

**Southern Regional Model United Nations XXII**  
**Addressing the global financial crisis:**  
**Restoring economic stability through international solidarity**  
November 17-19, 2011. Atlanta, GA  
Email: [eclac@srmun.org](mailto:eclac@srmun.org)



Dear Delegates,

I would like to welcome you to the Southern Regional United Nations Conference (SRMUN) XXII and the Economic Commission of Latin America and the Caribbean (ECLAC). I will serve as your Director, and it is an honor for me to serve on the ECLAC commission of SRMUN this year. This is my third year with SRMUN and each year is a more rewarding experience than the last. What I enjoy most about SRMUN is the feeling of family I receive not only from other staff members but from the committee itself as well as the opportunity to mentor and teach the experience of Model UN.

The Economic Commission of Latin America and the Caribbean was established in 1948 as a regional body of the Economic and Social Council. The mandate of ECLAC includes studying, researching and reporting on the economic and developmental activities of the region and the Commission. ECLAC aims to promote the economic and social development through regional and subregional cooperation and integration. We have chosen the following topics to discuss at this year's conference due to the importance they play in achieving economic security through international solidarity:

- I. Encouraging Multinational Corporations to Invest and Provide Opportunities within the Borders of Latin American Member States;
- II. Opportunities and Risks for Regional Development in Biofuels;
- III. Fighting Drug Production and Trafficking in Latin American Member States.

Each delegation is required to submit a position paper which covers each of the three topics. Position papers should not be longer than 2 pages in length and single spaced. The objective of the position paper is to convince and persuade the members of your committee that the approach outline in your paper is the best course of action. The position papers are therefore critical in providing insight into not only the policies and positions of each country, but should also provide insight into the direction each county will undertake in providing solutions to the challenges of this body.

Delegates are encouraged to use the position papers as an opportunity to state what your country plans to accomplish in this committee. Strong, well developed position papers are an excellent foundation for conference preparation. It is important to ensure all sides of each issue are adequately addressed and presented in a clear and concise manner that is easy for your audience to understand. More detailed information about how to write position papers can be found at the SRMUN website ([www.srmun.org](http://www.srmun.org)). **All position papers MUST be submitted by October 30th, 2011 by 11:59pm EST by using the submission function on the SRMUN website.**

I look forward to the opportunity to serve as the Director for ECLAC and I wish you all the best of luck and look forward to working with each of you. Please feel free to contact Reggie, Stefanie, or myself if you have any questions.

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## Committee History for Economic Commission for Latin America and the Caribbean

In February of 1948 the Economic and Social Council founded the Economic Commission for Latin America through resolution 106(VI). The Spanish name Comisión Económica Para América Latina (CEPAL) remains unchanged since most of the member's native language and working language is Spanish. The original members consisted of Member States in North, Central and South America, as well as, The United Kingdom, the Netherlands and France. In 1984 the Commission expanded to include the Caribbean Islands, changing the name to the Economic Commission for Latin America and the Caribbean. Though the name may have changed and its membership has expanded the mandate of ECLAC has remained unchanged.<sup>1</sup> The purpose of ECLAC is to contribute "to the economic development of Latin America, coordinating actions directed towards this end, and reinforcing economic ties among countries and with other nations of the world."<sup>2</sup>

The mandate of ECLAC includes studying, researching and reporting on the economic and developmental activities of the region and the Commission. ECLAC aims to promote the economic and social development through regional and subregional cooperation and integration<sup>3</sup>. The mandate of ECLAC rests upon the responsibilities of the Secretariat, which includes:

Provides substantive secretariat services and documentation for the Commission and its subsidiary bodies; Undertakes studies, research and other support activities within the terms of reference of the Commission; Promotes economic and social development through regional and subregional cooperation and integration; Gathers, organizes, interprets and disseminates information and data relating to the economic and social development of the region; Provides advisory services to Governments at their request and plans, organizes and executes programmes of technical cooperation; Formulates and promotes development cooperation activities and projects of regional and subregional scope commensurate with the needs and priorities of the region and acts as an executing agency for such projects; Organizes conferences and intergovernmental and expert group meetings and sponsors training workshops, symposia and seminars; Assists in bringing a regional perspective to global problems and forums and introduces global concerns at the regional and subregional levels; Coordinates ECLAC activities with those of the major departments and offices at United Nations Headquarters, specialized agencies and intergovernmental organizations with a view to avoiding duplication and ensuring complementarity in the exchange of information.<sup>4</sup>

The mission of ECLAC has always worked to promote the needs of Latin America and the Caribbean and in 1996 the mission of ECLAC was reformulated in order to "place emphasis on its role as a centre of excellence responsible for working closely with the region's countries in the comprehensive analysis of the development process."<sup>5</sup> The mission was expanded to include "the design, monitoring and evaluation of public policies and the provision of expertise, advisory services and training, as well as support for regional and international cooperation and coordination activities. The Commission also functions as a forum for dialogue among the region's countries and stakeholders on the problems and opportunities facing Latin America and the Caribbean."<sup>6</sup>

The main headquarters for the Commission are in Santiago, Chile; however, regional headquarters have been established in Mexico City, and Port-of-Spain in Trinidad and Tobago. There are also working offices in various cities throughout Latin America, including Buenos Aires, Brasilia, Montevideo and Bogotá.<sup>7</sup> These offices help to

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<sup>1</sup> About Economic Commission of Latin America and the Caribbean, <http://www.cepal.org/cgi-bin/getprod.asp?xml=/noticias/paginas/3/43023/P43023.xml&xsl=/tpl/p18f-st.xsl&base=/tpl/top-bottom.xsl>

<sup>2</sup> South-South Cooperation, [http://www.insouth.org/index.php?option=com\\_sobi2&sobi2Task=sobi2Details&sobi2Id=28&Itemid=68](http://www.insouth.org/index.php?option=com_sobi2&sobi2Task=sobi2Details&sobi2Id=28&Itemid=68)

<sup>3</sup> Mandate and Mission of ECLAC, <http://www.cepal.org/cgi-bin/getprod.asp?xml=/noticias/paginas/9/21469/P21469.xml&xsl=/tpl/p18f-st.xsl&base=/tpl/top-bottom.xsl>

<sup>4</sup> Ibid

<sup>5</sup> ECLAC today, <http://www.eclac.cl/noticias/paginas/0/21710/2008-803-ECLACtoday-web1.pdf>

<sup>6</sup> Ibid

<sup>7</sup> About ECLAC, <http://www.cepal.org/cgi-bin/getprod.asp?xml=/noticias/paginas/3/43023/P43023.xml&xsl=/tpl/p18f-st.xsl&base=/tpl/top-bottom.xsl>

further the work of the Commission, making information accessible to the Member States of ECLAC. The offices help facilitate the flow of the organization, which is led by an Executive Secretary that is directly responsible to the Secretary General of the United Nations. All of the administrative offices, which are located in Mexico, Chile, Columbia, Brazil, Uruguay, and Washington D.C, are under the direction of the Executive Secretary, as well as the Deputy Executive Secretary. The Deputy Executive Secretary serves as an aid to the Executive Secretary heads the ten main divisions in the Commission. The work of the Commission is carried out by ten main divisions including the Division of International Trade and Integration, Division of Production, Productivity and Management, Economic Development, Social Development, Women and Development, Population Division, Sustainable Development and Human Settlements, Natural Resources and Infrastructure Division, Statistics and Economic Projections Division, and Documents and Publications Division. Each of ten divisions has a Chief who handles the operations of the division and is accountable to the Executive Secretary. There is also the Office of the Secretary of the Commission which is under the Executive Secretary and is responsible for Information and Conference Services. The work of the Commission includes very detailed initiatives and due to the nature of the work of the Commission its offices are numerous and structured to perform specific research.<sup>8</sup>

The Commission meets every two years on even numbered years, with its next meeting scheduled to take place in 2012. Each of the committee session meets somewhere located in the Latin American region. In the sessions the Member States of ECLAC meet to discuss new findings based on the two years of study between sessions. In the 2010 session held in Brasilia, Brazil gender equality was the main focus of discussions. Being that ECLAC, as other regional commissions, reports directly to the body of ECOSOC, the Commission publishes reports on a regular basis and products resolutions to the challenges facing the committee. The budget for ECLAC comes from two main sources, the regular budget from the UN and extra-budgetary funds that are voluntarily donated to ECLAC by Member States, along with other UN funds for various programs like UNDP, UNFPA, and UNICEF. The money goes to various projects that have already been approved by the Member States in ECLAC. It is also important to note that ECLAC is not a donor IGO; therefore they cannot take funds from the ECLAC budget and donate it to other national or international projects not falling within the ECLAC framework. ECLAC plays a major role in the Latin American region and because this region is so large and growing region in the international system the area is becoming a stronger focus in the world.<sup>9</sup>

The current Member of the Economic Commission of Latin America and the Caribbean are:

ANTIGUA AND BARBUDA, ARGENTINA, BAHAMAS, BARBADOS, BELIZE, BOLIVIA, BRAZIL, CANADA, CHILE, COLOMBIA, COSTA RICA, CUBA, DOMINICA, DOMINICAN REPUBLIC, ECUADOR, EL SALVADOR, FRANCE, GERMANY, GRANDA, GUATEMALA, GUYANA, HAITI, HONDURAS, ITALY, JAMACIA, JAPAN, MEXICO, NETHERLANDS, NICARAGUA, PANAMA, PARAGUAY, PERU, PORTUGAL, REPUBLIC OF KOREA, SAINT KITTS AND NEVIS, SANTA LUCIA, SPAIN, ST. VINCENT AND THE GRENADINES, SURINAME, TRINIDAD AND TOBAGO, UNITED STATES, UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND, URUGUAY, VENEZUELA

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<sup>8</sup> Flowchart of ECLAC, <http://www.cepal.org/cgi-bin/getprod.asp?xml=/noticias/paginas/8/21348/P21348.xml&xsl=/tpl/p18f-st.xsl&base=/tpl/top-bottom.xsl>

<sup>9</sup> Frequently Asked Questions about ECLAC, <http://www.cepal.org/cgi-bin/getprod.asp?xml=/noticias/paginas/8/42828/P42828.xml&xsl=/tpl/p18f-st.xsl&base=/tpl/top-bottom.xsl#4>

## I. Encouraging Multinational Corporations to Invest and Provide Opportunities within the Borders of Latin American Member States

### *Introduction*

The importance of foreign direct investments (FDI) by multinational Corporations (MNCs) globally has grown exponentially over the past few decades. Specifically, Latin America and the Caribbean region have begun to rely heavily on FDI as a main source of regional income especially since the 1990's.<sup>10</sup> Since the 1980's, new inflows of FDI by MNCs has increased by around 100 percent within the Latin American region. Growth since the 1980's in the region has been referred to as volatile and is marked by several periods of significant growth and decline which has taken a significant toll on the domestic economies of Latin American governments.<sup>11</sup> According to the 2010 Foreign Direct Investment in Latin America and the Caribbean report produced by ECLAC, transnational corporations from the United States are the main investors (17% of total FDI in the region), followed by the Netherlands (13%), and China (9%).<sup>12</sup> Following the economic crisis of the 1980's FDI inflows grew until around 1999 when the economic recession of the United States took a toll on MNCs ability to continue growth in the Latin American region.<sup>13</sup> The Latin American and Caribbean region relies heavily on the status of the economies of the major investors especially the United States. This is why the various recessions within the United States history creates such a drastic change in the amount of FDI within the region. With FDI contributing such a large portion of overall GDP for many Latin American and Caribbean nations it is important for Member States of ECLAC to promote for FDI within other emerging economies globally in order to diversify the FDI portfolio. Within the past decade, FDI within Latin America has grown gradually despite the global economic recession beginning in 2008 and in 2010 became the region with the fastest growing flows of inward FDI.<sup>14</sup> This is demonstrated further by the sharp rise in inward FDI to the region in 2010 with a total of US\$ 112.6 billion which is a 40 percent rise over the US\$ 980.3 billion recorded in 2009.<sup>15</sup>

The recent trends in incentivizing MNCs to establish operations within Latin American Member States' borders do not seem to be a sustainable practice. Member states rely heavily on the revenue which comes from FDI and with globalization bringing a growing interdependence of nations this trend should continue. The challenge arises in maintaining an environment which is attractive to MNCs without causing a detriment to the host nation. Furthermore, it is important to many long-term strategic MNCs to have the ability to enter into a stable economic and political environment as well as solid infrastructure and human capital to pool from. Chile and Costa Rica have greatly benefited from a politically and economically stable environment for MNCs. Costa Rica has implemented initiatives in educating its workforce and therefore has done well to attract more technical corporations including the Intel semiconductor assembly and testing plant.<sup>16</sup> Software companies have recently begun to strategize their global expansion strategies differently by seeking operations spanning time zones and cost levels. This allows the corporations to become more available to their customers and see Latin America and the Caribbean as a focal point for investment due to its proximity to the United States. These corporations seek areas with low cost levels and operational risks as well as an educated workforce. In 2010, Brazil, Mexico and Argentina held 75 percent of the software projects within Latin America and the Caribbean. This influx of technical investment is accredited to industrialization strategies made by these nations to create a productive base of human capital and infrastructure

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<sup>10</sup> Giorgia Maffini and Anna Marenzi. "Corporate Tax Systems and Policies for Attracting FDI in Latin America." *Tax Systems and Tax Reforms in Latin America.* Ed. Luigi Bernardi et al. New York: Routledge. 2008, pp. 77-96.

<sup>11</sup> Ibid.

<sup>12</sup> Ibid.

<sup>13</sup> Ibid.

<sup>14</sup> "Foreign Direct Investment in Latin America and the Caribbean." Economic Commission on Latin America and the Caribbean. 2010.

<sup>15</sup> Ibid.

<sup>16</sup> Giorgia Maffini and Anna Marenzi. "Corporate Tax Systems and Policies for Attracting FDI in Latin America." *Tax Systems and Tax Reforms in Latin America.* Ed. Luigi Bernardi et al. New York: Routledge. 2008, pp. 77-96.

which led to a specialization in technology in the twenty-first century.<sup>17</sup> Caribbean nations maintain less than 3 percent collectively of technical projects which is owed to the environment created by governments who use only tax credits as a promotion strategy.<sup>18</sup>

In the early 1990's there were an estimated 37,000 MNCs throughout the world. This number nearly doubled as of 2004 to approximately 70,000 MCNs with around 690,000 foreign subsidiaries. Over half of these subsidiaries were located in developing nations leading to policy and framework changes within these developing nations to become a competition based mainly on tax breaks to attract MNCs.<sup>19</sup> These new policies specifically within Latin American developing nations has led to a "race to the bottom" as national governments are competing by offering lower and lower tax rates to transnational corporations in order to attract investment.<sup>20</sup> Within many Latin American countries, the estimated tax requirement for many MNCs has dropped by half since the spike of FDI in the 1990's.<sup>21</sup> This has caused many countries to develop a complex tax system which places high costs and taxes on the domestic citizens of the respective countries to offset the burden placed on administrations due to tax breaks offered to MNCs.<sup>22</sup> Many countries work relentlessly to attract these MNCs even sometimes at the expense of domestic citizens. This is due to the immense amount of overall benefits provided to the nation by FDI not only including a great increase in GDP but infrastructure benefits as well. Trinidad and Tobago has recently received US\$3 billion from China for an aluminum project, an official residence for the prime minister and the building of a National Academy for Performing Arts. Dominica has recently received financial assistance in the amount of US\$122 million and a cricket stadium from a MNC.<sup>23</sup> A balance must be reached within the Latin American and Caribbean region between attracting quality MNCs whose operations will provide "spillover effects" within the host country while maintaining a competitive advantage amongst other nations and regions.

### ***Market Changes and Industry Spillover***

Historically, and for most of the past century, MNC's have invested heavily in natural resources within the Latin American region.<sup>24</sup> Investment in natural resources within the southern cone are centered around oil, gas, copper, iron and natural raw materials such as wood while within Central America and the Caribbean 'green gold' such as sugar and coffee are most popular.<sup>25</sup> In general, between 1999 and 2010 overall FDI by MNCs have shifted from natural resources and manufacturing to service based industries such as tourism, real estate and business processes.

Although in general, investment in natural resources has decreased across the region, within South America the numbers actually have moved in the opposite direction. Investments increased from 33 percent of total FDI in 2005-2009 to 43 percent in 2010 in South America according to the ECLAC Foreign Direct Investment in Latin America and the Caribbean report.<sup>26</sup> The seeming shift to the service industry is mainly led by Mexico and the Caribbean where natural resource investments were down in 2010 to 5 percent of total FDI from 9 percent as recorded in 2005-2009.<sup>27</sup> Brazil, specifically, has received a consistent stream of investment from MNCs in natural resource investment over the past decades as the country has a very broad collection of natural resources. Brazil has been a focal point for investment starting in the 1600's with the gold rush. More recently, MNCs are investing and

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<sup>17</sup> "Foreign Direct Investment in Latin America and the Caribbean." Economic Commission on Latin America and the Caribbean. 2010.

<sup>18</sup> Ibid.

<sup>19</sup> Daniel Chudnovsky and Andres Lopez. "Foreign Direct Investment and Development: the MERCOSUR experience". CEPAL REVIEW 23. August 2007. pp7-23.

<sup>20</sup> Valpy FitzGerald. "International Tax Cooperation and Capital Mobility". CEPAL Review 77. August 2002. pp 65-78.

<sup>21</sup> Ibid.

<sup>22</sup> Giorgia Maffini and Anna Marenzi. "Corporate Tax Systems and Policies for Attracting FDI in Latin America." *Tax Systems and Tax Reforms in Latin America.* Ed. Luigi Bernardi et al. New York: Routledge. 2008, pp. 77-96.

<sup>23</sup> "China's growing investment in the Caribbean". Business Journal. 2011. <http://bizjournalonline.com/?p=2060>.

<sup>24</sup> Ibid.

<sup>25</sup> Emily Sinnott, et al. "Natural Resources in Latin America and the Caribbean". World Bank Latin American and Caribbean Studies. 2010.

<sup>26</sup> "Foreign Direct Investment in Latin America and the Caribbean." Economic Commission on Latin America and the Caribbean. 2010.

<sup>27</sup> Ibid.

exporting petroleum as well as growing and harvesting seed and grain in Brazil's rich soil.<sup>28</sup> With one-third of the world's rainforest in Brazil, it is important for Latin American Member States, including Brazil, to pay close attention to the FDI made by MNCs within this market in order to avoid depletion of a habitat which houses over 50 percent of the world's animal life.<sup>29</sup>

As mentioned above, reforms in tax exemptions have caused the overall FDI market to shift to the service and business process industry. Telecommunications is leading this industry shift creating stark differences between the FDI portfolios between regions of Latin America. South America received what is considered to be 'market-seeking' FDI which includes telecommunications, financial services and energy.<sup>30</sup> Within Mexico and the Caribbean, "efficiency-based" MNCs typically invest and include manufacturing corporations and the automobile industry.<sup>31</sup> These corporations are seeking areas with proximity to the United States while also taking advantage of the lower costs of the region. These low-costs are derived from not only the deep tax incentives offered to MNCs but also the low-cost supplies and labor.<sup>32</sup> Market and efficiency seeking corporations tend to take a 'the more the better' approach when selecting locations to invest and encourage the 'race to the bottom' in tax benefits occurring in developing nations.<sup>33</sup>

A concern of the market shifts from natural resources and manufacturing to a services industry is the 'spillover effect'. The 'spillover effect' is the positive or negative effect of the MNC on the local economy and can come in the form of infrastructure, human capital and environmental effects.<sup>34</sup> Generally speaking, corporations within the 'market-seeking' and 'efficiency-seeking' category do not seem to have a positive impact on their host country.<sup>35</sup> Common positive spillovers include improvement in human capital through knowledge sharing and education provided by the MNC and the level of competition on the market increases due to more advanced processes and technologies influencing the local market. Another expected positive spillover includes increased business within the host country's market as it is a common expectation that MNC's purchase supplies from local businesses in order to take advantage of low-costs.<sup>36</sup> Negative spillover is also possible and can be noted by local companies forced to cut production due to new competition in the market that has a lower overhead due to tax breaks.

Domestic businesses can also experience possible displacement from the market due to an inability to compete with the MNC.<sup>37</sup> In a study published by ECLAC in the 2007 CEPAL review FDI spillover in the MERCOSUR bloc was analyzed to identify both positive and negative spillover from MNCs. MERCOSUR is an agreement amongst a few South American Nations which provides services that encourage and aid in attracting MNC's to the South American Region.<sup>38</sup> The research indicated that there were no net positive spillover effects within the MERCOSUR bloc in regards to increased quality in infrastructure or human capital. Negative effects were identified in Uruguay in regards to production spillover as the MNCs were found to be more productive than their local counterparts.<sup>39</sup> Only within research and development was there found any real positive spillover and this effect was only present in Brazil where the highest concentration of technology-based firms are present.<sup>40</sup>

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<sup>28</sup> Emily Sinnott, et al. "Natural Resources in Latin America and the Caribbean". World Bank Latin American and Caribbean Studies. 2010.

<sup>29</sup> "Tropical Rainforests of the World". <http://rainforests.mongabay.com/0101.htm>

<sup>30</sup> Giorgia Maffini and Anna Marenzi. "Corporate Tax Systems and Policies for Attracting FDI in Latin America." *Tax Systems and Tax Reforms in Latin America.* Ed. Luigi Bernardi et al. New York: Routledge. 2008, pp. 77-96.

<sup>31</sup> Ibid.

<sup>32</sup> Ibid.

<sup>33</sup> Ibid.

<sup>34</sup> Ibid.

<sup>35</sup> Daniel Chudnovsky and Andres Lopez. "Foreign Direct Investment and Development: the MERCOSUR experience". CEPAL REVIEW 23. August 2007. pp7-23.

<sup>36</sup> Ibid.

<sup>37</sup> Ibid.

<sup>38</sup> MERCOSUR Trade Center. <http://www.mercosurtc.com/>

<sup>39</sup> Daniel Chudnovsky and Andres Lopez. "Foreign Direct Investment and Development: the MERCOSUR experience". CEPAL REVIEW 23. August 2007. pp7-23.

<sup>40</sup> Ibid.

The bulk of investment projects throughout the region are considered to be low to medium research projects however involvement in high-tech projects is greatly limited.<sup>41</sup> As shown by ECLAC research, the largest probability of positive spillover through technology and knowledge transfer on a host country comes from FDI within a high-technology sector.<sup>42</sup> Brazil currently provides tax incentives for MNCs which invest in technology and research and development. As demonstrated above, Brazil was the only nation to receive positive spillover from FDI in a 2007 ECLAC study.<sup>43</sup>

It is increasingly important for ECLAC Member States to not only continue to attract FDI from MNCs but to also take into consideration a need to attract 'quality' MNCs which product a positive spillover into the host country. Corporations which are seeking for investments that do not exploit the human capital and natural resources in the area and instead provide efficient and strategic benefits to both the corporation as well as the host country.<sup>44</sup> Therefore, it would be beneficial to Member States to invest in a policy framework which works to increase the likelihood of high-technology and strategic MNCs investing in the area.

### ***Free-Trade Zones***

Deregulation and privatization of services has led to Latin America becoming a highly attractive region for transnational corporations. Since the 1990's many national policies on corporate tax structures and incentives have undergone reforms ultimately increasing the attractiveness of the region. This in conjunction with the globalization of trade and investment are attributed to the rise in FDI within the region over the past couple decades.<sup>45</sup> Many countries have established trade agreements with neighboring nations which encourage corporations within countries surrounding the Latin American region (mainly the United States and Canada) to invest freely. Such trade agreements include the North America free Trade Agreement (NAFTA), the Free Trade Agreement of the Americas (FTAA) and the Southern Common Market (MERCOSUR).<sup>46</sup> In order to remain competitive within the global market to MNC's many Latin American nations, especially developing nations, provide deep tax cuts to transnational corporations as well as establish free trade zones (FTZs) for corporations looking to establish export centers.

Most developing nations within Latin America and the Caribbean have shown a constant reduction in the tax rate offered to MNCs within FTZs previously noted as the "race-to-the-bottom".<sup>47</sup> FTZs attract FDI to the participating regions but can also have a negative effect on trade with neighboring nations. For example, in 1993 a FTZ was established between Columbia, Ecuador and Peru. Between 1993 and 2005, trade increased within this region at an annual growth rate of 13.5 percent. Further studies revealed that trade seemed to only increase with countries outside the Andean region such as Europe, East Asia and the United States. Inter-regional trade decreased to an average of 10 percent of total exports compared to earlier years. The United States benefited from two-thirds of the exports from the FTZ and is more integrated as a regional player than nations within the region itself.<sup>48</sup> The FTZ was established with the intention to increase trade within the Andean region but actually acted as a trade diversion between countries within the region. Latin American countries must not forego the importance of integrated policies regarding trade in order to maintain sustainable economic growth.<sup>49</sup>

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<sup>41</sup> "Foreign Direct Investment in Latin America and the Caribbean." Economic Commission on Latin America and the Caribbean. 2010.

<sup>42</sup> Giorgia Maffini and Anna Marenzi. "Corporate Tax Systems and Policies for Attracting FDI in Latin America." *Tax Systems and Tax Reforms in Latin America.* Ed. Luigi Bernardi et al. New York: Routledge. 2008, pp. 77-96.

<sup>43</sup> Ibid.

<sup>44</sup> Daniel Chudnovsky and Andres Lopez. "Foreign Direct Investment and Development: the MERCOSUR experience". CEPAL REVIEW 23. August 2007. pp7-23.

<sup>45</sup> Giorgia Maffini and Anna Marenzi. "Corporate Tax Systems and Policies for Attracting FDI in Latin America." *Tax Systems and Tax Reforms in Latin America.* Ed. Luigi Bernardi et al. New York: Routledge. 2008, pp. 77-96.

<sup>46</sup> Ibid.

<sup>47</sup> Ibid.

<sup>48</sup> Jose E. Duran, et al. "Trade Agreements by Columbia, Ecuador and Peru with the United States: effects on trade, production and welfare." CEPAL Review 91. April 2007.

<sup>49</sup> Jose Louis Machinea. "Repurcussions of the Free Trade Agreement between Central America and the USA: CAFTA." Op-eds and articles by the Executive Secretary. Economic Commission for Latin American and the Caribbean.

Oftentimes, FTZs create a way for foreign investors to isolate themselves from the surrounding local communities. Although increasing revenue for the host nation as a whole, the seclusion of MNCs within FTZs does not create the expected benefit for local economies. Police often have to patrol the areas in order to protect corporations from union organizing (born from poor treatment of workers) and to protect women from sexual harassment.<sup>50</sup> FTZs do provide revenue and employment benefits to the host country but often times come at the expense of the local workforce and the environment. Due to trade agreements designed around the Free Trade Zones, many corporations are exempt from many local laws and basic human rights afforded to domestic citizens can easily be violated.<sup>51</sup> The strong concentration of MNCs investing in the Latin American region for its low-cost natural resources has led to forests being cleared, rivers contaminated, landscapes ruined, and citizens violated.<sup>52</sup>

Member States of ECLAC must work to create policies and framework which work to improve the conditions within and surrounding Free Trade Zones while maintaining the allure they provide to MNCs. Trade agreements between other regions can be re-negotiated to include better treatment of workers as well as the environment. Regional cooperation is necessary to ensure developing nations are not left out of possible further benefits from intra-regional trade. Trade agreements around FTZs can also work to spur partnerships between MNCs and local businesses and therefore creating more benefits for the local economy. FTZs provide an opportunity for development and revenue generation but are not a substitute for regional cooperation and strategy.

### ***New Frontier on Taxation***

In order to stop the 'race to the bottom' developing nations must understand that competing for FDI solely on tax incentives to MNCs is not a sustainable approach. The drastic tax cuts being made by many developing nations especially within the Caribbean is beginning to cause great burdens on national administrations as well as the citizens of respective countries. Furthermore, the infrastructure and programs needed to make Latin American countries more attractive to highly-technological firms cannot be supported with the over-powering deficits deepened by the continuing tax cuts. A balance must be met by taxation policies of national governments between attracting the right sector of MNCs and the benefit of the host country through social and physical infrastructure needed to continue attraction.<sup>53</sup> Developing nations within Latin America and the Caribbean are deeply burdened by debt, poverty, uneducated and unskilled workers as well as infrastructure.<sup>54</sup> Studies show that tax incentives seem to be considered an additional bonus to operating within a region by MNCs when determining placement for expansion.<sup>55</sup> Confidence in stability of regulations and social infrastructure are shown to be just as important to MNCs and evidence shows that corporations use tax incentives to determine where to operate within a country as opposed to whether or not to operate within a country.<sup>56</sup>

There are two main tax models for taxation of the financial assets of non-residents doing business within a nation's borders. The Organization for Economic Co-operation and Development (OECD) Draft Taxation Convention/Model Tax conventions is based on residence taxation while the United Nations Model Double Taxation Convention between Developed and Developing Nations is based on source taxation. For the purpose of explanation they will be referred to as residence vs. source tax models. Both models are similar in general provisions however differ in how they apply to developing versus developed nations.<sup>57</sup> Source taxation is based on the residence of the generated assets and profits while residence taxation is a theory based on overall capacity to pay and is based on the assets of domestic residents. Developing nations within ECLAC are shown to benefit from source taxation because administrations would be able to generate more revenue from applying taxes to the income and assets of transnational corporations than taxing the assets of domestic corporations abroad.<sup>58</sup> This is mostly due to the fact that inward FDI for developing nations is much larger than the outward FDI of Latin American

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<sup>50</sup> Cristina Lucero. "The Central American Free Trade Agreement: Effects on Labor in the Maquila Sector." DePaul University Libraries. June 2011.

<sup>51</sup> Ibid.

<sup>52</sup> Carrie McCracken. "The Impacts of Banana Plantation Development in Central America."

[http://members.tripod.com/foro\\_emaus/BanPlantsCA.htm](http://members.tripod.com/foro_emaus/BanPlantsCA.htm). 1998.

<sup>53</sup> Valpy FitzGerald. "International Tax Cooperation and Capital Mobility". CEPAL Review 77. August 2002. pp 65-78.

<sup>54</sup> Ibid.

<sup>55</sup> Ibid.

<sup>56</sup> Ibid.

<sup>57</sup> Valpy FitzGerald. "International Tax Cooperation and Capital Mobility". CEPAL Review 77. August 2002. pp 65-78.

<sup>58</sup> Ibid.



developing nations.<sup>59</sup> A second reason for source taxation is that most developing nations simply do not have the resources to appropriately track the foreign assets of residents.<sup>60</sup> The effective tax rate paid in the Latin American Region as opposed to comparing regions, such as East Asia and Europe, is significantly lower. Studies show that Latin American developing countries can minimally raise taxes on FDI using a source-based taxation policy and remain a leading player in the FDI market.<sup>61</sup>

Each country within Latin America has a different tax system and economic structure this fact is adding to the ‘race to the bottom’ as countries are constantly competing for investment.<sup>62</sup> With this disjointed effort in attracting FDI is created an environment where policies are abused and politicians easily corrupted. This comes at a cost to citizens within the host country as well as surrounding nations. In order to maintain sustainable economic growth based on FDI and attract quality MNCs with benefits other than tax breaks nations must cooperate. Brazil and Mexico generally have higher taxes than many other Latin American and Caribbean nations and have implemented a tax framework which offers incentives for research and development and technological enterprises.<sup>63</sup> As a result, Brazil and Mexico maintain the highest concentrations of highly technical FDI and this number has consistently increased within the past decade.<sup>64</sup> A regional framework on tax incentives would allow nations to truly find the balance between acceptable revenues and incentives which are attractive to MNCs.

### ***Infrastructure***

Availability of quality infrastructure is a key driver in decision making of quality MNCs on where to invest internationally. The definition of infrastructure can vary depending on context. For the purpose of this paper, the term is typically used to describe physical infrastructure such as roads, navigable waterways, electricity, clean water and airports.<sup>65</sup> Studies show that economic growth caused by FDI is more likely when a nation already has infrastructure in place for a MNC to utilize.<sup>66</sup> As mentioned previously, MNCs often see tax breaks as an additional incentive to establishing operations within a nation and first look at tangible factors of an area such as access to clean water, electricity, and various modes to transport goods.

Investing in infrastructure both physically and socially, such as in the form of human capital, creates a competitive advantage and is a force in sustainable economic growth of any country. Latin America has made significant strides in improving infrastructure over the past couple of decades however has still lost much ground in respect to other regions of the world competing for FDI especially East Asia.<sup>67</sup> The gap between East Asia and Latin America began to widen after the debt crisis of the 1980’s as most Latin American countries decided to forego investing in infrastructure in order to maintain low tax rates for both foreign investors and citizens. It is estimated that in order to remain competitive with other regions within the world, Latin American nations must begin investing up to 6% of GDP in infrastructure.<sup>68</sup> In April 2006, many national leaders of Latin American countries met at the World Economic Forum on Latin America in Sao Paulo to discuss the region’s ability to compete globally and how to create a competitive advantage. It was determined at this meeting that the main hindrance on Latin America maintaining a competitive advantage over other regions of the world was poor infrastructure.<sup>69</sup> With changing attitudes of quality MNCs viewing tax breaks as a windfall gain and concentrating more on stability and available

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<sup>59</sup> “Foreign Direct Investment in Latin America and the Caribbean.” Economic Commission on Latin America and the Caribbean. 2010.

<sup>60</sup> Valpy FitzGerald. “International Tax Cooperation and Capital Mobility”. CEPAL Review 77. August 2002. pp 65-78.

<sup>61</sup> Ibid.

<sup>62</sup> Giorgia Maffini and Anna Marenzi. “Corporate Tax Systems and Policies for Attracting FDI in Latin America.” *Tax Systems and Tax Reforms in Latin America.*” Ed. Luigi Bernardi et al. New York: Routledge. 2008, pp. 77-96.

<sup>63</sup> Ibid.

<sup>64</sup> “Foreign Direct Investment in Latin America and the Caribbean.” Economic Commission on Latin America and the Caribbean. 2010.

<sup>65</sup> Julio Estrada, et al. “Benchmarking National Attractiveness for Private Investment in Latin American Infrastructure.” World Economic Forum. 2007

<sup>66</sup> Daniel Chudnovsky and Andres Lopez. “Foreign Direct Investment and Development: the MERCOSUR experience”. CEPAL REVIEW 23. August 2007. pp7-23.

<sup>67</sup> Julio Estrada, et al. “Benchmarking National Attractiveness for Private Investment in Latin American Infrastructure.” World Economic Forum. 2007

<sup>68</sup> Ibid.

<sup>69</sup> Ibid.

infrastructure when determining where to invest it is clear that in order to maintain long-term competitiveness Latin American nations must invest more in infrastructure.<sup>70</sup>

### ***Human Capital***

The effect of MNCs on local economies in regards to job creation and an expected fiscal increase to the local economy is a key driver in the continued pursuit of FDI by Latin American nations. For example, many countries in Central America derive up to 74% of their export revenue from the banana trade and 88.5% of the generated revenue goes to multinational fruit countries.<sup>71</sup> These multinational fruit companies employ between 5-10 percent of the population in Costa Rica and Honduras. Workers produce around \$20,000 per year in revenue for the MNCs but receive only \$2,000 per year in wages. The average worker works 10-12 hours per day 7 days a week and many work on 90 day contracts which allow them to float from plantation to plantation while the MNCs owning the plantations never have to offer benefits such as health care and vacation time.<sup>72</sup> Supervisors and executives, who are typically from the home country of the MNC, live in large family homes with access to country clubs, pools, golf courses and most importantly air conditioning. The average worker lives in barracks with 2-3 people per room, and because of the 90 day contract most workers work under, these living conditions are not even guaranteed.<sup>73</sup> This treatment of workers is common amongst MNCs working in Free Trade Zones as they are often the efficiency-seeking corporations that are only concerned with short-term profitability. FDI by MNCs may result in an increase in employment across the country however these jobs are almost always unskilled labor and the MNC typically does not offer programs to knowledge share and train the domestic laborers to be promoted. The higher-technology jobs are usually reserved for individuals from the home country of the corporation.<sup>74</sup> This is attributed mostly to the fact that many citizens of the region are not educated enough in technology. This is especially true within Central America and the Caribbean where nations rely on tax breaks as a main incentive for investment.<sup>75</sup>

The effort of Members states to attract MNCs cannot come at a cost to local workers. National governments must create policies which encourage development of technical and knowledge sharing in order to ensure a long-term approach to remaining competitive in the global market. A tax incentive must be paired with business partnerships with local universities in order to improve the quality of human capital within the host country. Without education of the local citizens, Latin American nations cannot effectively compete for highly-technical corporations to invest within their borders.<sup>76</sup> A few countries within Latin America have begun to invest in their workforce through technological education. Slowly, the region is becoming known as a place for offshore software corporations however this reputation is very limited to just a few countries within the region. Brazil and Argentina combined hold 52 percent of the projects being outsourced by software companies as of 2010. This is due to reforms created in the late 1990's to reduce barriers for investment in their economy and provide more education to their workforce as well as the ability of Argentina and Brazil to place their skilled workers in the international market at a competitive price.<sup>77</sup> Latin America as a whole can establish itself as a leader in the technology industry if new strategies are implemented which allow for long-term cultivation of their human capital and social infrastructure. If this goal can be reached coupled with the already-present advantage of cost levels, operational risks and proximity to the United States the region will easily be a long-standing leader in FDI from this industry.<sup>78</sup>

### ***Central America, Panama and the Dominican Republic***

FDI has been a large catalyst for development in the region of Central America, Panama and the Dominican Republic over the past 100 years. Inward FDI rose sharply in the 1990's due to increases in general supply and demand, privatization of State-owned energy and multinational telecommunication companies. This subregion of

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<sup>70</sup> Ibid.

<sup>71</sup> Carrie McCracken. "The Impacts of Banana Plantation Development in Central America." [http://members.tripod.com/foro\\_emaus/BanPlantsCA.htm](http://members.tripod.com/foro_emaus/BanPlantsCA.htm), 1998.

<sup>72</sup> Ibid.

<sup>73</sup> Ibid.

<sup>74</sup> "The Cost and Benefits of Financial Globalization in the Caribbean Subregion." ECLAC Issue Brief. Economic Commission for Latin America and the Caribbean. Issue Brief No. 10. June 2002.

<sup>75</sup> Ibid.

<sup>76</sup> "Foreign Direct Investment in Latin America and the Caribbean." Economic Commission on Latin America and the Caribbean. 2010.

<sup>77</sup> Ibid.

<sup>78</sup> Ibid.

Latin America has used their proximity to the United States as an incentive for FDI as well as leverage for trade agreements with other North American countries.<sup>79</sup> The implementation of such agreements such as the United States-Caribbean Basic Trade Partnership Act (CBTPA) and the Dominican Republic-Central America-United States Free Trade Agreement (CAFTA-DR) has worked to encouraged not only interregional investment but also encouraged American companies to expand within the borders of Central America, Panama and the Dominican Republic increasing not only the GDPs of the respective countries but also domestic savings in infrastructure investment.<sup>80</sup>

Since 1999, this subregion has worked to restructure and transform its traditional industrial matrix from textiles and garments to more forward-thinking business services. Free-economic zones and financial and tax incentives have been extended to MNCs and has been successful in attracting telecommunication corporations, the tourism and real estate industry as well as business-process corporations.<sup>81</sup> Prior to 1999, tax incentives were offered to all MNCs which established business in the region. Since the reforms took place, incentives are now more regulated to strategic sectors and corporations which establish business in underdeveloped areas. Emphasis is placed on research and development, science and technology in order to enhance regional productivity as well as knowledge sharing among the local workforce. A transition from export-promotion to investment partnerships is a deliberate act within this subregion to diversify the inward FDI and increase indirect incentives to domestic areas surrounding the free-economic zones.<sup>82</sup> Many countries have adopted this new public framework of investment promotion agencies and business partnerships which has led to an increase upwards of 25% of FDI inflows between 1999 and 2010 in the region.<sup>83</sup>

### ***Conclusion***

The growth of FDI within the Latin American region over the past couple of decades has been exponential. The presence of multinational corporations within the borders of Latin American countries is very beneficial to the economic performance and employment rates of many countries. There is still much space for growth in the region as globalization opens up regions which will continue to compete for the business of MNCs. It is imperative for Member States of ECLAC to attract quality investments from MNCs which lead to long-term, strategic and mutually beneficial relationships between corporation and host country. It is important to progress toward finding a balance between offering prices low enough to enable the attraction of technical service-based MNCs and earning enough revenue to build the social and physical infrastructure needed to maintain a competitive advantage against other regions. This can be achieved through a cooperative regional approach of incentive reform including development and education human capital, support in research and development and strategic partnerships between businesses and both institutions and national governments.<sup>84</sup> This positive spillover is necessary in building a maintaining a competitive advantage in this increasing competitive world however it cannot be solely the responsibility of the MNC. National governments must take initiative and work as a regional unit to set a standard of regulations and taxation as well as implement a policy framework that is consistently working to improve the physical and social infrastructure quality MNCs search for.

### ***Committee Directives***

Delegates should keep in mind the importance of multinational corporations to the Latin American and Caribbean region. FDI from MNCs account for much of a country's GDP especially within developing nations. Delegates should consider the differences between the needs of developing and developed nations and understand how policy changes in one group and affect the other. Delegates should explore ways for Member States to effectively encourage MNCs to invest and provide opportunities within the region however keep in mind the needs of the citizens of the respective nations. Human capital, physical infrastructure and sustainable economic growth are all essential in maintaining a competitive advantage within today's global market. How can Latin American and

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<sup>79</sup> Ibid.

<sup>80</sup> Ibid.

<sup>81</sup> Ibid.

<sup>82</sup> Ibid.

<sup>83</sup> Ibid.

<sup>84</sup> "Foreign Direct Investment in Latin America and the Caribbean." Economic Commission on Latin America and the Caribbean. 2010.

Caribbean nations maintain their competitive advantage while ensuring the attraction of quality MNCs? Is the balance between revenue and low-cost incentives as important to developing nations or should it be even more so?

## II. Opportunities and Risks for Regional Development in Biofuels

### *Introduction*

Latin America and the Caribbean is one of the fastest developing regions in the world. In 2010 the region's economy grew by nearly 6% and their GDP increased by 4.8%. The economy in South America is expected to reach a 6.6% growth increase by the end of 2011, with Mexico and Central America expected to increase by 4.9% and the English and Dutch speaking islands of the Caribbean are set to grow by 0.5%. It is estimated that these figures will continue to rise during the coming years as outside investment and internal development grows.<sup>85</sup> As these countries continue to grow the amount of energy they need to sustain their population will also increase, which is causing a world-wide debate on how to supply the world with energy. The world relies heavily upon fossil fuels as a source of energy, "with coal, oil, and gas currently accounting for 81 percent of the total."<sup>86</sup> The demand for energy sources will continue to grow and with the threat of depletion, new sources of energy are being explored. One such energy source is biofuels. Many regions, like the United States and Europe, are researching and developing the use of biofuels as a source of renewable energy. The US and Europe are global leaders in the development of biofuels and other renewable sources of energy, such as wind energy and hydroelectric power. Recently, Latin America and the Caribbean have begun research on the development of biofuels as a source of energy. Brazil, Argentina and Colombia are leading this research and development in South America. Their research has caused other countries like Costa Rica, Paraguay and the Caribbean islands to begin to develop their own biofuel programs.

Biofuels are sources of energy that "are derived as any solid, gaseous, or liquid fuel obtained from biomass mainly of agricultural origin. Biomass comprises recently living organisms such as plants and animals or their metabolic byproducts-such as feces from cows."<sup>87</sup> There are three main types of biofuels that are used as sources of energy, bioethanol which is derived from fermented crops like corn and sugarcane, biodiesel, which is derived from oilseed crops like rapeseed and sunflower, and finally biogas, which is derived from organic wastes from animals.<sup>88</sup> Biodiesel and bioethanol are the two main types of biofuels in development today. Bioethanol is a renewable fuel that is considered a substitute for naphthas, which is gasoline produced from sugars and starches.<sup>89</sup> Biofuels are renewable sources of energy and the world has begun to focus on how to develop these biofuels and still have economic gains while investing in production. The need for alternative energy sources will continue to rise due to the finite amount of fossil fuels that are available across the world. As a whole, the world requires a lot of energy to keep up with the intense consumption of energy. Currently there is an unequal distribution of energy consumption due to developmental differences across the world. Countries like the United States and countries in Europe consume about 35.98% of the world's energy, compared to Latin America, which only consumes 4.39%.<sup>90</sup>

In the Latin American region countries such as Brazil, Argentina and Colombia are the leaders in biofuel production. In the past thirty years Brazil has developed a program that has enabled them to reduce their dependency on oil while still meeting the energy needs of their country. As much development as there has been in biofuel production

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<sup>85</sup> "Preliminary Overview of the Economics of Latin America and the Caribbean," Economic Commission for Latin America and the Caribbean, December 2010 <http://www.eclac.org/cgi-bin/getProd.asp?xml=/publicaciones/xml/4/41974/P41974.xml&xsl=/de/tpl-i/p9f.xsl&base=/tpl-i/top-bottom.xsl>.

<sup>86</sup> "The State of Food and Agriculture 2008 Part I Biofuels: Prospects Risks and Opportunities Service," Food and Agriculture Organization, 2008 <ftp://ftp.fao.org/docrep/fao/011/i0100e/i0100e01.pdf>.

<sup>87</sup> "Implication for the Use of Biofuels with Special Reference to the Caribbean," Economic Commission for Latin America and the Caribbean, 14 December 2007 <http://www.eclac.cl/publicaciones/xml/3/32103/L.148.pdf>.

<sup>88</sup> Ibid.

<sup>89</sup> "The Contribution of Biofuels to the Sustainability of Development in Latin America and the Caribbean: Elements for Formulating Policy," Economic Commission for Latin America and the Caribbean, 2008 <http://www.eclac.cl/publicaciones/xml/7/34977/lcw219i.pdf>.

<sup>90</sup> Ibid.

many countries have little to no access to renewable sources of energy. Many of the islands of the Caribbean do not have access to renewable energy sources simply because they lack the financial means to fully develop them. There are many other areas of the world that have similar disadvantages when it comes to the development of biofuels and other renewable energy sources, such as Africa and some areas in Southeast Asia. Due to the lack of development in biofuels the United Nations has begun researching how biofuels can be implemented in lesser developed countries. One such development is the Biofuel Initiative by United Nations Conference on Trade and Development. This was launched in 2005 with the goal of supporting “the use and production of biofuels as an emerging trade and investment opportunity for developing countries.”<sup>91</sup> This program is aimed specifically at developing countries that would benefit from the long term production of biofuels. Brazil’s biofuel program has created thousands of jobs in rural areas and has decreased their dependency on fossil fuels. Brazil has also become a stronger player in the international biofuel market and is a leading example of biofuels production.

### ***Fuel Reserves versus Regional Growth and Development***

Alternative sources of energy have been under development and exploration for the past several years and especially after it was discovered in 2001 that the “proven world oil reserve was about 143.1 thousand million tonnes.”<sup>92</sup> In a report in 2009 by OPEC, the regional organization of the petroleum exporting countries, estimated that their reserves were around 1064 billion barrels of oil, and non-OPEC reserves were estimated at 272.9 billion barrels.<sup>93</sup> The actual estimate of oil reserves varies depending on where the data is collected. In a report by ECLAC on the implications for the use of biofuels in Latin America and the Caribbean, they estimated at the end of 2001 that there was 143.1 thousand million tonnes of oil left in the world and that it would only last for so long before it ran out. The report also highlighted the alarming increase in oil production. Between 1991 and 2001 production went up by 13.6% to 3584.9 million tonnes causing a surplus of 74.3 million tonnes. In 1991 the amount of oil being produced was about 3155.5 million tonnes per year but the 13.6% increase to 3584.9 tonnes caused a huge surplus in oil. This surplus probably explains the low price in fuel during the early to mid 1990s. Along with production, consumption of oil has also increased drastically, between 1991 and 2001 consumption increased by 12%. In 1991 the world was roughly consuming 3137.6 million tonnes of oil annually and by the end of 2002 annual consumption increased to 3510.6 million tonnes.<sup>94</sup> The 143.1 thousand million tonnes are only predicted to last another 40.8 years, around 2044, before they are completely depleted.<sup>95</sup> There are other areas that may contain oil reserves that have yet to be discovered, however, it is clear that oil reserves will only last so long before the well will run dry. Currently the world obtains most of its energy from oil, around 35.29%, natural gas, around 20.91%, and coal, around 24.10%, where as only 10.66% comes from biofuels, and 9.03% coming from other renewable sources.<sup>96</sup> It is important to note that this is incredibly important to the Latin American region because two of the top producers of oil in OPEC are Venezuela and Ecuador. Venezuela produces 19.8% of OPEC’s oil and their economy is heavily relied upon by other countries in South America and the Caribbean. The oil that Venezuela produces goes to several different countries around the world, yet a large portion of their oil, around 34%, goes to the Caribbean.<sup>97</sup>

The United Nations has expressed a desire for countries to explore the option of using renewable energy sources like biofuels, but suggests that further research is needed. One thing that is known is that the use of biofuels may actually have some positive impacts on the amount of greenhouse gas emissions that are put into the atmosphere. One report from United Nations Environmental Program suggests that “ethanol can lead to emissions reductions of more than 70 per cent when substituted for petrol, as is being done currently in Brazil. However, the way in which biofuels are produced matters in determining whether they are leading to more or less greenhouse gas emissions, added the

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<sup>91</sup>“The Biofuels Initiative of UNCTAD” United Nations Commission on Trade and Development,  
<http://r0.unctad.org/ghg/biofuels.htm>

<sup>92</sup> “Implication for the Use of Biofuels with Special Reference to the Caribbean,” Economic Commission for Latin America and the Caribbean, 14 December 2007 <http://www.eclac.cl/publicaciones/xml/3/32103/L.148.pdf>.

<sup>93</sup> OPEC Share of World Crude Oil Reserves, 2009 [http://www.opec.org/opec\\_web/en/data\\_graphs/330.htm](http://www.opec.org/opec_web/en/data_graphs/330.htm).

<sup>94</sup> “Implication for the Use of Biofuels with Special Reference to the Caribbean,” Economic Commission for Latin America and the Caribbean, 14 December 2007 <http://www.eclac.cl/publicaciones/xml/3/32103/L.148.pdf>.

<sup>95</sup> Ibid

<sup>96</sup> “Implication for the Use of Biofuels with Special Reference to the Caribbean,” Economic Commission for Latin America and the Caribbean, 14 December 2007 <http://www.eclac.cl/publicaciones/xml/3/32103/L.148.pdf>.

<sup>97</sup> OPEC Country Profile, Venezuela, 2009 Statistical Report [http://www.opec.org/opec\\_web/en/about\\_us/171.htm](http://www.opec.org/opec_web/en/about_us/171.htm).

report.”<sup>98</sup> The potential use of biofuels has only begun to be researched and developed on a larger scale, in 2008 only 2% of global cropland was used for biofuels. The Caribbean, as a region is most heavily dependent upon fossil fuels. In the Caribbean islands 93% of electricity production depends directly on fossil fuels such as oil, natural gas and coal. As mentioned before, 34% of Venezuela’s oil goes directly to the Caribbean region. This area is the most dependent upon oil imports, with only 3% of electricity is produced from some type of renewable energy source. The remaining 3% of energy comes from their production of fossil fuels in their region, which is very limited.<sup>99</sup> The Caribbean has the potential to develop biofuel programs and other renewable sources of energy; however they lack the financial means of starting such programs.

This information highlights the root of the problem within the region; the reliance on oil is preventing Member States from developing renewable sources of energy. The statistics show that oil, as well as other fossil fuels are depleting and the region is increasing their energy consumption each year. The Member States of ECLAC may not consume as much energy as other regions of the world at this time, however, as they become more industrialized the need for energy will continue to rise. The need for biofuels and other renewable sources of energy is ever increasing as the demand for energy continues to rise around the world. Latin America and the Caribbean each have the potential to invest more in biofuels on a regional level, however, the startup cost are often more than some Member States are able to afford, thus they continue to rely on fossil fuels. There are many Member States that have the potential to invest in biofuels, such as Guyana, Chile, El Salvador and Ecuador. As great as it is that they have the potential to invest in biofuels, Member States must find out how they can begin to develop biofuels in their own country.

### ***Reliance on Oil in Latin America***

Latin America and the Caribbean is an oil rich region, and have thus relied heavily on oil for their energy consumption. The region only accounts for nearly 5% of the world’s energy consumption, yet where they get their energy from does not vary greatly. The Caribbean accounts for nearly half of all of Venezuela’s oil exports, at around 34%. Many countries in South America obtain their oil from Venezuela and other countries in the region. Latin America and the Caribbean rely heavily upon fossil fuels for their energy consumption; nearly 67.8% of their energy comes from those fossil fuels.<sup>100</sup> To understand just how much the region relies on fossil fuels, it is important to note that 65.6% of the world’s energy comes from fossil fuels. Latin America relies on fossil fuels even more than the world as a whole does, which is important to consider as the world tries to find sustainable, renewable energy sources in the years to come. The reliance on oil has increased over the years and in 2005 oil accounted for 41.45% of energy consumption, with natural gas accounting for 26.36% of energy consumption and only 13.71% in biomass energy consumption.<sup>101</sup> These statistics indicate just how oil dependent the region has become and that there is a serious need for sustainable energy research and production.

There is a distinct difference between countries that are heavily dependent on their oil imports and those that rely on oil as an export that funds their economy. Member States such as Chile, Jamaica, Barbados, Guyana, Panama, Cuba and Costa Rica rely heavily on their oil imports and are among the poorest countries in the region. In contrast, Member States such as Venezuela, Suriname, Argentina and Trinidad and Tobago rely on their oil exports to fund their economies.<sup>102</sup> The amount of oil consumption has been on the rise for over thirty years, beginning in 1980 when South America consumed 2,633.50 barrels a day, and in 2009 average daily consumption was 4,932.95 barrels.<sup>103</sup> There have been occasional drops in the amount of barrels consumed daily due to typical ebbs in flows in the market; however, the overall trend is an increase in daily consumption. The level of oil dependency has sparked a concern for some Member States in the region and has led to an increased effort to find more environmentally friendly and sustainable sources of energy. Oil dependency has reached a peak in the past several years, which has

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<sup>98</sup> “Further debate needed on pros and cons of biofuels, says UN report,” UN News Centre, 16 October 2009  
<http://www.un.org/apps/news/story.asp?NewsID=32577&Cr=energy&Cr1=>

<sup>99</sup> Caribbean Renewable Energy Development Programme, Thomas Scheutzlich, June 25-26, 2007  
<http://www.eclac.cl/dnri/noticias/noticias/1/28921/Thomas%20Scheutzlich.pdf>

<sup>100</sup> “The Contribution of Biofuels to the Sustainability of Development in Latin America and the Caribbean: Elements for Formulating Policy,” Economic Commission for Latin America and the Caribbean, 2008  
<http://www.eclac.cl/publicaciones/xml/7/34977/lcw219i.pdf>

<sup>101</sup> Ibid

<sup>102</sup> Ibid

<sup>103</sup> IndexMundi, 2011, <http://www.indexmundi.com/energy.aspx?region=sa&product=oil&graph=consumption>

caused countries like Brazil and Argentina to develop their own biofuel technologies. The new research has been met with harsh criticism from other Member States in the region; however, as more research is being done and the potential benefits become more evident there is hope the sustainable solutions can be reached.<sup>104</sup>

The implication of relying so heavily on oil as a source of energy is the sustainability of a limited supply. Research shows that in time the oil reserves built up around the world will eventually dry up. There is enough oil to last approximately 50-60 years and once those reserves run out other sources of energy will be needed. Many countries, like Brazil, have realized that their dependency on oil can have negative implications for their country. This view is shared by many others who feel that their over-dependence on oil can become complicated if their supply of oil was ever disrupted, causing extreme burdens to those who rely so heavily on imported oil.<sup>105</sup> ECLAC is one of the many bodies of the UN urging Member States to take advantage of biofuel initiatives available to them. In March of this year ECLAC launched three studies on biofuels that look specifically at the programs started by Brazil, Colombia and Argentina. These studies are examining the various biofuels policies of countries in the region and any risks their development may pose to the country.<sup>106</sup> As more research is done to find sustainable energy supplies the world's reliance on oil may begin to lessen over the years.

### *Early Support and Criticisms of Biofuels*

One of the earliest supporters for the use of biofuels is Brazil, which has been developing its biofuel program for the last thirty years. Brazil has been the undisputed leader of using bioenergy in South America, "with a strong State role, technological developments and a growing role for biofuels in Brazil's transportation system make it unique among developing countries."<sup>107</sup> The government of Brazil has been heavily involved in the development of their bioenergy program. In 1975 their ethanol production program was launched, using sugar cane to produce their bioenergy products. Brazil has set its program on the foundation of "promoting rural development and reducing poverty and inequalities; strengthening its leadership in the transitional stage that involves introducing liquid biofuels to the international market; furthering its technological development in first-and second-generation biofuels; and demonstrating that the development of biofuels is compatible with the objectives of sustainability and environmental conservation."<sup>108</sup> The aim of Brazil's program is to invest more in biofuels in order to help those who lack employment and improve quality of life for those working on the project. Another aim is to be a strong player in the international bioenergy market. Brazil does not stand alone in their efforts to invest in biofuels; however, theirs is the most developed because of the involvement of the government. Countries in Latin America have yet to agree on any standard as far as the production and consumption of biofuels, however, many countries are following in Brazil's footsteps and making goals to use more biofuels in the future. Those who support Brazil's initiative suggest that "biofuels generate income and jobs, especially in rural areas, while producing clean, renewable energy."<sup>109</sup>

Despite all the positive feedback biofuels generate, there are many that do not agree with the sentiment that biofuels are the answer to the energy depletion question. Venezuela openly criticizes the development of biofuels, as well as Bolivia, Nicaragua and Cuba. In 2008 the Food and Agriculture Organization of the UN held a meeting about biofuels and the threat their production poses to the access of food in rural areas. Two chief opponents to the production of biofuels were Venezuela and Cuba, two powerful players in the Latin American market. Gerardo

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<sup>104</sup> "Biofuels threaten food access in Latin America: UN," Reuters, April 14, 2008 <http://www.reuters.com/article/2008/04/14/us-brazil-fao-biofuels-idUSN1440379820080414>.

<sup>105</sup> "Biofuels-Advantages and Trade Barriers," United Nations Conference on Trade and Development, 4 February 2005 [http://www.unctad.org/en/docs/ditcted20051\\_en.pdf](http://www.unctad.org/en/docs/ditcted20051_en.pdf).

<sup>106</sup> "Brazil, Argentina and Colombia lead biofuel Production in the Region," ECLAC Washington Office, March 29, 2011 <http://www.eclac.cl/cgi-bin/getProd.asp?xml=/prensa/noticias/comunicados/8/42938/P42938.xml&xsl=/prensa/tpl-i/p6f.xsl&base=/colombia/tpl/top-bottom.xslt>.

<sup>107</sup> "The Contribution of Biofuels to the Sustainability of Development in Latin America and the Caribbean: Elements for Formulating Policy," Economic Commission for Latin America and the Caribbean, 2008 <http://www.eclac.cl/publicaciones/xml/7/34977/lcw219i.pdf>.

<sup>108</sup> Ibid

<sup>109</sup> "Biofuels are no Villain," Luiz Inácio Lula da Silva, UN Chronicle, 2008 [http://www.update.un.org/wcm/content/site/chronicle/cache/bypass/lang/en/home/archive/issues2008/pid/5098?ctnscroll\\_articleContainerList=1\\_0&ctnlistpagination\\_articleContainerList=true](http://www.update.un.org/wcm/content/site/chronicle/cache/bypass/lang/en/home/archive/issues2008/pid/5098?ctnscroll_articleContainerList=1_0&ctnlistpagination_articleContainerList=true).

Rojas, Vice Minister for Rural Development in Venezuela said that “without food safety (for the poor) we can’t even think about biofuels...it could create enormous food deficits and social unrest.”<sup>110</sup> Jose Antonio Marcondes Carvalho of Cuba has also expressed its support of Venezuela’s idea by saying that “it is unacceptable for poor countries, which account for 15 percent of the world’s cars, to produce clean fuels for the rich...we could all save hundreds of millions of dollars and not use a single hectare (of land) with energy efficiency measures.”<sup>111</sup> It is clear that the production of biofuels could have a negative impact on the production of food by creating competition for land. The competition for land could cause an increase in the prices of food, as well as the prices of ethanol. These concerns are met by a decrease in cooperation between certain Member States, however, each are working towards a sustainable solution to these issues. Venezuela and Cuba are not the only member states to disagree on the biofuel question, Member States like Mexico and Argentina are calling for further research to be done on the use of biofuels and any environmental risk that may be associated with their production.<sup>112</sup>

Currently Argentina, Colombia and Brazil have developed the most successful biofuel programs, and countries like Guyana, Suriname, Cuba, Jamaica and Grenada have the potential to develop substantial biofuel programs. The Caribbean, who shows no clear opposition to the production of biofuels lacks the ability to invest in biofuels because they are simply too poor and lack the financial capability of investing in the market. The regional tension and reliance on fossil fuels has sparked a heated debate between different Member States in the region, however, as more research is presented talks remain on the table at ECLAC meetings.

### ***Benefits of Biofuels***

The benefits of using biofuels vary from region to region; one common benefit is the potential is for international trade. Member States that invest in the biofuel market are open to a large international trading system that could develop exponentially as more countries develop biofuels. There is a strong potential market for bioethanol and biodiesel, by 2020 the “amounts will be functionally equivalent to 48 million tons of oil, and 35 million tons of oil respectively.”<sup>113</sup> In these terms the potential profit than can be earned by selling ethanol will be the equivalent of selling 48 million tons of oil, and for biodiesel, the potential profit is equivalent to selling 35 million tons of oil. The prices of oil fluctuate daily; however, it still generates billions of dollars worth profit annually. The potential for trade “depends on the availability of new technologies, the implantation of standards for the sustainable production of biofuels, and discussions regarding protectionist measures such as tariff barriers.”<sup>114</sup> The development of the biofuel market will depend on access to technologies that make it possible to participate in such a large international market. One of the biggest concerns with this benefit is who will have access to biofuel technology and how the technologies will be implemented for Member States. Biofuels, especially bioethanol, have become a high priority for the US and the EU because they are less expensive than oil and are more environmentally friendly.<sup>115</sup> The more those countries invest in biofuels the more the market will expand, including more countries. As the biofuel market develops tariffs and taxes will inevitably be a part of the market, but nonetheless market growth is exponential. A key thing to remember is that if a country can grow crops they are capable of producing biofuels, perhaps enabling countries to be self sufficient in terms of their energy supply.

Along with the development of a biofuel market, another benefit of investing in biofuels is the jobs that are generated through the agricultural work of farming crops for biofuels. The development of biofuels could potentially lead to the creation of new jobs, especially in rural areas that do not have access to a variety of different jobs. With the addition of new jobs available income growth would be expected to increase as well, which will improve the quality of life for those who participate in the growth of crops for biofuels. These factors would lead to a general

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<sup>110</sup> “Biofuels threaten food access in Latin America: UN,” Reuters, April 14, 2008  
<http://www.reuters.com/article/2008/04/14/us-brazil-fao-biofuels-idUSN1440379820080414>.

<sup>111</sup> Ibid

<sup>112</sup> Ibid

<sup>113</sup> “The Contribution of Biofuels to the Sustainability of Development in Latin America and the Caribbean: Elements for Formulating Policy,” Economic Commission for Latin America and the Caribbean, 2008  
<http://www.eclac.cl/publicaciones/xml/7/34977/lcw219i.pdf>.

<sup>114</sup> Ibid

<sup>115</sup> “Biofuels-Advantages and Trade Barriers,” United Nations Conference on Trade and Development, 4 February 2005  
[http://www.unctad.org/en/docs/ditcted20051\\_en.pdf](http://www.unctad.org/en/docs/ditcted20051_en.pdf).



improvement in the well-being of those involved in the production of biofuels at every level.<sup>116</sup> Rural communities would benefit most from involvement in the production of biofuels through revitalization of agriculture, rural job creation, and crop diversification.<sup>117</sup> The benefits of biofuel production will take time to develop; however, there are long term benefits to biofuels. The potential for job creation is large, especially when looking at Brazil's example. Their biofuels program created more than 700,000 jobs directly in biofuels and indirectly created almost 3.5 million jobs. The potential for creating a strong labor force in biofuels is there, not every country may have this result but it proves that the many jobs can be created in biofuel production.<sup>118</sup>

The benefits of using biofuels also transcend to an environmental level, as well as an economic level. Biofuels are carbon neutral, and therefore do not emit any greenhouse gases and do not pollute the earth like other energy sources.<sup>119</sup> In the past ten years the world has focused on how to reduce greenhouse gases that are destroying the earth's atmosphere. Fossil fuels such as oil, natural gas and coal release large amount of greenhouse gases and "trap infrared radiation (heat) emitted from the earth, preventing it from escaping into space."<sup>120</sup> The results of these trapped gases have long-term negative consequences because they contribute to global warming. In the production of oil there is always the threat of spills, causing severe damage to the environment. In 1989 the Exxon Valdez spill is one of the most famous oil spill disasters in history. The tanker that hit a reef in northern Alaska led to 10.4 million gallons of oil into the water, causing serious environmental damage. The 1,300 mile shoreline of the Prince William Sound caused damage to wild and sea life, as well as to the ocean water.<sup>121</sup> Recently the oil spill in the Gulf of Mexico caused by BP has costs nearly \$40 billion in damages. One of the greatest benefits of biofuels is their carbon neutrality because "these fuels produce no net output of carbon dioxide as when they grow they absorb the same amount of carbon dioxide as when they are burned."<sup>122</sup> The production of biofuels inevitably cause some greenhouse gas emission due to the fertilizer production that is used to help the plants grow, however, their output is small when compared to other energy sources. One of the last main benefits of the production of biofuels as an energy source is the security of supply that would occur. Since biofuels are a renewable energy source they will be available in years to come, whereas fossil fuels have a finite amount that will be only be available for a certain amount of time. It is important to remember as well that oil prices will always be subject to the will of OPEC, which can vary greatly.

Due to the often opposing views on biofuels ECLAC has furthered its research into the production of biofuels, assessing both the risks and benefits of production. As mentioned, ECLAC has launched three studies into the production of biofuels, and has highlighted the advantages of bioethanol fuels. In 2008 ECLAC held a conference an international conference on biofuels and highlighted the benefits of biofuel production and the efforts made by countries in the Latin American region. ECLAC is focusing on finding sustainable forms of energy and how it can benefit those who help produce biofuels.<sup>123</sup>

### ***Challenges of Biofuels***

One of the biggest challenges facing biofuel production is the argument that they take away land that could be used for the production of food. Several countries, including Venezuela, Cuba and Mexico argue that the production of

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<sup>116</sup> "The Contribution of Biofuels to the Sustainability of Development in Latin America and the Caribbean: Elements for Formulating Policy," Economic Commission for Latin America and the Caribbean, 2008  
<http://www.eclac.cl/publicaciones/xml/7/34977/lcw219i.pdf>.

<sup>117</sup> "Implication for the Use of Biofuels with Special Reference to the Caribbean," Economic Commission for Latin America and the Caribbean, 14 December 2007 <http://www.eclac.cl/publicaciones/xml/3/32103/L.148.pdf>.

<sup>118</sup> "Biofuels-Advantages and Trade Barriers," United Nations Conference on Trade and Development, 4 February 2005  
[http://www.unctad.org/en/docs/ditcted20051\\_en.pdf](http://www.unctad.org/en/docs/ditcted20051_en.pdf).

<sup>119</sup> "Implication for the Use of Biofuels with Special Reference to the Caribbean," Economic Commission for Latin America and the Caribbean, 14 December 2007 <http://www.eclac.cl/publicaciones/xml/3/32103/L.148.pdf>.

<sup>120</sup> Ibid

<sup>121</sup> "Energy & The Environment: Myths and Facts," The Manhattan Institute, Drew Thornley, 2009  
<http://www.manhattan-institute.org/energymyths/>.

<sup>122</sup> "Implication for the Use of Biofuels with Special Reference to the Caribbean," Economic Commission for Latin America and the Caribbean, 14 December 2007 <http://www.eclac.cl/publicaciones/xml/3/32103/L.148.pdf>.

<sup>123</sup> "ECLAC Highlights Advantages of Sugarcane-based Bioethanol over other biofuels," ECLAC Press Release, 18 November 2008 [http://www.portofentry.com/site/root/resources/industry\\_news/7347.html?changer-id=ama35kPgg3ne&lang=es](http://www.portofentry.com/site/root/resources/industry_news/7347.html?changer-id=ama35kPgg3ne&lang=es).

biofuels leads to lack of access to food and poverty. There is the potential that biofuel production could lead to negative impacts on the environment, including “land deterioration, water use, changes in land use that could affect the food supply, concentration of land ownership, the exclusion of small and medium-sized producers, and threats to biodiversity.”<sup>124</sup> These challenges are what prohibit some Member States from engaging in the production of biofuel. Out of all these possible challenges the one most heavily debated is food security. As these foods, mostly starches and sugarcane, are used for biofuels the land they occupy takes away from areas that could be used to grow food for human consumption. There are four main parts to the impact biofuels production has on food security, availability, access, stability and use.<sup>125</sup> In simple terms, if the land is being used for biofuel production it is not being used to grow food for hungry people. It is also important to note that the production of biofuels does require the use of some raw materials, which can raise their overall price for everyone, not just producers. This problem can lead to lack of access to food for the world’s most poor. If the price of food is raised too high because of biofuel production those who live in low-income areas could have trouble purchasing food to consume. As the biofuel market continues to expand it could lead to a lack of stability in the prices of food if there are too many fluctuations. As prices for fuel and raw materials change it can spill over into other areas, such as the supply of food, which affects its overall use.<sup>126</sup> These concerns are heavily researched by the FAO, who “estimates that over 850 million people are under-nourished world-wide, and that over 96% of these are in developing countries with annual growth rates of 1.1%, while two thirds of these are children.”<sup>127</sup>

It is clear that in deciding whether or not to invest in biofuel production is a serious matter and can lead to negative outcomes. This debate over food versus fuel has spilled over into international trade, which is affecting “food sovereignty, rural livelihoods, forests and other ecosystems, and these negative impacts are expected to accumulate rapidly.”<sup>128</sup> There is also concern that the production of biofuels will increase competition for land, rural unemployment (which has been challenged by Brazil’s program), destruction of traditional farming practices, destruction of watersheds, competition for water and droughts.<sup>129</sup> It is believed that those who will be most negatively affected by these consequences are indigenous populations and women, groups that are already marginalized by society, especially in Latin America and the Caribbean. These consequences have led to seriously politicized debates in the region, particularly those who hold opposing viewpoints, like Venezuela and Brazil.

A major challenge to biofuel production that has been highlighted by the UN and ECLAC is policy implementation. There has always existed a struggle between the decisions made in government and the affect it has on their citizens. The area of biofuel production does not differ in this area. One chief problem with land usage is the occurrence of land divisions for biofuels without consulting small farmers. The increased land competition causes problems between larger, more commercial farms and smaller, family owned farms. The development of biofuel could cause major problems between the two and negatively affect small landowners if strict policies are not developed at the national level.<sup>130</sup> Those who cannot afford to invest in large-scale biofuel production will be kept from the market, leading to a monopolization of the market. If biofuels are produced on a much larger scale in the future price competition will isolate larger firms, cutting out those who could most benefit from biofuel production. The lack of transparency in the biofuel market already exists in the market and could become worse as larger firms enter the market. These large, private sector firms enter contracts with smaller farmers yet they take the largest share in any profit that is earned. It is important that the policies implemented are understood by farmers so that they can receive their share in the profits.<sup>131</sup> The challenge for governments is to initiate policies that allow equal access to the biofuel market. There are many factors to consider when developing regulations for biofuel production, “policymakers need to decide on issues such as allocation of water for food and fuel; how to handle losers in the

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<sup>124</sup> “The Contribution of Biofuels to the Sustainability of Development in Latin America and the Caribbean: Elements for Formulating Policy,” Economic Commission for Latin America and the Caribbean, 2008 <http://www.eclac.cl/publicaciones/xml/7/34977/lcw219i.pdf>.

<sup>125</sup> Ibid

<sup>126</sup> Ibid

<sup>127</sup> Ibid

<sup>128</sup> “Implication for the Use of Biofuels with Special Reference to the Caribbean,” Economic Commission for Latin America and the Caribbean, 14 December 2007 <http://www.eclac.cl/publicaciones/xml/3/32103/L.148.pdf>.

<sup>129</sup> Ibid

<sup>130</sup> “Biofuel expansion: Challenges, risks and opportunities for rural poor people,” International fund for Agricultural Development, Commission on Sustainable Development, May 2008 [http://www.un.org/esa/sustdev/csd/csd16/documents/bp10\\_2008.pdf](http://www.un.org/esa/sustdev/csd/csd16/documents/bp10_2008.pdf).

<sup>131</sup> Ibid

biofuel market, such as poor consumers and the landless; and how to help people take advantage of new opportunities. Mechanisms are needed to deal with these issues.”<sup>132</sup> There are many areas that could be affected by biofuel policies, including transportation, agriculture, the environment and most importantly energy. There are many levels that must be considered when a government is developing biofuel policies. Ms. Alicia Bárenca, the current Executive Secretary of ECLAC, “emphasized that promoting research, development and innovation policies is key to advancing towards an energy paradigm alternative to fossil fuels without affecting food production, of low environmental impact and high energy and economic competitiveness.”<sup>133</sup> As many challenges as there are to biofuel production there are many opportunities to develop sustainable biofuel programs in Latin America and the Caribbean.

### ***Opportunities for the Development of Biofuels***

There are many areas in the Latin American region that have the potential to develop biofuel programs, as well as areas in the Caribbean. As previously mentioned, Brazil, Colombia and Argentina are developing strong programs that serve as a model for other Member States in the region but there is much potential in other areas. The subregions in Latin America and the Caribbean can be broken down and explored based on their ability to develop biofuel programs. In the Caribbean they rely almost exclusively on oil imports from either Venezuela or Trinidad and Tobago. The area is full of potential to develop renewable sources of energy; however, they lack the financial capability of starting any programs geared towards biofuels. The Caribbean is well situated to develop wind energy, hydropower and solar-thermal energy.<sup>134</sup> Barbados, Saint Lucia and Jamaica all have expressed interest in developing some form of renewable energy, particularly biofuels. In most areas though there are no governmental regulations that specifically deal with the development of biofuels or renewable sources of energy. In the Caribbean the most potential lies in the development of wind energy or hydropower.<sup>135</sup>

In Central America is a unique region in Latin America because it actually has “regulations regarding the development of RES at both national and subregional levels.”<sup>136</sup> Costa Rica has developed a governmental plan that encourages the production of renewable sources of energy and biofuels, as well as El Salvador, Honduras and Nicaragua. The most developed programs harness such renewable sources of energy as wind and hydropower; however, biofuels have yet to be fully explored in the region. South America is full of areas that truly have the capability to develop biofuel programs. Guyana has the potential for biofuel production and could benefit from involvement in the international biofuel market. Currently 56.3% of their energy supply comes from oil and 41% comes from renewable sources. The potential in Guyana is in cane production, which is the base of Brazil’s program. A deeper look into the Latin America and Caribbean region’s potential for biofuel development reveals that many countries have the capability to implement biofuel programs throughout the region. There are many Member States that have the potential to develop programs as strong as Brazil, Colombia and Argentina. ECLAC has been a leader in strong regional bodies in the UN that research their area and provide support to its Member States. ECLAC encourages the region to continue to explore sustainable solutions to the energy situation in the region.

### ***Conclusion***

Latin America and the Caribbean is one of the fastest growing regions in the world and is becoming a more dominant figure in the global community. The region has made many strides in developing strong economies that are prominent in international trade and development. One of the main challenges for regional development of biofuels is the reliance on oil and other fossil fuels. Latin America and the Caribbean has a limited amount of non-renewable resources coupled with an exponentially rising consumption of energy due to industrialization within the developing nations, which makes transitioning to renewable energy sources difficult. Many Member States, despite

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<sup>132</sup> Ibid

<sup>133</sup> “ECLAC Highlights Advantages of Sugarcane-based Bioethanol over other biofuels,” ECLAC Press Release, 18 November 2008 [http://www.portofentry.com/site/root/resources/industry\\_news/7347.html?changer-id=ama35kPgg3ne&lang=es](http://www.portofentry.com/site/root/resources/industry_news/7347.html?changer-id=ama35kPgg3ne&lang=es).

<sup>134</sup> “Renewable Energy Sources in Latin America and the Caribbean,” Economic Commission for Latin America and the Caribbean, May 2004 [http://www.eclac.cl/publicaciones/xml/1/14981/Lcl2132i\\_s.pdf](http://www.eclac.cl/publicaciones/xml/1/14981/Lcl2132i_s.pdf).

<sup>135</sup> Ibid

<sup>136</sup> Ibid

the challenges, have developed biofuel programs, along with other renewable sources of energy. Brazil, Argentina, and Colombia are great models for renewable energy programs. Member States of ECLAC have the potential to develop every kind of biofuel, like bioethanol, biodiesel and biomass, and thus reduce their dependence on oil, which may come with both negative and positive consequences. The region as a whole relies heavily on oil, which is can hinder the development of biofuels programs. It is important to note that many countries within ECLAC have the ability to produce biofuels but lack the support and means of investing in the regional development of biofuels.

### ***Committee Directives***

Delegates should keep in mind that developing sustainable sources of energy is reaching a critical point in the world's history. Latin America and the Caribbean have the potential to be leaders in the biofuel market and many subregions specifically have the opportunity to develop biofuels. It is also important to consider which kind of biofuel or combinations of biofuels would best meet the energy needs of the Member State. Delegates should also consider regional cooperation with the development and innovation around mass production of biofuels. How can regional cooperation aid developing nations in becoming fast leaders in the industry? ECLAC has done a lot of research over the past few years into the opportunities and risks in the development of regional biofuels. Questions to consider would be how governments can development biofuels in their region efficiently and with access available to as many people as possible? What would be the implications for governments and domestic citizens developing biofuels? How many Member States rely on oil and what are negative consequences of relying on oil? How could the Member State benefit from the development of biofuels and any barriers to development? How can the innovation and production of biofuels aid in the creation of sustainable economic growth and development specifically in developing Member States.

## **III. Fighting Drug Production and Trafficking in Latin American Member States**

### ***Introduction***

The fight against drug production and trafficking has been a global issue debated by Member States of the United Nations for decades. Many global initiatives have been adopted in an effort to fight the production and trafficking of illegal drugs. In 1958, the Economic and Social Council (ECOSOC) passed resolution 698 J (XXVI) creating a single convention on narcotic drugs with the intent to create a single agreement with supremacy over all existing treaties between Member States.<sup>137</sup> This treaty prohibited the production and supply of narcotic drugs with the exception of medicinal use and was the first time narcotic drugs were declared illegal worldwide.<sup>138</sup> Twenty-one out of 33 ECLAC Member states were present in this convention.<sup>139</sup> The three main narcotic substances mentioned in the resolution, especially following ratification in 1972, include cocaine, cannabis (marijuana) and opiates.<sup>140</sup> This treaty is especially important to Latin American nations as the top three producers of coca plants, the origin of cocaine, worldwide are Columbia, Peru and Bolivia.<sup>141</sup> These three nations account for nearly all global production of coca plants with Columbia leading production out of the three countries.<sup>142</sup> Columbia is the only nation which produces all three major substances.<sup>143</sup> 60 to 65 percent of cocaine produced in Latin America is trafficked to the United States with Mexico serving as the main point of entry.<sup>144</sup> The remainder is trafficked through Caribbean nations with the Dominican Republic, Haiti and Puerto Rico serving as the main ports.<sup>145</sup> Most of the cocaine sent to the United States and Europe is derived from Columbia with Peru and Bolivia serving the southern cone region of

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<sup>137</sup> *Single Convention on Narcotic Drugs 1961 as amended by the 1972 Protocol*. The United Nations. March 24, 1972.

<sup>138</sup> *Ibid.*

<sup>139</sup> *Ibid.*

<sup>140</sup> *Ibid.*

<sup>141</sup> *Ibid.*

<sup>142</sup> Marco Sibaja. "UN Reports coca leaf production down in L America". Taiwan News. June 24, 2011.

<sup>143</sup> "The Social Agenda: drug production in Latin America." *Social Panorama of Latin America 1999-2000*. The Economic Commission for Latin America and the Caribbean. 2000.

<sup>144</sup> Peter Chalk. *The Latin American Drug Trade: Scope Dimensions, Impact, and Response*. Rand Project Air Force. 2011.

<sup>145</sup> *Ibid.*

Brazil, Argentina and Chile.<sup>146</sup> South American consumption of cocaine is estimated at around 1 percent of the total population with Brazil containing the highest number of users at 900,000.<sup>147</sup>

Latin America and the Caribbean is considered one of the most unequal regions in the world in regards to wealth, education, water, electricity and voice. Columbia is ranked as the 9<sup>th</sup> most unequal country with 85 percent of the population living on less than US\$ 3 per day.<sup>148</sup> Coupled with the fact that Columbia not only the largest producer of cocaine in the world but also is the only nation to produce all three main categories of narcotic drugs furthers the idea that extreme poverty furthers the drug trade. This extreme poverty present throughout the Latin American and Caribbean region often pushes local farmers into the cultivation of narcotic raw materials in order to provide income for their families. To a certain extent, the drug trade stimulates local economies and improves the macro-economic environment for people who could not provide otherwise. Drug production and trafficking creates a boom and bust effect within many Latin American nations as drug traffickers do not have an integrated cultivation industry within many nations and depend on buying the illicit crops as needed from local farmers. This creates an environment that seems profitable for a short period for farmers in extreme poverty but eventually plunges them further into destitution.<sup>149</sup> Although there are clearly short-term economic incentives for participation in the drug trade, especially at a macro-economic level, nations tend to pay a high social and political price.<sup>150</sup>

### ***Cultivation and Consumption***

Cannabis is the most widely produced and used narcotic drug in the world according to a 2011 UN report on the world drug trade.<sup>151</sup> Mexico has recently increased their production of marijuana as major cartels in Columbia have broken due to government initiatives.<sup>152</sup> Marijuana is Mexico's largest agricultural export and generates billions of dollars each year for organized crime and cartels. In 2010 production of marijuana in Mexico is reported to have increased by 35 percent to around 30,000 acres planted.<sup>153</sup> Cannabis is grown throughout the South American cone as well with production still high in most countries within Central and South America. 70 percent of global cannabis farm seizures in 2009 occurred within Central and South America with 75 percent of these seizures occurring in South America. Trafficking of marijuana is mainly intra-regional with Mexico as the primary source for the United States. An average of 3 percent of the population within South America and Central America are consumers of marijuana while estimates show that up to 7.5% of the population within the Caribbean consume the drug.<sup>154</sup> This is attributed to the fact that the Caribbean is used as a main trafficking route for all drugs not going to the United States.

Columbia is also the leading producer of opiates specifically supplying North American countries.<sup>155</sup> Opium is created from poppy seeds and mainly leads to the production of heroin within North America. Columbia is said to be the main producer for around half of the heroin consumed east of the Mississippi within the United States.<sup>156</sup> The opium market is also high in Mexico as well as in Guatemala and Peru – these nations typically serve the heroin market within western United States. Mexico was traditionally a shipper of opiates however as government concentration on cannabis seizures is increasing, cartels are supplementing income with poppy farms.<sup>157</sup> Opiates are

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<sup>146</sup> Marco Sibaja. "UN Reports coca leaf production down in L America". Taiwan News. June 24, 2011.

<sup>147</sup> Ibid.

<sup>148</sup> *Alternative Development: A Global Thematic Evaluation*. UN Office on Drugs and Crime . United Nations Publications: New York. December 2005. [http://www.unodc.org/pdf/Alternative\\_Development\\_Evaluation\\_Dec-05.pdf](http://www.unodc.org/pdf/Alternative_Development_Evaluation_Dec-05.pdf)

<sup>149</sup> *Economic and Social Consequences of Drug Abuse and Illicit Trafficking*. United Nations Office on Drugs and Crime. 1999.

<sup>150</sup> Ibid.

<sup>151</sup> "UN Report: Marijuana most popular illicit substance in region" Kaieteur News Online. June 24, 2011.

<http://www.kaieteurnewsonline.com/2011/06/24/un-report-marijuana-most-popular-illicit-substance-in-region>.

<sup>152</sup> "The Social Agenda: drug production in Latin America." *Social Panorama of Latin America 1999-2000*. The Economic and Commission for Latin America and the Caribbean. 2000.

<sup>153</sup> Jason Beaubien. "Cash from Marijuana Fuels Mexico's Drug War." National Public Radio. May 19, 2010.

<http://www.npr.org/templates/story/story.php?storyId=126978142>.

<sup>154</sup> "UN Report: Marijuana most popular illicit substance in region" Kaieteur News Online. June 24, 2011.

<http://www.kaieteurnewsonline.com/2011/06/24/un-report-marijuana-most-popular-illicit-substance-in-region>.

<sup>155</sup> Peter Chalk. *The Latin American Drug Trade: Scope Dimensions, Impact, and Response*. Rand Project Air Force. 2011.

<sup>156</sup> Ibid.

<sup>157</sup> Ibid.

still the least grown of the three main narcotic substances however are on the rise as production and trafficking to North America is shifting from East Asia to Latin America.<sup>158</sup>

In accordance with the global fight on drugs, the United Nations passed the “United Nations Convention Against Illicit Traffic in Narcotic Drugs and Psychotropic Substances in 1988.” The convention serves to add legal mechanisms to the Single Convention on Narcotic drugs passed in 1961 and ratified in 1972. The convention requires cooperating nations to ban the personal possession of drugs and mandates governments to aid in the tracing and seizing of drug related assets of members involved in organized crime.<sup>159</sup> A few Latin American nations interpret this convention as requiring nations to criminalize the cultivation of certain illicit drugs leading to Bolivia and Columbia submitting reservations to the treaty. Bolivia submitted for the record that the interpretation of the criminalization of the use, consumption, possession, purchase or cultivation of the coca leaf was a direct violation of their national constitution. Bolivia stated in its reservation that the coca leaf is not of itself a drug and it is the addition of chemicals, which are not manufactured within the country that created the illegal substance of cocaine. The Bolivian government did state, however that they would take all necessary measures to control the cultivation of the coca leaf for the production of cocaine and take legal measures against the consumption and purchase of cocaine but not the coca leaf in raw form.<sup>160</sup> The government of Columbia submitted a similar reservation to the convention stating that the criminalization of cultivation of the coca leaf must be combined with a policy of alternative development. The Columbian government felt that without providing sufficient alternatives, the criminalization of the coca leaf violated the rights of the indigenous people whose culture was based on the growth of the coca leaf.<sup>161</sup>

### ***Drug Trafficking***

Estimates show that around half of the cocaine produced within Latin America is trafficked through Caribbean nations. Haiti and Puerto Rico lead trafficking for Marijuana although over the past few years, Mexico and Canada have been used as transit points for the United States and Europe.<sup>162</sup> Between 60 and 65 percent of all cocaine is trafficked to the United States through Mexico and Central America. The remainder is trafficked through the Caribbean to the United States as well Europe and Africa.<sup>163</sup> A majority of the Columbian cocaine is trafficked to Europe either through the Caribbean or West Africa is exported out of the southern cone through Venezuela.<sup>164</sup> In 2005, President Hugo Chavez accused the Drug Enforcement Agency (DEA) of espionage against his government and ceased all cooperation and communication with the agency. As a result, cocaine seizures by the DEA drastically decrease leading and equally drastic increase in exportation of cocaine out of the Venezuelan borders.<sup>165</sup>

Drug trafficking involves many different players and over the past decade the mix of individuals involved in trafficking has changed. Large transnational smugglers and large cartels lead the charge of drug trafficking and rely mostly on small farmers and individual dealers to move the product within cities. At a local level women and young adults are beginning to participate in microtrafficking in order to supplement income in poverty-stricken areas.<sup>166</sup> Women’s involvement in drug trafficking as increased over the past decade as many women take over the previous duties of the man of a household when he is forced to flee or is killed. Many low level mules are forced into the

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<sup>158</sup> “The Social Agenda: drug production in Latin America.” *Social Panorama of Latin America 1999-2000*. The Economic Commission for Latin America and the Caribbean. 2000.

<sup>159</sup> *United Nations Convention Against Illicit Traffic in Narcotic Drugs and Psychotropic Substances in 1988*. The United Nations. December 20, 1988.

<sup>160</sup> *United Nations Convention Against Illicit Traffic in Narcotic Drugs and Psychotropic Substances in 1988*. The United Nations. December 20, 1988.

<sup>161</sup> *Ibid.*

<sup>162</sup> “The Social Agenda: drug production in Latin America.” *Social Panorama of Latin America 1999-2000*. The Economic Commission for Latin America and the Caribbean. 2000.

<sup>163</sup> Peter Chalk. *The Latin American Drug Trade: Scope Dimensions, Impact, and Response*. Rand Project Air Force. 2011.

<sup>164</sup> *Ibid.*

<sup>165</sup> *Ibid.*

<sup>166</sup> “The Social Agenda: drug production in Latin America.” *Social Panorama of Latin America 1999-2000*. The Economic Commission for Latin America and the Caribbean. 2000.

trade by either men in their family or as a way to gain domestic control.<sup>167</sup> According to a 2009 study, the number of women arrested for drug trafficking in Brazil rose two-hundred fifty-three percent over 3 years.<sup>168</sup> It is important for ECLAC Member States to understand the implications that drug trafficking are having on vulnerable groups while working to attack this serious problem.

Traffickers are constantly seeking new routes and tend to pick on areas with weak political and legal systems. Once the drug trade becomes prevalent in these areas it erodes the standards for socialization and creates a viscous circle of poverty and violence.<sup>169</sup> Urban youths in developing nations are the most vulnerable due to issues with self-esteem, breakdowns in the family structure common in these areas, and eroded social values.<sup>170</sup> The normalization of crime and drugs leads to a replacement of the family with membership into a gang. The gang then becomes the primary source of support for the individual which entrenches the area further in the drug trade.<sup>171</sup> The tendency for involvement in the drug trade is increasing and is starting at earlier and earlier ages. In a survey by ECLAC to Member States, it was found that many nations attribute this to a failure of public view on drug trafficking and too much of a focus on crop eradication within Latin America States.<sup>172</sup> Also found in this study was that many nations recognized that vulnerable groups such as women and children in urban areas were the most affected by the drug trade within their local area. These same nations also agreed that special attention was not being made to these vulnerable groups when charged with crimes related to drugs.<sup>173</sup>

### ***Extreme Poverty Fueling the Drug Trade***

As mentioned above, the Caribbean is the main route used for trafficking of narcotic drugs to Europe and the United States. Many studies on drugs, poverty and violence in the Caribbean show that many men and women become involved in the drug trade as a coping mechanism for extreme poverty within these nations.<sup>174</sup> The increased involvement in the drug trade is attributed to the extreme amount of poverty faced by many Caribbean nations. An ECLAC report on the Caribbean determines the growth in youth involvement in drug-related crime is caused by a government failure to create an environment of sustainable economic growth and stability<sup>175</sup> Within the Dominican Republic the use of drugs by locals who also traffic the substances has led to a national health crisis. The public health system has run out of assets necessary to properly support all the addicts.<sup>176</sup> National governments must approach the drug-war, and specifically the increase in involvement by young people and women in the drug-trade, by fighting at the source of entry: extreme poverty.

ECLAC Member States must find the balance between fighting the drug war not only at the cultivation level but must also enact policies and programs which work to fight drug trafficking as well. Policies must target populations which are at risk to be lured into the drug trade due to extreme poverty. These types of policies will work to decrease the involvement with the drug trade and can aid governments to control the supply more effectively.<sup>177</sup> In a message in June 2010 for the International Day against Drug Abuse and Illicit Trafficking by UN Secretary General Ban Ki-Moon stated:

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<sup>167</sup> Howard Campbell. "Female Drug Smugglers on the U.S.-Mexico Border: Gender, Crime, and Empowerment." *Anthropological Quarterly*. Volume 81. Number 1. Winter 2008. pp 233-267.

<sup>168</sup> "The risks of women drug mules in Brazil." BBC News. December 21, 2009. <http://news.bbc.co.uk/2/hi/8418878.stm>.

<sup>169</sup> "The Social Agenda: drug production in Latin America." *Social Panorama of Latin America 1999-2000*. The Economic Commission for Latin America and the Caribbean. 2000.

<sup>170</sup> Ibid.

<sup>171</sup> "Exploring Policy Linkages between Poverty, Crime and Violence: A Look at Three Caribbean States." The Economic Commission for Latin America and the Caribbean. May 19, 2008.

<sup>172</sup> "The Social Agenda: drug production in Latin America." *Social Panorama of Latin America 1999-2000*. The Economic Commission for Latin America and the Caribbean. 2000.

<sup>173</sup> Ibid.

<sup>174</sup> "Caribbean Development Report: Volume II." The Economic Commission for Latin America and the Caribbean. December 2009.

<sup>175</sup> Ibid.

<sup>176</sup> Peter Chalk. *The Latin American Drug Trade: Scope Dimensions, Impact, and Response*. Rand Project Air Force. 2011.

<sup>177</sup> "The Social Agenda: drug production in Latin America." *Social Panorama of Latin America 1999-2000*. The Economic Commission for Latin America and the Caribbean. 2000.

“The illicit drug trade...undermines governance, institutions and societal cohesion. Drug traffickers typically seek routes where the rule of law is weak. In turn, drug-related crime deepens vulnerability to instability and poverty. To break this vicious cycle, it is essential to promote development in drug-growing regions. Our work to achieve the Millennium Development Goals and fight drugs must go hand in hand. In seeking to eradicate illicit crops, we must also work to wipe out poverty”,<sup>178</sup>

Countries must find a way to optimize efforts already in place within poor urban areas to include initiatives which decrease the social and economic impact of the drug trade including work with NGOs and the private sector.<sup>179</sup>

### ***Economic and Physical Security***

As mentioned previously, the drug trade has many different stakeholders. Most of these players are lead and controlled by organized crime in the form of cartels. The cartels in charge of the drug trade intimidate and threaten the population into either participating or not reporting drug trade activities in the local area.<sup>180</sup> If activities are reported, cartels often bribe politicians and local police and are not affected.<sup>181</sup> Specifically, in Mexico the cartel’s control of the drug trade has led to a breakdown in the political and social system of the country. Extreme corruption of major political figures and local police has led to an extremely violent environment where it is not uncommon for victims, including uncooperative officials, to be beheaded, dismembered and openly murdered in the streets of major Mexican cities.<sup>182</sup> Studies show that between 2006 and 2008 11,500 public servants were fined or fired for involvement with cartels and in 2010, one-tenth of police officers were fired for failing to pass anti-corruption tests.<sup>183</sup> Since 2006 when Mexican President Felipe Calderon declared war on the cartels over 24,000 people have been killed in drug-related violence.<sup>184</sup>

In addition to the increased violence and social dis-reform, drug trafficking is often linked to the trafficking of firearms. This correlation is a plague in many Caribbean nations. Drug-related crime and violence has risen over the past decade in Caribbean nations.<sup>185</sup> Jamaica now maintains one of the highest crime rates within the Caribbean region. In 2007, the murder rate in Jamaica rose by 17.5 percent over the previous year; police murders increased by 90% within the same time period.<sup>186</sup> Gang violence and involvement in the drug trade is blamed for this increase in crime rates within Jamaica and is furthered by the fact that around 70% of arrested individuals were young males who were involved in local gangs.<sup>187</sup> Gang violence has also caused many citizens to be forced from their homes for non-cooperation or to flee from the severe violence caused by the drug trade. In 2008, the United Nations High Commissioner for Refugees (UNHCR) recorded 27,000 internal refugees within Columbia displaced due to drug-related violence.<sup>188</sup>

The increase of violence and poverty spawned from the drug trade is having damaging effects on the political and economic security of nations. Gangs and cartels have created a multi-billion dollar black market which more than supports a lifestyle that could not be afforded otherwise.<sup>189</sup> Local farmers and residents of poverty-stricken areas

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<sup>178</sup> <http://www.un.org/News/Press/docs/2010/sgsm12969.doc.htm>

<sup>179</sup> “The Social Agenda: drug production in Latin America.” *Social Panorama of Latin America 1999-2000*. The Economic Commission for Latin America and the Caribbean. 2000.

<sup>180</sup> Jason Beaubien. “Cash from Marijuana Fuels Mexico’s Drug War.” National Public Radio. May 19, 2010. <http://www.npr.org/templates/story/story.php?storyId=126978142>.

<sup>181</sup> Ibid.

<sup>182</sup> Peter Chalk. *The Latin American Drug Trade: Scope Dimensions, Impact, and Response*. Rand Project Air Force. 2011.

<sup>183</sup> Ibid.

<sup>184</sup> Jason Beaubien. “Cash from Marijuana Fuels Mexico’s Drug War.” National Public Radio. May 19, 2010. <http://www.npr.org/templates/story/story.php?storyId=126978142>.

<sup>185</sup> “Exploring Policy Linkages between Poverty, Crime and Violence: A Look at Three Caribbean States.” The Economic Commission for Latin America and the Caribbean. May 19, 2008.

<sup>186</sup> “Caribbean Development Report: Volume II.” The Economic Commission for Latin America and the Caribbean. December 2009.

<sup>187</sup> Ibid.

<sup>188</sup> Peter Chalk. *The Latin American Drug Trade: Scope Dimensions, Impact, and Response*. Rand Project Air Force. 2011.

<sup>189</sup> Clare Ribando Seelke, et al. “Latin America and the Caribbean: Illicit Drug Trafficking and U.S. Counterdrug Programs” Congressional Research Service. April 30, 2010. <http://fpc.state.gov/documents/organization/142364.pdf>.



often choose to participate in the drug trade as the financial benefits far outweigh a job in the legal sector.<sup>190</sup> These farmers often rely on 50 percent or more of their family income from narcotic raw material cultivation.<sup>191</sup> The problem lies in that statistically, local farmers typically only benefit from around 6 percent of the total profits of the drug production however oftentimes this minor amount is still greater than the amount of income that could be produced by legal means.<sup>192</sup> For this reason, drug cultivation and trafficking thrives in areas with low levels of human development and security as cartels can easily manipulate the local residents. Broad based development programs which work to improve the physical and economic security of an area has shown sustainable reductions in illegal activity.<sup>193</sup> Brazil has worked hard to implement macroeconomic policy which works to aid the poor in conjunction with reduction in drug consumption and trafficking. This has led to an environment which can balance social and economic change while participating in the drug war.<sup>194</sup>

### ***Alternative Development***

Alternative Development is an initiative used throughout the Latin American and Caribbean region by governments to strategically eradicate the cultivation of narcotic raw materials and replace the income with legal crops to local farms.<sup>195</sup> Cartels employ local poor farmers and indigenous people to cultivate the coca, cannabis and poppy materials which are then made into narcotic drugs.<sup>196</sup> Alternative development seeks to replace these crops within poverty-stricken and rural areas through the cultivation of legal crops as well as the raising of farm animals for sale in local and regional markets.<sup>197</sup> Currently, the United Nations Office on Drugs and Crime (UNODC) aids in implementing alternative development crops within three Latin America nations: Bolivia, Peru and Columbia. The Columbian government has worked extensively to eradicate the extensive production of the coca leaf within its borders mainly through alternative development initiatives. 2008 estimates show that around 60,000 households in Columbia were involved with the cultivation of the coca leaf.<sup>198</sup> Two main programs of alternative development are present in Columbia. “Products of Peace” help rural farmers eradicate the cultivation of illegal crops and replace these crops with legal crops such as beans, cacao, coffee, honey, dairy products and coconuts. The farmers are taught organic and environmentally friendly ways of cultivation which not only decrease the effect the crops have on the environment but help aid the farmers in being competitive in international markets. This helps to supplement the income of the illegal crops due to the increased pricing structure on organic products due to recent market trends.<sup>199</sup> “Forest-Warden Families Programme” is monitored mainly by the UNODC and encourages farmers to voluntarily eradicate illicit crops and participate in forest recovery.<sup>200</sup> Production of cocaine in Columbia has decreased from around 245,000 acres in 2007 to 153,000 acres in 2010 and is attributed to the efforts of alternative development by the national government.<sup>201</sup>

Peru and Bolivia have similar projects to that of Columbia regarding alternative development. In Peru the focus is on short and long term sustainable economic development of rural areas through the cultivation of legal crops. Similar to the “Products of Peace” program in Columbia, farmers are taught economically-friendly ways of

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<sup>190</sup> “UNODC and Alternative Development” The Commission on Narcotic Drugs. <http://www.unodc.org/unodc/en/alternative-development/index.html?ref=menuse>

<sup>191</sup> Ibid.

<sup>192</sup> *Economic and Social Consequences of Drug Abuse and Illicit Trafficking*. United Nations Office on Drugs and Crime. 1999.

<sup>193</sup> David Mansfield. “Assessing Supply-Side Policy and Practice: Eradication and Alternative Development.” Global Commission on Drug Policies. January 2011.

[http://www.globalcommissionondrugs.org/Arquivos/Global\\_Com\\_David\\_Mansfield.pdf](http://www.globalcommissionondrugs.org/Arquivos/Global_Com_David_Mansfield.pdf).

<sup>194</sup> Shweta Mukesh. “Revisiting the Drug Trade and Prospects for Latin America and the Caribbean: Interview with Former VP of Costa Rica.” *Prospect Journal of International Affairs* at University of California at San Diego. January 2011.

<sup>195</sup> “UNODC and alternative development.” The United Nations Office on Drugs and Crime.

<http://www.unodc.org/unodc/en/alternative-development/index.html>.

<sup>196</sup> “The Social Agenda: drug production in Latin America.” *Social Panorama of Latin America 1999-2000*. The Economic Commission for Latin America and the Caribbean. 2000.

<sup>197</sup> “UNODC and alternative development.” The United Nations Office on Drugs and Crime.

<http://www.unodc.org/unodc/en/alternative-development/index.html>.

<sup>198</sup> “Columbia.” The United Nations Office on Drugs and Crime. <http://www.unodc.org/unodc/en/alternative-development/Colombiaprogramme.html>

<sup>199</sup> Ibid.

<sup>200</sup> Ibid.

<sup>201</sup> Marco Sibaja. “UN Reports coca leaf production down in L America”. Taiwan News. June 24, 2011.

cultivation thus making them competitive in the market of organic, economically friendly products.<sup>202</sup> Alternative development programs in Bolivia focus mainly on forest conservation and development. Around 4500 families benefit from increased income, employment and availability of natural resources due to a project under the Bolivian Integrated Strategy to Counter Drug Trafficking. This program teaches practices of soil and water conservation but generates income for families through sustainable forest utilization and agroforestry management practices.<sup>203</sup> Another program in Bolivia in conjunction with the Bolivian Strategy for the Fight against Drug Trafficking works to teach young workers within the coca farms vocational skills which qualifies them for work within the tourism and service industry. This is a long-term approach to coca leaf eradication and works to create sustainable economic growth within a region through investment in education and takes advantage of the economic shift in the area to a service economy.<sup>204</sup>

The limitation of alternative development is that often ambiguous in approach and it is difficult to clearly provide support to the differing needs of indigenous people involved in the drug trade. There is often no continuity between programs and levels of support. Therefore, long-term solutions are often not supplied and many individuals return to the drug trade due to the financial benefits which are difficult to achieve otherwise.<sup>205</sup> The fact that drug production concentrates in areas of limited development, more must be done to positively affect the social and economic development of an area prior to simply introducing an alternative legal crop to residents.<sup>206</sup>

### ***Conclusion***

There is a need for greater ownership by local governments in the fight against drug production and trafficking. The problem affecting many local governments, however, is vast corruption of public officials by local organized crime members through a break-down in security.<sup>207</sup> The difficulty for the drug trade to be fought at the local level is furthered by the fact that many local farmers rely on the short-term fiscal benefits of drug cultivation for survival. Although alternative development and eradication have assisted in the fight against drug production these programs are severely under-funded and do not work to solve the underlying reasoning for drug concentration in the area. ECLAC Member States must work to attack the drug war at the core and work to fight the demand of drugs as well as the extreme poverty present in many Latin American and Caribbean nations. Regional cooperation is necessary as the flexibility and mobility of cartels allows the trade to be moved to a neighboring nation seamlessly. Corruption, poverty and increased addiction coupled with the flexibility of traffickers are simply undermining the efforts of many national governments.

### ***Committee Directive***

Delegates must not simply work to fight the drug trade using programs which fight the production and trafficking directly. There must be an understanding that the war against the drug trade should be fought indirectly by solving for the incentives that drive many into participation. Extreme poverty coupled with the short-term fiscal benefits afforded by the drug trade forces many small farmers and local politicians into cultivation and trafficking of illicit drugs. The control of the cartels on local and national governments must be broken before any real effects can be felt on the drug trade. The increase of illicit drug consumption by citizens of trafficking nations, specifically within the Caribbean, is only deepening the hold the cartels and the drug trade maintains on the region. Delegates must consider policies and programs which work against these incentives which constantly feed the drug trade as a whole. Incentives which can act as alternatives to fear and extreme poverty must be considered as well as a minimum of sub-regional cooperation. Delegates must also consider the positions of their individual country as many Latin American nations recognize cocaine as an illicit drug however the raw material, the coca leaf, as a legal and major means of income for the national economy.

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<sup>202</sup> “Peru” The United Nations Office on Drugs and Crime. <http://www.unodc.org/unodc/en/alternative-development/Peruprogramme.html>.

<sup>203</sup> “Bolivia” The United Nations Office on Drugs and Crime. <http://www.unodc.org/unodc/en/alternative-development/bolivia-projects.html>.

<sup>204</sup> Ibid.

<sup>205</sup> David Mansfield. “Assessing Supply-Side Policy and Practice: Eradication and Alternative Development.” Global Commission on Drug Policies. January 2011. [http://www.globalcommissionondrugs.org/Arquivos/Global\\_Com\\_David\\_Mansfield.pdf](http://www.globalcommissionondrugs.org/Arquivos/Global_Com_David_Mansfield.pdf).

<sup>206</sup> Ibid.

<sup>207</sup> Ibid.

**Technical Appendix Guide (TAG)**  
**Topic I: Encouraging Multinational Corporations to Invest and Provide Opportunities  
within the Borders of Latin American Member States**

R.M Bird. "Tax Incentives for Foreign Investment in Latin America and the Caribbean.

Do They Need to be Harmonized?" International Tax Program Institute for International Business. January 2006.

A preliminary document that discusses potential framework options for promoting analogous tax incentives for countries in Latin America. The author discusses the evolution of tax incentive policy and the positive and negative effects with foreign investment.

Beverly A. Carlson. "Job Losses, Multinationals and Globalization: The Anatomy of Disempowerment."

Economic Commission for Latin America and the Caribbean: The Division Production, Productivity, and Management. November 2002.

This paper examines the impact multinational enterprises place upon various job markets, specifically within Latin America. Furthermore, the disempowerment of national authorities is another effect that is influenced by the significant growth and concentration of multinational enterprises. By using the ECLAC Investment and Corporate Strategies Database for Latin America and the Caribbean the author discusses particular disadvantages faced by Latin America and the presence of multinational corporations.

Daniel Chudnovsky and Andrés López. "The Strategies of Multinational Corporations in 1990s Argentina." CEPAL Review 76. Economic Commission for Latin America and the Caribbean. April, 2002.

Using Argentina as a case study, the authors analyze the unique environment of multinational corporations in this region. This document discusses the phases of multinationals and the influence on domestic markets. The authors also examine how multinationals function in different economic models; particularly regarding access to Brazilian markets under Mercosur.

"Data: Indicators". The World Bank. <http://data.worldbank.org/indicator>

World Development Indicators (WDI) is one of the most popular datasets of the World Bank. Browse hundreds of the most up to date case studies and statistical development reports on over 200 countries on issues such as development, economic policy, and financial sectors.

Graciela Mogueillansky. "Corporate Risk Management and Exchange Rate Volatility in Latin America." Economic Commission for Latin America and the Caribbean. March, 2003.

This article studies the currency risk management of multinational companies with investments in Latin American countries. Mogueillansky explores the interaction between the microeconomic behavior and the macroeconomic impact on the foreign exchange market by analyzing episodes of currency or financial shocks in host countries.

Theodore H Moran. "Multinational Corporations and Dependency: A Dialogue for Dependencistas and Non-Dependencistas." *International Organization*, Vol. 32, No. 1, Dependence and Dependency in the Global System. (Winter, 1978).

Theodore Moran, former member of the Policy Planning Staff to the Department of State, investigates three characteristic assertions of the relationship between multinational corporations and their respective host countries in the Third World. Such assertions include; host countries receive too little benefits; FDI causes distortion in domestic economic policy; and, FDI alters host countries' political processes. Moran's work provides fundamental insight into the intricate relationship between multinationals and their host countries.

R. Rios-Morales and D. O'Donovan. "Can the Latin American and Caribbean Countries Emulate the Irish model of FDI Attraction?" CEPAL Review. Vol. 88. Economic Commission for Latin America and the Caribbean. 2006.

Rios-Morales and O'Donovan emphasize the importance foreign direct investment (FDI) has on the success of a country or region's development. The authors suggest that countries in Latin America may benefit greatly by emulating certain aspects of Ireland's FDI policies.

"Trade by Region: International Trade Statistics 2000." World Trade Organization.  
[http://www.wto.org/english/res\\_e/statis\\_e/tradebyregion\\_e.htm](http://www.wto.org/english/res_e/statis_e/tradebyregion_e.htm)

The World Trade Organization has produced a dataset for all regions highlighting individual country performance in import, export, trade, and inter-regional trade. The research also provides figures for comparing export/import quantities in Mercosur and Andean members.

## **Topic II: Opportunities and Risks for Regional Development in Biofuels**

Luiz Augusto Horta. *Biofuel Potential in Guyana*. Economic Commission of Latin America and the Caribbean. 2007

This document is from ECLAC, it highlights the potential for biofuels in Guyana, an area that would benefit from the development of biofuels. Guyana is a small country compared to others in the Latin American region but has strong potential to develop bioethanol. Though the information is specific to Guyana delegates could benefit from learning about the potential for biofuels for other Member States. There is also a lot of general technical information that is presented in this document, especially in the introduction and background, as well as the conclusion.

Peter Meisen and Sebastian Krumpel, Renewable. "Energy Potential in Latin America" Global Energy Network Institute. December 2009.

In 2009 ECLAC released a document highlighting the potential for renewable energy in Latin America, which has specific information for each country. The country profiles highlights the potential for many different types of renewable energy sources, especially biofuels. This is a great source of specific information for each country and delegates would benefit from looking up their Member State to find out their potential for biofuels and other renewable sources of energy. There is also a lot of general information about the importance of finding renewable energy sources.

Integrated Environmental Strategies, Latin America Profile . United States Environmental Protection Agency.  
<http://www.epa.gov/ies/country.htm>.

The EPA created Integrated Environmental Strategies for various Member States in ECLAC. These strategies provide assistance to different countries to lower their greenhouse gas emissions. Each of the Members States that have country profiles participate in the IES program. This would provide soling information about their willingness to control their GHG emissions. There is a lot of detailed information about the Member States participating in IES and looks also at their policy making.

Biofuels in Latin America. BioTop Boofuels RTD Cooperation. [http://www.top-biofuel.org/index.php?option=com\\_content&task=view&id=4&Itemid=6](http://www.top-biofuel.org/index.php?option=com_content&task=view&id=4&Itemid=6).

Biofuels in Latin America is a great resource about biofuel potential in the LAC region. There are a lot of different aspects to the website, which includes and interactive biofuel map for Latin America as well as biofuel policies and legislation in Latin America. This gives a lot of really specific information about biofuels and the biofuel market, which is particularly helpful for this committee. Delegates could gather a lot of technical information about biofuels,

as well as feedstock, one of the challenges to biofuels. This is a wealth of information that is specific to Latin America.

Tom Philpott. The Trouble with Brazil's Much Celebrated Ethanol "Miracle". Grist. April 2010. <http://www.grist.org/article/2010-04-13-raising-cane-the-trouble-with-brazils-much-celebrated-ethanol-mi>.

There has been a lot of attention paid to Brazil's bioethanol program and this article presents another side of the story. It is about Brazil's program and some of the negative aspects of it, especially the balance between energy consumed and energy created. One of the benefits of biofuels is that during production the process of pollution is cancelled out and this article presents a different point of view. This is a great article to look at because it balances some of the positive feedback on biofuel production. Delegates would benefit from having a thorough knowledge of the benefits and risks of biofuel production.

Don Hofstrand. Brazil's Ethanol Industry. Iowa State University Ag Decision Maker Newsletter. January 2009. <http://www.extension.iastate.edu/agdm/articles/hof/HofJan09.html>.

This source is a journal article written about Brazil's ethanol program. Brazil is an example of successful biofuel production and there are many aspects of their research which provides a lot of information about biofuels. This article presents information about the delicate balance between Brazil's labor market and the environmental impact of biofuel production. Delegates could use this source as an example for their own country to see if Brazil's program can be replicated in their own country. This also presents a lot of useful information about other Member States and their biofuel production.

"Ethanol's Mid-Life Crisis" The Economist. September 2010. <http://www.economist.com/node/16952914>.

This is a great article about the ethanol market and how it has grown over the past few years. The ethanol market has reached a critical point where it needs to continue to grow, rather than stall out like it has been. This is a great article to get information about ethanol and see where the market is heading in the future. The economist is a great source of information and this article provides a lot of background information. The ethanol market is not perfect and having a deeper understanding of it would help all the delegates.

Carlos E. Ludena, et al. *Biofuels Potential in Latin America and the Caribbean: Quantitative Considerations and Policy Implication for the Agricultural Sector*. Economic Commission for Latin America and the Caribbean. <http://ageconsearch.umn.edu/bitstream/9986/1/sp07lu01.pdf>.

This is a great document about biofuel potential in Latin America and the Caribbean. It is a different type of source because it talks specifically about how the production of biofuels affects the agricultural sector. There is a lot of technical information about biofuels that can get confusing but this is a great resource about their implications in Latin America and the Caribbean. Delegates would benefit from gathering as much information as possible so that they can know if their country has the potential for biofuel production.

"Brazilian Bioethanol Science and Technology Laboratory." Brazilian Bioethanol Science and Technology Laboratory. <http://www.bioetanol.org.br/english/interna/index.php?chave=ctbe>.

Along with being a great example of biofuels, Brazil has done a large amount of research about biofuels that could help all Member States of ECLAC understand. Brazil's research into bioethanol is very thorough and is available for all Member States to use. This website looks into the basic science behind biofuels, their sustainability as an energy source and a look into their pilot plant. Delegates could use this as a great base of information about bioethanol's and how Brazil set up their program.

### Topic III: Fighting Drug Production and Trafficking in Latin American Member States

“Drugs and crime in Central America and the Caribbean.” United Nations Office on Drugs and Crime. <http://www.unodc.org/unodc/en/frontpage/drugs-and-crime-in-central-america-and-the-caribbean.html>  
This article gives delegates a brief glimpse into the current state of the drug trade in Latin America and the Caribbean. The article discusses the correlation between the drug trade and crime in many countries within the region.

*Topics of United Nations Convention against Transnational Organized Crime and its Protocols relative to drug trafficking.* United Nations Office on Drugs and Crime.  
<http://www.unodc.org/unodc/en/treaties/CTOC/index.html>

The United Nations Convention against Transnational Organized Crime, adopted by General Assembly resolution 55/25 of 15 November 2000, is the main international instrument in the fight against transnational organized crime. It opened for signature by Member States at a High-level Political Conference convened for that purpose in Palermo, Italy, on 12-15 December 2000 and entered into force on 29 September 2003. The Convention is further supplemented by three Protocols, which target specific areas and manifestations of organized crime: the Protocol to Prevent, Suppress and Punish Trafficking in Persons, Especially Women and Children; the Protocol against the Smuggling of Migrants by Land, Sea and Air; and the Protocol against the Illicit Manufacturing of and Trafficking in Firearms, their Parts and Components and Ammunition. Countries must become parties to the Convention itself before they can become parties to any of the Protocols.

“Innovation Programmes To Reach Out To Young Victims, And Perpetrators, Of Drug Violence.” Economic Commission for Latin America and the Caribbean  
<http://www.eclac.org/cgi-in/getProd.asp?xml=/prensa/noticias/comunicados/0/28980/P28980.xml&xsl=/prensa/tpl-i/p6f.xsl&base=/prensa/tpl/top-bottom.xslt>

In the Caribbean, young people are over-represented among the victims and authors of violent crime. Gang violence is a serious problem in El Salvador, Guatemala and Honduras. In Central America and Panama, 80% of both criminal offenders and their victims are between the ages of 12 and 25. But as one of the studies show, gang culture is a symptom of deep social ills that "cannot be resolved by putting street children behind bars." All the countries of the region are taking measures to confront the threat of illicit drugs and the violence they cause. We highlight three replicable initiatives that have been successful in helping youth and reinserting them into society. All three initiatives are finalists in the Experiences in Social Innovation competition, organized by ECLAC and the W.K. Kellogg Foundation.

Jose E. Duran L. “Some considerations on the possible effects of the failure of the United States Congress to renew ATPDEA.” Economic Commission for Latin America and the Caribbean. May 2007.

Delegates can use this report to research true importance of the ATPDEA regime for the four Andean countries and for the United States, in the areas of trade, welfare, employment, migration pressures, drug control efforts, energy security, regional political stability and contribution to the economic development to which the less favored countries of the region so aspire. “The cost of failing to renew the ATPDEA - measured in loss of jobs, political instability, recession, loss of welfare, etc.—appears to be very high. Delegates can also use this to begin researching the possibility of effects on the drug trade of other trade agreements.

“Andean Trade Preferences Act.” Office of the United States Trade Representative. <http://www.ustr.gov/trade-topics/trade-development/preference-programs/andean-trade-preference-act-atpa>

**ATPDEA is a trade preference system, when one country prefers buying goods from some other country over other countries**, by which the United States grants duty-free access to a wide range of exports from four Andean countries: Bolivia, Colombia, Ecuador, and Peru. ATPDEA was enacted October 31, 2002 as a replacement for the similar Andean Trade Preference Act (ATPA). The purpose of this preference system is to foster economic development in the Andean countries to provide alternatives to cocaine production. The objective of the original ATPA was to strengthen the legal industries of the aforementioned countries as alternatives to drug production and trafficking. In 2002, the program was renewed as ATPDEA. Under this more extensive act, Andean products exempted from tariffs increased from around 5,600 to some 6,300.

Clare Seelke et al. "Latin America and the Caribbean: Illicit Drug Trafficking and U.S. Counterdrug Programs." Congressional Research Service. April, 2010.

This report provides an extensive analysis of drug flows in the Americas. Though this report mainly offers guidelines for US Congressional action, there is a plethora of informative data and sources within this document. By utilizing this document, delegates can familiarize themselves with some of the most pressing and current issues facing the Latin America drug trade.

"A Review of Social Development in the Caribbean in the Nineties World Summit for Social Development (WSSD)+5." Economic Commission for Latin America and the Caribbean. November 1999.

Following the Copenhagen Summit, steps were taken by the entire United Nations system to support national governments in their efforts to implement this agenda. Several meetings and inter-sessional reviews were held, both at regional and national levels. Two conferences are worthy of note. The First Regional Conference in Follow-up to the World Summit for Social Development was held in Sao Paulo, Brazil, from 6 to 9 April 1997. This conference was attended by 11 Caribbean countries: Barbados, Belize, Cuba, Dominica, Dominican Republic, Haiti, Jamaica, Netherlands Antilles St. Kitts and Nevis, Saint Lucia and Trinidad and Tobago. The Caribbean Subregional Review of WSSD+5, held in Port of Spain, Trinidad and Tobago, 2 September 1999 was also well attended by member countries, agencies and NGOs. In addition, the Preparatory Committee for the Special Session of the General Assembly on the Implementation and Outcome of the World Summit for Social Development and Further Initiatives continues its work, drawing on inputs from regional and subregional assessments and meetings. This document describes different facets of social development in the fields of health, education, crime and violence, drugs and migration faced in the Caribbean in the five years following the 1995 World Summit for Social Development.

"Latin American Drugs II: Improving Policy and Reducing Harm." International Crisis Group: Working To Prevent Conflict Worldwide." March 2008. <http://www.crisisgroup.org/en/regions/latin-america-caribbean/026-latin-american-drugs-ii-improving-policy-and-reducing-harm.aspx>

This article discusses the failures of drug policies of many Latin American countries and the effects of these failures on the security of the region. Cocaine availability and demand have essentially remained stable in the U.S. and have been increasing in Europe. Use in Latin American transit countries, in particular Argentina, Brazil and Chile, is on the rise. Recommendations are also made by the group as to policy changes which can improve the effects and security of countries within the region. Delegates can use this guide to become familiar with various counter-drug policies and the harmful effects on a nation's economy and security when these policies fail.