

# The Border Environment Cooperation Commission (COCEF): a Case of International Federalism

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## *Abstract*

*This paper is written within the conceptual framework of international federalism, which has developed in literature as a logical consequence of increasing globalization, whose micro-dimensional implications affect both regional and community development. The conceptual and empirical framework used to analyze the micro and macro-relations of international federalism in this paper is derived from the respective Constitutional principles and the international cooperation that gave birth to the BECC-COCEF (Border Environment Cooperation Commission-Comisión de Cooperación Ecológica Fronteriza). The BECC was agreed by the governments of Mexico and the United States, within the context of the North American Free Trade Agreement (NAFTA), which came into force in 1994. This paper includes maps and tables with references to the operations and consequences of the BECC on environmental infrastructure projects in the Mexico/United States border region. It also accounts for how compliance with the requirements of public participation and sustainability established by BECC have contributed to democratization in northern Mexico, and to environmental and economic development on both sides of that border area.*

*Mr. Tomás Balarezo, senior technician at the BECC, has cooperated with the author in building tables and maps.*

## *I. INTRODUCTION*

This paper is written within the conceptual framework of international federalism, developed in the literature as a logical consequence of the growing pace of globalization (Cabrera Beck [2004] p. 251). As globalization has spread, so federalism has come to involve groups of players with an increasing number of members and greater organizational complexity. This process has crossed the micro-dimensional level of a relationship between communities that had a certain autonomy and has begun to include a macro dimension with independent nations surrendering part of their sovereignty by allowing multinational organizations to represent their interests.

Once international agreements have been explicitly ratified by the highest legislative authorities, usually the Senate, most modern constitutions include the

international legal principle of the preeminence of international agreements within the highest hierarchical levels of their domestic law. Constitutional Law has responded to the international federalism -as it is now called- resulting from the growing complexity of federated entities. Starting from the original structure of a federation formed by states or provinces under one federal government and collectively identified as one national state, constitutions have evolved from being rules governing the relationships of states or provinces with one another, and with lower hierarchy entities such as municipalities, to being rules that govern the relations between each of these and the federal government (Ramos [1996] pp. 48-52). Globalization has created the need for constitutions to establish the scope and limits of sovereignty in the dealings of states or provinces with other national states defining themselves as federations so that the power of the states or provinces to commit the federation as a whole is specifically defined.

Regional development, understood as the development of a geographical area including several states or provinces and identified as a region by a certain community of interests, has given rise to new forms of international federation.

This paper deals with the border regions of Mexico and the United States. Indeed, their border location is what unites them as a region, as this paper will stress. On the Mexican side of the border, running west to east, this region comprises the states of Baja California, Sonora, Chihuahua, Coahuila, Nuevo León and Tamaulipas. On the American side, also running west to east, the border region includes the states of California, Arizona, New Mexico, and Texas. It is on this bi-national border region where the Border Environment Cooperation Commission- COCEF- (BECC) operates. This Commission is a bilateral organization created by North America Free Trade Agreement (NAFTA), and treated in this paper as a case of international federalism.

As explained below, the BECC's main contribution to the democratization of northern Mexico has been its emphasis on public participation in decisions about environmental infrastructure projects in the border region. If international federalism is understood as a type of democratic government involving the hierarchical participation of different layers of governments of two or more countries, directly including the opinion and voting power of the public affected by its decisions, BECC is an eloquent example of successful international federalism. The key to the democratic nature of this type of government is the equal participation accorded to federated members' representatives at each different level. This equality among peers ranges from the highest level of government in both countries to the individuals that participate in public meetings, where their participation is "operationalized" in the decision-making processes affecting them.

This border relationship between neighbors gives a special character to international relations between Mexico and the United States. The overlap causes the border region to lose part of the homogeneity that otherwise characterizes the two nations beginning and ending at the border. One only has to think about environmental phenomena to be able to understand this phenomenon whereby shared realities cause a partial loss or dilution of the national features that distinguish neighboring nations. They are so dynamic that they are not stopped by an international border: neither air, nor watersheds, nor the main subsoil resources, nor migratory species can be stopped. The border region always has national realities that cross the border, environmental features being just one example of these. This means that the legal concept of "international border", and the legal order deriving from it, which as a rule begins as an agreement of sovereign wills, cannot be separated from the border reality. These sovereign wills also give rise to constitutions as fundamental laws giving national states their ontological sense of political destiny.

The legal status of international borders inherently implies the notion of at least two parties. Just the way constitutions imply a sovereign decision defining a nation and the territory that nation occupies, without which a nation is inconceivable, they also imply the definition of its borders as being essential to its identity because, unless it is an island, (like Australia, N.Z., the U.K, etc.) a nation that has borders with nothing is similarly unthinkable. Borders not only define a country's own territory but also other countries' territories. Every definition of border includes a dimension of otherness wherein lies the understanding of the neighboring nation while identification of the other is also a sine qua non condition for the spatial definition of one's own nation. Moreover, the dimension of otherness inherent to any international border suggests an interaction between a country's own features and those of the neighboring country. It also suggests that "the other" -the neighboring nation- has just as much right to define its borders as our sovereign right to define our own borders. In Mexico's legal tradition, this notion of international border is implicit in the legal apothegm that says, "respecting the other's right means peace". President Benito Juárez is revered in Mexico as one of the main creators of the Mexican nation in the sociological and political sense. His apothegm entails a theory that has guided Mexico's international politics for more than a century. This theory is relevant for the analysis of the international federalism presented in this paper because it implies the notion of Law both as a result of international agreement, and as the goal of international relations.

This notion is manifested in the NAFTA and in the BECC referred to in this paper. President Juárez's legal savvy created a tradition out of which the motivation arose to conclude the NAFTA and create the BECC. His notion of Law as the ideal corollary of international relations suggests that as there is something that can be shared in every border area, there is also a need for agreement between the neighboring nations about rules that will result in a mutually acceptable arrangement of the multiple interactions that take place across the border. This need to agree on rules is more acute insomuch as some cross-border situations arise regardless of the will of the neighboring peoples or governments. This is frequent in natural disasters that occur along the border. However, the all-encompassing need for cross-border agreements takes on additional complexities when it refers to cross-border interactions that are freely entered into, especially as any border interaction assumes, by definition, that the parties have acquired a national identity that is different to the other's, or at least, the legal status of citizens of separate countries that differentiates them from each other. The component of otherness'- implicit in the term border means that every border transaction is characterized by national differences in the laws and courts that regulate the rights and duties associated with the transaction. This, in turn, leads to a potential dichotomy or divergence which is always present in attempts to deal with cross-border issues but which is not necessarily present when the neighboring countries deal with purely domestic issues. Thus, the possibility that "border issues" will arise leads the parties to agree in advance which country will be responsible for solving different controversies. This is a reality inherent in border relations that makes such interactions a microcosm with great potential for informing the more wide-reaching aspects of relations between neighboring countries.

In one way, this is what happened with the BECC, which is presented in this paper as a case of international federalism resulting from a long legal tradition and from an understanding of globalization as a process which Mexico could not avoid, and within which a method of sustainable economic development for its border region had to be sought. Such development depended on the resolution of shared environmental problems that had appeared with rising trade.<sup>1</sup>

## II. *THE BECC: BACKGROUND*

Towards the end of the NAFTA negotiations, the signatory governments were convinced that opening up trade would surely bring environmental consequences. This resulted in the creation of two bi-national institutions: the BECC and the North American Development Bank (NADB).<sup>2</sup> The creation of these institutions was agreed by an executive agreement signed by US President Clinton and President de Gortari of Mexico in 1994. The central objective of both institutions was to "Contribute to the environmental preservation, protection and strengthening of the border region with the aim of improving the standard of living of the neighboring populations of Mexico and the United States". Coordination was needed between both institutions to solve the shared need for environmental infrastructure projects in the border region, aimed at improving the standards of living of the 24 million inhabitants living on both sides of the border. These institutions were given the task of designing the necessary regulations to carry out their respective objectives and of involving the public in these measures.

The Agreement on Cooperation for the Protection and Improvement of the Environment in the Border Area, known as the 'La Paz Agreement' because it was signed in the city of La Paz, Baja California Sur, Mexico, is the legal basis for the 2012 Border Program whose mission is: "to protect public health and the environment in the US-Mexico border region, consistent with the principles of sustainable development. The 2012 Border Program is the legal-political framework within which the joint activities of the BECC and the NADB are developed.

The 2012 Border Program is a 10-year program that focuses on local and regional levels. The proposal for this Program was announced in Mexico on September 20, 2002, at the meeting of the environmental agencies from the ten border states and in the official US newspaper (US Federal Register). These announcements resulted in a 60-day public consultation period during which Mexico's Secretariat of the Environment and Natural Resources (Secretaría de Medio Ambiente y Recursos Naturales - SEMARNAT), the United States Environmental Protection Agency (Agencia de Protección al Medio Ambiente - EPA), the ten border states, and the border Tribes of both countries undertook an intense public participation process including a combination of national and bi-national meetings in 27 cities along the Mexico-United States border. The SEMARNAT and the EPA also requested comments from other interested communities and groups through additional meetings, and by e-mail and ordinary mail.

Environmental awareness is understood here as a cultural and economic value that considers environmental quality and the preservation of natural resources as the minimum condition of a heritage that must be transferred intact from one generation to the other, and that understands environmental sustainability as the obligation of every individual, who therefore has the right to demand accountability from those government authorities responsible for economic development. This is a cultural value that is not consistently found throughout Mexico, but it was sufficiently present in the political context in which NAFTA was discussed to receive majority support, especially in the border area where the environmental issue appeared in the so called "side agreements" whose goals included in the BECC were soon assimilated by the border population. The case of Tijuana illustrates this point. The greater environmental awareness of its population is related to the social importance of its middle class compared to other cities of similar size, or national averages measured in terms of income distribution. Elsewhere, the social classes tend to form a pyramid, with the poorest classes at the base and the richest at the top. Tijuana is a

different case. Its distribution of income is not pyramid-shaped but more like an upright pentagon. In fact, most of the population is in the bulge of the pentagon between the flat base and the peak at the top and the poorest classes at the base of the pentagon do not constitute most of the population. The income of Tijuana's population is greater than in most Mexican cities with more than one million inhabitants. This feature, together with the fact, also unusual in Mexico, that Tijuana has always been a service economy rather than a farming community, means that its values are closer to those of cities where the social space is mostly occupied by the middle classes. One of the values typical of the middle classes is greater awareness of the significance of environmental quality, which is shown in their demands for public authority accountability. This atypical feature explains why Tijuana and Baja California have been the first electorates in the country that chose an opposition party to run the executive.

Having said this, it should be remembered that environmental awareness as a cultural value is not consistently found throughout any country in the world. It is generally associated with levels of education. In an individual context, levels of education are, in turn, usually related to levels of income, which depend on levels of economic development. As there are no accurate measurements of environmental awareness, the data on economic development are a good approximation and should be taken into account in order to understand to what extent "international federalism" is supported by the dimension of sovereignty on which federalism as an option of government is based.

In order to understand better the differences characterizing the border population served by the BECC,<sup>3</sup> Mr. Tomás Balarezo, senior technician at the BECC, has cooperated with the author in building tables giving an idea at State and municipality level of some of the basic characteristics of BECC's target population and of the different levels of economic development it has to deal with to achieve its goals. However, before showing the data on these tables, a brief explanation is provided of what the BECC represents within the framework of international federalism.

After the signing of this trilateral agreement between Canada, the United States and Mexico, the negotiations for which were initiated during George Bush's administration although the agreement was not signed until after his presidency had ended, Bush's successor in the White House, President Clinton, proposed adding some agreements on environmental and labor issues. Though the Mexican Government initially rejected the proposed additions, it ended up accepting that NAFTA would not have been signed without them. Thus, the so-called "side agreements" on labor and environmental issues respectively appeared as an integral part of NAFTA. It is worth mentioning that, at the very beginning of the negotiations between Mexico and United States, the Government of Mexico tried to include labor markets where there was migration of Mexican workers to the United States. The author of this paper was present as advisor to the Mexican delegation at a meeting in Mazatlan<sup>4</sup> where, in an informal context, before formal negotiations began, the American delegation clearly rejected a timid Mexican proposal to include the subject of migratory workers on the NAFTA negotiating agenda, unless Mexico also agreed to include the subject of oil. The Mexican delegation was not willing to pay such a high price for including the issue of migratory labor and, from then on, it was clearly understood that neither of these two subjects would be included in the NAFTA agreements.

To understand NAFTA it is worth highlighting that a basic motivation of the Mexican Government to negotiate this agreement was in order to generate a legal instrument that would help counteract the asymmetry of power between both countries, characterized

by the fact that the Mexican economy was one twentieth of the size of the American economy and that most of Mexico's exports go to United States (from which it also receives most of its imports). As shown in Table 1, the gross national product (GNP) of Mexico is just under one seventh of US GNP.

Faced with such unequal economic development, the Mexican Government undertook to establish regulations that protected the interests of Mexican exporters from the real power of the United States to impose prices on Mexican export products. Before NAFTA Mexico had very bad experiences with cement and steel exports. The Mexican Constitution establishes that one of the Executive's responsibilities is to guide economic development, which means it is responsible for planning. At the planning stage of NAFTA, the economic models developed to calculate the possible economic impact of the agreement pointed to an urgent need to create jobs in Mexico (Hinojosa Ojeda & Robinson [1992] pp.69-108). The data in Table 2 give an idea of regional inequality within Mexico itself.

The differences in favor of the border States shows the influence exerted by the proximity of the United States on the economic development of those States in contrast with the southern States of the country, which are among the poorest in Mexico. Trade among those border States and the US economy was favored by the free zone regime that privileged most of the border region at different times for more than a century. The free zone regime was a free trade zone, restricted to certain border cities where, with certain exceptions, everything that was sold on the other side could be imported without paying import duties. During the thirties, the free zone regime was part of President Lazarus Cardenas's strategy to encourage settlement in the border region with the idea of preventing the American population from moving further south. The main effect of the 'free zone' was a de facto integration of the Mexican border economy with the US economy. What could not be legally imported was imported anyway. In practice, this created a mentality among the border population of living under free trade conditions, which generated a very similar consumer culture on both sides of the border. This tradition of free trade meant that NAFTA received broad support in the border region and was not something new for the border population. In fact, it legalized the trade already taking place between the border cities on both sides. This does not mean that conditions were the same along the more than 3,000 km of border. Tables 3A, 3B, 3C and 3D show some of the socioeconomic differences among the border municipalities. Indeed, Mexico borders with both the counties of highest *per capita* income of the United States, (such as the counties of San Diego and Imperial in the south of California), and with the counties of lowest *per capita* (income such as the counties of Hidalgo, Star, Webb and Pharr in the southeast of Texas). Moreover, it is important to stress that while border municipalities have socioeconomic levels above the national averages, as can be seen in (Table 2), most American counties bordering with Mexico represent the lowest socioeconomic levels of the US, except for those in California.

The relationship between free trade and economic development had already been shown in the border economy of the north of Mexico. This served to validate the NAFTA as the basis of a new strategy for the economic development of the country as a whole (Lustig & Bosworth [1992] p. 3). A factor in the development plans that particularly affected the Mexican border region was the program of maquiladoras, or assembly industries. The most positive side of this program was the creation of jobs. Shortly before the economic recession in the United States in the late 1990s, the assembly industry had created one million jobs: most of them in the border cities of the north of Mexico (OCDE [1998] pp. 184-189)). This industrialization program also brought about negative consequences, particularly in

environmental matters. However, the Mexican government established inspection and monitoring systems that have produced positive results (*Ibidem*, [1998] p. 191).

### *III. THE BECC: OPERATIONS*

The BECC is governed by a Board of Directors composed of a Chairperson, representatives of the US Environmental Protection Agency (EPA) a representative of the Mexican Secretariat of the Environment and Natural Resources (SEMARNAT), a representative of the United States State Department, and a representative of the Foreign Affairs Secretariat of Mexico, the respective chairs of the Borders & Waters Commission (Comisión de Límites y Aguas - CILA) of Mexico and its US counterpart, the US Water International Boundary Commission (USWIBC), a representative of the Government of one border state of each country and, a representative of the border communities of each country. BECC's operations are managed by a General Manager and a Deputy General Manager on a rotary basis: every four years a different country appoints a new General Manager, who must not be from the same country as the Deputy General Manager or the Chairman of the Board of Directors.

Technical and administrative staff report to the managers, who must keep a balance between the number of representatives from both countries. BECC headquarters are in Ciudad Juarez, Chihuahua, Mexico. Its affairs must be dealt with in both languages, (Spanish and English), and a balance between both nationalities must be kept in terms of personnel and budgetary allocations when contracting support staff or auxiliary companies.

BECC was created to work together with the NADB which funds projects previously certified (approved) by BECC. Funding was separated from other technical and social functions to avoid conflicts of interests in project approvals. The operating bases of both institutions have recently been changed, both Boards of Directors being merged into one. Their members, however, have not yet been appointed.

BECC was created with the power to supervise and certify (approve) that projects submitted for its consideration satisfactorily met the requirements established to that effect. The bilateral presidential agreement that gave rise to this international bilateral organization lays down as indispensable requirements for such certification that: (1) projects must be subject to local control with the participation of the public in all their development stages; (2) project beneficiaries must pay work operation and maintenance expenses, and debt servicing, through user fees; (3) the highest level of transparency must be ensured; (4) the BECC requirements in the areas of health, environmental impact, technical feasibility, financial feasibility, project management and administration must be met; (5) public participation (of the community that the project serves) must be ensured and planned; and (6) BECC requirements for sustainable development must be met.

Public participation must be ensured through: (1) setting up a citizen guidance committee that gives its opinion on the design of the project and its scope; (2) the organization of at least two public meetings, previously announced in the local mass media; and (3) public access to all the pertinent information on the project.

Main steps for projects are:

- 1) Project presentation with a certification request
- 2) First prompt evaluation
- 3) Budget

- 4) Planning and evaluation of environmental impact
- 5) Public participation and financial feasibility
- 6) Final design
- 7) Certification

The public participation established by the BECC gave rise the first experience in Mexico of potential users of a public works project participating with a right to speak and vote in the decision-making process of a project designed for their community. This was difficult because Mexican and American political culture are based on very different ideas and practices. The concept of town meetings for decision-making on the construction of public works was a completely new procedure for the Mexican border communities. The first opponents to this idea were the municipal and state government representatives who argued that, as they had been elected to their positions by the public, they were the only authentic representatives of the community for all public participation effects.<sup>4</sup> At one of the first public meetings, a Mexican state government representative accused the Chairman of the Board of Directors chairing the meeting of being "pro-foreigner" for trying to apply a foreign concept that "meant ignoring" the representation resulting from popular elections. The real problem for these Mexicans was their unfamiliarity with public meetings as bodies that could take decisions on public works through the direct and open vote of those present, in contrast with the United States, where town meetings are a regular part of community life. The Chairman answered by saying that he was only trying to meet the provisions in an international agreement (NAFTA) on public participation an agreement duly ratified by the Mexican Senate and which therefore, according to the Mexican Constitution, occupied the highest level of hierarchy in the Mexican law. This explanation did not convince the questioner who tried to turn the difference into a matter of Mexican nationalism, with the support of other participants. In the end, it was clear that the BECC had to meet the agreements on 'public participation' established by the parties that signed the NAFTA.

At the first BECC public meeting, one citizen complained about the principle established in the BECC regulations that the cost of environmental infrastructure projects submitted for certification had to be partially funded by users' fees. The citizen argued that the Mexican State had the obligation to finance these projects in full because that was what taxes were for. He then made a passionate appeal to the attending public to boycott all BECC activities and to support EZLN struggles in Chiapas. The reaction of the public was overwhelmingly against the appeal of this citizen and the meeting finished with most attendants clearly supporting the first certification of a project by the BECC Board of Directors. Later on, some of the public meetings for project approvals included expressions of disagreement and even public protests. As public participation in the certification process increased, there was a clear tendency for disagreements with the projects being discussed to come from individuals arguing that their private interests would be unfairly affected by certain project. However, these views were not typical of those expressed by other attendants at the meetings, and indeed several public consultations were held to ascertain the needs felt by the majority.

An important element of these public meetings was the opinion of the neighboring community which, in accordance with the regulations, had been required prior to the public meeting for project certification. In time, BECC technicians learned to detect the disagreements of neighboring communities with projects before the process of certification began. There were some expressions of disagreement from members of neighboring border

communities. However, the disagreement of the neighboring community did not impede any of the first 100 projects certified by the BECC until 2004 (Chart 4). This was largely due to the fact that anyone interested in a project had unrestricted access to all the certification information and that BECC representatives listened to and dealt openly with any disagreement in the communities directly benefited by a project and in their neighboring communities. This point is particularly important bearing in mind that decision processes involve communities from two countries with two different cultures and languages.

A BECC regulation set forth in the BECC creation agreement was that the resources decided upon by the BECC and the NADB had to be equitably distributed between both countries. This explains why the amounts of money allocated to the certified projects referred to in Chart 4 are so close.

It is worth mentioning that the public participation practice established by the BECC has led to significant progress in the democratization process of the civil society in the north of Mexico. This fact is particularly relevant within the context of an international federalism involving the participation not only of federal governments but also state and municipal or local governments, as well as the direct public participation of border communities from two different countries, in deciding on the design, budget, operation, maintenance and assessment of environmental infrastructure project.

The Table 5 shows data on public participation in the certification process of environmental infrastructure projects on both sides of the border. The Chart 4 shows the geographical location of 100 BECC-certified projects until 2004. The Chart 6 shows data for certified projects by country and by investment over the last 10 years. The Chart 7 shows data for BECC-certified projects by type of project, by country and State, and by investment per project.

One challenge the BECC has faced is the vast inequality in the level of education of technical and administrative authorities on either side of the border, which has meant that the United States local authorities have been better prepared -with more engineers and equipment- to submit projects that meet BECC requirements for project certification more efficiently. At one point, this caused an imbalance in the allocation of resources, contrary to the regulation established in the BECC creation agreement. In order to solve this problem, a fund was created with resources from the Environmental Protection Agency to subsidize the necessary technical assistance so that local governments with fewer resources could make up for shortcomings in the preparation of projects to be considered by the BECC. The Chart 8 shows the distribution of funds for Technical Assistance. These funds are decided and allocated by the BECC.

To provide an idea of the way the BECC operates in its search for new projects, the projects in progress are listed below. The certification applications for these projects have already been received by the BECC and the projects have entered the certification process discussed above. This list does not mean that the projects mentioned will be certified. It only shows they entered the certification process before the end of May 2004.

#### *IV. CONCLUSION*

This paper has analyzed a case in which interactions in the border area have been channeled by an international agreement between Mexico and the United States. The NAFTA and its side agreements not only represent a new legal system that organizes cooperation between two border countries but also a kind of symbiosis or synthesis of the

best aspects of daily mutual cooperation among several million inhabitants on both sides of the border who have found a way to overcome differences in language, customs and national loyalties in order to coexist peacefully. The BECC has not only increased the likelihood and opportunities for improving the standards of living of those million border inhabitants through the establishment of new mechanisms to improve the quality of the environment and natural resources, but has also increased the political assets that democratic progress is built on. As an instrument of regional development, the BECC is seen from both sides of the border as something improvable. Constructive criticism is an essential element in this process and one that has encouraged the drafting of this document.

## *Notes*

<sup>1</sup> The Mexican President, Carlos Salinas de Gortari, on the conclusion of the NAFTA negotiations, August 12, 1992, defined his expectations as follows: "The Treaty means more and better paid jobs for Mexicans. This is the fundamental aspect of the Treaty and it is that way because more capitalists, more investment will come to our country, which means more job opportunities here, in our country for our fellow countrymen and women. Plainly speaking, we can grow faster and then focus our attention on benefiting those who have less".

<sup>2</sup> Also known by its English acronym as BECC (Border Environment Cooperation Commission)

<sup>3</sup> The author of this paper participated in this meeting as adviser to the Mexican delegation

<sup>4</sup> The author of this paper was entrusted with the task of chairing the first town meetings organized by the BECC in compliance with its regulations for project certification

Table 1

NATIONAL PRODUCT <i>PER CAPITA</i> BY SELECTED COUNTRY (In US\$)					
Country	1998	1999	2000	2001	2002
Brazil	4,610	3,860	3,610	3,060	2,850
Canada	20,000	20,600	21,720	21,930	22,300
South Korea	8,500	8,530	9,010	9,490	9,930
Costa Rica	3,590	3,580	3,820	3,970	4,100
Chile	4,890	4,730	4,810	4,600	4,260
China	740	780	840	890	940
Spain	14,880	14,690	14,760	14,300	14,430
United States of America	30,700	32,260	34,370	34,400	35,060
Russian Federation	2,270	1,750	1,690	1,750	2,140
France	24,830	24,460	23,990	22,730	22,010
Holland (Netherlands)	25,170	25,270	25,260	24,330	23,960
Israel	16,470	16,310	16,710	NA	NA
Italy	20,560	20,340	20,130	19,390	18,960
Japan	33,720	33,310	35,420	35,610	33,550
Mexico	4,020	4,460	5,100	5,560	5,910
United Kingdom	22,830	24,080	25,200	25,120	25,250
Singapore	23,510	22,660	22,780	21,100	20,690
South Africa	3,320	3,180	3,060	2,840	2,600
Switzerland	40,820	39,220	39,650	38,330	37,930
Venezuela	3,540	3,730	4,310	4,730	4,090

Notes: NA: Not available. Addition of the gross added value for all resident products (plus taxes minus subversions) plus the net earnings of primary income of non-residents divided by mean annual population  
Source: WB. The World Bank Atlas (various years).

Table 2

MEXICAN & AMERICAN BORDER STATES (Up to 100 km strip)						
Country/State/ Municipality	Population Country/State/ Municipality People <sup>(1)</sup>	% Population State/ Country 2000 <sup>(1)</sup>	Aver. Salary at Feb. 04 (IMSS) US\$ Exchange rate \$ 11.50 \$/US\$ <sup>(2)</sup>	% PEA with income at to 2 Minimun salaries: US\$ 2,871 annual approx. <sup>(3)</sup>	Marginal index place they occupy at nat. level <sup>(3)</sup>	GDP <i>per</i> <i>cápita</i> in US\$ adjusted <sup>(3)</sup>
Mexico	97,483,412	100.00	5,640 dll	29.31	NA	NA
BECC Region						
Baja California	2,487,367	2.41	5,603 dll	22.22	Very low (30)	9,571
Sonora	2,216,969	2.27	4,481 dll	40.95	Low (24)	8,761
Chihuahua	3,052,907	3.13	5,089 dll	37.67	Low (26)	10,324
Coahuila	2,298,070	2.35	5,163 dll	34.68	Very Low (29)	10,808
Nuevo León	3,834,141	3.93	6,327 dll	28.93	Very Low (31)	13,033
Tamaulipas	2,753,222	2.82	5,170 dll	46.72	Low (23)	7,757
<i>Total Regional or weighted if applicable</i>	16,642,676	17.07	5,305 dll	35.19	NA	10,042
The 5 Poorest States in Mexico						
Chiapas	3,920,892	4.02	3,898 dll	75.89	Very high (1)	3,302
Guerrero	3,079,649	3.15	4,496 dll	66.16	Very high (2)	4,112
Oaxaca	3,438,765	3.52	4,378 dll	71.93	Very high (3)	3,489
Veracruz	6,908,975	7.08	4,697 dll	68.64	Very high (4)	4,535
Hidalgo	2,235,591	2.29	4,626 dll	65.27	Very high (5)	4,690
<i>Total Regional or weighted if applicable</i>	19,583,872	20.08	4,419 dll	69.57	NA	4,025

Notes: 32 Federative Entities in Mexico. NA: not available.

Sources: (1) General Population Census 2000; (2) National Minimum Salary Commission; (3) National System of Municipal Information.

Table 3A

**ECONOMIC INFORMATION BANK - GROSS DOMESTIC PRODUCT BY FEDERATIVE ENTITY\***  
(Annual figures for the period 1993-2001 at current prices)

Period	Total National	Baja California	Coahuila de Zaragoza	Chihuahua	Federal District	Mexico	Nuevo León	Puebla	Sonora
1993	100.00	2.79	2.90	3.92	23.93	10.34	6.41	3.23	2.61
1994	100.00	2.91	2.88	3.83	24.00	10.17	6.55	3.25	2.66
1995	100.00	3.18	3.32	4.16	22.92	10.06	6.65	3.33	2.89
1996	100.00	3.16	3.30	4.23	22.77	10.38	6.61	3.41	2.78
1997	100.00	3.38	3.29	4.24	22.78	10.46	6.72	3.56	2.77
1998	100.00	3.37	3.32	4.33	22.70	10.37	6.82	3.73	2.75
1999	100.00	3.51	3.22	4.39	22.77	10.20	6.79	3.92	2.69
2000	100.00	3.61	3.01	4.59	22.77	10.22	7.06	3.87	2.69
2001	100.00	3.51	2.97	4.44	22.54	10.13	6.98	3.85	2.72

Note: \* Percentage participation of States in economic activities by great division of economic activity. Total of economic activity (Percentage participation).

Source: INEGI. System of National Accounts of Mexico.

Table 3B

MEXICAN & AMERICAN BORDER STATES & MUNICIPALITIES (Up to 100 km strip)					
State/ Municipality	Population Country/State/ Municipality people 2000 <sup>(1)</sup>	% Population State/Country & Municipality State <sup>(1)</sup>	PEA with income up to 2 minimum salaries US\$ 2.871 year approx. <sup>(2)(3)</sup>	Margin index Municipal: Place at national level <sup>(3)</sup>	GDP per capita in US\$ adjusted <sup>(3)</sup>
<i>Baja California</i>	2,487,367	2.41	22.22	<i>Non applicable</i>	9,571
Tijuana	1,210,820	48.67	18.41	Very low (2,421)	9,812
Mexicali	764,602	30.57	22.32	Very low (2,416)	11,855
Tecate	77,995	3.12	26.72	Very low (2,335)	6,750
Ensenada	370,730	14.90	33.89	Very low (2,316)	5,388
Rosarito	63,420	2.54	24.89	Very low (2,313)	5,353
<i>Sonora</i>	2,216,969	2.27	40.95	<i>Non applicable</i>	8,761
Agua Prieta	61,944	2.79	40.31	Very low (2,351)	11,817
Altar	7,253	0.32	38.80	Very low (2,219)	6,566
Caborca	69,516	3.13	39.67	Very low (2,232)	7,876
Cananea	32,061	1.44	34.36	Very low (2,433)	7,810
Fronteras	7,801	0.35	26.79	Very low (2,362)	8,232
Naco	5,370	0.24	38.67	Very low (2,253)	7,369
Nogales	159,787	7.20	27.96	Very low (2,385)	10,920
Puerto Peñasco	31,157	1.40	33.18	Very low (2,372)	8,474
San Luis Río Colorado	145,006	6.54	36.78	Very low (2,337)	10,152
Santa cruz	1,628	0.07	58.70	Low (2,157)	4,302
Saric	2,257	0.10	53.08	Low (1,993)	12,196
Plutarco Elías Calles	11,278	0.50	43.73	Very low (2,226)	10,813
<i>Chihuahua</i>	3,052,907	3.13	37.67	<i>Non applicable</i>	10,324
Ascensión	21,939	0.71	41.67	Very low (2,254)	4,967
Coyame	1,708	0.05	62.15	Low (1,838)	5,371
Guadalupe	10,032	0.32	36.43	Low (2,120)	6,027
Janos	10,214	0.33	55.64	Low (2,040)	4,486
Juárez	1,218,817	39.92	39.86	Very low (2,387)	12,970
Manuel Benavides	1,746	0.05	65.79	Middle (1,743)	3,263
Ojinaga	24,307	0.79	39.22	Very low (2,323)	6,610
Praxedis G. Guerrero	8,905	0.29	62.28	Low (1,951)	4,674

Table 3B (continued)

MEXICAN & AMERICAN BORDER STATES & MUNICIPALITIES (Up to 100 km strip)					
State/ Municipality	Population Country/State/ Municipality people 2000 <sup>(1)</sup>	% Population State/Country & Municipality State <sup>(1)</sup>	PEA with income up to 2 minimum salaries US\$ 2.871 year approx. <sup>(2)(3)</sup>	Margin index Municipal: Place at national level <sup>(3)</sup>	GDP <i>per capita</i> in US\$ adjusted <sup>(3)</sup>
<i>Coahuila</i>	2,298,070	2.35	34.68	<i>Non applicable</i>	10,808
Acuña	110,487	4.80	30.57	Very low (2,345)	10,335
Guerrero	2,050	0.08	52.23	Low (1,910)	7,531
Hidalgo	1,441	0.06	43.86	Low (1,837)	14,181
Jimenez	9,724	0.42	45.48	Middle (1,704)	5,924
Nava	23,019	1.00	29.42	Very low (2,334)	7,803
Ocampo	12,053	0.52	46.75	Middle (1,769)	5,794
Piedras Negras	128,130	5.57	29.39	Very low (2,425)	11,194
<i>Nuevo León</i>	3,834,141	3.93	28.93	<i>Non applicable</i>	13,033
Anahuac	18,524	0.48	50.54	Low (2,190)	7,770
Sabinas Hidalgo	32,329	0.84	41.88	Very low (2,377)	9,500
Cerralvo	9,343	0.24	46.62	Very low (2,288)	8,957
Agualeguas	4,390	0.11	53.37	Low (2,092)	15,823
Vallecillo	2,169	0.05	65.70	Low (1,810)	5,115
China	11,540	0.30	51.64	Low (2,124)	7,882
General Bravo	5,799	0.15	42.80	Low (2,062)	20,646
Los Ramones	6,237	0.16	63.23	Low (1,921)	5,056
<i>Tamaulipas</i>	2,753,222	2.82	46.72	<i>Non applicable</i>	7,757
Camargo	7,005	0.25	51.09	Very low (2,218)	6,213
Guerrero	4,366	0.15	52.84	Low (2,098)	6,977
Gustavo Díaz Ordaz	16,246	0.59	59.74	Very low (2,200)	5,644
Matamoros	418,141	15.18	37.86	Very low (2,325)	9,429
Mier	6,788	0.24	48.81	Very low (2,346)	6,498
Miguel Alemán	25,704	0.93	44.74	Very low (2,319)	7,376
Nuevo Laredo	310,915	11.29	37.76	Very low (2,365)	8,986
Río Bravo	104,229	3.78	55.89	Low (2,168)	5,687
Valle Hermoso	58,573	2.12	55.93	Low (2,180)	7,609
Reynosa	420,463	15.27	44.64	Very low (2,336)	9,174

Note: 2.430 Municipalities in Mexico (place # 1) = greater marginality.

Sources: (1) General Population Census 2000; (2) National Commission of Minimum Salaries; (3) National System of Municipal Information.

Table 4

CERTIFICIED PROJECTS (A benefit for more than 8 million border residents)			
Country	State - Communities	Number of Projects	Investment (US\$ million)
USA	California	11	182.59
	Arizona	12	106.22
	Nuevo Mexico	7	52.65
	Texas	38	650.59
<i>Total Investment in USA</i>		68	992.05
Mexico	Baja California	9	479.19
	Sonora	8	76.76
	Chihuahua	7	48.50
	Coahuila	3	154.80
	Nuevo León	1	1.40
	Tamaulipas	4	174.36
<i>Total Investment in Mexico</i>		32	935.01
<b>Total Estimated Investment</b>			<b>1,945.06</b>

Table 5

INDICATORS OF PUBLIC PARTICIPATION IN THE BECC CERTIFICATION PROCESSES IN MEXICO & USA (Strip up to 100 km - 1995-2004)					
Country/State/ Municipality	Certified projects	Investment (US\$ millions)	Established Citizens Committees	Local organizations contacted	Public meetings carried out
<i>USA</i>					
California	11	182.59	11	78	30
Arizona	12	106.22	13	89	33
New Mexico	7	52.65	7	48	18
Texas	38	650.59	39	272	102
Total regional	68	992.05	70	487	183
<i>Mexico</i>					
Baja California	9	479.19	13	120	36
Sonora	8	76.76	8	107	27
Chihuahua	7	48.50	8	53	18
Coahuila	3	154.80	5	21	10
Nuevo León	1	1.40	2	9	5
Tamaulipas	4	174.36	5	65	20
Total regional	32	935.01	41	375	116

Source: COCEF.

Table 6

**NUMBER OF PROJECTS CERTIFIED BY BECC BY COUNTRY**  
**INVESTMENT AMOUNT APPROVED BY COUNTRY OF BECC CERTIFIED PROJECTS 1999-2004**  
 (Until March 2004 - US\$ million)

Country	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	Total
Mexico	2	4	4	2	0	6	6	5	3	0	32
United States	2	4	3	5	6	5	6	10	22	5	68
<i>Total</i>	4	8	7	7	6	11	12	15	25	5	100

Country	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	Total
Mexico	9.29	44.36	101.26	97.20	-	183.60	38.00	25.54	453.76	-	953.01
United States	36.48	9.18	151.89	180.11	63.60	71.48	54.80	273.77	136.50	14.24	992.05
<i>Total</i>	45.77	53.54	253.15	277.31	63.60	255.08	92.80	299.31	590.26	14.24	1,945.06

Table 7

**PROJECTS CERTIFIED BY TYPE/COUNTRY/STATE/AMOUNT**  
 (US\$ million)

Country	State	Type	Cost	Projects
United States	California	Water	56.03	5
		Sewage	108.10	4
		Solid Waste	0.00	0
		Extension of Mandate	18.46	2
		<i>Total Cost</i>	182.59	11
	Arizona	Water	14.00	4
		Sewage	84.62	6
		Solid Waste	0.00	0
		Extension of Mandate	7.60	2
		<i>Total Cost</i>	106.22	12
	Texas	Water	516.26	15
		Sewage	70.45	6
		Solid Waste	5.90	2
		Extension of Mandate	57.98	15
		<i>Total Cost</i>	650.59	38
	New Mexico	Water	0.00	0
Sewage		40.45	5	
Solid Waste		3.20	1	
Extension of Mandate		9.00	1	
<i>Total Cost</i>		52.65	7	

Table 7 (continued)

PROJECTS CERTIFIED BY TYPE/COUNTRY/STATE/AMOUNT (US\$ million)				
Country	State	Type	Cost	Projects
México	Baja California	Water	36.60	2
		Sewage	108.29	5
		Solid Waste	2.30	1
		Extension of Mandate	350.00	1
		<i>Total Cost</i>	<i>497.19</i>	<i>9</i>
	Sonora	Water	57.10	3
		Sewage	0.90	1
		Solid Waste	6.76	3
		Extension of Mandate	12.00	1
		<i>Total Cost</i>	<i>76.76</i>	<i>8</i>
	Chihuahua	Water	9.14	3
		Sewage	31.16	1
		Solid Waste	3.20	2
		Extension of Mandate	5.00	1
		<i>Total Cost</i>	<i>48.50</i>	<i>7</i>
	Coahuila	Water	0.00	0
		Sewage	154.80	3
		Solid Waste	0.00	0
		Extension of Mandate	0.00	0
		<i>Total Cost</i>	<i>154.80</i>	<i>3</i>
	Nuevo León	Water	0.00	0
		Sewage	0.00	0
		Solid Waste	1.40	1
		Extension of Mandate	0.00	0
		<i>Total Cost</i>	<i>1.40</i>	<i>1</i>
	Tamaulipas	Water	76.06	1
		Sewage	84.00	2
		Solid Waste	14.30	1
Extension of Mandate		0.00	0	
<i>Total Cost</i>		<i>174.36</i>	<i>4</i>	

Table 8

TECHNICAL ASSISTENCE FUND		
Country	States – Communities	Investments (US\$ millions)
USA	California	2.01
	Arizona	3.03
	Nuevo México	3.49
	Texas	11.07
<i>Total USA</i>		19.60
Mexico	Baja California	1.70
	Sonora	2.87
	Chihuahua	2.25
	Coahuila	1.14
	Nuevo León	0.35
	Tamaulipas	2.92
<i>Total Mexico</i>		1.23
Total funds to May 2004		30.83

Table 9

## PROJECTS IN PROGRESS

## United States - 54 Projects in the Pipeline

## California - 5 Projects

Brawley	Secondary Treatment to Wastewater Treatment Plant
Brawley	Improvements to the Municipal Solid Waste System
Calipatria	Sewer Collection System Survey and Feasibility Study
Descanso	Water System Improvements Feasibility Study
Oasis	Extension of the Water and Sewer Systems

## Arizona - 9 Projects

Huachaca City	Improvements to the Water System
Nogales	Water and Wastewater Facility Plans
Patagonia	Construction of a Municipal Solid Waste Landfill Facility
Patagonia	Municipal Water System Improvements
Sahuarita	Construction of Water and Sewer System for La Villita
San Luiz	Iron Manganese Filtration System
Somerton	Solid Waste Collection Equipment
Yuma	Main Canal Water Conservation Improvements
Yuma	Wastewater System Improvements

## Nuevo México - 7 Projects

Chaparral	Wastewater Collection and Treatment System
Columbus	Wastewater Plant and Sewer System Improvements
Columbus	Water System Improvements
Doña Ana County	Water and Wastewater Project
Lordsburg	Flouride Water Project
Mesquite	Improvements to the Wastewater System
San Miguel	Rehabilitation of the Potable Water System

Table 9 (continued)

PROJECTS IN PROGRESS	
United States - 54 Projects in the Pipeline	
Texas - 33 Projects	
Alamo	Water and Wastewater Master Plan
Alpine	Water and Wastewater Systems Improvements
Brownsville	Cameron Park Water and Wastewater Systems Improvements
Brownsville-Matamoros	West Rail Project
Donna	Water Conservation Improvements
Donna	Water and Wastewater Systems Improvements
Eagle Pass	Improvements to Water Conservation
East Rio Hondo	Water and Wastewater Improvements
El Jardin	Water System Improvements
El Paso	Lower Valley Water District Expansion and Upgrade
Hidalgo County	Solid Waste Project
Hidalgo-Cameron Cos.	Water Conservation Improvements for ID 9
Horizon	Improvements to the Water and Wastewater Systems
Jim Hogg County	Restoration of the Old Landfill
La Grulla	Colonias Water and Wastewater Improvements
La Joya	Expansion of the Wastewater System
La Joya	Water System Improvements
Los Fresnos	Water and Wastewater Treatment Plants Improvements
Lyford	Improvements to the Wastewater System
Marfa	Water and Wastewater Master Plan
Mercedes	Wastewater Treatment Plant Infrastructure
Mission	Water Conservation Improvements
Olmito	Water and Wastewater Systems Improvements
Pharr	Wastewater Improvements
Rio Grande	Construction of the Rio Grande Potable Water Plant
San Juan	Water and Wastewater Improvements
Sheffield	Improvements to the Water and Wastewater Systems
Starr County	Solid Waste Management Plan
Uvalde County	Nueces River Authority Solid Waste Transfer Station
Valentine	Water and Sewer Systems Improvements
Virton	Improvements to the Water and Wastewater Systems
Webb County	Colonias Water and Wastewater Improvements
Weslaco	Water and Wastewater Treatment Plants Improvements

Table 9 (continued)

## PROJECTS IN PROGRESS

## México - 38 Projects in the Pipeline

## Baja California - 6 Projects

Mexicali	Solid Waste System Improvements
Mexicali	Comprehensive Energy Savings Program
Estado de Baja California	Tire Disposal Program
Tecate	Consolidation of Water and Wastewater Systems
Tijuana	Remediation of Contaminated Soils
Tijuana	Improvement and Expansion of Water and Wastewater Systems

## Sonora - 7 Projects

Agua Prieta	Water and Wastewater Systems Improvements
Naco	Municipal Solid Waste Management
Nogales	Comprehensive Sanitary Improvements
Nogales	Paving and Air Quality
San Luis Rio Colorado	Improvements to the Water System
Sonoyta	Water and Wastewater Systems Improvements
Sonoyta	Relocation of the Oxidation Lagoon

## Chihuahua - 11 Projects

Ciudad Juárez	Wastewater Treatment and System for Anapra
Ciudad Juárez	Air Quality / Public Transportation
Ciudad Juárez	Improvements to the Solid Waste Facilities
Ciudad Juárez	Design and Construction of Secondary Treatment Wastewater Plant
Ciudad Juárez	Water Quality Improvements & New Wastewater Treatment Plant for San Isidro
Ciudad Juárez	Water Quality Improvements & New Wastewater Treatment Plant for Dr. Parra
Ciudad Juárez	Water Quality Improvements & New Wastewater Treatment Plant for Guadalupe
Ciudad Juárez	Water Quality Improvements & New Wastewater Treatment Plant for El Porvenir
Ciudad Juárez	Water Quality Improvements & New Wastewater Treatment Plant for Esperanza
Ciudad Juárez	Water Quality Improvements & New Wastewater Treatment Plant Praxedis G.
Nuevo Casa Grandes	Construction of Wastewater Treatment Plant

Table 9 (continued)

PROJECTS IN PROGRESS	
México - 38 Projects in the Pipeline	
Coahuila - 3 Projects	
Cd. Acuña	Construction of Potable Water Treatment Plant
Cd. Acuña	Construction of a Solid Waste Facility
Piedras Negras	Water System Improvements
Nuevo Leon - 3 Projects	
Anahuac	Pick-Up and Disposal Solid Waste
Cerralvo	Solid Waste Management
Sabinas Hidalgo	Solid Waste Management Plan
Tamaulipas - 8 Projects	
Frontera Chica	Regional Solid Waste Management
Matamoros	Water and Sewer Service Feasibility Study
Mier	Construction of Wastewater Treatment Plant
Nuevo Laredo	Improvements to the Water and Sewer System
Reynosa	Potable Water Conveyance System Improvements
Reynosa	Construction of Solid Waste Landfill
Rio Bravo	Water and Wastewater Improvements
Rio Bravo	Construction of New Landfill

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