### INITIATIVE FOR THE INTEGRATION OF THE REGIONAL INFRASTRUCTURE IN SOUTH AMERICAN

STRATEGIC THINKING FORUM Sustainable development, environment and infrastructure: From planning to action

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### Purpose of the presentation

To motivate reflection in order to define a future, realistic and feasible vision that leads to the development of infrastructure within the context of the IIRSA / UNASUR, with a focus on sustainability.

### Contents

- I. A futurology exercise
- Building a sustainability strategy.
  Defining our starting point
- III. A multilevel work
- IV. From reflection to action: building a plan for the sustainable infrastructure

# I. How do we want to see the future?

A futurology exercise





## Sustainable development



**Environmental Protection** 

## The real vision of sustainability



## The future posed today

- There is not strategic reflection without a clear purpose. We must define the development of the infrastructure we want.
- Infrastructure becomes a real integration tool, based on information, reconnaissance and zoning of the territory, according to its potential, generating a virtuous circle.
- Physical integration makes other forms of integration more dynamic (cultural, educational ones, etc.)
- The IIRSA is an instrument that evolves from cooperation to integration.
- The IIRSA contributes to giving joint responses to common problems.

## Some elements for a sustainable future

- The 7 cornerstones for sustainable infrastructure:
  - Ex-ante / ex-post environmental considerations. Infrastructure foresees, plans, mitigates and controls.
  - Social considerations: Infrastructure is a key element for weathering poverty under conditions that offer the possibility of weathering it, instead of making it deeper. It promotes sustainable actions.

# Some elements for a sustainable future

- Governance, defined structure, with precise roles and spaces for participation. Governance at an internal level and at an international level.
- Financing with public-private alliances and alternative mechanisms. Compensation of impacts.
- Long-term planning.
- Research, technology, resilience.
- The development of infrastructure takes into consideration and incorporates variables in relation to transverse global challenges.

## The environmental future. Using ex-ante tools

- Environmental management instruments are systematically used as an effective mechanism of prevention, monitoring and correction of direct, indirect, cumulative and synergistic environmental impacts. The most important base instrument is the territorial zoning.
  - The instruments are not simple bureaucratic instruments.
  - The instruments take into consideration synergistic impacts and assess sectoral policies. There is an integrated vision of the infrastructures.
  - The Strategic Environmental Assessment is a central element, which anticipates to the individual projects.
  - The environmental measures coincide with the risk period.
  - Conditioners are used to facilitate the fulfillment of the management plan.
  - Management plans are updated.
  - Information is systematized.
  - The instruments are considered together with other reports. Revegetation, migration control, biodiversity monitoring.

### The environmental future. Using ex-post tools

- The monitoring and following-up of environmental considerations is a tool that, based on the balance of control mechanisms and incentives, motivates the development of good practices for the management of the ecosystems in the influence zone of the infrastructure works.
  - The *ex-post* environmental considerations recognize the global trends in fragile ecosystems (growth of the agricultural border, deforestation, climate change, etc.) and incorporate innovative mechanisms and incentives to control non-sustainable actions.
  - Participative monitoring mechanisms are developed.
  - Monitoring incorporates considerations and analysis of sectoral policies to define real proposals.
  - Incorporation of integrated conservation to the planning of the infrastructure.

# The future from the social point of view

- The initiative for the integration and development of infrastructure is a mechanism that is in favor of development and against poverty, based on respect for the environmental conditions and the promotion of sustainable activities, based in turn on the knowledge of the population and the appropriate incentives.
  - The benefits of the infrastructure are appropriately delivered on equity basis.
  - Using social-forest type mechanisms or type programs against poverty together.
  - The environmental and social funds are mechanisms that promote sustainable practices.
  - Infrastructure does not become a dynamizer of the change drivers in the Amazon ecosystem. Agricultural border, wood industry, climate change, forest fires, extractive activities, biofuel (Killeen)
  - Infrastructure develops on the base of respect for the rights of the communities.

## The future of financing

- Environmental and social actions related to infrastructure and its sustainable focus are based on innovative financial mechanisms.
  - Compensation of biodiversity, funds, carbon bonds, REDD (*Reducing Emissions from Deforestation and Degradation*), etc.
  - Use of mechanisms against poverty for the promotion of sustainable actions related to the infrastructure.
  - Environmental and social conditioners related to financing.
  - Public-private alliances. Works related to taxes, other actions.

## The challenge of governance

- Governance allows defined structures, at an internal and regional level, that recognize roles and generate space for the effective participation and dialogue in order to reach consensus.
  - UNASUR integrates the IIRSA as a technical space, articulated in a political space that integrates participation.
  - The governance structure is reproduced in the internal area.
  - The governance integrates the environmental and social variable in the institutional framework and in the analysis of sectoral policies. Cooperation at local, transborder and regional levels.

# II. Building a sustainability strategy

Defining our starting point

### Action Plan for the Integration of the Regional Infrastructure in South America. Montevideo, December of 2000

### Basic actions of the Plan

- To design a more integral vision of the infrastructure. Synergistic development of transportation, energy and telecommunications.
- To modernize and update the national regulatory and institutional systems that are part of the use of the infrastructure.
- To valorize the environmental and social dimension of the projects, setting own criteria and common rules and coordinating actions.
- To incorporate participation and query mechanisms.

# Diagnosis for sustainability in the infrastructure

### • From the economic point of view.-

- There is a continuous demand from the developing countries for the financing of the key infrastructure projects (energy, transportation and communications).
- Attention must be paid to the transverse aspects of the climate change, the role of the private sector, etc. (BM 2008)
- The financial mechanisms do not necessarily guarantee a sustainability focus for the infrastructure.

### From the social point of view.-

- Sustainability crashes with demands performed by the poorest towns, which prioritize short-term actions and demand road integration of towns.
- Infrastructure pressures occupation of the land and development of non-sustainable activities.

#### From the environmental point of view.-

- The most under-privileged areas regarding infrastructure are the most isolated ones as well as the most fragile ones (natural conditions).
- The development of infrastructure implies necessarily direct and indirect impacts that affect the natural conditions.
- Three scenarios for the future of the Amazon region.- Timothy J. Kileen
  - The Amazon region as a barn (practical scenario)
  - The Amazon region as a zone of wild forests (utopian scenario)
  - The Amazon region as a degraded forest (realistic scenario)

#### From the political point of view.-

- The development of infrastructure generates political advantages.
- The infrastructure and its development are focused mainly in spaces related to specialized political decision, which does not integrate transverse variables.
- Sustainability in a changing world.- Trends that affect the way the infrastructure services are planned, financed and operated (World Bank, 2008)
  - Climate change
  - Globalization of trade and services
  - Increase of regional inequalities within the context of rapid urbanization and decentralization
  - Change in the global financial conditions, including increase in private investment related to infrastructure in emerging markets
  - A complex architecture regarding global assistance
  - Increase in the energy prices
  - Crisis related to the price of food

## It is possible to build a Strategy for the sustainable infrastructure

### Elements to build a sustainability strategy:

 Systemic (series of actions), it cannot be isolated. In the specific case of sustainability, the economic, social and environmental elements must necessarily be integrated.

### Tangible elements:

- It includes systems, processes and staff.
- Intangible elements:
  - Behavior, styles, skills
- It has a defined purpose

### **Conditions for sustainability**

- Taking into consideration the fact that sustainability implies the fulfillment of certain conditions:
  - Political system that guarantees participation
  - Economic system that can create surplus and appropriate surplus distribution (local development)
  - Social system that prevents tension
  - Technological system
  - Administrative system: flexible and capable of correcting itself
  - Production system that preserves the environment
    - Bruntland report

## III. A multilevel work



## **Environmental variable**

Trends:

-Public-private partnerships -Opportunities of the carbon markets - ODM

<u>Pressures</u>: -Conservation of ecosystems -Direct and indirect impacts

- Domestic context: -Environmental -Regulations EIA/EAE -Rules related to infrastructure -Institutionality for infrastructure -Environmental institutionality
- International context: -The IIRSA as Integration initiative -Trend with the EAE -UNASUR

<u>Opportunities</u>.--Carbon markets / biodiversity offsets / biodiversity banking -Promotion of sustainable activities related to infrastructure

## IV. From reflection to action

Building a Strategic Plan for the Sustainable Infrastructure

Central elements of the Plan for the Sustainable Infrastructure

- 1. The environmental baseline.- (Timothy Killeen)
  - 1. Progress of the agricultural border
  - 2. Forest management and wood extraction
  - 3. Global and regional climate change
  - 4. Extractive activities
  - 5. Energy
  - 6. Biodiversity
  - 7. Environmental services

### 2. The social baseline.-

- Occupation of the land
- Migration processes
- Indigenous towns
- The local development strategies
- 3. Territorial zoning
- 4. Integration of the environmental and social management instruments for the sustainable infrastructure
  - 1. Strategic environmental assessment
  - 2. Environmental impact studies
  - 3. Assessment of the direct, cumulative and synergistic impacts
  - 4. Development of participation spaces for citizens
  - 5. Economic incentive plan for the development of sustainable activities related to the infrastructure
  - 6. Legal security regarding land

### 5. The multilevel governance structure

- 1. Council of Ministries of the UNASUR
  - 1. Secretary
  - 2. The IIRSA integrated as technical space?
- 2. Interministerial councils for the sustainable infrastructure at an internal level
- 3. Participation spaces within the context of the UNASUR/IIRSA
- 4. Participation at an internal level
- 6. Promotion of sustainable activities related to the infrastructure
  - 1. Mechanisms for legal security related to the land
  - 2. Economic incentives for the development of sustainable economic activities based on a migration control plan, as well as on plans for the management of the landscape and economic incentives for the development of sustainable actions

- 7. The financial mechanisms for sustainability.-
  - 1. The role of the banks in financing
  - 2. Definition of conditions and their enforceability
  - 3. Mechanisms to compensate the loss of biodiversity
  - 4. Funds for sustainable management
  - 5. Carbon markets

## Giving the first steps

- To structure an initial plan for sustainable infrastructure
- Knowledge of carbon markets. Post Kyoto negotiations and REDD markets
- To open participation mechanisms
- To define roles, institutional structure
- Take reflections to the internal area
- To define *ex-post* mechanisms for the promotion of good practices and the development of sustainable activities

## Thank you very much

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