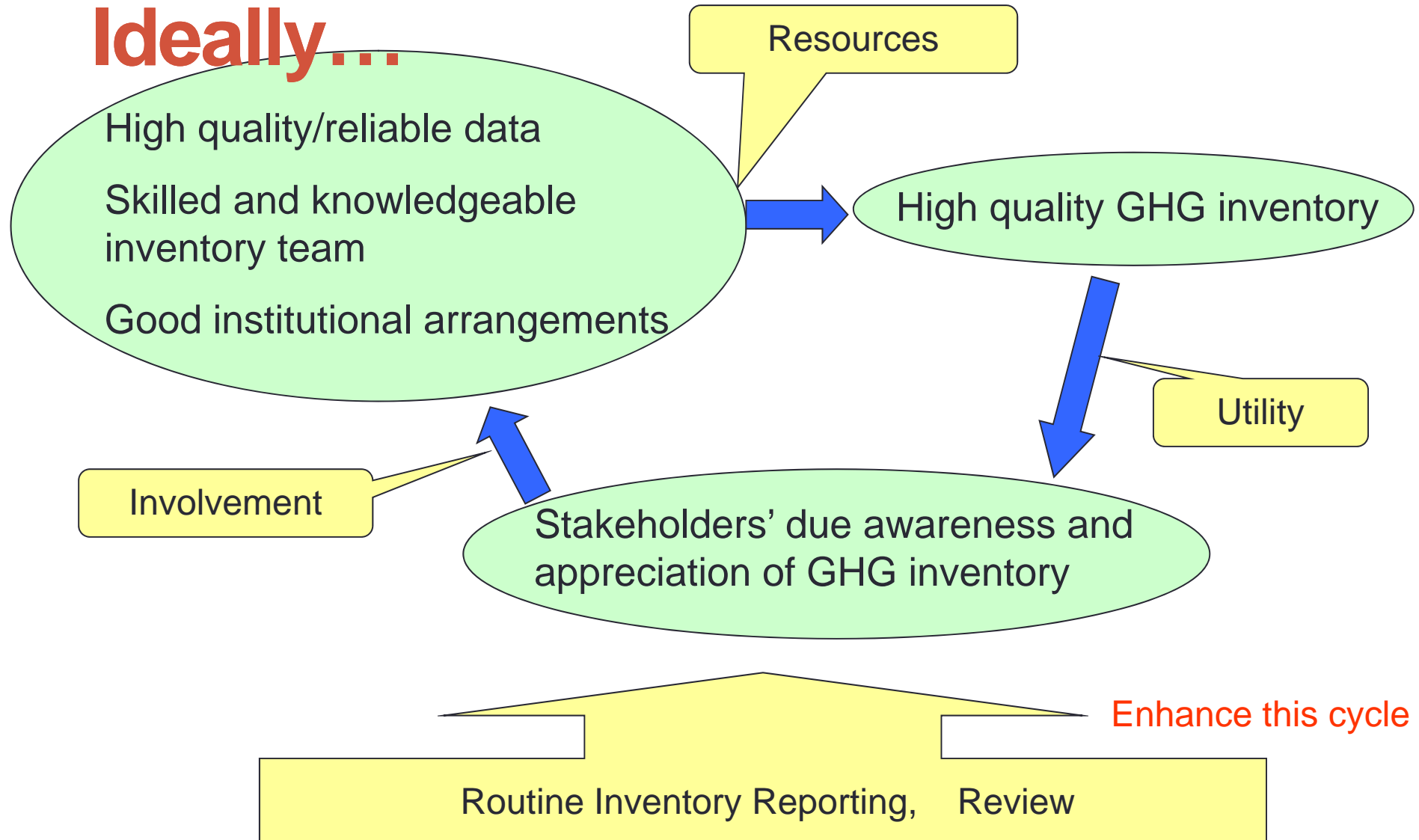
- Time limitation
 - International Assessment ~~vs~~ International Consultation can be implemented in a timely manner?
 - Is it realistic and/or effective to implement IAR/ICA process for all countries every 2 years...?

Expectation to BUR/ICA

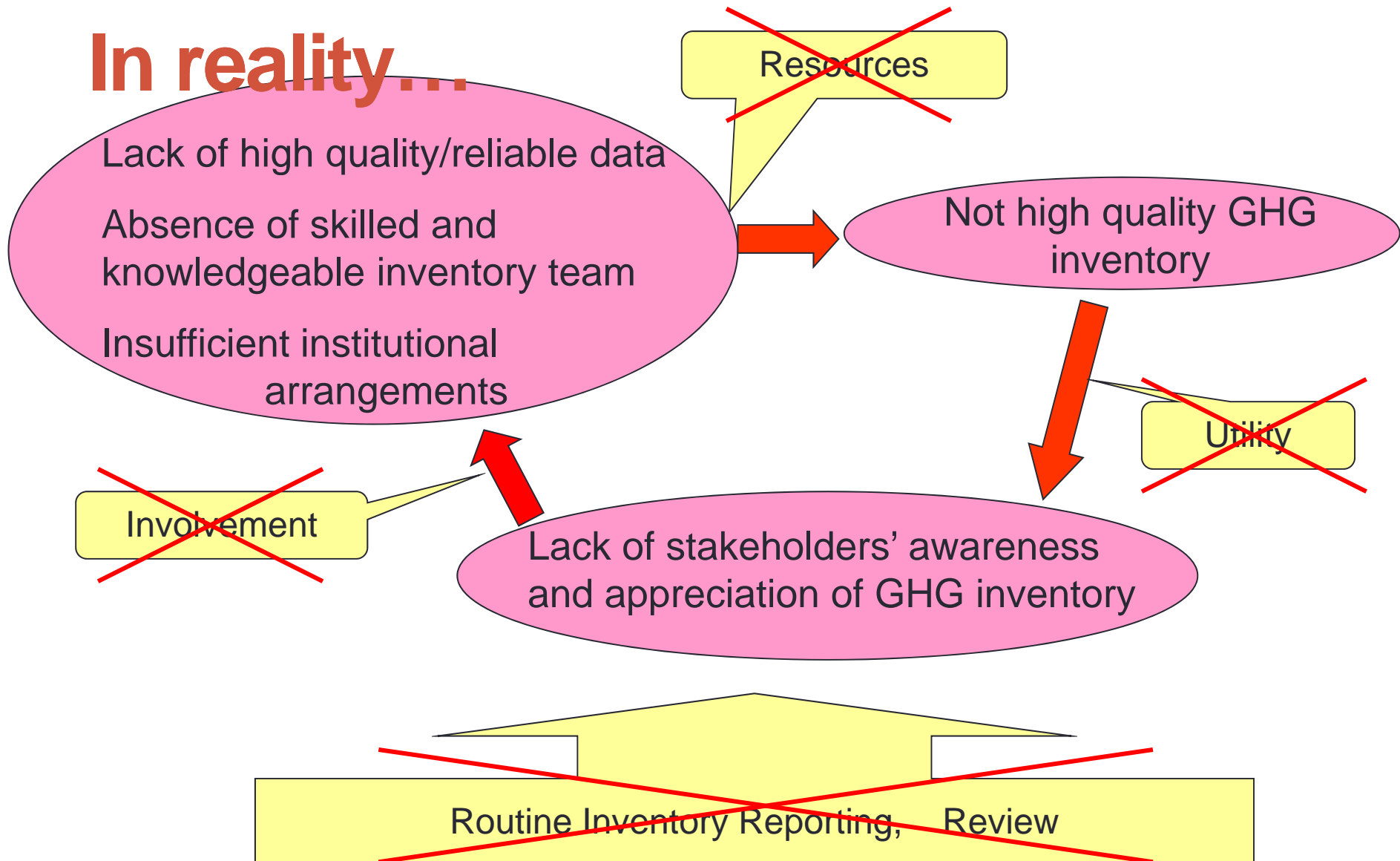
- Regularization of MR activities by introduction of BURs
- “Facilitative sharing of views” – new endeavor!
 - ▣ Non-Annex I Parties will have to answer questions by other countries about their report (including national GHG inventories). It will help them improve their “MR”.
 - ✓ Ownership
 - ✓ Visibility
 - ✓ Advice from other countries

PROBLEMS WITH CURRENT MRV IN NAI COUNTRIES

Ideally....



In reality....



To overcome lack of (activity) data

- Desirably, official statistics should be developed (particularly for key categories).
- A possible way forward:
 - Take stock of (key) categories in which better activity data are needed.
 - Learn from the other countries' experiences
 - What kind of official statistics are used?
 - For what purposes those statistics were originally developed by whom (which ministry), and how they are used?
 - Persuade/induce relevant ministries to develop such official statistics, emphasizing its usefulness for their own policy purposes.

To improve institutional arrangements

- Need to enhance involvement of relevant ministries/agencies and other stakeholders.
- Awareness-raising is key.
 - Education/Training Needs
 - Officials (at various levels) – Role of Emission Inventories, co-benefits, need to influence high-level decision makers
 - Public – Climate Change, Emissions and their reductions, ways to reduce personal emissions, simplified estimation methods
 - Industry/Companies – Climate Change, Emissions and reductions, projects (CDM etc.)
 - *Essential to successful inclusion of F-gases in inventory reporting*
 - Need to promote EI across agencies
 - Links to other issues – energy security, food security etc.

To improve capacity of inventory team and inventory process

- Routinizing inventory compilation will help:
 - improve inventory team's skill
 - facilitate data collection
- Currently, NAI countries compile their inventories only as part of NCs not on a regular basis.
- In the future climate regime, routine inventories (annually? every two years?) should be encouraged.
 - On a voluntary basis? – May need some incentives
 - Mandatory? – Will need revision of UNFCCC guidelines to separate GHG inventories from NCs

To improve capacity of inventory team and inventory process

- “Review” (or the like) will be also helpful since it is a learning process.
 - Inventory team will improve their skill through interaction with external inventory experts.
 - Inventory team can identify categories/gases that should be prioritized in their work to improve the overall quality of inventory.
- Contentious issue!!
- Cross-checking of inventories among some countries as informal process – will it work?

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One Hundred Questions & Answers about MRV in Developing Countries

IGES Institute for Global Environmental Strategies
公益財団法人 地球環境戦略研究機関

<http://www.iges.or.jp/en/climate-energy/mm/201309mrv.html>

将来枠組みにおけるMRVの あり方について

現在の制度の活用とスリム化

- 現在のMRV制度(特に附属書I国用)は、長年の経験を蓄積して改善を重ねてきており、将来枠組みにおけるMRVの基礎となり得る。
- しかし、現行制度は必ずしも効率的とはいえない。無駄を排してスリム化する必要がある。
 - ✓ 例えば、附属書I国について、重要な情報は年次インベントリや隔年報告書で通報されることを考えると、国別報告書の作成・提出はもっと頻度が低くてもよいのではないか。
 - ✓ インベントリ審査は、内容が細かくなり過ぎており、附属書I国に非効率な改善を要求するケースもみられる。審査基準を見直して、インベントリ作成に非効率な資源投入をしなくてすむようにすべきではないか。
- 人的資源の限界を考えると、審査制度(ICA含む)の簡素化、効率化の追求は必要不可欠。

現在の制度の活用とスリム化

- すべての国に定期MRを求める現在の制度は維持すべき。
 - ✓ 定期的なMRは、MR能力の維持・向上に資する
 - ✓ 報告条件(タイミング)の統一性は、国別比較や全体像の把握のために必要不可欠
 - ✓ 事務局による統合レポート作成は、将来枠組みにおいても重要。全体像の把握を可能とし、プレッジや緩和進捗状況とあるべき削減幅とのギャップの把握につながり、野心向上についての基礎的情報を与える。
 - ✓ Vについては、必ずしも毎回のMRに対して実施する必要はないのではないか (MRを2年おき、Vを4年おき、ということでもよいのではないか)
- ERTやTTEによるVerificationは、一貫性の問題を抱えているが、現実的な方法であり、将来枠組みでも活用すべき。
 - ✓ 少数の専門家・単一の評価機関による一元的なVerificationは、コストの高さ、政治的な合意形成の難しさ、専門家の能力の限界などから、実現困難なのは。

厳格なVよりもFacilitativeなV？

- 一般的な意味での Verification を厳格に適用するのは、現実的ではない。
 - ✓ 途上国に対しては、特に非現実的。
 - ✓ 先進国(附属書I国)に対しても、難しいのでは。
- “Facilitative sharing of views” をより柔軟に行うのが有効な策の一つと思われる。
 - ✓ 必ずしもSBIのセッション中に限定する必要はない。
 - ✓ 全参加型のみならず、地域内小グループでの意見交換や、バイラテラルな相互学習型も有効ではないか。

その他...

- MRの内容の簡素化、効率化は必須
 - ✓ 緩和策の検討・効果把握に役立つ情報にしぼったMRの実施（特にインベントリ）のあり方を考える必要
 - ✓ 例えば、インベントリでは、主要排出源だけを報告・審査の対象にすればよい、という方針も特に途上国に対して認めることが考えられる。
（先進国あるいは国際機関による主要排出源分析実施の支援や、政策措置（P&M）ガイダンスの作成・提供が必要となる可能性）
- 目標の共同達成制度とのリンクは可能か
 - ✓ 目標の共同達成をする場合、MRについても協力することを促すべき。
例えば、先進国が途上国と目標共同達成することを奨励すれば：
 - ✓ 先進国はパートナー途上国のMR精度向上を積極支援するようになる？
 - ✓ 途上国は、パートナー先進国の支援強化を期待して、（意欲的な）目標設定に前向きになる？

その他(国以外の主体が果たし得る役割)

➤ 国際機関

- ✓ 国ではカバーできない分野のMRVの推進
 - 国際航空・外航海運からのGHG排出量の報告・削減(ICAO、IMO 等)
- ✓ 国のMRVにおける補助的役割
 - 検証用データの提供及び検証への参加(IEA、FAO 等)
 - 途上国へのデータ提供支援(IEA、FAO 等)やデータ分析の代行(UNFCCC?)

➤ 国際産業団体

- ✓ 国のMRVにおける補助的役割
 - (特に)途上国へのデータ提供支援、国内MRVに資する情報提供

➤ 自治体

- ✓ 国のMRVにおける補助的役割
 - 国内MRVに資する情報提供(ICLEIやWRIIによるGPCの活用、等?)
- ✓ 先進自治体による小途上国への協力
 - 先進自治体が既にもつMRVノウハウの、LDC等への移転

➤ NGO

- ✓ Facilitative sharing of viewsへの参加