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The Latin American Southern Common Market (MERCOSUR): Environment and Regionalisation

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Introduction:

Regional economic and policy associations of different sorts are not new to the Latin American political and trade scenarios. For several decades throughout Latin America and the Caribbean there has been a tendency toward regional associations between countries in the region, many of these taking the form of commercial trading markets, as well as (to a lesser extent) co-ordinate policies tangentially related to commerce. Among these regionalisation exercises such examples ranging from the Central American Common Market originating in the 1960s to the Andean Pact, the Group of Three between Colombia, Mexico and Venezuela onward to more ambitious arrangements, such as the Latin American Economic System or Latin American Integration Association, have marked the pace for the region. Added to these are myriad of bilateral trade and co-operation treaties between Latin American and Caribbean countries.

Within this context originates the Mercado Común del Sur/Southern Common Market or MERCOSUR. This accord, extrapolation of a bilateral trade agreement between Argentina and Brazil, has grown into the worlds' fourth largest trade bloc.

Although many of the issues involved in the functioning of MERCOSUR are related to environmental variables, the incorporation of environment - development matters into the functioning of the accord has been weak and sporadic. This paper will briefly analyse the incorporation or lack of environment issues into the functioning of the accord. It will also extend its analysis toward the inter-linkage between the regionalisation and globalisation of environmental variables and highlight the environmental singularities of the region where MERCOSUR is inserted in.

Shifting nature of trade accords in Latin America

Whereas regional trade blocs' creation is not new to Latin America, many attempts to create regional markets have not prospered in the long term. Several causes can be attributed to these relative failures some of them local and others of a global nature.

Among the local causes is the lack of complementarity between the national economies of countries involved (the production of the countries in the region and in subregions being quite similar, and not diversified to the level necessary for true complementarity).

Another cause was the fact that the economies of the region have tended to be

linked more to industrialised countries than to potential members of trade co-operation accords.

A further cause is the fact that the economies of the region tend to be linked more to industrialised countries than to other potential members of trading blocs. In addition, political factors were also prominent in the relative lack of success in the earlier integration attempts of Latin America, given the lack of political stability of countries in the region until recent times. Nonetheless, a great impact that has not accompanied previous integration arrangements but has been positive in the circumstances of current commerce agreements, has been the international context, which --due to today's tendencies for globalisation and regionalisation throughout the world-- is more favourable to these sorts of arrangements.

The creation of these commerce alliances responds to a historic aim for countries in the region that tend towards integration and economic co-operation of one sort of another; recently the establishment of trade blocs also responds to an adaptation to the globalisation of the world economy.

However, although historically there has been the aforementioned goal to integrate, currently the nature of these agreements has been altered as a response to international economic changes. In the past, the aims and purposes of the accords had been to increase trade between and among partners, to enhance the internal development of member nations, as well as to strengthen the economic variables of each country member with co-ordinated plans of development. Currently, however, regional trading organisations are formed with the expansion of free trade and de-regulation as their basic

guiding principles, with the explicit economic context for developing countries of shifting internal consumption toward export-oriented growth (Onestini, 1993).

Mercosur's structure

MERCOSUR (Mercado Común del Sur/Southern Common Market), as has been stated above, is a regional project for a common trading bloc that has been developing in the last decade with serious efforts by partner countries to operationalize it. The base for the MERCOSUR was the bilateral trade agreement established between Argentina and Brazil in the mid-1980s. The Treaty of Asunción [accord that sets up MERCOSUR] was signed in March 1991 by its current full members: Argentina, Brazil, Paraguay and Uruguay.¹

MERCOSUR, in its origins, just as other agreements of the time, has implicit and explicit goals of economic integration and the social development of its member nations with environmental guidelines. This is expressly stated in the treaty when it states that "We understand that this objective should be obtained through the utilisation of available resources, the preservation of the environment, the improvement of physical interconnections..." Although the wording of the accord would be difficult to implement, given that the definition of 'preservation of the environment' is maintaining ecological systems in pristine conditions without anthropic impact, it can be seen that, at least

¹ See: Tratado de Asunción: Tratado para la Constitución de un Mercado Común entre la República Argentina, la República Federativa de Brasil, la República de Paraguay y la República Oriental del Uruguay, Asuncion, Paraguay, March 1991.

symbolically, social development integrated to some sort of environmental variables was present in the negotiated text.

Nevertheless, at the inception of administrative and policy-making structures of MERCOSUR, environmental variables were not considered of the same importance as other subjects.

Mercosur's governing and official consultative bodies are as follows: (Ouro Preto Protocol):

- Southern Market Council [Consejo del Mercado Común (CMC)];
- Common Market Group [Grupo Mercado Común (GMC)];
- Commerce Commission [Comisión de Comercio del MERCOSUR (CCM)];
- Joint Parliamentary Commission [Comisión Parlamentaria Conjunta (CPC)];
- Socio - Economic Consultation Forum [Foro Consultivo Económico - Social (FCES)];
- MERCOSUR Secretariat [Secretaría Administrativa del MERCOSUR (SAM)];

Of these bodies, the first three are decision - making intergovernmental organisms (that is, the Southern Market Council, the Common Market Group, and the Commerce Commission). It is within the Common Market Group that environmental variables are to some degree incorporated into MERCOSUR.

Mercosur's formal incorporation of environmental variables

Following is an examination of Mercosur's incorporation of environmental variables. Researchers have indicated that dealing with trade agreements is not the correct point of entry in the analysis and execution of development and environment policies (Tussie and Vazquez, forthcoming). However, the same problem that occurs at the international level with the World Trade Organisation and its relation to environmental questions occurs at the regional level. That is, due to a lack of commensurate organisations and institutional mechanisms to deal with environmental problems at a regional level, at least in theory, much of the emphasis in Latin American environmental variables are placed upon trade agreements which have more concrete applications and maintain some consulting and dispute settlement mechanisms. Moreover, although the trade accord and trade mechanisms emanating from them might not be the choice institutions by which countries could or should deal with environment and development matters, it cannot be denied that the results that accompany these [i.e. increased and changing trade patterns] do have and will continue to have a marked impact on environment and development variables.

The executive organ of MERCOSUR, the Grupo Mercado Común (GMC) was originally composed of ten Working Groups (Sub Grupos de Trabajo - SGT). The tasks of the SGT are to analyse the inherent situations of the member states that affect foreign trade. As such, they are entitled to inspect legal dispositions and their effective application in the countries that make-up the MERCOSUR in order to analyse the asymmetries present and to recommend harmonisation measures (Novara, 1994). Yet,

none of the original SGTs dealt exclusively with environmental matters. The original working groups dealt with subjects such as fiscal policy and co-ordination of macroeconomic policy.² Furthermore, at a latter stage a labour issues working group was added. Lastly, a technical subgroup on environment has been added as of late 1995. The technical subgroup bases its actions on eleven basic directives in environmental policies that are translated into an official workplan.

This subgroup (SGT 6 Medio Ambiente) is currently embarked in its work plan, which according to the relevant resolutions it deals with six priority areas:³

- non-tariff restrictions;
- competitiveness and environment;
- international norms - ISO 14 000;
- sectoral issues;
- juridical environmental instrumentation;
- environmental information system; and,
- 'green seal'.

The basic directives in environmental policy within MERCOSUR are the guiding

² The Original Mercosur Working Groups were:

Subgroup 1: Commercial Matters; Subgroup 2: Customs Matters; Subgroup 3: Technical Norms; Subgroup 4: Fiscal and Monetary Policies Related to Commerce; Subgroup 5: Land Transportation; Subgroup 6: Maritime Transportation; Subgroup 7: Technological and Industrial Policies; Subgroup 8: Agricultural Policies; Subgroup 9: Energy Policies; Subgroup 10: Macroeconomic Policies Coordination.

³ See Resolution 38/9 del Grupo Mercado Común, etapa Union Aduanera - Mercosur.

principles of this Subgroup's work. At least in theory, the underlying ideas in most of these directives are related to guaranteeing competitiveness between States part of the accord through the harmonisation and co-ordination of environment-related issues. However, although some issues of sustainable development at large are included in these eleven basic directives, none of them are reflected in the work plan that has ensued from the directives. That is, the work plan of the environmental organism within the regional trade arrangement strictly deals with possible environmental non-trade barriers intra MERCOSUR. Therefore, although its initial mandate is to deal (*inter alia*) with issues of sustainable development of a broad nature, it restricts its actions purely to trade-related policies of environmental policies and their possible impact on commerce among members.

Despite the planned work, however, environmental questions within the MERCOSUR have always been set about as an unwelcome companion to the integration exercise. It is of interest to note that while the nations that make-up the MERCOSUR trade accord individually participated or ascribed to international environmental agreements the inclusion of environmental concerns into their own trade accord was quite tardy. First, although the same countries parties to the MERCOSUR in the early 1990s were negotiating --albeit in different arenas-- the finalisation of the Uruguay Round with its late yet complex incorporation of some environmental questions, concurrently negotiating UNCED and UNCED-related conventions with trade clauses, and witnessing environmental negotiations in the North American Free Trade Agreement, their own

incorporation into MERCOSUR of an environmental dimension was absent.

The second reason for this late and partial incorporation of environmental issues to MERCOSUR is due to the fact that, differently than in other accords, natural resources use and consumption as well as broad environmental considerations are not perceived as development and trade opportunities but as barriers or potential conflict situations.

Furthermore, although policy statements⁴, work plans, and recently institutional mechanisms are present in MERCOSUR to incorporate trade-related environment issues to the agenda, it has not developed public policy for environmental responsible actions by market forces.

Although a trade accord of the nature of MERCOSUR cannot and should not be artificially extrapolated to be an inclusive sustainable development tool for the countries in the Southern Cone, it can be said that --to date-- it has not yet suitably accomplished strategic work needed for dealing with strict trade - environment questions.

Yet, the most questionable point is not what is present in MERCOSUR vis-à-vis environmental variables but what is lacking in broader terms. No concerns are expressed by negotiating parties as well as representatives of productive sectors as to the impact that trade liberalisation has or can have upon environmental variables.

The agreement as well as the general economic concerns prevalent in the region explicitly states that this a free trade accord. Although the tension between defining MERCOSUR as a free trade zone or it being an albeit future full integration exercise are

⁴ See Protocolo de Ouro Preto, Declaración de Canela, Declaración de Taranco.

present, it can be safely stated that currently it is a free trade agreement that is moving toward co-ordination of macroeconomic policies in the near future. This is particularly the case after the recent economic crisis experienced in the region. It is therefore of interest to note that currently it is a good stage to begin evaluating and debating as to the impact of trade liberalisation on sustainable development issues.

MERCOSUR has also been unsuccessful in providing potential tangential environmental benefits. For example, the reconciliation of non-conflictive practices in the management of natural resources common to the countries in the treaty (such as in shared ecosystems) has not materialised.

Environment and trade in MERCOSUR

Latin America, to some extent, reflects a similar process occurring at the international level: due to the lack of competent regional environmental structures, the realm for the debate --and to some degree the action-- in relation to environmental issues is taking place in the trade arena.

In the region, although environment - trade debate in progress for the last few years has not been intensive, it has taken on two distinct or causal preoccupations, as it has in most other regions of the world:

- 1) First, there is the preoccupation on how environmental questions, guidelines, or norms will impact upon or hinder transboundary trade [concerns

for so-called 'green protectionism']. Impacts of environment guidelines on trade.

2) Second, the inverse discussion is on how trade [in particular new modalities of fairly unrestricted and increased commerce] impact upon environmental variables. Impact of unregulated trade on sustainable development.

Within each position, contrary conclusions are presented, and diverse broader impacts on development per se are expressed. Governments mostly express the 'green protectionism' consideration as do those sectors of society involved in the exploitation of natural resources and productive processes. Either at the general global level (for example in issues related to GATT/WTO) or within regional mechanisms of trade exchange, any sort of environment related negotiation or clause is reacted upon as a non-trade measure. Government and the productive sector argue that these are barriers to the free expansion of trade. Latin American countries have expressed this view in diverse fora, at the international and regional level of trade negotiations (CEPAL, 1995). Here, the argument is generally accompanied by the assertion that expansion of trade should be fostered given that it will augment economic variables, such as income. In turn -- according to these hypothesis-- this will elevate environment and development variables.

On the other hand, researchers and practitioners involved in issues of environment and development have centred their attention on the impact that the expansion of trade has on sustainable development variables. The apprehension arises not out of trade in itself, given that the region has been inserted in international markets for quite some time.

The concern is about the impact of unrestricted and unregulated trade and due to the sheer volume of natural resource exploitations that demand-driven consumption patterns are causing. Commerce expansion has provided pressures on environmental variables in Latin America, and such processes as the advancement of agribusiness from former boundaries expanding to areas of ecological fragility, the exploitation of renewable and non-renewable resources expanded without adequate management plans [as for example the growth of mining, fisheries harvest and plantations] as just two of a set of dynamics that are having large and lasting negative environmental impacts in the region (ECLAC, 1994).

With regard to the specific assertion that the expansion of trade will have benefits on environmental variables, the response from sustainable development researchers has indicated that --although the above could be accurate if a series of mechanisms assuring that the benefits of trade expansion are translated into improved conditions for local economies and population-- given that these mechanisms are not in place, the expansion of trade is not automatically being rendered into improved environment and development indicators in the region.

Environmental variables in MERCOSUR countries

First, the question of why environmental variables are important within the regional trade arrangement of MERCOSUR must be examined. The ecological goods of the region covered by the agreement are substantial, not only if defined by local parameters but also if defined as the so-called 'global commons'. Notwithstanding the

richness of ecological scenario there are also grave environmental problems facing the countries that composes this region. Lastly, juxtaposed to the environmental situation already at hand, the potential impact of major projects to be carried out or in place to uphold the economic changes that MERCOSUR is bringing about should be acknowledged.

The Southern Common Market coincides with some of the planet's richest ecosystems. Not only is most of the Amazon embraced within the geopolitical borders of MERCOSUR countries, other ample ecosystems are also present within the region. Gran Pantanal --an ecosystem shared by Argentina, Bolivia, Brazil and Paraguay-- is considered to be the largest wetland on earth. The world's largest fluvial complex is present in the Amazon's hydrographic system. Concerning biodiversity, some of the richest regions in the world in several categories are in the countries that make-up MERCOSUR (PNUD/AECI/MOPU, 1990).

At a more reduced scale, 120 mammals and 235 bird species are endemic just to the four countries in MERCOSUR. The annual internal renewable freshwater resources for Argentina, Brazil, Paraguay and Uruguay is of 6037 cubic kilometres (roughly the same amount as all of North and Central America combined and approximately 2.5 times more than Western and Central Europe brought together). In the same vein, one could proceed in detailing a series of data for distinct ecological aggregates which exemplify the richness of natural resources of the area (WRI/UNDP/UNEP, 1994).

Trade is also based largely on ecological goods or in manufactured items with high environmental impact. Seventy percent of Argentina's international commerce is

based on natural resources while 72 % of manufactured goods exported are of products of high to medium contamination impact. (Chudnovsky et.al. 1999).

Atop this abundance of ecological variables a series of grave environment problems are present nevertheless. Environmental issues negatively affecting the region are not related to a lack of resources, but to a model of development that use them in a non-sustainable manner. As can be seen in the chart below, the four countries (Argentina, Brazil, Paraguay, and Uruguay) share similar urban environmental problems of water contamination as well as waste management issues. Brazil and Paraguay face grave deforestation problems while soil erosion and land degradation are problems confronting all of the countries within the regional trade arrangement. The consequences upon the local population as well as the loop effect of degradation - environmental problems - further degradation have similar outcomes through all the countries in the sub-region.

MERCOSUR Country	Major Environmental Problem
Argentina	<ul style="list-style-type: none"> ▪ Water pollution in urban areas ▪ Air pollution in urban areas ▪ Soil erosion ▪ Desertification ▪ Water contamination in rural districts (by agrochemicals)
Brazil	<ul style="list-style-type: none"> ▪ Deforestation ▪ Urban air pollution ▪ Water pollution in urban areas; ▪ Water contamination by primary activities (e.g. mining) ▪ Land degradation
Paraguay	<ul style="list-style-type: none"> ▪ Deforestation ▪ Water pollution in urban areas ▪ Deficient urban waste disposal
Uruguay	<ul style="list-style-type: none"> ▪ Water pollution in urban areas ▪ Deficient solid/hazardous waste disposal ▪ Soil degradation

To give some numerical dimensions to these problems, it is estimated that Paraguay has lost several million hectares of forestland in the last decades at a rate of nearly 300 000 hectares per year in the last decade. In the most industrialised province of Argentina (Buenos Aires), 47,000 tons of hazardous wastes mostly from metallurgical-electronic and chemical-petrochemical industries are disposed off untreated per year (World Bank, 1995)

Future scenarios regarding environmental impact of MERCOSUR

The future scenario vis-à-vis the relation between environment and the growth of MERCOSUR remains to be seen. As with all of the complex issues of trade - environment, it is not the binomial simplicity of trade versus sustainable development that must be looked at, but the manner in which trade takes place within MERCOSUR and outside of the trade bloc. If trade is to take place in a totally deregulated context, without the full incorporation of environmental costs or other environmental degradation considerations, the impact can be quite negative in the medium and long term.

If only the potential environmental impact of infrastructure needed to uphold the regionalisation process is briefly analysed, we can see that there is a wide margin for environmental degradation if these processes are not carried out in a matter that acknowledges impact and mitigates negative outcomes. The Inter-American Development Bank (IDB) has identified a total of 32 large-scale projects necessary for infrastructure integration of the regional trade arrangement (1996). Fourteen transport projects, eight hydroelectric projects, four power system connections, and six gas

pipelines are deemed as essential foundations to fuel and transport tradable goods. (See Annex 1, Main Projects of Infrastructure Integration for MERCOSUR). The latitude for degradation without adequate management is quite wide.

Much as in the international debate (World Wildlife Fund, 1998), a pending consideration is to assess the broad impact that trade liberalisation as a whole is having within MERCOSUR countries. This is no small feat given that such an analysis and debate should consider a wide set of economic, developmental as well as environmental inputs in the examination in a realm with few sets of data and indicators. Without a full-fledged critique that takes into account the various inputs and outputs of trade upon the environment an integrated approach is quite elusive.

Potential environmental benefits of MERCOSUR

Notwithstanding the impact that trade-growth can have on sustainable development factors, if MERCOSUR is to move toward a fuller integration arrangement, and not only a free-trade agreement between the countries which are party to it, there is a set of potential environmental benefits that could be explored and expanded upon for the advantage of the region.

Regional environmental issues abound within the MERCOSUR territory and regional solutions are the only cohesive manner to deal with them. (di Pace, 1992) An integrated approach to manage these issues could be one of the positive outcomes posed by the political co-ordination and integration already accepted as part of the regional

trade arrangement. Some of the regional-level environmental issues are shared river basins, mutually affecting natural disasters, and common ecosystems,

Shared hydrological basins are a major characteristic of the area that MERCOSUR has an impact on, and a shared management of these basins could reduce the conflictual nature of present management. Related to the shared river basins is the matter of hydrological power, and as seen in the section on infrastructure, one of the growth areas proposed to provide the energy needed for fuelling possible future trade modifications. A congruent approach to hydroelectric power exploitation can be of benefit to the four countries currently involved in MERCOSUR, with spin off advances in other related areas such as the management of natural flooding within the shared river basins.

A mirror of the "natural trade integration" principle based on geographic proximity could be extrapolated to "natural environmental integration," in particular in the issue of joint management of shared ecosystems. For example, in the area of the tripartite border between Argentina, Brazil, and Paraguay, joint and symmetric management of threatened subtropical forests could be a positive outcome to unsustainable current practices that have endangered the forest ecosystems in this sub-region.

Lastly, transboundary impacts of production process are already being experienced within and because of the MERCOSUR trade arrangement, as for example in the boundary between Brazil and Uruguay. Much as in other integration exercises, the co-ordinated regionalised effort to manage these problems can be one of the categorical outcomes of environmental regionalisation.

Global environmental governance and environmental regionalisation

Global frameworks that deal with global environmental issues are one of the missing machineries in current international structures. Therefore, a debate as to the creation of global governance environmental structures is ensuing in different academic as well as institutional arenas (Biermann and Simonis, 1998; Whalley and Newell, 1999).

Much as in the world trade versus regional trade question regarding complementarity or undermining of a regional system by a multilateral one, the relation between regional and global environmental arrangements must be taken into account when international environmental governance is debated. Within MERCOSUR there is not a regional environmental institution, and an environmental protocol is one of the missing aspects of the regional trade arrangement. Nevertheless, there is a rich mosaic of sectoral, bilateral and regional environmental accords that should be contemplated when structuring or analysing global organisations.

Some of the most relevant environment accords within the Southern Common Market are:

- Río de la Plata and its seacoast Treaty (Tratado del Río de la Plata), between Argentina and Uruguay, Montevideo, 1973.
- Co-operation accord between Argentina and Uruguay for the prevention and action against pollution incidents of water courses caused by petroleum and other damaging materials, Buenos Aires, 1987.

- Environmental treaty between Argentina and Chile, Santiago, 1991.
- Environmental accord between Uruguay and Brazil, Montevideo, 1992.
- Environmental co-operation accord between Argentina and Brazil, Buenos Aires, 1997.

Although a full listing and analysis of accords goes beyond the scope of this paper, it is apparent that to a greater or lesser degree an incipient environmental regionalisation is present within Latin America, including the MERCOSUR region (Onestini, 1999). That is, accords among nations that deal with sectoral ecological issues (such as river basins) or with environmental affairs (as a distinct yet encompassing unit of analysis in and of itself) are present within the countries that make up the regional trade arrangement. Sectoral accords begin to grow from the early 1970s, while formally environmental accords were beginning to be ratified in the late 1980s. These latest type of accords, that tend to take into account the relation between natural and social systems as a whole, and somewhat bear in mind the matter of environment in a somewhat more holistic matter are the latest type of agreements ratified, and which in turn respond to global environmental arrangements.

Conclusions

A moving element is difficult to grasp, therefore drawing finished conclusions on what is considered a tangential subject of a transforming trade arrangement can be an uncertain appraisal. Nevertheless, regionalisation of trade needs to be accompanied by a regionalisation of other factors, such as environment. Whether the causality of directional links (is trade growth positive for sustainable development or are environmental restrictions just inequitable barriers), still needs to be thoroughly studied and evaluated in different contexts, it cannot be denied that it is a subject with much uncertainty and changes in the near future. If on top of this the tension between regionalisation and globalisation of environmental factors is added, a multi-layered system emerges. Much as in the international versus regional trade debate flourishes, also the global versus the regional environmental debate must be carefully thought about and incorporated when analysing rapidly occurring inter-linkages between environment and development.

References

- Biermann, F. and Simonis, U (1998) "A World Environment and Development Organization" Policy Paper No. 9 Development and Peace Foundation, Bonn, Germany.
- Chudnovsky D., Rubin S., Cap E., and Trigo E. (1999) "Comercio Internacional y Desarrollo Sustentable: La expansión de las exportaciones argentinas" Centro de Investigaciones para la Transformación.
- Comisión Económica para América Latina y el Caribe (CEPAL). (1995) *Comercio Internacional y Medio Ambiente: La Discusión Actual*. Santiago de Chile.
- di Pace, M. (Coord.) (1992) *Las Utopías del Medio Ambiente: Desarrollo Sustentable en la Argentina*. Centro Editor de América Latina, Buenos Aires.
- Economic Commission for Latin America and the Caribbean (ECLAC). (1994) "The environmental dimension of economic policies in Latin America and the Caribbean". Santiago de Chile.
- Inter-American Development Bank (IDB). (1996) "Mercosur: Regional Programming Paper" Washington D.C.
- Novara, J. (1994) *Integración Económica, Comercio Internacional y Medio Ambiente* IERA/Fundación Mediterránea/Fundación Konrad Adenauer. Buenos Aires.
- Onestini, M. (1999) "Creation of a World Environment Organization from a Latin American perspective" mimeo, CEDEA.
- Onestini, M. (1993) "MERCOSUR and trade blocs in Latin America. The relationship between trade and environment" in *Striking a Green Deal. Europe's role in environment and South-North trade relations*, Environment and Development Resource Centre. Brussels.
- Programa de las Naciones Unidas para el Desarrollo/Agencia Española de Cooperación Internacional/Ministerio de Obras Públicas y Urbanismo de España (1990) *Desarrollo y Medio Ambiente en América Latina y el Caribe: Una Visión Evolutiva*. Madrid.
- Tussie, D. and Vasquez, P. "Regional Integration and Building Blocks: The Case of Mercosur" in *The Environment and International Trade Negotiations: Developing Country Stakes* (forthcoming).

- Whalley, J. and Newell, P. (1999) "Towards a World Environment Organisation?" in Institute of Development Studies Bulletin, Vol. 30, pp. 16-24.
- World Bank (1995) "Argentina: Managing Environmental Pollution: Issues and Options. Technical Report" Washington D.C.
- World Resources Institute/United Nations Environment Programme/United Nations Development Programme. (1994) *World Resources 1994-95: A Guide to the Global Environment*. Oxford University Press, New York.
- World Wild Fund for Nature (WWF). (1998) "Developing a Methodology for the Environmental Assessment of Trade Liberalisation Agreements" Gland, Switzerland.

Annex 1

Main Projects of Infrastructure Integration for MERCOSUR

TRANSPORT PROJECTS

1. Overland bridge between Colonia and Buenos Aires	Will link the Argentine coast, from some 20-Km to the south of Buenos Aires, with the Uruguayan coast. Length: approx. 45 Km.	Argentina and Uruguay
2. Highway between Rio de Janeiro and Buenos Aires	Approx. 3.000 Km long and will run through Sao Paulo, Curitiba, Florianopolis, Porto Alegre, and Montevideo. The project basically aims to replace and repair existing sections of roadway.	Argentina, Brazil and Uruguay
3. Bridges in Uruguay	Repair and reinforcement of some 50 bridges to enable them to bear the cargo to be hauled on along the Rio de Janeiro Buenos Aires axis.	Uruguay
4. Low clearance tunnel in the Andean Mountains	Part of the Rio de Janeiro-Montevideo-Buenos Aires-Santiago axis. Length: 28Km. Will link Mendoza to Santiago.	Argentina and Chile
5. Highway between Rosario and Victoria With Bridge over the Paraná	Part of the axis described. Length: 80Km	Argentina
6. Highway between San Ramón and San Matías	Part of one of the alternative Atlantic-Pacific corridors including the construction of a section 652-Km long running from the Eastern part of Bolivia to Brazilian border.	Bolivia
7. La Paz-Guajara-Mirim highway	Also part of the corridor; covers the construction of 1,000 Km in Bolivian territory.	Bolivia
8. Matarani/Ilo- Puerto Maldonado-Inapiri highway	Repair, upgrading, and widening of a section of the corridor.	Peru
9. Section of railway between Zapala, Neuquén, to Lonquimay in Chile's Region IX	Basic section of the possible rail link between Bahia Blanca on the Atlantic coast and Concepción on the Pacific coast.	Argentina and Chile
10. Paraná- Paraguay waterway	Project to promote navigation of both rivers, to give traditional products of the region an Atlantic Ocean outlet. Work will consist basically of dredging and surveying.	Argentina, Bolivia, Brazil, Paraguay, and Uruguay

11. Paraná- Tieté waterway	Designed to promote shipment of cargo over 2,400 Km of water, with investment in fleet and port facilities.	Brazil
12. San Borja- Santo Tomé bridge. Repair of the Sao Paulo- Buenos Aires railway. Repair of the Rivera-Montevideo and Fray Bentos railway. High-speed railway between General Luz and Pelotas.	The projects are part of the Sao Paulo- Buenos Aires axis.	Argentina, Brazil, and Uruguay
13. Repairs to the Santos-Arica- Antofagasta railway, including the construction of the Santa Cruz – Cochabamba section in Bolivia	Sao Paulo- Santiago axis	Brazil, Bolivia, and Chile
14. Border crossings	Improvements and repairs to border crossings.	Argentina, Brazil, and Chile

HYDROELECTRIC PROJECTS

1. Corpus Christi plant	Hydroelectric development of the Paraná river, installed capacity will be 2,800 MW and annual average output will be 19,300 Gwh.	Argentina and Paraguay
2. Itaití- Itacorá	Hydroelectric development to supplement the Yacyreta plant. Total capacity will be 1,660 MW, an annual average output of 11,300 Gwh.	Argentina and Paraguay
3. Garabí	Hydroelectric Development of the Uruguay river, with a total potential of 1,800 MW and an annual average output of 6,100 Gwh.	Argentina and Brazil
4. Roncador	Hydroelectric development of the Uruguay river, with a total potential of 2,700 MW and an average output of 9,300 Gwh.	Argentina and Brazil
5. San Pedro	Hydroelectric development of the Uruguay river, with an installed capacity of 550-750 MW and an annual average output of 3,250-3700 Gwh	Argentina and Brazil

6. Caipipendi	Multipurpose hydroelectric plant on the Pilcomayo river. Functions: sediment reduction, flow rate regulation, irrigation, and energy production.	Bolivia
7. Development of the Bermejo river	Set of 7 projects on sedimentation control, irrigation, swell control, and energy production.	Argentina and Brazil
8. Other projects	Hydroelectric development of the Beni and Yaguaron rivers.	Bolivia and Brazil and Brazil and Uruguay respectively

Power System Connections

1. Itaipu- Corpus- Yaciretá	Connection of hydroelectric plants with one 375-KM cable	Brazil, Paraguay, and Argentina
2. Garbi	900 MW Frequency conversion station, to connect the electricity systems of Argentina and Brazil	Argentina and Brazil
3. Connection of power supply systems of Argentina and Chile	275-Km cable with a tension of 220 kW, to link the transformer stations of Gran Mendoza in Argentina and Polpaico in Chile	Argentina and Chile
4. Connections of power supply systems of Brazil and Uruguay	Study of several alternatives for the potential sale of energy to Brazil	Brazil and Uruguay

Gas Pipelines

1. Gas pipelines between Argentina and Chile	To use surplus natural gas in Argentina, the following gas pipelines have been confirmed: a) 12 inches in diameter and 48 Km long, to the south of both countries; b) 467 Km long and 24 inches in diameter, at Mendoza; c) in addition, another project is being evaluated to connect Neuquen to the industrial and residential market Chile's VIII Region.	Argentina and Chile
2. Gas pipelines Between Argentina and Brazil	Gas pipeline Between Parana in Argentina and Uruguayana in Brazil, with Connection at Puerto Alegre	Argentina and Brazil
3. Gas pipelines between Argentina and Uruguay	a) Buenos Aires- Montevideo gas Pipeline: Extension of 230Km; b) Between Paraná and Fray Bentos, 256 Km long and 18 inches in diameter, which could be extended to Paysandu; c) Possibility of using some caves in Santa Lucia (Uruguay) as a peak shaving plant for Buenos Aires.	Argentina and Uruguay
4. Gas pipelines between Bolivia and Brazil	a) 32 inches in diameter between Rio Grande and Sao Paulo, with smaller branch lines to Porto Alegre, Florianopolis, and Curitiba; 1,803 Km long without the branch lines; b) between Rio Grande and Puerto Suarez, in Bolivia, to supply a thermal plant that would supply electrical energy to areas in the Brazilian Mato Grosso	Bolivia and Brazil
5. Gas pipelines between Bolivia and Chile and Argentina and Chile	To supply the northern part of Chile with natural gas, projects originating in Bolivia and Argentina have been considered.	Argentina, Bolivia, and Chile
6. Gas pipeline between Bolivia and Paraguay	Planned construction of 846 Km of gas pipeline to supply Paraguay, with branch lines to the main cities.	Bolivia and Paraguay

Source: Inter-American Development Bank. (1996) *Mercosur: Regional Programming Paper*. Washington D.C.