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DO AIJ PROJECTS SUPPORT SUSTAINABLE DEVELOPMENT GOALS OF THE HOST COUNTRY?

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Abstract: One of the criteria established for the AIJ pilot phase projects was to support national priorities of host countries. Success in contributing to these countries' sustainable development was less a factor of the design of the pilot phase, and more the result of national capacity to define and implement policies, legal frameworks and financial instruments for sustainability. Developing countries will pursue greenhouse gas mitigation projects only if these promote national priorities. Costa Rica's successful AIJ program is one of the elements in a strategy to obtain sustainable financing for a clear national environmental agenda. India's demand side management project has specific community level benefits. As we move forward toward the design of the CDM, a combination of national, as well as community level, sustainable development criteria, may be helpful in ensuring that international mitigation projects will, in fact, contribute to the sustainable development of host countries.

In this paper we shall argue that the responsibility for ensuring that AIJ pilot phase projects contributed to the sustainable development of the host country rested on the shoulders of the host country. Sustainable development was not an agreed-upon criterion for the AIJ pilot phase. However, interested individual host countries were free to set country specific host country acceptance criteria which, in some cases, included sustainable development guidelines. Those countries that were proactive in defining their national development goals, and set AIJ project acceptance criteria to reflect these priorities, were able to benefit from AIJ in a measurable and concrete manner. Sustainable development disappointments from the AIJ pilot phase were largely the result of differing expectations between hosts and investors.

1. Definition of sustainable development

The World Commission on Environment and Development (WCED) in their report Our Common Future (1987) first defined sustainable development as "meeting the needs of the present without compromising the ability of future generations to meet their own needs". The word 'sustainable' has acquired tremendous currency in recent years, particularly after the UNCED '92 in Rio de Janeiro, Brazil. Sustainable Development is a critique of the concurrent growth-oriented, top-down development paradigm. It emphasizes a development framework, which is based on an appreciation of the finite human and natural resources available on planet earth. However, the concept has not yet been fully integrated to the operational aspect of development strategies of the industrialized and developing countries. It remains the sovereign right and responsibility of each country to define sustainability in its own terms, and to ensure that sustainable development is being pursued.

2. The AIJ pilot phase and sustainable development

The 1995 Berlin Mandate established a pilot phase for joint implementation projects in reaction to fears that too many questions regarding the benefits of international mitigation projects remained unanswered. In addition to myriad technical uncertainties, the question of whether and how joint implementation project activities could avoid inequitable treatment of host (non-Annex 1) countries loomed large in the G77 agenda at the first Conference of the Parties.

This chapter will focus on one of the five criteria established for the AIJ pilot phase:

“Activities Implemented Jointly should be compatible with, and supportive of, national environment and development priorities and strategies, contribute to cost-effectiveness in achieving global benefits, and could be conducted in a comprehensive manner covering all relevant sources, sinks, and reservoirs of greenhouse gases”. (Decision 5/CP.1).

It is important to note that no mention of “**sustainable development**” is made in the 1995 Berlin Mandate. It was precisely the ensuing discussion about whether or not these projects actually contributed to the sustainable development of the host country, which led to a change in wording for the CDM. The Clean Development Mechanism (CDM) defined under the Kyoto Protocol, clearly states as one of its purposes to “*assist Parties not included in Annex I in achieving sustainable development*”.

The following discussion centers around two developing countries' (Costa Rica and India) evaluation of whether and how AIJ projects undertaken in their countries were in fact “**compatible with and supportive of national environment and development priorities and strategies**”. Two perspectives are presented. Costa Rica stresses the compatibility with national sustainable development goals, whereas India emphasizes the importance of a community approach.

3. Costa Rican National Environment and Development Priorities and Strategies

In the mid 90's, the small environmentally aware country of Costa Rica was already signatory to both the FCCC and the Biodiversity Convention, and was considered an international center for biodiversity research and creative conservation approaches and projects. Costa Rica had also already been successful with innovative financial mechanisms such as debt-for-nature swaps and "bio-prospecting", as well as nature-based ecotourism. There was recognition of the many different values of natural resources, as well as a comfort level with merging private and public sectors in the pursuit of environmental goals. Traditional sources of funding for conservation were diminishing, and the country recognized that any really effective attempt to grow "sustainably" would have to involve the private sector.

Beginning in 1994, Costa Rica based its national development strategy on the concept of sustainable development, which it defined as "*development which represents the balance provided by political stability, social equity, economic stability and development in harmony with nature*". (Figueres, J.M. 1996) There was a firm commitment to prove that intelligent environmental management can complement economic growth, and that civil society and the private sector can and should be fully engaged in the decision making process.

Some of the sustainable development priorities for 1994 – 1998 (the period during which AIJ projects were designed) were clearly defined by the administration: (Figueres, J.M., 1996)

- Territorial ordainment, or consolidation and improved management of protected areas.
- Climate change and energy policies – the country was at the time already generating 90% of its power from renewable energy sources. The commitment was made to further increase clean energy generation as well as promote energy efficiency in the industrial sector.
- Biodiversity - Costa Rica has 5% of the world's biodiversity. An impressive 24% of its national territory is designated as national parks or protected areas. The goal was set to consolidate the park system so as to guarantee its existence for future generations.
- Macroeconomic Policies – restructuring the economy toward an open and more balanced one, reducing one of the highest deficits in Latin America and promoting internal savings.
- Incorporate civil society and the private sector into the decision making process

3.1. COSTA RICAN EXPERIENCE WITH THE AIJ PILOT PHASE

Costa Rica was the first developing country to recognize that the AIJ pilot phase could be designed to become a tool for financing national sustainable development priorities. Thus, Costa Rica has done more than any developing country to establish a comprehensive JI/AIJ regime as a strategy to promote its own sustainable development goals, while at the same time meeting the objectives of the climate treaty.

In 1994, a high level consultative committee on climate change was formed to shape JI policy and oversee the completion of the national greenhouse gas emissions inventory. In September 1994, Costa Rica and the United States signed a bilateral Statement of Intent on Sustainable Development and Joint Implementation (Castro, Tattenbach, 1998).

The Costa Rican Office for Joint Implementation (OCIC) was established in 1995 within the Ministry of Natural Resources, Energy and Mines. (Figueres, C, et al. 1996). OCIC carries out the country's JI evaluation, acceptance and promotion activities. The office combines expertise from forestry, to energy, to marketing, and is housed in the private sector export promotion office, Coalición Costarricense de Iniciativas de Desarrollo (CINDE). OCIC is directed by a leading forestry non-governmental organization. It is therefore a tri-partite collaboration among the government, private and NGO sectors. OCIC works with project developers, national policy makers, and other countries, in order to ensure that quality projects are designed and marketed abroad.

In 1995, OCIC established project approval criteria and procedures. Since then, OCIC has assisted in the development of more than fifteen project proposals. Three of the seven projects approved in the first round of evaluations by USIJI were from Costa Rica. These included a wind energy project, Plantas Eolicas, and two carbon sequestration projects: Ecoland and Carfix. During the second round of USIJI, Costa Rica had five more projects approved: three renewable energy projects (Doña Julia Hydroelectric project, Aeroenergía wind project, and Tierras Morenas wind project) and two carbon sequestration projects (Biodiversifix and Klinki Forestry project).

More recently, the OCIC strategy has been to consolidate small projects into three national scale programs focusing on: 1) consolidation of parks, 2) natural forest management by private landowners, and 3) renewable energy. The development of national level AIJ programs reduces the per-ton transaction costs associated with developing, evaluating and marketing projects - thereby removing one of the most important obstacles to developing country participation in AIJ project development. The first two of these “umbrella” programs, known as the Protected Areas Project (PAP) and the Private Forestry Project, which focuses on land use, will eventually encompass most of the threatened forested areas of the country.

Carbon offsets generated by the PAP are certified annually by the Societe Generale de Surveillance and are being sold to interested buyers in one ton increments as Certified Tradeable Offsets (CTOs). Two of the previously approved projects, the Carfix project and the Biodiversifix project, have subsequently been incorporated into the PAP, which received USIJI approval in the third evaluation round.

OCIC has recently made its 1999 report on the AIJ pilot phase to the Secretariat of the Convention. The report summarizes Costa Rican projects as follows (Costa Rica, 1999):

TABLE I: Land use change and forestry projects in Costa Rica

Name of the project	Type of project	Area (ha)	Life of project (years)	Total cost (US\$ millions)	Emission reductions (Tm C)
ECOLAND	Conservation	2.340	15	1	366.200
KLINKI	Reforestation	6.000	40	3.8	1.966.495
CR/Norway	Conservation	2.000	25	3.3	313.646
	Reforestation	1.000			
	Regeneration	1.000			
PAP	Conservation	422.800	25	180	18.000.000
	Regeneration	107.698			
TOTAL		542.838		188.1	20.646.341

TABLE II: Energy projects in Costa Rica

Name of project	Type of project	Installed capacity (MW)	Annual Production (GWhr/yr)	Total cost (US\$ millions)	Emission reductions (Tm C)
Plantas Eólicas	Wind	20	98	30.4	506,720
Tierras Morenas	Wind	20	90	27	562,020
Aeroenergía	Wind	6.4	30	8.85	146,000
Doña Julia	Hydro	16	85	27	562,020
TOTAL		62.4	303	93.25	1,776,760

TABLE III: Agriculture projects in Costa Rica

Name of project	Type of project	Total cost (US\$ million)	Life of project (years)	Emission reductions (tm C)	
				(tm C)	(tm CO ₂)
ICAFE/BTG	Waste water treatment	0.973	10	34,645	127,031

The renewable energy projects, which will all be operational by September 1999, represent a total of \$93,000,000 in new investment and will generate 6.5% of Costa Rica's installed electricity capacity. Of the sequestration projects, both Ecoland and CNFL are fully funded. Klinki Forestry is partially funded and under implementation. The PAP is 6% executed through the sale of 200,000 CTOs at \$10/ton of carbon to the Government of Norway. (Costa Rica, 1999).

Costa Rica has established a carbon fund which serves as a financing agent for national carbon offset projects by supplying funds both to purchase threatened lands in order to expand the government forestry incentives, and to support renewable energy projects. Individuals may receive compensation for "ecosystem services", including carbon sequestration provided by their land under arrangements that cede their environmental services rights to the Government for its use and possible resale. The carbon fund markets and sells those rights internationally, producing CTOs. Funds generated by the sale of CTOs are then distributed to landholders under ecosystem services contracts. (Castro, Tattenbach, 1998).

3.2 DO COSTA RICA'S AIJ PROJECTS CONTRIBUTE TO ITS NATIONAL PRIORITIES?

In order to meet sustainable development objectives, a country must formulate clear policies, develop effective legal frameworks, and implement efficient financial instruments. Costa Rica is a case study in this attempt. Over the last decade Costa Rica has developed a variety of legal, policy and financial instruments with the goal of supporting sustainable development goals. Costa Rica's AIJ program is one of the elements within the framework for the sustainable financing of a clear environmental agenda.

Costa Rica and Australia are the only two countries that specifically mention "sustainable development" in their AIJ project acceptance criteria, although many countries require evaluation of non-greenhouse gas costs and benefits including environmental, social and economic impacts.

Costa Rica's AIJ project criteria specifically require that an approved project be "*compatible with and supportive of Costa Rican national environment and development priorities and strategies, including biodiversity conservation, reforestation and forest preservation, sustainable land use, watershed protection, air and water pollution reduction, reduction of fossil fuel consumption, increased utilization of renewable resources and enhanced energy efficiency.*"

The criteria also require that projects enhance the income opportunities and quality of life for rural people, and transfer technological know-how and capacity building. In order to be accepted for host country approval, project developers must prove to OCIC that they will meet these criteria.

Costa Rica's renewable energy projects have been reported as having the following benefits: (US EPA, 1999)

- Help support Costa Rica's goal of satisfying Costa Rica's current and future energy needs with a diverse portfolio of clean, renewable and environmentally sound energy sources
- Attract foreign capital investment that would not otherwise be invested
- Provide protection from rising fuel prices and dependence on imported fuel
- Transfer modern, clean and efficient technology
- Provide energy to meet Costa Rica's 7-9% annual increase in energy demand
- Local economy benefits from improved roads, access to electricity and increased local commerce
- Reduce non-GHG pollutants/improve air quality by replacing highly emitting fuels
- Provide employment during both construction and operation

Costa Rica's land use change, forestry and agriculture projects have been reported as providing the following benefits:

- Prevent deforestation of primary forests
- Protect biodiversity in critical unprotected habitats
- Maintain water quality
- Reduce soil erosion
- Reduce logging pressures on natural forest

- Reduce use of chemicals through substituting other low-yield crops with forest plantations
- Provide a stable source of income to small, medium and large local farmers through payments for plantings and carbon credits

All of these benefits are *“compatible with and supportive of (Costa Rica’s) national environment and development priorities and strategies”*. Costa Rica has been able to further its sustainable development agenda through AIJ. Increased financial resources for investment in environmentally beneficial projects that are additional to official development assistance (ODA), and in most cases, from private sources, have begun to flow to Costa Rica. A monetary value is being given to environmental services provided by the country’s natural resources, and Costa Rica has a greater control over the sustainable use of these natural resources. Incentives, such as contracts with individual landowners for their “environmental service rights”, provide competitive economic alternatives to destroying biodiversity rich primary forests.

4. India's National Development and Environmental Priorities

India’s natural environment has been severely degraded by population growth, rapid urbanization, the development of heavy industry and unsustainable agricultural practices. Moreover, in India as throughout the developing world, it is the poor who suffer the most from air and water pollution, erosion, and other environmental problems -- the poor who have no option but to rely on their immediate environment for survival. In many cases, government policy may exacerbate problems rather than solve them. International regimes such as AIJ, therefore, should provide both local environmental benefits and promote the development of sustainable livelihoods, which do not degrade the environment.

India's development priorities are quite evident (Chatterjee, K. 1997):

- poverty alleviation and provision of basic facilities
- increased investment in priority sectors
- increased investment without debt
- technology transfer
- reduced imports of fossil fuels
- decentralized power for rural areas
- increased and efficient power generation
- investments in irrigation, efficient use of power for irrigation, and shift towards sustainable agricultural practices
- water management and pollution
- land degradation and soil erosion

India’s development and environmental priorities are inseparable. Following the Rio summit in 1992, the Government of India laid out its overarching environmental policy in 1993 : The Environmental Action Plan (EAP). The priority areas of the EAP are

- conservation and sustainable utilization of bio-diversity in selected eco-systems
- afforestation, wasteland development and conservation of soil moisture
- control of industrial and related pollution with an accent on reduction and management of wastes
- improving access to clean technologies
- tackling urban environmental issues
- strengthening scientific understanding, training and awareness of environmental issues
- developing an alternative energy plan

4.1. INDIA'S EXPERIENCE WITH AIJ

Although the concept of AIJ was introduced during COP1 by the Indian Minister of Environment and Forests not much progress was reported in India to get the benefit of the learning phase of AIJ. Development Alternatives organized a major international conference on AIJ, Perspectives from Developing Countries, in January, 1997 in New Delhi (Chatterjee, 1997). This AIJ conference generated considerable interest in India and the Asia- Pacific region but nothing much tangible happened until the Kyoto Protocol to the Convention on Climate Change was adopted in December, 1997.

The Government of India has established an AIJ Task Force (TF) consisting of representatives from the implementing Ministries of the Government of India and some NGOs. This Task Force examines the AIJ proposals submitted to the Government of India for endorsement. The actual work of the TF really started only after the Clean Development Mechanism was introduced in the Kyoto Protocol with the expectation of sharing credits between the investing partners, and the concerned non - Annex 1 for meeting the cost of certified CDM activity and adaption cost to the host country.

During January-February 1998 five AIJ projects were approved by the Task Force. These projects are:

TABLE IV: Indian approved projects

S.No.	Project title	Host	Investor	Location of the Project
1.	Integrated Agricultural Demand side Management Project	Andhra Pradesh State Electricity Board (APSEB)	World Bank	Andhra Pradesh
2.	Tamarind Orchardgro-Forestry for Dry Lands	Women for Sustainable Development (WSD)	USA	Bagepalli, Karnataka State
3.	DESI-Power: biomass gasification	DESI Power, Development Alternatives, India	The Netherlands	At 6 sites in India
4.	Direct Reduced Iron (DRI)	M/S ESSAR, Gujrat	NEDO, Japan	Gujrat state
5.	Energy Recovering form waste Gas and Liquid	IPCL Plat at Vadodara, Gujrat	-	Vadodara, Gujrat

None of them have been implemented so far. The last two projects in the table mentioned may not be implemented at all eventually. The other these projects are under the different processes at present leading to signing of the MOUs between the project partners.

4.1.1. DESI POWER

This project was conceived as a possibility of decentralized generation systems in villages in India. This concept is based on local sources of renewable energy like biomass and can be competitive with power supply for conventional fossil fuel power plants. The biomass gasification technology used in DESI power has been developed indigenously by the Indian Institution of Science, Bangalore. The biomass used in this technology is an abundantly available local weed that is harvested, transported, cut and stored by manual labour. Extensive biomass surveys were done before finalizing the project and the system of biomass management was established in consultation with the local partners and villagers.

The AIJ project envisages establishment of six such stations spread over villages at different locations of the country for gaining experiences and capacity building. Each unit will produce 100kw of power for supply to small rural enterprises as well as replacing kerosene lamps.

The MOU of the project will be shortly signed between the investor (The Netherlands) and the DESI power limited in India.

4.1.2. *The Tamarind Orchard Agro - Forestry AIJ Project*

This project envisages horticulture activities that involve both tree growing and cropping. Trees are raised on crop lands. The trees that are selected have a high economic value which not only give a steady income to the farmers but also improve soil stability. Species choice has been determined through preliminary discussions with farmers. Tamarind or mango will be grown. Along the borders there will be eucalyptus and Prosopis Juliflora for protection and some teak for timbers. 1000 hectares of dry land spread over in geographical area of five taluks of North Kolar district, Karnataka, and about 2500 farmer families are involved.

The carbon pool created by the project is 124 tC / ha. The total incremental projected CO₂ sequestration is 118975 tC. The project will also benefit the local farmers not only during the project period but also much beyond the project life. This will also create employment for at least one to two people per family for 2500 families. The local environmental benefits are sustainable and substantial land reclamation will be effected.

The MOU of the project will be shortly signed between the partners

4.1.3. *Integrated agricultural demand side management (DMS) project in Andhra Pradesh*

Consumption of electricity in the agricultural sector of Andhra Pradesh presents a significant challenge for the Andhra Pradesh State Electricity Board (APSEB). This sector consumes much electricity and is growing rapidly. Energy consumption by the agricultural activities is 19 % of the total energy sales. At the same time, agricultural tariffs do not provide sufficient revenue to cover the cost of production. A number of studies have indicated that there are significant cost effective opportunities to increase the efficiency of electricity usage both in terms of improving the efficiency of the distribution system and in terms of increasing end-use efficiency, particularly of the agricultural pump sets.

The agricultural pumpsets are used for pumping water for agricultural purposes and their type of service will remain the same. What is important however is that the AIJ project will improve the efficiency of pumpsets. A survey was conducted by the APSEB to measure the over all efficiency of agricultural pumpset installation have indicated that the efficiency is as low as 30%. The pilot project executed for energy efficiency improvement of agricultural pumpsets indicated 25% to 30% savings can be achieved by rectification of pumpsets.

The project combines the following four technical measures in an integrated package to generate electricity saving and greenhouse gas emission reductions:

- improvement of the distribution system efficiency by conversion of low voltage (LV) feeders to high voltage (HV) feeders
- reduction in system demand and line losses, as well as improved service to non agricultural customer through the use of automated load control
- the provision of customer meters to provide information on energy consumption
- improvements in end-use efficiency by replacement of pumpsets and associate pipes and valves with efficient products

This pilot project encompasses approximately 5800 pumpsets on 8 feeders in two geographically separate areas of Andhra Pradesh. The cost of this project is estimated at \$ US 4.60 millions. The funding for the pilot project is being made available under the World Bank / Norway AIJ Program.

Some of the major economic contributions of the project are:

- The freeing of electricity in the system due to increased efficiency of the pumping systems and the reduction of line losses in the distribution system.
- A reduction in the need for rewinding pumpset motors, resulting in the saving of Rs. 1000 per year in the rewinding of motors. Studies have estimated that farmers spend on an average Rs. 1500-2000 per year on pumpset maintenance.
- A boost for the economy of the pumpset manufacturers in the country.
- One time cost of replacement of existing 5,800 three phase pumpsets by more efficient single phase pumpsets.
- An efficient pump irrigation system will result in better yields in food production bringing additional economic returns from the sale of agricultural yields. This will also improve the farmers per capita income and purchase power.
- Economic analysis of the projects has shown that implementation of the project will provide excellent economic benefits for the region. Approximately 12% of the economic benefits accrue directly to the farmers who participate in the program due to reduced maintenance and capital costs.

The social contributions of the project are:

- Increased flow of water to the farmers due to introduction of an efficient pumping process.
- Better crop yields.
- Better employment benefits. The project will result in the creation of short term jobs in and around the project sites for the implementation of the distribution system conversion to high voltage, the implementation of the automation of the distribution system and the manufacture and installation of the pumpsets. In addition to the extent that the farmers are better off as a result of the project, there should be employment benefits resulting from the spending of their additional incomes.
- Better purchase capacity of the people around the project area.

The environmental contributions of the project are both at the local and at the global levels:

Local: The introduction of efficient and single phase pumpsets is expected to result in energy of 3.42 GWh. Due to conservation of fossil fuels, particularly coal, there will be less emissions of NO_x, CO, SO_x and suspended particulate matters.

Global : reduction in greenhouse gas emission. Based on a preliminary feasibility study the demand side measures proposed in the project would result in the saving of 180,000 kWh a year. It is assumed that the freed electrical energy available for re-sale is equivalent to deferring building new infrastructure in the electricity sector. Assuming a 20 year lifetime for this DSM project, the expected carbon reduction is about 150,000 tons of carbon abatement over the life of the project. The carbon abatement cost being paid to Andhra Pradesh, Government of India is about US \$ 30 per ton of carbon abated, while the cost to Andhra Pradesh works out to roughly US \$ 6.4 per ton.

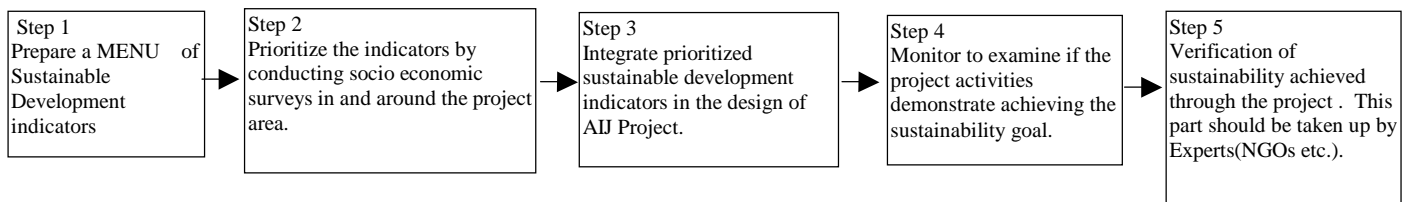
Important as the global environment is, for this and future generations, India's role in international efforts to avert climate change must be based on domestic development priorities. The pressing issues of alleviating poverty, providing for basic needs, and economic development are the starting point for assessing the potential for AIJ. Only by addressing these needs and critical environmental problems will the concept of AIJ flourish in India.

5. AIJ and Sustainable Development

Activities Implemented Jointly (AIJ) if so designed that such activities are compatible with, and supportive of, national development priorities, and driven by the needs of developing countries, may substantially contribute to sustainable development. However sustainable development indicators for monitoring success of projects would be most useful if applicable to two levels: the national level, and the project level. Some of the indicators which are likely to be common for most of the developing countries are:

- Economic
 - additional financial flows
 - increase in purchasing power of the people
 - increase in per capita income
 - employment opportunities
 - poverty alleviation
 - transfer of clean technologies
- Social
 - clean and safe drinking water supply
 - basic health facilities
 - education to children and women
 - sanitation facilities
 - socio-economic impacts
- Environmental Improvement in
 - air quality
 - water quality
 - soil fertility
 - local environment
 - biological diversity

Sustainability achieved through a AIJ can be verified using the following methodology:



A case study of this methodology is summarized in Box 1.

Box 1

AIJ Pilot Project Kilung - Chuu Micro-Hydel in Bhutan

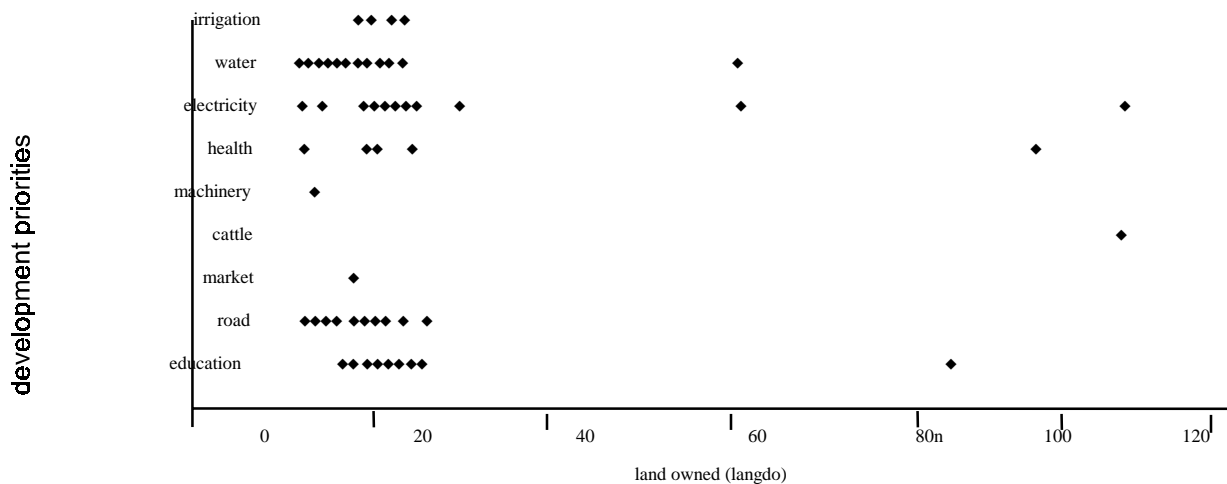
The AIJ Pilot project concerns a micro-hydel system of 100 kw in a previously non electrified area to reduce deforestation through reduced fuelwood consumption, leading to reduced GHG emissions from the area. The project region has a moderate climate at an altitude ranging from about 1,230 meters (Kilung- Chuu river) to 2,130 meters (Samling village).

Development Priorities : an Exante Field Assessment

To assess the development relevance of the micro-hydro installation, the population was asked to indicate their development priorities through individual household interviews and village meetings. The number of households in the surveyed villages in the project are 108, with an estimated population of 700-800 people.

The development priorities were plotted against the land ownership (figure). Although a broad range of development criteria were mentioned, apparently drinking water, electricity, education and road were clearly the main priorities.

Figure 2 Priorities Mentioned in Household Interviews



To integrate such sustainable development requires a major shift towards self-defined, self-reliant decision making on the part of people and society within the context of a global vision - 'Thinking globally, Acting locally'. A community approach to GHG benefits is of vital importance. Sustainable development as a priority is not achievable without a thorough understanding of the sustainable development needs of the local community in and around the project area.

6. Conclusions

Out of the 500 million people in absolute poverty in South Asia (about half the world's poor) India alone have as many as 360 million people living below the poverty line. Developing countries such as India do not have any commitments to reduce their emissions of GHG under the FCCC, nor are they likely to have any in the near future. Their expectations from AIJ, therefore, are quite different from those of

industrialized countries who see it as a way to reduce the cost of fulfilling future commitments. Developing countries expect AIJ to help them meet their national development priorities -- otherwise they have no reason to devote scarce resources to develop AIJ programs.

Under the AIJ pilot phase the contribution to the sustainability of the host country was largely the responsibility of the host country. Under the CDM, this may not be dramatically different. The stated objective of the CDM covers the needs of the host countries as well as the needs of the industrialized countries. Everyone agrees that offset projects must contribute to sustainable development. But agreement on how to measure sustainable development, and whose responsibility it should be to insure it, is more difficult to achieve.

Three approaches are currently being discussed: 1) let the individual countries determine their own sustainable development goals and approve projects based on them; 2) establish a set of international sustainable development indicators that projects can be measured and certified against by "operating entities" or certifying bodies; and 3) a combined approach which would establish a general set of principles or indicators, and encourage countries to specify individual country goals/criteria beyond the general indicators.

As we move toward the design of the CDM, we should learn the lessons of the AIJ pilot phase. The combined general/specific approach may be helpful in order to offer both broad guidelines, as well as respect the sovereign right of each host country to define its own priorities. However, the responsibility for insuring the contribution to sustainable development cannot be placed on the international system which is being created. This responsibility continues to rest on the shoulders of developing countries themselves. They must ensure that their criteria accurately reflect the nation's sustainable development goals and priorities both at the national as well as at the local levels. Projects must then be evaluated and approved according to their contribution to those objectives. Ultimately, the congruence between mitigation projects and national sustainable development goals is not only a sovereign right, it is an inescapable national obligation.

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