|                    | Colombia   |  |  |  |  |  |  |
|--------------------|--|--|--|--|--|--|--|
| Sector             | Sector selection factors   | <b>Economic Findings</b>   | Environmental<br>Impacts   | Social Impacts   | Legal-Regulatory<br>Effects  |  |  |
| Textiles & Apparel | <ul> <li>Economic/Trade Factors:</li> <li>Apparel represents the most important element of the textile value chain and is the greatest contributor to the trade balance.</li> <li>Represents approximately 9% of national industrial production, out of which 30% is for exports.</li> <li>Textiles represent 15% of non traditional exports to the United States.</li> <li>Analysis shows that Colombia has comparative advantages in apparel relative to the rest of the world (comparative advantage index of 1.9).</li> <li>Analysis shows that textiles and apparel have competitive positions in the US market (Relative Commercial balance above 0.8, Specialization index above 0.1).</li> </ul> | <ul> <li>In a US-Colombia FTA scenario there's a projected price increase in textiles of 1% that could foster an increase in the offer of textiles of 0.288%.</li> <li>In a US-Colombia FTA scenario the projected price range for apparel would be US\$8.51 and US\$12.97 and the demand increase would range between 1.87% and 2.85%.</li> <li>There's a projected proportional increase in the demand of inputs for production and their price.</li> <li>This is considered a sensitive sector in a US-Colombia FTA scenario and the impact of an FTA in this sector is expected to be positive.</li> </ul> | <ul> <li>Low impact of textile effluents in sewage due to high content of sulfur and sulfates, low impact on water quality.</li> <li>Low impact of effluents in biological treatment plants due to high concentration of chemicals.</li> <li>Low impact from noise pollution in knitting stage.</li> <li>Moderate impact on air pollution due to water vapor, incineration of solid residues, particles and volatile organic components from hydrocarbons and chemical reactions.</li> </ul> | High impact on workers and communities health due to exposure to chemicals; also potential auditory problems due to noise pollution exposure.  Positive impact on employment generation. | <ul> <li>Lack of coordination in sectoral regulations.</li> <li>Conflicts of jurisdiction including with respect to municipal authorities and powers.</li> <li>Sector not required by law to have an environmental license or permit.</li> <li>Constitutional right of citizens to participate.</li> <li>Legal framework enables citizens to participate in administrative actions regarding modification, issuance or cancellation of environmental licenses or permits for activities with potential impacts on the environment. Also for the imposition of sanctions for lack of compliance.</li> <li>These dispositions are somewhat ineffective in this sector given that there is no requirement for environmental permits.</li> </ul> |  |  |

| Colombia                    |  |                          |                          |                       |                              |  |
|-----------------------------|--|--------------------------|--------------------------|-----------------------|------------------------------|--|
| Sector                      | Sector selection factors   | <b>Economic Findings</b> | Environmental<br>Impacts | <b>Social Impacts</b> | Legal-Regulatory<br>Effects  |  |
| Textiles & Apparel (cont'd) | Social Factors:  Textile production has a very important role in terms of contribution of value and currency.  It is also an important generator of income and employment in all elements of the value chain. Approximately 200,000 direct job posts and 600,000 indirect jobs, including a high demand for female labor.  90% of the apparel industry is formed by micro-enterprises and small-medium enterprises (SME). Only 10% of the establishments are large industries and vertically integrated.  Environmental Factors:  Environmental demands of the market.  Nature of inputs used in production, including chemicals.  Generation of liquid effluents with local impact. |                          | Impacts                  |                       | Need to improve enforcement. |  |

|               | Colombia  |   |   |   |  |  |  |
|---------------|---|---|---|---|--|--|--|
| Sector        | Sector selection factors  | <b>Economic Findings</b>  | Environmental<br>Impacts  | Social Impacts  | Legal-Regulatory<br>Effects  |  |  |
| Leather Goods | <ul> <li>Economic/Trade Factors:</li> <li>The leather chain of production comprises integrated productive activities, raising the value added of finished products.</li> <li>As a whole, these activities represent about 2% of national industrial production; the shoe industry share is 30.4%.</li> <li>During the 1990s this sector showed a growth trend of 68%.</li> <li>During the period of 2001-2004, the leather industry had a constant trade surplus and an average trade balance of US\$66 millions.</li> <li>Within the chain, leather represents the highest percentage of exports 47%.</li> <li>Analysis shows that Colombia has comparative advantages in leather relative to the rest of the world (comparative advantage index of 1.5).</li> </ul> | <ul> <li>In a US-Colombia FTA Scenario there is a projected price change per leather unit ranging from US\$0.04, US\$0.05 and US\$0.07; and the demand increase would range between 2.74% and 5.7%.</li> <li>This sector is considered sensitive in a US-Colombia FTA scenario, given that it currently benefits of ATPDEA preferences.</li> <li>The impact of an FTA in this sector is expected to be positive.</li> </ul> | <ul> <li>High impact on water quality due to liquid chemical byproducts and effluents.</li> <li>High impact on air quality due to emissions and use of chemicals.</li> <li>High impact from odors.</li> </ul> | <ul> <li>High impact on workers and communities health due to exposure to chemicals and water quality related issues.</li> <li>Positive impact on employment generation.</li> </ul> | <ul> <li>Lack of coordination in sectoral regulations.</li> <li>Conflicts of jurisdiction and authorities given municipal powers.</li> <li>Sector not required by law to have an environmental license or permit.</li> <li>Constitutional right of citizens to participate.</li> <li>Legal framework enables citizens to participate in administrative actions regarding modification, issuance or cancellation of environmental licenses or permits for activities with potential impacts on the environment. Also for the imposition of sanctions for lack of compliance.</li> <li>These dispositions are somewhat ineffective in this sector given the non requirement of environmental permits.</li> <li>Need to improve enforcement.</li> </ul> |  |  |

|                                | Colombia  |  |   |  |   |  |
|--------------------------------|---|--|---|--|---|--|
| Sector                         | Sector selection factors  | <b>Economic Findings</b>   | Environmental<br>Impacts  | Social Impacts   | Legal-Regulatory<br>Effects   |  |
| Leather<br>Goods<br>(cont'd)   | The Specialization index and coefficient of export liberalization show that the level of competitiveness for the different products within this sector has increased enabling market access to foreign markets. |  |   |  |   |  |
|                                | • The US is the most important market for Colombian leather exports.  |  |   |  |   |  |
|                                | Social Factors:   |  |   |  |   |  |
|                                | Important role in job and<br>income generation due to<br>slow technological<br>improvements.  |  |   |  |   |  |
|                                | • Represents 4.4% of all agro-industrial jobs.  |  |   |  |   |  |
|                                | <b>Environmental Factors:</b>   |  |   |  |   |  |
|                                | • Intensive use of chemicals and high concentrations of effluents and by-products.  |  |   |  |   |  |
| Livestock,<br>Cattle &<br>Meat | Economic/Trade Factors: The initial VCR analyses and previous studies of the agricultural sector in Colombia show comparative advantages for poultry and cattle meat and disadvantages for pork.                | The demand for meat is inelastic 0.77  In a US-Colombia FTA scenario with specific and ad valorem tariff elimination, the projected price reduction of meat will range from US\$0.04 to US\$0.92 per kg. | <ul> <li>Most of the impacts of this sector are related to the cattle raising phase of the value chain.</li> <li>High impact related to increase of Green Gas House Emissions and air quality.</li> </ul> | <ul> <li>High impact on health of communities related to pesticide residues in water, soil and food.</li> <li>Positive impact on employment generation.</li> </ul> | Lack of coordination in sectoral regulations.     Conflicts of jurisdiction including with respect to municipal authorities and powers. |  |

|  | Colombia  |   |  |                |  |  |  |
|--|---|---|--|----------------|--|--|--|
| Sector                                     | Sector selection factors  | <b>Economic Findings</b>  | Environmental<br>Impacts   | Social Impacts | Legal-Regulatory<br>Effects  |  |  |
| Livestock,<br>Cattle &<br>Meat<br>(cont'd) | <ul> <li>However, the sector traditionally has been closed, hence the comparative advantage, trade balance and specialization index show certain weakness in this sector with regards to exports.</li> <li>Quality in production among other factors makes this sector competitive.</li> <li>Colombia is one of the main producers of meat with position number 10 in world production.</li> <li>In 2003, cattle exports increased from 3,445 tons to 117,150 tons in 2004.</li> <li>Social Factors:</li> <li>Industrial activities within the livestock/cattle chain of production represent 2.3% of the gross manufacturing industry production and 2.1% of the value added of this industry.</li> <li>Cattle-raising generates 823,526 direct jobs, which in 2004 represented 24% of total agricultural employment.</li> </ul> | <ul> <li>The reduction in price would foster and increase in demand between 0.77% and 16%.</li> <li>The projected impact of a US-Colombia FTA scenario in this sector with regards to prices and quantity are positive but minimal.</li> <li>Colombian production in this sector has a lot of potential for export given the quality of the product and price competitiveness.</li> </ul> | <ul> <li>High impact on water quality trends and water supply.</li> <li>High impact on biodiversity (flora and fauna)</li> <li>High impact on land surface for agriculture due to soil erosion.</li> </ul> |                | Sector not required by law to have an environmental license or permit.  Constitutional right of citizens to participate.  Legal framework enables citizens to participate in administrative actions regarding modification, issuance or cancellation of environmental licenses or permits for activities with potential impacts on the environment. Also for the imposition of sanctions for lack of compliance.  These dispositions are somewhat ineffective in this sector given that there is no requirement for environmental permits.  Need to improve enforcement. |  |  |

|  | Colombia  |                          |                          |                |                             |  |  |  |
|--|---|--------------------------|--------------------------|----------------|-----------------------------|--|--|--|
| Sector                                     | Sector selection factors  | <b>Economic Findings</b> | Environmental<br>Impacts | Social Impacts | Legal-Regulatory<br>Effects |  |  |  |
| Livestock,<br>Cattle &<br>Meat<br>(cont'd) | Meat production is the<br>highest income and<br>employment source within<br>the chain and all agro<br>industry. |                          |                          |                |                             |  |  |  |
|  | <b>Environmental Factors:</b>   |                          |                          |                |                             |  |  |  |
|  | • Change in use of soil.  |                          |                          |                |                             |  |  |  |
|  | High concentration of<br>effluents into media.  |                          |                          |                |                             |  |  |  |
|  | • Deforestation.  |                          |                          |                |                             |  |  |  |

|                           | <b>Ecuador</b>  |   |  |   |  |  |
|---------------------------|---|---|--|---|--|--|
| Sector                    | Sector selection factors  | <b>Economic Findings</b>  | Environmental<br>Impacts   | Social Impacts  | Legal-Regulatory<br>Effects  |  |
| Tuna & Canned Tuna in Oil | <ul> <li>Represents 4% of the total exports of Ecuador to the United States and 8.5% of total exports.</li> <li>Analysis shows that Ecuador has comparative advantages in canned tuna in oil relative to the rest of the world (comparative advantage index of 15.94).</li> <li>Competiveness indexes show that canned tuna in oil has a high competitive potential compared to its current position in the US market (Competitive Position Index and Competitive Potential index).</li> <li>Social Factors:</li> <li>Source of approximately 250,000 jobs.</li> <li>Cultural aspects related to fishing traditions.</li> </ul> | <ul> <li>Increased margin of trade.</li> <li>Within a Free Trade scenario there's an important projected increase in production of 26% (11681 TM) for export to the US and a 6.63% of production of total tuna captures. There's also a projected moderate increase in exports for short term and higher increase in long term due to scale effect and technological improvements.</li> <li>Moreover there's a projected price change of 10%.</li> <li>This increase is relevant since currently canned tuna in oil does not have preferences with the ATPDEA.</li> </ul> | Main impacts related to capture of non-objective tuna population (high)mainly in the case of bait and also to the impact on water quality from navigation (moderate), in particular in loading areas of ports and areas where there's excavation | <ul> <li>Positive effects in terms of employment and income generation.</li> <li>Also positive impact on gender related issues, given that the processing stage of value chain requires female labor.</li> <li>Cultural changes related to long absences of fishermen.</li> <li>Immigration related changes.</li> </ul> | <ul> <li>Clear standing regarding authorities that regulate production aspects.</li> <li>Regulatory framework is not clear in terms of defining required coordination for enforcement.</li> <li>Productive sector authority respects norms regarding closed seasons and has adopted an ecosystemic approach with regards to managing marine resources.</li> <li>International parameters, market access requirements and MEAs play a key role in enforcement of regulatory framework and respect of capture levels.</li> </ul> |  |

|   | Ecuador   |  |   |  |  |  |  |
|---|---|--|---|--|--|--|--|
| Sector                                      | Sector selection factors  | Economic Findings  | Environmental<br>Impacts  | Social Impacts   | Legal-Regulatory<br>Effects  |  |  |
| Tuna &<br>Canned<br>Tuna in Oil<br>(cont'd) | <ul> <li>Environmental Factors:</li> <li>Environmental and health conditions related to market access of tuna products.</li> <li>High level of incidental fishing (Non-objective species such as dolphins).</li> <li>Marine pollution issues.</li> </ul>  |  |   |  |  |  |  |
| African Palm<br>& Palm Oil                  | Economic/Trade Factors:  Ecuador is the second largest producer in the Americas of palm with potential opportunities for expansion in production of cooking oil for export.  Analysis shows that Ecuador is not very competitive relative to the rest of the world in production of palm oil (comparative advantage index of 0.40); this is mostly due to the fact that most of production is currently to meet domestic demand | <ul> <li>No real linkage between price and offer.</li> <li>Low coefficient of annual aggregate (0.19) as well as monthly (0.33).</li> <li>The model shows an adjusted and realistic perspective of the potential benefits of tariff reduction in this sector.</li> <li>The sector has a favorable attitude to liberalization.</li> <li>Projections show no increase in exports in the short term, but expected modest increase for long term.</li> </ul> | <ul> <li>The main impact is related to deforestation of primary forest in non-agricultural zones (expansion of the agricultural frontier).</li> <li>There are also impacts on the quality of water and biotic component due to chemical treatments to maintain palm crops.</li> <li>There is low impact from air emissions and land based pollution from process residues, which are not disposed of properly.</li> </ul> | <ul> <li>Positive effects in terms of employment and income generation.</li> <li>Cultural changes in rural populations in forest areas.</li> <li>Potential for conflicts related to immigration, the productive model and land tenure issues.</li> </ul> | Clear standing regarding authorities that regulate production aspects.  Regulatory framework is not clear in terms of defining required coordination for enforcement.  Sectoral policies gap regarding palm.  Lack of enforcement of sustainable development and environment related regulations by authority that regulates production. |  |  |

|  | Ecuador  |                          |                          |                |                             |  |
|--|--|--------------------------|--------------------------|----------------|-----------------------------|--|
| Sector                                 | Sector selection factors   | <b>Economic Findings</b> | Environmental<br>Impacts | Social Impacts | Legal-Regulatory<br>Effects |  |
| African Palm<br>& Palm Oil<br>(cont'd) | • Palm oil has a significant competitive potential compared to its current competitive position index (Competitive Position Index 1.71 and Competitive Potential index 3.29).  |                          |                          |                |                             |  |
|  | Social Factors:  |                          |                          |                |                             |  |
|  | • Source of approximately 90,000 jobs.   |                          |                          |                |                             |  |
|  | Multicultural opportunities.   |                          |                          |                |                             |  |
|  | • Displacement of small farmers.   |                          |                          |                |                             |  |
|  | • High concentration of land rights in the hands of private producing companies.   |                          |                          |                |                             |  |
|  | Health implications related to the use of agrochemicals: in 1998, approximately 58% of farmers in palm production showed symptoms of exposure to pesticides and agrochemicals. |                          |                          |                |                             |  |
|  | <b>Environmental Factors:</b>  |                          |                          |                |                             |  |
|  | • Deforestation.   |                          |                          |                |                             |  |
|  | • Land based pollution from pesticides and chemicals.  |                          |                          |                |                             |  |
|  | • Water contamination.   |                          |                          |                |                             |  |

|                    | Peru   |   |   |  |   |  |  |
|--------------------|--|---|---|--|---|--|--|
| Sector             | Sector selection factors   | <b>Economic Findings</b>  | Environmental<br>Impacts  | Social Impacts   | Legal-Regulatory<br>Effects   |  |  |
| Textiles & Apparel | <ul> <li>Economic/Trade:</li> <li>Manufacturing represents approx 15% of the GDP.</li> <li>Analysis shows that Peru has comparative advantages in different type of textiles including yarns and apparel.</li> <li>The index of specialized specific exports (IEEe) is greater than 1 for all textiles and apparel.</li> <li>Social Factors:</li> <li>One of the most important sources of employment in the country.</li> <li>More than 10% of the population depends directly or indirectly on the 350,000 jobs associated with the textile value chain.</li> <li>High percentage of female workers benefit from employment in this sector.</li> </ul> | <ul> <li>15.6% of exports in this sector destined to the US and 3.8% of the total exports.</li> <li>ATPDA existing preferences will be consolidated with the implementation of Peru-US Trade Promotion Agreement (PTPA).</li> <li>Within a PTPA-NMF scenario there's a projected increase in production of 3.97% in textiles and of 8.7% in apparel.</li> <li>Expected growth of exports in apparel is 75% and in textiles 5.46%.</li> <li>There is a 0.62% projected decrease in production of inputs such as wool, silk and cotton; in this regard there is a need to establish adjustment programs for small farmers, in particular cotton producers, which are estimated to be the most affected given US subsidies.</li> </ul> | Air: Low Impact, related to burning of fuel.      Water: High impact on water quality and groundwater availability, due to industrial effluents in production stage of value chain.      Soil: Low impact related to pollution from production residues.      Geomorphology: Low impact related to inadequate management of production waste and residues.      Land Ecosystems:     Moderate impact related to inadequate disposal of production solid waste and residues, mostly from SMEs. | Employment: Positive impact, with PTPA the projected growth in employment is 3.71% for textiles and 8.33% for apparel.      Workers Health: Low impact, potential increase in respiratory illnesses from inhalation of fabric balls and chemicals for dyeing also of skin irritation from exposure to tinctures. Also low risk of auditory disabilities due to sound pollution and exposure to noise of heavy equipment. | <ul> <li>In general terms the regulatory effects in an MFN-PTPA scenario are considered positive, given the environmental provisions in the PTPA, including, in particular, the obligation to effectively enforce environmental laws, and given the existence of a comprehensive legal institutional framework.</li> <li>There is a need for coordination amongst different competent authorities to ensure enforcement.</li> <li>Enforcement and compliance requires a partnership among actors and there is a need for a coordinated strategy of inspection and control coupled with incentives.</li> </ul> |  |  |

|                               | Peru  |   |  |  |  |  |
|-------------------------------|---|---|--|--|--|--|
| Sector                        | Sector selection factors  | Economic Findings   | Environmental<br>Impacts   | Social Impacts   | Legal-Regulatory<br>Effects  |  |
| Textiles & Apparel (cont'd)   | <ul> <li>Environmental Factors:</li> <li>Environmental demands of the market.</li> <li>Nature of inputs used in production, including chemicals.</li> <li>Generation of liquid effluents with local impact.</li> </ul>  |   |  |  | At the regulatory level, norms do not exist with regards to the maximum allowable levels of pollution, in particular for effluent discharge in the case of water where the highest impact is noted for this sector.      Regulations need to be developed in this area.      There are various means for citizens to voice concerns with regards to environmental management in these sectors. |  |
| Forestry,<br>Wood &<br>Timber | Peru is the second largest producer of timber for export in Latin-America.     20% of SMEs are related to wood furniture production.      Social Factors:     Sector generates approximately 200,000 jobs.     Precedent of forced labor and worker safety related to illegal logging according to the ILO. | <ul> <li>According to FAO, the world deficit of wood by 2010 will be 500 million m³.</li> <li>Since 1995 production has increased 10 times from US\$16 million to US\$168 millions.</li> <li>Approximately 1.3% of the exports of timber are destined to the US.</li> <li>Exports of timber represented 36% of the total exports to the US in 2005.</li> <li>84% of wood furniture exports are destined to the US.</li> </ul> | <ul> <li>The most important impacts in this sector are derived from strange elements to the value chain, illegal logging and wood traffic.</li> <li>Air: Low impact related to the manufacturing processes, and only in cases were wood is covered; this depends on the concentration and type of chemical used. Percentage of covered wood is minimal.</li> </ul> | Employment: Positive impact, with PTPA the projected growth in employment in this sector is 1.98%.      Cultural: cultural changes due to infrastructural development, in particular for indigenous people.      Government infrastructure: Changes related to increased enforcement and strategies against illegal logging. | In general terms the regulatory effects in an MFN-PTPA scenario are considered positive, given the environmental provisions in the PTPA, including, in particular, the obligation to effectively enforce environmental laws, and given the existence of a comprehensive legal institutional framework.   |  |

|   | Peru   |   |  |                |   |  |  |
|---|--|---|--|----------------|---|--|--|
| Sector                                    | Sector selection factors   | <b>Economic Findings</b>  | Environmental<br>Impacts   | Social Impacts | Legal-Regulatory<br>Effects   |  |  |
| Forestry,<br>Wood &<br>Timber<br>(cont'd) | Community settlements surrounding forest, cultural aspects related to coexistence with biodiversity.      Environmental Factors:     Availability of resource and productive capacity.     Environmental management instruments validated by the government.      Illegal logging, emerging trends in climate change and global warming.      Potential for opportunities related to environmental services provided by forests. | <ul> <li>Within a PTPA-NMF scenario the projected increase in wood production is 2.42%.</li> <li>Expected growth of exports in this sector is 3.31%.</li> </ul> | Water: Low to moderate impact from sediments, logging materials, excavation, vegetation removal, and poor management of solid and liquid residues. This impact can be mitigated with certain actions in environmental management plan.      Soil: Medium to high impact related to change of soil use, illegal logging, slash and burning, migratory agriculture, vegetation removal and movement of heavy equipment that could diminish the physical quality of the soil and soil erosion.      Geomorphology: Moderate-medium impact related to land movement, pre-harvesting and harvesting stages, and to illegal logging.      Land Ecosystems: High impact related to logging in harvesting stage, illegal logging and wood traffic. Main impacts on biodiversity and in loss of environmental services provided by forests. |                | <ul> <li>However, at the regulatory level, norms do not exist with regards to the maximum allowable levels of pollution, or effluent discharge.</li> <li>In this sector the requirements of a forest management plan and the existence of national strategy against illegal logging are positive factors.</li> <li>There are various means for citizens to voice concerns with regards to environmental management in these sectors.</li> </ul> |  |  |