

GSSD Reports

New Partnerships to reduce the Buildup of Greenhouse Gases

GSSD Report

An Open Forum in San Jose, Costa Rica
October 29-31, 1996

PRESENTATION

The Second Conference of the Parties to the UN Framework Convention on Climate Change (UN-FCCC) affirmed the warnings of potential human-induced climate change presented by the international scientific community in the Intergovernmental Panel on Climate Change's Second Assessment Report (SAR). The report, which describes a "discernible human influence on global climate," provides a scientific underpinning for policies that seek to reduce greenhouse gas emissions and enhance natural ecosystems as carbon sinks in order to reduce the threat of climate change.

The threat of human-induced climate change challenges the world community to build scientific, political, and methodological consensus on viable economic options that reduce the risks presented by such change. One initial approach to meeting this challenge involves international cooperation in "activities implemented jointly" (AIJ). While other instruments will emerge in the future, AIJ is one of the most important vehicles to date that can reduce emissions of greenhouse gases while supporting environmentally sound economic development. Furthermore, the success of AIJ as a mechanism which can contribute to the success of the FCCC depends on the degree to which AIJ meets the current and future needs of all host and investing country governments, investors, and project developers and other organizations that are partners in AIJ projects.

UNEP, the Earth Council, and the Government of Costa Rica are convening this Open Forum in order to advance consideration of a range of issues related to AIJ in an informal context away from the international negotiations.

OBJECTIVE

The objective of this Open Forum is to contribute to a broader global understanding of the issues associated with building international consensus for the development of innovative financing mechanisms, particularly AIJ, to develop a common vision which promotes new partnerships between the North and the South.

STRUCTURE

As the purpose of this Open Forum is to build confidence by airing the full range of views on these issues, the dialogue will be organized into a series of interactive roundtable discussions. Each roundtable will include a facilitator to promote and guide the discussions and a rapporteur to summarize the principal discussions arising in the debate. The results of the individual roundtables will be considered at the closing session by a high level panel that will draw policy-relevant conclusions emerging from the discussions at the Open Forum.

OPENING CEREMONY

ELIZABETH DOWDESWELL
Executive Director of UNEP

MICHAEL ZAMMIT CUTAJAR

Executive Secretary, UN-FCCC

JOSE MARIA FIGUERES
President of Costa Rica

ROUNDTABLE #1
THE GLOBAL CHALLENGE

This roundtable should provide the context for the Forum by addressing such questions as:

- A. Why should we worry about climate change? What does it mean to us? Who is at greater risk?
- B. What are the issues being discussed internationally, and what is the relationship among them?
- C. How do countries differently meet the goal of the Convention, and how will this look in the future?

Facilitator: IRVING MINTZER

Centre for Global Change, University of Maryland (U.S.)

A. "THE HUMAN FACE OF CLIMATE CHANGE"

ROBERT T. WATSON
Co-Chairman, IPCC WG II, Environment Department (U.S.)

B. "STATUS AND PROSPECTS OF INTERNATIONAL CLIMATE CHANGE NEGOTIATIONS"

TAHAR HADJ-SADOK
Coordinator, Financial and Technical Cooperation Programme, UN-FCCC

ROUNDTABLE #2
ASSESSING POLITICAL REALITIES

This roundtable strives to put on the table the full range of political views on AIJ. Issues to be addressed in this session include:

- A. Is AIJ a useful instrument for Annex I countries? What would be the implications of an AIJ regime open only to Annex I?
- B. What are the challenges faced by non-Annex I countries who might want to participate in AIJ? What are the costs of participation?
- C. Can AIJ be designed and implemented to be equitable to all participants? D. What are the shortcoming of fairness in AIJ?

Facilitator: Nazli Choucri

Political Science Department, Massachusetts Institute of Technology (U.S.)

A. "AIJ RISKS AND BENEFITS FOR THE SOUTH"

LUIS GYLVAN MEIRA FILHO
President, Space Agency of Brazil

B. AIJ RISKS AND BENEFITS FOR THE NORTH

FRANZ JOSEF SCHAFTHAUSEN
Federal Ministry of the Environment, Nature Conservation and Nuclear Safety, Germany

C. AIJ AS PART OF A WIN-WIN STRATEGY

FRANZ TATTENBACHV
Director, Oficina Costarricense de Implementacion Conjunta (OCIC) (Costa Rica)

D. ENSURING RECIPROCITY IN AIJ

CHOW KOK KEE

Director, Malaysian Meteorological Service

ROUNDTABLE #2: EVENING SESSION
TRADING IN GREENHOUSE GAS EMISSIONS

Coordinator: MICHAEL J. WALSH

Vice President, Centre Financial Products Ltd. (U.S.)

PANELISTS

NATHAN COLLAMER

Department of Energy, Environmental and Mineral Economics, Pennsylvania State University
(U.S.)

MICHAEL J. WALSH

Vice President, Centre Financial Products Ltd. (U.S.)

FRANK T. JOSHUA

Development Finance Branch, Global Interdependence Division, UN Conference on Trade and Development (UNCTAD)

FRANZ TATTENBACH

Director, Oficina Costarricense de Implementaci—n Conjunta (OCIC) (Costa Rica)

ROUNDTABLE #3
UNDERSTANDING TECHNICAL ISSUES

This roundtable addresses a range of technical components. The technical issues to be addressed in the roundtable are organized into those common to all AIJ projects, those particular to energy and transportation projects, and those related to land-use projects.

Facilitator: KAZU KATO

Professor, Nagoya University (Japan)

A. COMMON CHALLENGES IN AN AIJ REGIME

LISA CARTER

Climate Policy and Programs Division, Office of Policy, Planning and Evaluation, U.S.
Environmental Protection Agency

KENNETH ANDRASKO

U.S. Environmental Protection Agency/ US IJI

B. CHALLENGES SPECIFIC TO EMISSION REDUCTION PROJECTS

LUIS PINUGUELLI-ROSA

President, Latin American Association of Energy Planning (ALAPE) Director, COPPE Post
Graduate School of Engineering, Federal University of Rio de Janeiro (Brazil)

C. CHALLENGES SPECIFIC TO SEQUESTRATION PROJECTS

MARIELOS ALFARO

Planning Director, FUNDECOR (Costa Rica)

ROUNDTABLE #4
EVALUATING THE FINANCIAL ISSUES

This roundtable will discuss some of the financial aspects of an AIJ regime. The issues to be addressed include:

- A. The viability of meaningful private sector investment during the pilot phase.
- B. The role of governments during the pilot phase.
- C. The effect of value driven "credits" on AIJ

Facilitator: ASHOK KHOSLA

President, Development Alternatives India

A. JI REGIME WITH CREDITS SENSE AND CENTS

MARK C. TREXLER

President, Trexler and Associates, Inc. (U.S.)

B. INCENTIVES FOR INVESTMENTS IN AN ERA WITHOUT CREDITS

KAZU KATO

Professor, Nagoya University (Japan)

C. INVESTING DURING THE PILOT PHASE

STEVE PETRICONE

Coordinator, Central America Projects, GPU International (Costa Rica)

ROUNDTABLE #4: EVENING SESSION

**THE ROLE OF DEFINING THE ADDITIONALITY CRITERIA FOR GLOBAL BENEFITS AND
FINANCING IN THE AIJ NEGOTIATION CONTEXT**

Coordinator: INGO PUHL

Administrator, Division for Energy and Environment, IEA

ROUNDTABLE #5
A FUTURE OUTLOOK

This roundtable is not intended to restrict discussion to a particular topic, but rather to invite interchange about various aspects of AIJ which may be becoming more important in the development of the regime.

Facilitator: ELIZABETH DOWDESWELL

Executive Director, United Nations Environment Programme

A. NATIONAL JI PROGRAMMES

CARLOS GAY

Coordinator, International Cooperation and Agreements Unit, National Institute of Ecology,
Mexico

B. EMERGING FINANCIAL OPTIONS

RICHARD SANDOR

Chairman and Chief Executive Officer, Centre Financial Products Limited (U.S.)

C. AIJ'S FUTURE IN THE CLIMATE CHANGE NEGOTIATIONS

GEIR SJØBERG

Executive Officer, Ministry of Foreign Affairs, Norway

CONCLUDING PANEL
THE LEGACY

A group of high-level policy experts will contribute with individually drawn policy-relevant conclusions from the preceding Forum discussions. Each panel member will be provided with written reports of the five roundtables.

Chair: JOSE MARIA FIGUERES

President of Costa Rica

IRVING MINTZER

Centre for Global Change, University of Maryland (U.S.)

MOSTAFA TOLBA
International Centre of Environment and Development (Egypt)

OGUNLADE DAVIDSON
Head of the Department of Mechanical Engineering, University of Sierra Leone

CHEN CHIMUTENGWENDE
Minister, Ministry of Environment and Tourism, Zimbabwe

MICHAEL ZAMMIT-CUTAJAR
Executive Director, Climate Change Secretariat, UN Framework Convention on Climate Change

MAURICE STRONG (Costa Rica)
Chairman, The Earth Council

ELIZABETH DOWDESWELL
Executive Director, United Nations Environment Programme

GSSD Reports **New Partnerships to reduce the Buildup of Greenhouse Gases** **Opening Ceremony**

ELIZABETH DOWDESWELL
Executive Director of UNEP

UNEP's role is that of an honest broker and passionate in defense of environment. UNEP advice is untainted by special interests. It is the voice of reason.

Note of Urgency:

1. Climate is changing and we fear the consequences
2. There is no one single remedy
3. We must necessary find a "mix of measures" as appropriate for each nation so that collectively, global gains are achieved
4. The situation appears to be one of "unwanted carbon"

There are Major Opportunities:

1. Low polluting technologies are available
2. We must have the will and capacity to share burdens
3. Innovative energy management is required
4. New fiscal measures must be developed, such as:
 1. carbon taxes
 2. market and non
 3. market instruments

4. voluntary measures

Practical Alternatives to Current Modes Include:

1. fuel switching,
2. cogeneration
3. renewable energy processes as alternatives (developmental)
4. better forestry and land use practices
5. reduce economic distortions
6. and others

Strategies and Actions Must be Fair

1. Global emissions cap means sacrifice
 1. all partners must be satisfied they obtained fair profit
 2. host country must feel that it has realized full potentials in its activities
 2. JI strategies require that assessment and brokering be done through neutral international process
 1. Continued exchanges of viewed must be maintained
 2. Finding ways of making JI attractive is a key task
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MICHAEL ZAMMIT CUTAJAR Executive Secretary, UN-FCCC

Clearly there is an increasing interest on a global basis in reducing greenhouse gases. Current phase of negotiations focusing political attention on cooperative means of achieving Convention goals

On Global Moves

1. Political orientation has opened possibility that agreement to be reached will include some provision of such mechanisms to be constructed applicable to developing countries
2. "Partnerships" important since obviously climate change calls for global partnership.
3. Limited partnerships can be set up under a broader global umbrella

Dual Imperatives

1. Partnerships between DC and developing partners must build bridge between:
 1. global change
 2. national objectives on sustainable development
2. Any scheme that involves transfer of credits or trading of emissions must be based on system of accounting and accountability that is agreed upon by all parties

The Pilot Phase

1. Such issues are being addressed in AIJ pilot phase
 2. FCCC promotes sustainable development with energy as its core
 3. Resulting international arrangements could become important element of global international economic cooperation
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JOSE MARIA FIGUERES

President of Costa Rica

Costa Rica has taken active leadership position in developing theory and practice of AIJ. The Forum is an opportunity for frank and open discussion. It is not to promote a specific point of view but to discuss issues away from the varieties of international pressures.

Costa Rican Perspective

1. A developing country committed to sustainable development and to the AIJ experiment
2. AIJ must be based on reciprocity and it must be fair

Reality is on AIJ:

1. There are many AIJ proposals but very few financed projects
2. Expectations have been raised in developing countries but not fulfilled commitments
3. Incentives are need to mobilize the private sector
4. Unfinanced and unexecuted project ideas stand no chance for assessment.

The AIJ Challenge

1. AIJ maybe one of the best opportunities to build synergies for global environmental protection and national economic development.
2. Public sectors need to create more incentives for business that seek to increase global benefits through investments.
3. Corporate leaders must be responsive to such needs
4. Multilateral organization need realistically to evaluate current conditions and provide some financial supports the AIJ experiment

AIJ in Practice

1. Costa Rica has worked hard to promote AIJ despite restriction; fully institutionalized AIJ program
2. First to sign multilateral agreements with US, Norway.
3. Costa Rica and Norway will announce land use AIJ development; use new greenhouse gas reduction "Certifiable, Tradable Offset" (CTO).:

4. If sustainable development is to be sustained and AIJ become a reality, future depends on not only words but hard work.
5. As Professor Choucri of MIT said, "It takes two to tango!"

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Round Table #1

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Facilitator: IRVING MINTZER (U.S.)

Centre for Global Change, University of Maryland

A. "THE HUMAN FACE OF CLIMATE CHANGE"

ROBERT T. WATSON (U.S.)

Co-Chairman, IPCC WG II, Environment Department

What we care about:

1. Wealth of a nation (in economic and non-economic terms)
2. Environmental viability (at all levels)

Recognizing Linkages

Biodiversity, climate change, ozone depletion, forestry are all interlinked intellectually, scientifically, politically

Complexity of Climate Change

1. Causes for change:
 - a. population
 - b. demands on resources
 - c. inappropriate use of technologies
 - d. failure of economic markets to recognize true value of resources
 - e. failure to internalize environmental externalities to the market
 - f. Failure of people to consider the long-term consequences of their actions

Key findings from IPCC:

1. Human activities increasing atmospheric greenhouse gases, aerosols; greenhouse gases

- warm; aerosols cool
2. Earth's temperature affected; sea level rising
 3. We cannot explain observed changes on natural variability;
 4. Without greenhouse gas policies current patterns will persist

Result in terms of adverse effects

1. Developing countries harder hit
2. Range of cost
3. Effective technologies and policies available now to reduce emission of greenhouse gases from energy supply; energy demand; land management
4. International and Intergenerational equity issues are critical for policy formulation

Complexity of Time Constants:

1. emissions to concentrations -- centuries for CO2
2. concentration to temperature -- decades to centuries
3. temperature to sea level -- many centuries
4. ecosystems restoration -- decades to centuries
5. species loss -- irreversible
6. capital stock turnover -- years to a century

Implications:

If anthropogenic emissions of greenhouse gases cause unwanted environmental damage, then the time to reverse the damage would be centuries even with a complete cessation of greenhouse gas emissions. Therefore, governments cannot wait.

Implementation Challenges:

1. The goal is to obtain CO2 decreases at lowest cost, taking into account the range of known vulnerabilities
2. These include vulnerabilities to human health, ecosystems, agriculture, forestry, coastal systems, water systems, among others
3. Social costs and equity issues need be addressed head on.

B. "STATUS AND PROSPECTS OF INTERNATIONAL CLIMATE CHANGE NEGOTIATIONS"

TAHAR HADJ-SADOK (UN-FCCC)

Coordinator, Financial and Technical Cooperation Programme, UN-FCCC

Pilot Phase on Activities Implemented Jointly:

1. Established Factors
 - a. among Annex I parties and non-parties on a voluntary basis
 - b. AIJ should be compatible with national environmental priorities
 - c. should contribute to cost-effectiveness
 - d. could be conducted in comprehensive manner

- e. AIJ require acceptance by governments of parties
 - f. AIJ bring about real measurable environmental benefits that otherwise would not have happened
 - h. No credits should accrue to parties resulting from emissions reduced
2. Process:
- a. SUBSTA would establish framework for reporting of AIJ
 - b. COP is to review annually progress of pilot phase and take decision on continuation
3. On Crediting
- a. Unless there is crediting, AIJ activities don't have much of a future. In order to have crediting must have:
 - i. political agreement
 - ii. a large number of methodological issues and institutional issues need to be resolved
 - b. Technical issues include: baselines, additionality, verification, measurement of benefits, design of institutional arrangements, etc.); complicated issues

DISCUSSANTS

Atiq Rahman; Hermann Ott; Youba Sokona; Mario Kampff; Suzana Kahn Ribeiro
Issues Raised by the Panel

1. It is important to keep track of "who is consuming what, how much, and with what impacts.
2. The matter of compensation is critical
3. In terms of effective responses: both mitigation and adaptation need to be examined
4. FCCC focuses not on stabilization of emissions but stabilization of concentrations
5. There is a moral issue within the climate change domain and it is that: there may not be enough resources around the world to solve problems. Joint implementation a way of reducing emissions but not other critical priorities in development
6. There appears to be a lack of understanding of what AIJ is about in business community; therefore it is important to devote effort to helping business know what it is about so that business is prepared.
7. In this connection it is important to appreciate the differences between economic benefits and social benefits.

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Round Table #2

ASSESSING POLITICAL REALITIES

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- D. What are the shortcoming of fairness in AIJ?

Facilitator: NAZLI CHOUCRI (U.S.)

Political Science Department, Massachusetts Institute of Technology

As an introduction, each panelist provided a "sound-bite" on the perspective they bring to this Roundtable

LUIS GYLVAN MEIRA FILHO (Brazil)

President, Space Agency of Brazil

- Perspective of strong interest in climate change issues from scientific `point of view and following negotiations of Convention

FRANZ TATTENBACH (Costa Rica)

Director, Oficina Costarricense de Implementaci—n Conjunta (OCIC)

- Perspective of support for JI strategy; i.e. If each party chooses its own strategy alone, we will end up in a worse situation.

CHOW KOK KEE (Malaysia)

Director, Malaysian Meteorological Service

- Perspective of the South and how they get a fair deal.

FRANZJOSEF SCHAFTHAUSEN (Germany)

Federal Ministry of the Environment, Nature Conservation and Nuclear Safety

- View from the AIJ / Federal Government of Germany activities

EDMUNDO DE ALBA (Mexico)

Asesor, Programa Universitario de Estudios sobre la Ciudad, Universidad Nacional Aut—noma de Mexico (UNAM)

- Salience of the Question: Cooperation or enforcement?

GEIR SJ...BERG (Norway)

Executive Officer, Department of Natural Resources and Environmental Affairs, Ministry of Foreign Affairs

- The View from an International negotiations Perspective

OGUNLADE DAVIDSON (Sierra Leone)

University of Sierra Leone

- The energy point of view and the political realities with respect to developing countries

BERNADITAS C. MULLER (Philippines)

Director of the Office of the UN and International Organizations, Department of Foreign Affairs

- The Perspective of a Negotiator for Government of the Philippines

NAZLI CHOUCRI (U.S.)

Three issues central to the considerations at this Roundtable:

1. Politics matters; it will not "go away"
2. Technology is an essential to the issues at hand as is capacity building
3. Advances in technology/particularly in electronic networking communication are important in developing communication worldwide

A. "AIJ RISKS AND BENEFITS FOR THE SOUTH"

LUIS GYLVAN MEIRA FILHO (Brazil)

President, Space Agency of Brazil

Concept of JI

During first conference of the parties the question was: "does the Convention mean that quantitative targets be met with JI (emissions reductions) in other countries rather than the countries that are ready to take up the commitment?"

The difficult question is this:

"Is it acceptable if one of the countries would not have quantitative target?"

Global Regime

We need to try to advance in the difficult but necessary process to establish global regime of sharing burden of mitigating climate change because: If credit is given, associated with mitigation measures, between two countries; economically would only make sense if credit has value.

There is pressure for targets to be established by non Annex I countries. Non Annex I countries not recognize need to limit emissions until Annex I countries show progress

Burden Sharing

It is important to develop a burden-sharing regime which would be thought of as share proportional to physical contribution of each country to produce climate change; this is an index that can be adapted to negotiation.

Full JI must be put in place only after global regime is formulated about sharing burden of climate change

B. AIJ RISKS AND BENEFITS FOR THE NORTH

FRANZJOSEF SCHAFTHAUSEN (Germany)

Federal Ministry of the Environment, Nature Conservation and Nuclear Safety

Position and Potentials:

1. AIJ is a change/opportunity not only for the developed works but also developing countries; therefore very difficult and perhaps not so wise to discuss separately risks and benefits for north and south. philosophy of mechanism is cooperation: to reach common benefit.
2. Nobody knows exactly what AIJ is and how to transfer AIJ into JI or perhaps as a next step into a trading system. We need experiences. Task and challenge of Pilot Phase decided in Berlin. Agree with colleague from Mexico (swimming and water need water to learn how to swim).
3. AIJ can create flexibility and creativity to affect climate change in a cost effective manner. CO2 reduction but also climate convention focuses on all greenhouse gases.

Global Concept

1. In principle every form of cooperation undertaken Climate Change can fall under the concept.
2. Thus AIJ may occur in all areas of importance for emission of GHG gases, from production to consumption in all sectors.
3. Of importance here are not only sources but also reservoirs. Germany focuses on reducing from sources.

Coverage:

1. Economic form of AIJ covers variety of activities from joint projects between investor, all the way to cooperation and management; and this may also involve technological or also

- financial support.
2. Under AIJ agreement framed in Berlin (COP1) a formal requirement must be fulfilled. All AIJ require prior acceptance/ endorsement of governments of all parties participation in activities. Due to experimental nature of pilot phase, not to separate

Credits

1. No credits would be allowed FCCC for activities AIJ at the pilot phase:
2. AIJ regulations which would allow only bilateral would not allow to fully exploit market opportunities for global system of JI.
3. Most basic concern about JI and AIJ centers around allocation of ccommitments of FE to developed and developing states.

Responsibilities:

1. The Convention acknowledges that the largest share of emissions is generated in developed states. Sets the principle of common but differentiated responsibility.
2. Only developed states required to develop national policies and take specific measures; developing states expected only to adopt less demanding

Overcompensation

JI should be developed under regime of overcompensation. A basic requirement would have to take into account that investors would assume risks abroad that they may not face at home.

JI ceiling is regarded as a global effort and as a consequence of global change. JI projects at the hands and responsibility of developed and developing states.

As a result, AIJ can be seen as opportunity for economic exchange and technology transfer and integrating developing states into the global market.

Financing Issues

Financing of AIJ project should not reduce official development assistance/financial arrangements. Such issues must be left to be decided by individuals on individual case.

The German Experience: AIJ is connected to monetary agreements of government and industry.

Clearly there are complex legal issues in AIJ context, and there is a need for a brokered consensus in general and specific issues should be in place to allow meaningful decision to support the FCCC.

C. AIJ AS PART OF A WIN-WIN STRATEGY

FRANZ TATTENBACH (Costa Rica)

Director, Oficina Costarricense de Implementacion Conjunta (OCIC)

Presentation is made from perspective of a country committed to AIJ strategy:

Key Actors and Decisions:

1. governments of North
2. developing countries
3. private sector of the North

Game-theoretic context is a great facilitator for tracking decision-interdependence among actors.

D. ENSURING RECIPROCITY IN AIJ

CHOW KOK KEE (Malaysia)

Director, Malaysian Meteorological Service

JI - AIJ

JI refers to commitments under Article 4.2(1) and (b) of FCCC. AIJ refers to Decision 5/Cop1. "activities implemented jointly" under pilot phase.

But there is a lack of understanding of the concept itself; and this is a source of concern. Mixing up JI and AIJ (and of these two approaches) will only complicate and slow down the political concurrence.

Political Realities

Developed countries rushed for decision in COP1.

Many developing countries are still having reservations concerning

- a. concept
- b. assessments
- c. transfer of commitments
- d. carbon colonization

Transfer of Technology and AIJ

Transfer of technology is provided in accordance of Article 4.3; 4.5 and COP decision as well as Agenda 21

Little transfer of technology has taken place Transfer of technology is not AIJ; it is a separate mechanisms for achieving the objectives of the Convention

Ensuring reciprocity in AIJ

This means that:

(a) Developed countries must demonstrate that they are taking sufficient domestic measures to reduce greenhouse gases; and

(b) Speed up transfer of technology in addition to AIJ

AIJ is only one of the mechanisms for addressing Climate change issues. Provision of transfer of technology and financial resources are prerequisites.

DISCUSSANTS

Edmundo de Alba; Geir Sjoberg; Ogunlade Davidson; Bernaditas C. Muller

Among the issues raised by the discussants are the following:

1. In the last 25 years reduction in capital flows to African countries External investment important for developing countries. If not coming from traditional funding or without unusual conditionalities; creates opportunities for AIJ.
2. Most technologies ("sound technologies") can be acquired; countries with weak capacities -- cannot have radical transfer of technology. Developing countries use AIJ to increase capacity.
3. Few developing countries have well specified national objectives; and therefore it is very

- difficult to establish links between national policies and AIJ.
4. AIJ
 5. JI Terminology starts to carry its own life, "What does it all mean"? We must see this opportunity to get experience.
 6. Cooperation within the FCCC involves:
 - a. research to fill gaps in knowledge of problem
 - b. transfer of technology
 - c. national activities leading to possible cooperation
-

OPEN DISCUSSION

1. There is a distinction between fairness vs. reciprocity: the issues may not be entirely uniform for all countries. Some countries may see AIJ saving more potential promoting their own development agenda than other countries.
2. AIJ is only one instrument. The international community needs a bundle of measures and policies.
3. From the point of view of developing countries AIJ is not the only way.. Some countries need AIJ; some need transfer of technology.

Involvement of private sector important. JI is a way of promoting national objectives. The priority should be in clarifying such goals and then aligning these to AIJ - JI opportunities.

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Round Table #2: Evening Session

TRADING IN GREENHOUSE GAS EMISSIONS

Coordinator: MICHAEL J. WALSH (U.S.)
Vice President, Centre Financial Products Ltd

TRANSACTION COSTS AND JI

NATHAN COLLAMER (U.S.)
Department of Energy, Environmental and Mineral Economics, Pennsylvania State University

Core Position

1. Transaction costs do not reduce GHGs
2. Transaction costs pose a serious threat to the success of JI
3. Transaction costs can serve as an impetus for the evolution of JI from the pilot to mature phase and from JI to marketable permits
4. Reducing transaction costs can promote equity and efficiency simultaneously.

Basics of Transaction Costs

Types of transaction costs include:
search, approval, enforcement, negotiation, monitoring, insurance

These are reduced in general by:

- economies of scale
- information accessibility
- simplifying and standardizing transaction routines
- specialized intermediaries

Uncertainties

1. There is uncertainty whether JI projects are consistent with national priorities.
2. If JI constructed to facilitate transactions these would be reduced

Standardization of transactions and moving toward market price

As people know more what price might be, negotiation easier.

Marketable permits

1. no project risk, because now they are permits (not projects)
2. effect of monitoring, verification, adjudication, enforcement on national level more efficient than on project-by-project level

Factors reducing transaction costs

1. economies of scale
2. consolidation of functions
3. learning curve
4. extension of existing institutions
5. market clearing price (important in equity considerations)

Conclusions

1. We must design JI in order to reduce transaction costs
2. We need to promote and facilitate the emergence of intermediaries and the commoditization of greenhouse gas reductions
3. We must also understand that equity and cost-effectiveness are not mutually exclusive.
In fact, they are promoted by transaction cost reduction.

Transaction costs can serve as bridge economics and politics and between rich and poor

US SULFUR DIOXIDE EMISSION ALLOWANCE MARKET

Panelist: MICHAEL J. WALSH (U.S.)

Vice President, Centre Financial Products Ltd.

The US sulfur dioxide emission allowance market is a marketable permit program and it can be used as model for carbon trading

Emissions Trading with Firm Emission Limits ("cap")

1. model is proven
2. certainty in reducing greenhouse gas
3. lower cost to society
4. technology transfer

US SO2 Market Fundamentals

1. tradable allowances issues
2. emissions monitored
3. sources of savings
 - a. prices guide compliance choices
 - b. low cost sources make more cuts (exactly the point of the program)
 - c. flexibility and innovation

Markets Can Work if Properly Designed

Markets Can Overcome Obstacles

These include:

1. technical parameters
2. cultural differences
3. legal complications
4. currency issues
5. hundreds of difficult measures

Panelist: FRANK T. JOSHUA (UNCTAD)

Development Finance Branch, Global Interdependence Division, UN Conference on Trade and Development (UNCTAD)

History

Emissions trading program since its beginning in 1991. Much work has been done; many lessons learned; and now we must turn to current work.

Lessons learned:

1. Question of climate change is a development issue
2. In developing countries process of industrialization process incomplete;
3. Accountability of increasing industrialization and decrease emissions
4. Global trading systems can reduce costs
5. Incentives for development for development and transfer of new and existing technologies
6. Most important: role of questions such as equity and allocation (such as allocation of permits among countries)

General Points:

1. Regulation is the mother of an efficient trading system. For trading system to be efficient requires adequate
2. Credibility of system requires monitoring

Institutions required at international level:

Two institutional services are needed

1. international trading organization
 - a. issuance of allowances, credits, tracking, accounting, bookkeeping
 - b. regulation and supervision of market private sector; trading of allowances, transfer of allowances, settling of accounts, transfer of funds
2. monitoring functions to oversee overall activities

Emissions trading should not be seen as alternative to AIJ, but rather complementary Their coexistence is desirable. If countries willing to experiment with trading, they should be allowed to do so.

Panelist: FRANZ TATTENBACH (Costa Rica)

Director, Oficina Costarricense de Implementacion Conjunta (OCIC)

Two difficult issues for Costa Rica: trading and allowances and credits

To what extent are trades to allowances equivalent to what overcompliance is to regulation in the sulfur trade.

Talking about trading system where only Annex I countries can participate does not look very attractive to countries like Costa Rica.

It is well worth thinking about negotiation phase to allow room for countries (not necessarily with obligations) so that some kind of common cooperation could evolve

Commodity Program in Costa Rica:

Costa Rica is a non-Annex I country that is participating in AIJ

How to implement program -- national vs. international

Priority in Costa Rica is Sustainable Development:

1. Biodiversity
2. Protection of forests

There are two priorities leading to other relevant factors:

1. Private sector forestry: percent of fossil fuel tax to national forestry fund -- then distributed to private sector to small farmers for sink enhancement (e.g. sustainable forestry management of some national forest). Flow of funds to carbon fund/national forestry fund
2. At another level: There is an emergent provision for a carbon fund

3. AIJ attracts particular investors

Documenting greenhouse gas reduction is to be made available only when all phases have been completed.

Because pool is big, these activities can offer insurance. Many farms involved; and with more farms there is a guaranteed part of pool.

A cleaner way to deal with these issues is for a country to decide what sectors to involve in AIJ activity. Once specific sectors chosen, then rules can be made.

In conclusion, we need to:

1. Lower transaction cost
2. Facilitate achievement of national objectives
3. Democratize AIJ.

OPEN DISCUSSION

MICHAEL J. WALSH (U.S.)

At times there are some fortuitous events that help drive down costs.

And when there are strong signals that flexibility is inherent in the system, costs can be driven down further. Only 16% of electric generating capacity involved in the program at this time has reduced its emissions through scrubbing.

In short, regulators' first alternative was the market's last alternative.

FRANK T. JOSHUA (UNCTAD)

Governments use allocation method to their advantage; does matter how you allocate, because it becomes a policy instrument.

Eventually the issues come down to least-cost outcome.

It is important to understand what is the schedule for reduction of gases.

We must give countries option of not putting all eggs in one basket.

MICHAEL J. WALSH (U.S.)

Easier to initiate program within one country.

But with international trading systems in place today, we can solve multi-country problems: e.g., trading in crude oil.

We now have a starting point from which we can learn and move forward.

NATHAN COLLAMER (U.S.)

Transaction costs will serve as impetus for formation of permit market.

Transaction costs are reduced by emergence of permit market.

Equity is not a precondition for marketable permits, but rather a result of marketable permits.

FRANZ TATTENBACH (Costa Rica)

Do something based on audit; after 3 years need satellite image.

FRANK T. JOSHUA (UNCTAD)

In the "pilot phase" conception -- there are conditions:

1. The pilot is pursued in the context of the original convention (Protocol) legally binding targets and timetables.
2. It assumes the entire world not trading; a small number of countries; provides small degree of homogeneity -- not perfect for "trading scheme" (not a perfect world)

What should targets be?

For countries that are part of Annex I the approach can be as simple as a grandfathering issue, e.g., Western Europe and Eastern Europe trading partners.

MICHAEL J. WALSH (U.S.)

We also should keep tradable instruments as simple as we can.

FRANK T. JOSHUA (UNCTAD)

It is important to explore:

1. Convention provides for classes of countries; and
2. All arrangements must be voluntary

NATHAN COLLAMER (U.S.)

We must also consider Risk Differentials: less risky projects are better from investors' perspective, and develop better rates of return. It is difficult to break down transaction costs and then pull away from overall development costs

DONALD GOLDBERG (U.S.)

Center for International Environmental Law (CIEL)

How can a trading scheme and a JI scheme exist side by side?

Difference between the cap that countries agree to and scheme where government is not affected.

NATHAN COLLAMER (U.S.)

This is a difference to be sure.

In the second phase trade in allowances and credits will require that we:

- a. avoid credit difference problems
- b. avoid unreliable comparisons

We should not start with "junk trading"; these may become "junk credits" in the future, but we must not start this way.

GSSD Reports

New Partnerships to reduce the Buildup of Greenhouse Gases

Round Table #3

UNDERSTANDING TECHNICAL ISSUES

This roundtable addresses a range of technical components. These are organized into: issues common to all AIJ projects, those particular to energy and transportation projects, and those related to land-use projects.

Facilitator: KAZU KATO (Japan)
Professor, Nagoya University

A. COMMON CHALLENGES IN AN AIJ REGIME

LISA CARTER (U.S.)

Climate Policy and Programs Division, Office of Policy, Planning and Evaluation, US Environmental Protection Agency

KENNETH ANDRASKO (U.S.)

US Environmental Protection Agency/ US IJI

Technical AIJ issues need to be addressed

1. national and international issues
2. greenhouse gas
3. sustainability & accountability
4. project and program implementation issues

National and International Issues

- a. development of project and program criteria,
- b. design of projects to meet program criteria,
- c. additionality of financing source
- d. host country acceptance

Greenhouse Gas

- a. inclusion of relevant sources and sinks,
- b. reference case development and selection;
- c. off -site effects of projects (leakage),
- d. additionality of greenhouse gas benefits

Sustainability and Acceptability

- a. environmental impacts and development benefits assessment
- b. monitoring of greenhouse gas flows,
- c. verification of project performance;
- d. reporting of project and program performance

Some Project Implementation Issues and Approaches

Issue: Additionally of Greenhouse Gas Benefits

Would greenhouse gas benefits occur without project?

Approach:

1. document how AIJ program or AIJ project status reduced barriers to project development

2. document lack of plans or funding to conduct activity without project
3. provide data on technology diffusion rates
4. identify technologies or practices highly likely to be additional

Issue: Leakage of GHG Benefits:

When emissions happen off the site of your project

Approach:

1. develop decision tools to identify likely leakages
2. conservative estimation of benefits
3. site selection to reduce leakage

Issue: Land Use Projects

Do forest projects produce greenhouse gas benefits?

Can project design solve estimation and leakage issues

Approach:

1. documentation of deforestation threat
2. site-specific or recognized data
3. assessment of land-use change dynamics
4. local participants included

Issue: Environment and development Impacts

How do we design project to support development priorities

Approach:

1. design for multiple benefits
2. AIJ programs & developers identify priorities
3. local partners to identify local needs

Issue: Monitoring and Verification

What and verified and by whom

what degree of accuracy is required?

what methods are appropriate?

Approach:

Project-based monitoring and other methods.

In Conclusion:

Current Priorities Need to:

1. improve information collection and exchange

2. develop guidance documents and protocols
3. support capacity building in host countries
4. provide technical assistance to projects
5. (direct technical expertise to) assist proposal development
6. experiment with risk reduction methods
7. improve presentation of project financial and non-greenhouse gas benefits
8. fund creative pilot solutions to issues

Other Non-technical Issues Include:

1. concerns that AIJ is more costly than other policy alternatives
2. ethical concerns regarding AIJ
3. bringing together investors and host partners
4. national sovereignty issues
5. project management
6. market barriers to technology diffusion
7. risks of unproven technologies/application

B. CHALLENGES SPECIFIC TO EMISSION REDUCTION PROJECTS

LUIS PINUGUELLI-ROSA (Brazil)

President, Latin American Association of Energy Planning (ALAPE)
Director, COPPE Post Graduate School of Engineering, Federal University of Rio de Janeiro

Why should developing countries consider climate change?

Differences in development include:

- DC fuel consumption-, LDC land use deforestation
- DC CO₂; LDC CH₄
- DC past and present contribution to CO₂, - future contribution
- DC higher efficiency conservation; LDC renewable energy, hydro, biomass
- DC high energy consumption per capita; LDC: population growth

There are potential negative consequences for both which need practical solutions:

- DC must reduce present emissions
- LDC must reduce in the future emissions

How to avoid the following:

1. transfer of old technologies
2. transfer of heavy energy-intensive industry
3. transfer of credits per CO₂ emission at low costs of abatement and to pay high costs in the future
4. additionality issue, transaction cost to control it

How to ensure that

1. global emissions will be lower than without AIJ
2. AIJ will slow rate of growth in emissions of developing countries
3. AIJ emission reduction project support national development priorities

To have solution, we need to know: what is problem?

To whom is solution (not so clear)?

AIJ is a kind of laboratory for specific cases to learn how to tackle problem in the future

OPEN DISCUSSION

Who Decides?

When there is no clearing-house, who should decide what moves from developed countries to developing countries is environmentally friendly;
Are we running the risk of transferring problem from developed countries to developing countries?

Bargaining power

This is a situation of two players with different position.
Energy-intensive technology transferred in past years; need to invest in low technology industry.

Base-line and monitoring.

Difficult to establish one base line; have to work with scenarios. Pilot phase is meant to find solutions.
Monitoring is a laborious process, raises transactions costs. In pilot phase should take this for granted -- all in the game.
We must learn from pilot phase; later COP decide in simple

Need for Experience

World Bank experience through implementing their own AIJ program implementing pilot projects with funding from donors two projects under implementation-, preparing 3-4 more
Projects must be country-driven. Only way to address concerns of host country; excellent example Costa Rica program. important that host country role include all areas: design, analysis, reporting, monitoring.

Baseline question:

In each individual project, you estimate change over period of time; essentially increase stock of carbon. Still a question whether there is any change in net flux of carbon before and after implementation of project; there is a basic assumption that there are net sinks of carbon.

Even if we consider only the changing stock, there is a basic assumption that the changing stock (replacement of agriculture by forest) implicit assumption that you will continue to do so forever.

From an economic point of view we have to take into account period of time; resulting questions raised when we do into analysis over long periods of time,

We need dynamic baselines; they may offer advantage both to host country and to home country.
One difficulty is that both host and home country have some incentive to aim towards the higher end of the baseline. Both parties must negotiate from the same side of the table.

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New Partnerships to reduce the Buildup of Greenhouse Gases

Round Table #4

EVALUATING THE FINANCIAL ISSUES

This roundtable discusses some of the financial aspects of an AIJ regime. The issues to be addressed include:

- A. The viability of meaningful private sector investment during the pilot phase.
- B. The role of governments during the pilot phase
- C. The effect of value driven "credits" on AIJ

Facilitator: ASHOK KHOSLA (India)

President, Development Alternatives

Some of the Financial issues underlying AIJ

The Southern viewpoint: twin objectives

- a. reduction greenhouse gases
- b. accelerating development

We all have high principles under which we choose strategies to achieve fairness, equity, and reciprocity.

With reciprocity must come consistency; i.e.,

how to be consistent with policies over time at national level and policies towards other nations and other peoples and remain consistent within the Framework.

Rules and Realities:

Many issues have long gestation periods.

We are in Global casino, are playing with a deck of stacked cards; the dice are loaded;

The rules are set up so that can't win -- or even break even

The rules changes in middle of game; we can't get out of the game.

To summarize what we have heard so far in earlier Roundtables:

Strength of AIJ

- Some countries interested in it:
- It provides energy saving and greening of the planet.
- It could mobilize the private sector and new forms of funding.
- And it could lead to technology development and technology transfer.

Weaknesses of AIJ

- Concept not yet well defined to evaluate cases.
- Countries are skeptical
- Regime foundations are not clear.
- It could lead to wrong types of technology in developing countries.
- AIJ does not presently offer opportunities of fundamental changes.

Urgent need to help poor countries make it through democratic transition. It is an important means for reducing impact of people on atmosphere.

Sustainable development is a prime instrument for achieving national goals. Perhaps there is no substitute for trying out specific AIJ projects

A. JI REGIME WITH CREDITS SENSE AND CENTS

MARK C. TREXLER (U.S.)

President, Trexler and Associates, Inc.

To credit or not to credit: is that the right question?

1. Most JI analysis have treated JI and crediting as two sides of the same coin.
2. The "no-credit" terms of AIJ pilot have led observers to ask whether JI should proceed without crediting
3. Maya and Gupta characterize one developing country position as "joint implementation is thus acceptable if the reduction in emissions is not credited to a Northern country"

Where to go without crediting:

Assumptions:

Without pre-supposing who should do what, some conclusions:

1. potential for NS funding to significantly reduce global emissions not in question
2. important sets of these opportunities are transitory and will disappear with inaction
3. notwithstanding Annex I obligations, industrialized countries will not generate the kinds of funding that are needed
4. The only other major source of potential funding is the private sector, which could generate billions in incremental flows annually
5. Potential for billions of dollars in funding flows

Private sector must have credits to proceed with significant funding:

1. Public relations goes only so far
2. Coming up the learning curve doesn't require significant funding
3. Private sector has to justify any significant spending and show something for it
4. Even with domestic crediting, would need good project assessment and documentation. Often will not occur without credit-type thinking
5. When Annex I JI begins, crediting will obviously become indispensable for non-Annex I projects as well.

Once countries start adding regulations, regulators will be looking at projects and numbers to see if they are valid; groundwork to be laid in planning phase.

Implications of current system; implications of "no-credits"

1. Without credits, there may be a tendency to classify business as usual as AIJ mitigation
2. Without credits, even national AIJ programs have had to lower standards
3. Without credits developing countries have little influence on the kinds of projects that are pursued, the terms of the projects, etc. Without credits, what can a country withhold?

Is AIJ Destined to Fail?

- AIJ was a tortured compromise of very different interests.
- Gaining experience being emphasized by all sides.
- But what kind of experience are we gaining?
- AIJ activity is simply not what JI was intended to deliver
- AIJ at its most rigorous is not fundamentally different from ODA and from business as usual

May be easier to work out crediting issues before full incentives come into place, because relative demand much smaller and controllable.

B. INCENTIVES FOR INVESTMENTS IN AN ERA WITHOUT CREDITS

KAZU KATO (Japan)

Professor, Nagoya University

Incentives to Promote AIJ from Japan Perspective

Type A: Possible incentives to be applied in the pilot phase for AIJ:

Sample:

- a. providing AIJ logo as publicity tool;
- b. commendation system;
- c. voluntary reporting of greenhouse gas emissions by domestic bodies;
- d. establishment of a project clearing house or bulletin board;
- e. bilateral agreements on promotion of AIJ with potential recipient countries

Type B: Financial incentives (of which applicability depends on the future conditions of the commitment and credit under UN-FCCC)

Sample:

- a. subsidies for feasibility study (F/S) and monitoring of AIJ projects;
- b. subsidies implementation of AIJ projects;
- c. tax reduction or exemption for AIJ projects;
- d. other financial incentives for investment in AIJ projects

Type C: Incentives to be formulated by combining economic incentives with greenhouse gases offset by AIJ (of which applicability depends on the future conditions of the commitment and credit under UN-FCCC)

Sample:

- a. combination of greenhouse gas emissions taxation or charging system with GHGs offset by AIJ
- b. tradable emission permits system and AIJ or JI

Type D: Incentives to be formulated by combining regulatory measures with greenhouse gases offset by AIJ (of which applicability depends on the future conditions of the commitment and credit under UN-FCCC)

Sample:

- a. combination of greenhouse gas emission control regulation with GHGs offset by AIJ
- b. Without credit, it is difficult to provide financial incentives; at present the Japanese government does not provide incentives.

Possible incentives to be applied in pilot phase for AIJ

- Providing AIJ as publicity tool; Incentive: Commendation system; e.g.:
- commanding participants for achieving remarkable results by the AIJ projects, such as the most cost-effective greenhouse gas emission reduction, or the largest greenhouse gas emission reduction or sequestration, etc.
- encouraging domestic bodies emitting greenhouse gases to voluntarily report their annual emission amounts to government, by which their awareness of global warming issues may be cultivated
- Establishment of project clearing house or bulletin board

C. INVESTING DURING THE PILOT PHASE

STEVE PETRICONE (Costa Rica)

Coordinator, Central America Projects, GPU International

We must focus on two prerequisites for private-sector investment in AIJ based on the following assumptions

1. consensus that parties to convention favor experimentation
2. no credits in pilot phase
3. two ways of approaching
 - a. theoretical
 - b. trying to resolve problems and obstacles through project execution (experimentation) and gaining insights based on experience (GPU's position)

The prerequisites are

Certainty: regarding greenhouse gas and AIJ policy host

Value: the project must be designed and valued as an investment in terms that are used for project investment by the private sector

On Certainty:

The objectives of host country need to be clear, including explicit policies, clear legal regimes, regimes and policy guidelines on creditors or future creditors. Necessary in pilot phase characterized by rules changing

When a host country demonstrates specific interest, private sector interest grows.

On Value:

For example, approaches an AIJ project only if presented as business investment. Project holistically should be designed as an investment; comply with rule of sustainability: full valuation of project. Companies can value greenhouse gas in AIJ projects, but up to host country in absence of direct incentives, absence of creditor, to provide framework

As long as regime is as certain as possible and host country (and home) institutionalized support over time, investors will be more inclined to respond, if only among other reasons to buy a seat at the table. The only way to move ahead is through experimentation.

OPEN DISCUSSION

Pilot phase:

First, the voluntary basis and should not be in conflict with political realities. Some countries take it for granted that there are no credits. This is needed in order to provide some record

Conditions on Incentives for Action:

1. There should be domestic recognition or credit for international greenhouse gas benefit.
2. There must be common rules and procedures for improving and recognizing projects
3. There is a need to Provide certainty on bilateral and multilateral action/agreements

Important distinctions:

- investing vs. providing incentives for investment.
- AIJ vs. JI.
- AIJ with credits vs. AIJ without credits
- additionality as essential vs. non-essential

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New Partnerships to reduce the Buildup of Greenhouse Gases Round Table #4: Evening Session

THE ROLE OF DEFINING THE ADDITIONALITY CRITERIA FOR GLOBAL BENEFITS AND FINANCING IN THE AIJ NEGOTIATION CONTEXT

Coordinator: INGO PUHL (IEA)

Administrator, Division for Energy and Environment, IEA

Additionality involves:

- understanding global benefits as a commodity
- financial additionality in the context of documents negotiated

Why is additionality so important?

- We need to find commodity before we can go on
- We cannot pretend that credits don't matter now
- The word "credit" is often used meaning that there is a commodity

OPEN DISCUSSION INCLUDING PANELISTS

IRVING MINTZER (U.S.)

Center for Global Change, University of Maryland

How can we now advance our understanding of additionality without waiting for the completion of further negotiated instruments protocols to supplement the Convention?

Can anything be done now to focus so that it become vehicle so that address priorities and efficient in pilot phase?

NICOLAS BROWN (Australia) International Competitiveness Branch, Department of Foreign Affairs and Trade

Are we being too stringent in discussion additionality?

Have to apply give-and-take in way additionality applied A lot of projects have not gone ahead because they do not fit AIJ criteria.

HUGO CONTRERAS (Mexico) Director of Natural Resources Analysis, Ministry of Environment, Natural Resources and Fisheries

The question of additionality has to be extra investment by private firm, government, or international organizations represent less profit or more benefits to environment.

COMMENT FROM THE FLOOR:

- Important issue at stake is that choices are being made today --
- We must measure benefits
- otherwise not have done without additional incentives -- additional financial obligations here --
- the issue of relating additionality of finance to additionality of benefits
- the importance of negotiation and consensus
- carbon offset deal started without any specific idea of financial incentive

Additionally becomes in the eye of the beholder; in other words, people creating barrier to show they are crossing barrier

The "IEA Approach":

There is no clear need for negotiation in order to deal with the additionality question IEA approach using case studies:

How to find baselines in a changing world

Parameters of change:

1. Market driven changes in energy market systems which impact the greenhouse gas efficiency of baseline investments -- e.g. new energy security issues; natural capital turnover rates and ?elastic? cost development
2. Technology driven commercialization of new technologies into the baseline -- changing technology risk perception; changing local technology availability

Real market constraints to implementing more greenhouse gas efficient projects:

1. AIJ-related barriers

- a. little understanding of the AIJ concept
- b. negative government perception of the AIJ concept
- c. AIJ uncertainty
 - i. verification of credits
 - ii. future of the instruments

2. Barriers related to the lack of institutional capacity

- a. processing project proposals for new types of projects
- b. technical and financial project appraisal
- c. lack of project related infrastructure - maintenance service; local technical skills; local manufacturing of project components; local financing

How to establish additionality

1. Establish a baseline
2. AIJ projects face real market barriers
3. Additional measures are needed to push them into implementation
4. AIJ investors need to show that their project faced such barriers prior to implementation and that they supplied measures to overcome them

General approach to a reporting framework:

1. Identify projects which support local development objectives that need to be pushed into implementation but can't be done by host alone
2. Identify the barrier to project implementation (multidimensional)
3. Project sponsors need to show that their project includes components to effectively remove those barriers
4. These components need to be defined. The costs of their implementation is recovered in form of greenhouse gas benefits.

COMMENTS FROM THE PANEL

- Projects have to be country-driven by the host country or they will be failures.
- Financial mechanisms of AIJ are not in convention; they are country-driven, and in the projects only negotiated between countries
- The "additionality" issue is the most important issue in the context of AIJ if it is going to work.
- Only certain kinds of projects should be considered AIJ, such as:
power plant
renewables
demand side management
- We must define what is the baseline for certain regions and for certain sectors. Different projects can be different baselines.

OPEN DISCUSSION

Added Issues:

If we consider that ODA is diminishing every year; what is base year for ODA? Then we can talk about additionality.

If a country makes a decision for reasons other than AIJ, does it lose additionality benefits it otherwise would have?

As move to crediting and incentives additionality less of an issues -- actual size of investment to hosts dwarf amount that would have occurred outside of JI.

In terms of definition of AIJ project: we need to flexibility of application of criteria necessary; and we have to consider acquisition of data from project cases

Investments are step functions. We have to buy into the whole investment and remove all barriers for it to be actually undertaken. This is why barriers must be understood and eliminated

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Round Table #5

A FUTURE OUTLOOK

This roundtable is not intended to restrict discussion to a particular topic, but rather to invite interchange about various aspects of AIJ which may be becoming more important in the development of the regime.

Facilitator: ELIZABETH DOWDESWELL (UNEP)
Executive Director, UNEP

We started on Day One by assessing the enormity of the challenge; and we assessed the political realities. On Day Two we focused on the technical issues and financial issues involved. Now we must look ahead to see what the future is apt to bring, and specifically with respect to:

1. national programs
 2. evolving financial options
 3. AIJ/JI in the context of FCCC and further negotiations
-

A. NATIONAL JI PROGRAMMES

CARLOS GAY (Mexico)
Coordinator, International Cooperation and Agreements Unit
National Institute of Ecology, Mexico

I would like to summarize the thinking and organizing in Mexico around climate change and climate variability. With help of UNEP and US initiative, we are involved in:

1. measuring greenhouse gases
2. doing something about emissions factors, and
3. doing something about land-use change

Once we have information, then we can consider how we compare with other countries. We have signed the Convention; we are focusing on energy efficiency; uses of different fuels; and alternative energies in non-energy areas. We are interested in carbon sequestration; and we are developing a unit for protection of climate.

For Mexico, AIJ/JI represents new opportunities; we have to be ready, when these things solidify, to take advantage of new opportunities.

ELIZABETH DOWDESWELL (UNEP)

The Mexican example shows the emphasis on coordination and how it is important for action.

There must be transparency and openness of laying out facts and figures. And all of this must serve as a guide to opportunities ahead

B. EMERGING FINANCIAL OPTIONS

RICHARD SANDOR (U.S.)

Chairman and Chief Executive Officer, Centre Financial Products Limited

Changing Definitions

- we should remember that commodities business used to have very easy definition;
- it began with the idea of a storable commodity (agricultural)
- this was changed in the 1960s when we started trading other things (e.g., live cattle)
- In the 1970s we moved to currencies and bulk
- In 1975 the Commodities Trading Future Corporation defined commodities as "anything tangible or intangible"-
- this opened the way for financial futures; the first futures market was for financial projects

We are redefining commodities to include property rights e.g. water rights and commoditizing real goods and services will lead us to a better social economic situation

Market-based solutions to climate change

We need effective politics to prevent climate change.

Need to get economic and social benefits and need to transfer technology to emerging markets -- This means that we must develop not only the science but also financial know-how to trade.

Visibility of Emissions Trading Proven by US SO2 market

1. 50% cut in utility emissions
2. major reduction in cost to society
3. active trading market
4. and we have 100% compliance

Benefit from 50% reduction in SO2 emissions

Environmental amenities:

- a. reduced damage to forests, lakes, streams;
- b. reduced corrosion on buildings, historic structures;
- c. improved visibility in scenic areas
- d. health benefits

US SO2 allowance prices

Compliance costs: 5% of predicted costs

Original estimate of cost high -- politically motivated number -- utilities wanted it to be high; people were concerned (\$200/ton)

Success of US SO2 allowance trading program due to

- a. clear emission limits
- b. precise monitoring/reporting
- c. known penalties for noncompliance
- d. absence of trading barriers

Why Start with a Pilot Greenhouse Gas Allowance Market?

1. limited participation simplifies implementation
2. prove the concept on a manageable scale (voluntary)
3. smaller market makes improvements easier
4. need to test/improve reliable enforcement mechanisms

Implementation recommendation for pilot climate change emissions allowance trading program

1. clearly define the tradable commodity

2. establish market oversight body
3. establish emission baselines
4. specify clearly monitoring and allocation procedures
5. establish uniform, non-segmented allowances
6. launch international allowance clearinghouse/registrar
7. and other factors

Global environmental trading system (GETS)

This is a new initiative which is:

1. pilot greenhouse gas allowance trading program
2. sponsored by Earth Council
3. combining private and public funding
4. its parameters and participation consistent with FCCC

GETS implementation involves the following:

1. capitalize the organization
2. establish market infrastructure
3. set program parameters with participating governments
4. test phase
5. launch market and expand activities

Conclusion:

- The problem is easier than we think.
- Definition has been done through Clean Air Act of 1990 -- it costs now 3% of what the politicians said it would be
- This is a practical way to transfer all of that technology from SO2 to carbon issues
- We have 13-point program -- the analysis is out there and has been supported
- All of the infrastructure does exist to make this process a reality

C. AIJ'S FUTURE IN THE CLIMATE CHANGE NEGOTIATIONS

GEIR SJØBERG (Norway)

Executive Officer, Ministry of Foreign Affairs, Norway

Is there scope for arriving at a mutually beneficial basis for addressing climate change more effectively on a global level?

Point of departure:

1. different parties have different interests
2. direct interests are factors that must be appreciated in order to establish basis for proceeding
3. without mutually beneficial incentive structure there would not and should not be future progress:
 - a. costs: (i)transfer of commitments and restrictions on economic growth; (ii). compatibility
 - b. investors: cost-effectiveness and global benefits of measures
 - c. third parties: quantifiability and verifiability of global benefits produced
 - d. commonality: additionality of global benefits and financing; avoidance of turning activities in host countries into commitments of host countries

Hypotheses:

1. reconciliation of the different interests would be helpful
2. means to this end, establishment of certain premises could be useful
3. such premises could also serve to facilitate and focus the work related to methodological issues because:

- a. premises could serve to separate concerns of overriding from technical issues
- b. premises could serve to focus subsequent methodological work on relevant outstanding issues and accumulated practices experience
- c. departing on the route of methodological challenges at an early stage in the pilot phase when limited practical experience has been accumulated could turn the work into an unproductive academic exercise
- d. pragmatic solutions may always exist if the potential dangers of cooperative efforts are alleviated (example of clearinghouse function)

What is an indicative list of premises that may serve to reconcile the interests of different parties?

1. Accounting of greenhouse gas benefits from activities implemented jointly in non-Annex I parties should be done at the project or sector-program level
2. Additionality of global benefits would imply that greenhouse gas emission and sequestration paths are altered in comparison to a business-as-usual scenario. (additionality should be defined as alteration of business-as-usual scenario)
3. Financial additionality would imply that greenhouse gas benefits have monetary value and that it is something host countries can put a positive price on. (greenhouse gas benefits are assets just like natural resources or property -- adds to assets of developing countries)

We need some neutral reference without pre-empting the outcome of pilot phase that links any possible progress beyond pilot phase to legal instruments. With no such reference in the Kyoto agreement, then critical ambiguities will remain.

DISCUSSANTS:

Cecil Ember; Nicholas Brown; Brenda's C. Mueller; Kazoo Kate

CECIL EMBER (Canada)
Consultant, Climate Change

Concerns of non Annex I countries can best be summarized by saying that there is a feeling of lack of control.

In order to gain some control:

- activities in non-Annex I countries should not be seen as commitments but as future opportunity;
- Business in those countries can start to create that asset; various mechanisms -- institutional mechanisms that governments can institute.
- Other efforts: looking at new initiatives and greenhouse gas aspect of that and address in legal agreements, perhaps between fuel suppliers and power plants and addressing the ownership of any reduction changes;
- Opportunities of creating funds

NICHOLAS BROWN (Australia)
International Competitiveness Branch
Department of Foreign Affairs and Trade, Australia

The real challenge is private sector participation and getting private sector engaged in climate change issues.

The question is how to set up institutions in relation of private sector.

BRENDA'S C. MUELLER (Philippines)

Director of the Office of the UN and International Organizations

Department of Foreign Affairs, Philippines

1. Without AID is it possible for countries to meet commitments under the convention?

2. It is clear that non-Annex I parties are agreeing to achieve objectives of Convention without AID -- so we must look at it as a voluntary. We must look at objectives of Convention -- not reduction of emissions alone.

3. In Convention AID is a cooperative agreement

KAZU KATO (Japan)

Professor, Nagoya University

First prerequisite of any trading system; agreement on total emissions cap

Even if Kyoto Conference agrees to objectives and legally binding, applies only to Annex I countries; it is unlikely that by that time unlikely we have enough experience from AIJ without credits to move to JI with credit attached.

GEIR SJOBORG (Norway)

The more effective measures we can agree on, the more ambitious commitments Annex I countries can sign off to.

Projects must be country-driven

RICHARD SANDOR (U.S.)

AIJ/JI is an intermediate -- a process -- not the goal.

The goal is to reduce emissions, not to focus on the process.

CARLOS GAY (Mexico)

Pilot phase has to be shown to be neutral beneficial. It must be accepted by everybody. From developing world point of view, this is healthy.

ATIQ RAHMAN (Bangladesh)

Director, Bangladesh Center for Advanced Studies

There is an important question here: Why not let the Country (U.S.) control its own CO2, and then let the rest of the world do its own.

Also, JI not operational. It is carbon reduction vs. carbon transfer.

Transfer itself does not take us any further; reduction will.

Critical issue may be the dollar game, but the key objective is regarding carbon.

NAZLI CHOUCRI (U.S.)

Political Science Department, Massachusetts Institute of Technology

Technology Factors

Turning to matters of technology which have been ignored here:..

We have not recognized that we are in technology revolution -- Internet.

This revolution is changing radically how we obtain information and disseminate information: i.e. how we get and how we give.

A form of large-scale technological obsolescence going on.

It is an obsolescent to which we are all party.

The gaps in some key technologies are not only between rich and poor but between current generation (ourselves) and younger generation (our children)

If this kind of discussion is to go forward, we must use advances in technology and bring that element in negotiations and deliberations.

Advanced information technologies are equalizers in terms of types of information available and ability to hear perspectives from around the world.

WYTRE VAN DER GAASST (Netherlands)

Foundation Joint Implementation Network

Different countries different interests environmental . We must continue to bring them together -- AIJ is a way to do this.

Difficult to have enforcement procedure in CO2; JI more suitable because enforcement of JI is easier.

JI is moving to international allowances, so enforcement issue has to be solved.

CHOW KOK KEE (Malaysia)

Director, Malaysian Meteorological Service

We must disassociate the two processes technology transfer and AIJ.

There are other ways of transfer of technology, e.g., technology cooperation.

UNEP should promote transfer of technology, innovations in transfer of technology in meeting objectives of Convention.

RICHARD SANDOR (U.S.)

1. What's wrong with inventing a thermometer? only asking to measure the problem. Those that measure problems give insight to second step.

2. Nobody advocating that anybody do anything except on voluntary, non-binding basis. Informed people are better than misinformed people.

3. How to enforce? We are going to guess. We don't really know. But you have to start someplace

4. Nothing wrong with identifying and quantifying. We must get past qualitative into quantitative discussions.

ELIZABETH DOWDESWELL (UNEP)

To summarize:

There is optimism at these meetings.

We should be cautiously optimistic given, some of the things that are already happening

GSSD Reports

New Partnerships to reduce the Buildup of Greenhouse Gases Concluding Panel

THE LEGACY

Chair: JOSE MARIA FIGUERES

President of Costa Rica

IRVING MINTZER (U.S.)

Summary of Roundtable Discussions

1. Context and Opportunities

This first session reviewed the state of science; links to climate change and biodiversity; and the context of AIJ.

The basic message is this:

the situation related to greenhouse gases is serious; the potential for damage is real; the need for urgent action to modify long-term trends is immediately at hand.

The key point is a shared understanding that the central issue is continuing sensitivity to equity and fairness.

For AIJ to be universally accepted, requirements of developing countries must be identified and addressed.

Developed countries' leadership in reducing their own emissions

Without fairness, risk of increasing poverty and promoting likelihood that planet fail to develop in manner that is sustainable.

2. Political realities:

Different parties have different perspectives and different interest in AIJ.

AIJ is attractive to the North (cost-effective emission reduction; new partnerships in the commercial sector; new technologies); think about AIJ as vehicle -- credits; trading.

For developing countries, AIJ reveals opportunity and risks: no commitments by non-Annex 1 countries at present; AIJ not a substitute for technology transfer or for other obligations.

3. Technical issues

Leakage from AIJ projects that cause emissions to shift from one area to another Monitoring

Obsolete technologies (even if useful to host country)

Additionality related problems

Matters of baseline, etc.

4. Financial questions:

There were fewer areas of consensus than of concern.

We need to think carefully how to bring in investors without credits.

AIJ process will remain very small and a source of limited experience without some form of credit or payoff

Limited in opportunities unless process makes clear how AIJ advances national priorities of host countries.

Overall impact of these discussions is this:

We need to highlight the fact that there is still opportunity to work for consensus; these discussions exposed a range of differences and passions in these areas.

MOSTAFA TOLBA (Egypt)

International Centre of Environment and Development

AIJ is considered a vehicle for JI; but it would probably sell better as a vehicle for development.

Two burdening issues for third world still unresolved: financing resources and technology transfer

AIJ to be offered to these countries as a vehicle to meet these objectives, they will be more willing.

Vehicle for development and also one component in the strategy for implementation of the Climate Change Convention and clear indication of what are the other components, particularly from the North

There is a problem of viewing AIJ as business and "permits to pollute"

We should impose "limits" on emissions, rather than giving "right" to pollute.

How can we now connect the financial requirements of different Conventions?

OGUNLADE DAVIDSON (Sierra Leone)

Head of the Department of Mechanical Engineering,
University of Sierra Leone

We must identify appropriate implementing mechanisms for the Climate Convention.

The world is in a time of rapid changes in social and economic frameworks:

1. increased competition for market shares
2. reduction of ODA
3. increased democratization of education
4. changes in old technology markets

We will witness a new set of winners and losers.

Knowledge emanates from controversies.

JI and AIJ have generated controversies and new views; these reflect differentiated responsibilities in the climate change debates.

Financing will remain a problem for some time -- governments of Annex 1 countries have domestic demands.

Participation of private sector must be fully engaged in this concept. Building partnerships in reducing greenhouse gases, create market stability, enhance participation. Partial subsidies, loan guarantees, tax breaks, reduction of subsidies to make price more meaningful and useful.

The technologies are well-known but not accessible. Develop innovative mechanisms for technology acquisition (e.g. technology easing).

This is a consensus-building exercise with innovative schemes. We now need types of AIJ

projects to be increased; and we need more roundtables for discussion.

This is what must now be done:

- increase awareness of governments and private sector on different issues of AIJ
 - fill strategic gaps in knowledge base
 - continue dialogue in Annex 1 countries with the private sector
 - provide professional guidance from Annex 1 countries to improve participation
 - improve knowledge and transmission of AIJ
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CHEN CHIMUTENGWENDE (Zimbabwe)

Minister, Ministry of Environment and Tourism,
Zimbabwe

The question is:

How to reduce the buildup of greenhouse gases?

The proposal is this:

We must develop new partnerships; AIJ may be one of the most important ways of achieving this objective.

Developing countries are very unsure and suspicious of AIJ (previous experience with the international system). They suspect a sinister agenda (for good reason -- past experience).

Developing countries can influence the outcome of the final product.

AIJ is not a fait accompli; we welcome this roundtable as "brainstorming"; the meeting has advanced understanding and moved evolution of AIJ -- sharpened our ideas about it.

Developing countries encouraged to take initiative in accordance with their genuine interest. and Developed countries must respect wishes of developing countries if exercise is going to be a success.

MICHAEL ZAMMIT-CUTAJAR (UN-FCCC) Executive Director,
Climate Change Secretariat, UN Framework Convention on Climate Change

Reflections on the discussions:

1. Two linkages between this discussion (AIJ/JI and trade) and other elements of the Convention process

- a. common accounting system -- can't define reductions until define emissions (methodologies)
- b. Tie AIJ to national development priorities

2. Reactions to concerns in the debate:

a. some speakers not too happy with terms of reference of AIJ and define certain principles beyond the pilot phase -- crediting. Berlin does provide opportunity to work out how crediting will work, assuming it will follow. Risk -- business is about risk. Some public money a useful supplement to encourage investment.

b. if COP3/Kyoto leads to pursue JI with crediting among Annex I parties, that might be the time

to look at AIJ within the framework of the pilot phase.

c. additionality to finance -- why should one who gets profit also get credit --should. Convention does not provide for bulk of financing; where is that money coming from? Credit could be incentive

3. Re fears of potential intrusiveness of AIJ:

Any "cooperative" venture is voluntary by definition.

Present rules do ask each party to identify national authority who can say yes or no to ensure national policy ensured.

New questions:

Can we imagine that private investors in fossil energy sector are holding back from expressing interest because that would mean they are taking climate change seriously?

The developing countries may be wondering that if they do not move from pilot phase to phase with credits, will credits be swallowed up by economies in transition?

MAURICE STRONG (Costa Rica)

Chairman, The Earth Council

AIJ is controversial, and there are controversies in respect to climate change itself.

We are assuming that climate change issue is going to move to center of international agenda; unfortunately it is not there yet.

We are at the beginning stages of an historic process; value of sessions like this where people with expertise address controversies; identify controversies and range with respect to them -- a continuum.

AIJ must lead to credits, and lead to trading. But we are not there yet.

We understand AIJ/JI limitations -- that it is one of several approaches and tools; but it offers one of the most promising prospects for genuine transfers to developing countries -- ODA assistance becoming less.

As difficult as the technical issues are, they are not as difficult as political issues and equity and fairness. Technical issues require much more work (accounting, validation, etc.); the biggest challenges will probably lie elsewhere.

Credits are key; probably not major movement towards JI without credits. Credits exist now and can be created by bilateral arrangements. Do not depend on international agreement; ultimately any durable system of JI will require credits if there is going to be any real scale to it.

Importance of pilot phase:

Can't test everything; present tests limited but extremely important. But provide technical evaluations and also framework for continuing process.

If no progress COP3/Kyoto next year, doubts for the process; must move for progress at that meeting.

ELIZABETH DOWDESWELL (UNEP)

Executive Director, United Nations Environment Programme

**This is a forum about partnerships
We have an important partnership with Earth Council.
And the support of a number of governments.**

Encouraging in optimism and spirit of collaboration (even taking into account different opinions).

This was a platform not speaking to the converted but also to those skeptical and curious. Also to be a forum in which private, non-governmental and government sector have equal legitimacy.

Opportunity to be informed, learn, and discuss.

Why did UNEP do this?

UNEP's intent is to make its contribution to implementation of the Climate Change Convention; that is the only agenda.

UNEP helps to advance state of the science; helps develop effective public policy and social consensus

JOSE MARIA FIGUERES (Costa Rica)

Concluding remarks:

This forum opportunity frank interchange of ideas among those from sectors who don't usually exchange -- need for exchange in informal setting parallel to international formal negotiations.

Good news:

1. These arguments (political or technical) reflecting deeper thinking about issues that we have seen in the past. Debate is evolving from concept to being closer to application.

2. Although consensus on particulars still needs to be reached, some basic technological and methodological questions (e.g. accounting) no longer stand in the way of progress in this issue.

Continuing reality:

1. Observable trend to credible emissions trading within A1 countries only. Pilot phase only Annex 1 countries -- unfair -- where does it leave developing countries and non-Annex 1 countries?

What about Central America? We must address where developing countries who do want to be involved stand in COP3/Kyoto. It is unfair to be left out because of the specific categories in which countries are placed.

2. We are caught in the midst of two vicious cycles:

a. we need more experimentation to encourage the market and vice versa

b. In Annex 1 countries the private sector won't increase engagement without economic signals; their governments are not creating signals.

3. If gridlock is not broken, the pilot phase will fail. Cost of failure borne of non-Annex 1 countries. AIJ is a vehicle of development. Best opportunity to build true synergy for global environmental protection and national economic development. If we don't break gridlock/fiscal circle, we risk losing financing source of incremental cost of sustainable development.

Developing countries can't afford not to move to Sustainable Development. If we lose, developing nations will be condemned to follow cheaper (only in the short run) but more polluting paths.

4. There is a need for increased dialog with the private sector. Financial fuel for AIJ success.

Next Steps

We must convene another open forum shortly now focusing specifically on the issue of financing. The private investment sector is underrepresented here.

This forum should convene two actors:

1. Investors from the private sector -- not only business but those in corporations and companies that have the authority to make investment decisions
2. Industrialized country government officials who can affect economic signals offered to AIJ project investors.

GSSD Report

This Report is prepared by the management of GSSD as an informal review of the discussions and deliberations at the Open Forum in San Jose, Costa Rica, October 29-31. It is strictly an informal summary. Comments made by individual speakers are for information only and not for direct quotation or formal attribution. The purpose of this Report is to facilitate distribution of information and exchange of views. It is meant for consensus-building, information exchange, and informal discourse. Further, this Report cannot be considered an exhaustive rendition of all issues discussed in the fullest sense.

Presentation

Each Roundtable discussion is summarized in the order of issues raised. As indicated in GSSD Report, is an informal presentation of the issues and deliberation. It cannot be viewed as a formal reporting of discussions. All comments were in an informal setting for the exchange of ideas. All the usual caveats and qualifications remain.