Economic Diversification: The Case of Ecuador

María Belén Freire
I. Introduction:

Ecuador, a country in the Andean region of South America, is richly endowed with natural resources, and historically has based a large share of its production and export structure in these resources, particularly in the areas of fishing, agriculture, and mining. The country historically has presented a large concentration of production and exports in primary products, and natural resource based products. As of 2001, the 5 goods with the largest share in the value of exports accounted for 67.1% of export value, and were all primary good such as crude oil (36.8%), bananas (17.9%), and only one natural resource based manufactured product (tuna) (2.9%). This structure has not changed much over the last decade, and as of 2010 the structure remains similar: 72% of the value of exports corresponds to only 5 products: crude oil, bananas, fuel oils, shrimp and roses. Meanwhile, the production and export structure has also remained less diversified relative to other countries of similar income levels and with more or less similar natural resource endowments.

The structure of the report is as follows. In Section II, we present an Overview of Existing Policies and Strategies for Economic and Export Diversification that discusses the policies put in place during the last decade (especially the current policies) and their specific goals and targets. Section III, Analysis of Policy Outputs, presents an assessment of the results that these economic and export diversification policies have achieved in terms of creating the inputs, that is the environment necessary for diversification. Section IV, is an Assessment of Policy Outcomes that measures the extent to which economic and export diversification has come about or not, in response to the incentives and environment created by the economic and export diversification policies that have been implemented in the recent years. Finally, Section V presents policy recommendations and advocacy strategies on the basis of the analysis of stakeholders and relevant agents, and the information presented in previous sections.

II. Overview of Existing Policies and Strategies for Economic and Export Diversification:

1. Assessment of Ecuador’s level of diversification compared to similar countries:
As of the year 2009, Ecuador appears to have a similar level of economic diversification compared to other Andean nations plus Chile when comparing the Herfindahl concentration index of value added for aggregate economic sectors, as appears in the following table. However, it is worth noting that Ecuador has a much lower share of manufacturing in total value added (9.8%), compared to a median share of 14.6% in the sample of countries analyzed, which may be signaling a lower sophistication of economic activities.

Table 1:
Share of value added per sections of the International Standard Industrial Classification ISIC (2009)

<table>
<thead>
<tr>
<th>Section</th>
<th>Bolivia</th>
<th>Chile</th>
<th>Colombia</th>
<th>Ecuador</th>
<th>Peru</th>
<th>Venezuela</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture, hunting, forestry, fishing (ISIC A-B)</td>
<td>13.3%</td>
<td>3.3%</td>
<td>9.2%</td>
<td>7.2%</td>
<td>7.1%</td>
<td>3.9%</td>
<td>7.1%</td>
</tr>
<tr>
<td>1.ISIC C AND E (Mining and utilities)</td>
<td>18.0%</td>
<td>21.4%</td>
<td>10.7%</td>
<td>16.2%</td>
<td>14.2%</td>
<td>32.5%</td>
<td>17.2%</td>
</tr>
<tr>
<td>2.Manufacturing (ISIC D)</td>
<td>13.8%</td>
<td>12.7%</td>
<td>15.3%</td>
<td>9.8%</td>
<td>16.0%</td>
<td>15.6%</td>
<td>14.6%</td>
</tr>
<tr>
<td>3.Construction (ISIC F)</td>
<td>3.0%</td>
<td>8.0%</td>
<td>9.6%</td>
<td>11.2%</td>
<td>6.6%</td>
<td>7.6%</td>
<td>7.8%</td>
</tr>
<tr>
<td>4.Services and other activities 2/</td>
<td>51.9%</td>
<td>54.6%</td>
<td>55.2%</td>
<td>55.4%</td>
<td>56.2%</td>
<td>40.4%</td>
<td>54.9%</td>
</tr>
<tr>
<td>4.1Wholesale, retail trade, restaurants and hotels (ISIC G-H)</td>
<td>11.6%</td>
<td>9.4%</td>
<td>12.8%</td>
<td></td>
<td>17.7%</td>
<td>11.1%</td>
<td></td>
</tr>
<tr>
<td>4.2Transport, storage and communication (ISIC I)</td>
<td>10.5%</td>
<td>8.1%</td>
<td>7.0%</td>
<td></td>
<td>9.0%</td>
<td>6.2%</td>
<td></td>
</tr>
<tr>
<td>4.3Other Activities (ISIC J-P)</td>
<td>29.8%</td>
<td>37.2%</td>
<td>35.3%</td>
<td></td>
<td>29.6%</td>
<td>23.1%</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>100.0%</td>
<td>100%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td></td>
</tr>
</tbody>
</table>

1 Andean nations and Chile have many similarities with Ecuador in terms of income levels and natural resource abundance particularly in mining.
2 Manufacturing is generally considered the sector in which value added can be increased by means of applying more knowledge to production. Another signal of less sophistication of Ecuador’s economy is the fact that within the manufacturing sector, Ecuador presents a lower share of medium and high technology sectors compared to Colombia, country with similar income per capita. As of 2005, 72% of Ecuador’s manufacturing value added was natural resource based manufacturing, and 12% was medium and high tech manufacturing; Colombia had shares of 46% and 30% respectively (Freire, María Belén “Innovación: revisión de literatura y algunos hechos estilizados para el caso ecuatoriano”, 2010).
Herfindahl index

<table>
<thead>
<tr>
<th></th>
<th>0.34</th>
<th>0.37</th>
<th>0.36</th>
<th>0.36</th>
<th>0.37</th>
<th>0.30</th>
<th>0.36</th>
</tr>
</thead>
</table>


1/In the case of Ecuador, the data was taken from the Monthly Statistical Bulletin (Banco Central del Ecuador, October 2011), since the United Nations database presents a significant discrepancy with the value added data published by Banco Central del Ecuador, which is the official institution in charge of national accounting in Ecuador, particularly in the case of the manufacturing sector, which according to Banco Central del Ecuador has a value added 5.5 times greater than the figure reported by the United Nations database.

2/Composed by ISIC categories G through P; this disaggregation is showed for all countries except Ecuador, for which disaggregated values for all these categories was unavailable.

In terms of export diversification, Ecuador seems to have lower export diversification than other countries within the Andean region plus Chile. Indeed, the share of the 5 main export products in total exports has been recurrently higher in Ecuador compared to these other countries since 1990 at least, and even if this share has decreased from 86.7% in 1990 to 74.9% as of 2010, it is still more than 10 percentage points above what is observed in countries like Chile and Colombia.

### Table 2

<table>
<thead>
<tr>
<th></th>
<th>1990</th>
<th>2001</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chile</td>
<td>66.06</td>
<td>58.60</td>
<td>59.76</td>
</tr>
<tr>
<td>Colombia</td>
<td>63.80</td>
<td>47.94</td>
<td>62.58</td>
</tr>
<tr>
<td>Ecuador</td>
<td>86.73</td>
<td>72.77</td>
<td>74.90</td>
</tr>
<tr>
<td>Andean Community of nations</td>
<td>68.03</td>
<td>60.45</td>
<td>n.a.</td>
</tr>
</tbody>
</table>


The Herfindahl index for export concentration shows a similar pattern, since Ecuador's Herfindahl index is above that of Chile or Colombia, both in 2002 and 2010. These 3 countries show an increase in export concentration during the last decade but it is Ecuador that had a larger increment in its Herfindahl index and the largest Herfindahl index by 2010. Latin American countries were faced with higher prices for their primary exports during this period, which could have aided in increasing the concentration of exports and in the specific case of Ecuador, this larger concentration can be traced both to the accelerated growth of crude oil exports since 2004 when the heavy crude oil pipeline was put into operation, and the increase in crude oil prices during that same period. In terms of a more historical perspective, a study by the Andean Development Corporation (CAF)3 states that Ecuador hasn’t been able to change the high concentration level of its exports since the early 1970’s, with a Herfindahl index above 0.20 for both the 1970-1972 period and the 2000-2004 period. Colombia, on the other hand, was

successful in decreasing its Herfindahl index from above 0.30 in 1970-1972 to approximately 0.10 in 2000-2004.

Table 3
Normalized Herfindahl index for export concentration

<table>
<thead>
<tr>
<th></th>
<th>2002</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chile</td>
<td>0.0720</td>
<td>0.1515</td>
</tr>
<tr>
<td>Colombia</td>
<td>0.0660</td>
<td>0.1425</td>
</tr>
<tr>
<td>Ecuador</td>
<td>0.1792</td>
<td>0.2818</td>
</tr>
</tbody>
</table>


But not only are Ecuador’s exports less diversified than its peers in the Andean region plus Chile; its export structure also seems to be more dependent on primary goods than that of Chile and Colombia during the last decade. As of 2010, 78% of Ecuadorian exports were made up of primary goods, substantially above the other countries mentioned, and this, alongside a lower share of natural resource based manufactured goods, compared to these other countries, reinforces the idea of a low level of export sophistication.

Table 4
Share of primary exports and natural resource based manufactured goods in total exports

<table>
<thead>
<tr>
<th></th>
<th>2002</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Primary goods</td>
<td>Natural resource based manufactured goods</td>
</tr>
<tr>
<td>Chile</td>
<td>34.1</td>
<td>51.5</td>
</tr>
<tr>
<td>Colombia</td>
<td>49.0</td>
<td>16.9</td>
</tr>
<tr>
<td>Ecuador</td>
<td>74.7</td>
<td>17.2</td>
</tr>
</tbody>
</table>


2. Analysis of development strategies and diversification policies:

Development strategies and economic diversification policies during the last 2 decades can be subdivided into 2 distinct sub-periods: one, up to the year 2006, and another one from 2007 all the way to the present day.

4 These are goods probably “closest” to primary goods since they are based on the transformation of these, but that have included value added through innovation.
Before describing the development strategy during this period, it is relevant to do a brief review of the historical context surrounding it. Starting in the 1980’s, the import substitution industrialization development strategy that had been followed during the 1970’s was abandoned due to the fiscal constraints derived from the debt crisis, but also partly due to the problems or limitations it had run into in terms of generating economic and social development. The 1980’s was a decade of painful fiscal adjustment and of economic liberalization, including a sharp process of tariff reduction at the end of the decade (1989), which continued until 1992, and in 1993 a free trade zone was put in place among the Andean countries. This free trade zone provided Ecuadorean firms with the opportunity of exporting manufactured goods to a larger market that was protected from foreign competition, and even if the Andean region had always been the most important market for Ecuadorean manufactured products, its share in Ecuadorean manufactured exports increased after 1993. Also, some empirical evidence supports the hypothesis that the Andean free trade zone was beneficial to the increase in non-traditional export volumes. Two years later in 1995, a law that liberalized the financial system was enacted.

Furthermore, the 1990’s was a decade of profound political and economic instability (with 3 presidents overthrown before ending the term for which they were elected), which culminated in a financial and balance of payment crisis in 1998-1999. Between 1993-1999, according to Verdesoto, 1999 (cited in Falconi, Oleas “Economía ecuatoriana”, FLACSO-Sede Ecuador 2004, page 48), there were 26 development “agendas”, 10 of which were made by the State and its central or sectorial planning agencies, and the rest by different segments of the population. Worth mentioning in terms of development strategies and objectives during the 1990’s, is the Foreign Trade and Investment Law (Ley de Comercio Exterior e Inversiones (LEXI)) enacted in 1997, which defined the institutional structure in charge of designing and implementing trade and investment policy as well as the objectives of trade and investment policy. The guidelines for trade policy were defined as:

1) to promote the modernization and efficiency of the domestic industry;
2) to secure the freedom necessary to develop export and import activities and make it easier for economic agents to conduct such activities;
3) to prevent and counter the adverse effects of unfair trade practices on the domestic industry;
4) to foster export growth and diversification;
5) to further strengthen and develop mechanisms for the promotion of exports;
6) to use the opportunities offered by world trade in technology and services in order to boost the country’s exports;
7) to ensure that the domestic industry competes internationally according to fair and equitable trade practices; and
8) to promote existing integration processes and bilateral and multilateral agreements.

Furthermore, the LEXI law created the Corporation for the promotion of exports and investments (CORPEI, Corporación de Promoción de Exportaciones e Inversiones), entity responsible for designing and implementing the non-financial promotion of exports and investment. This

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5 For more in depth analysis on this subject, see for example: Perez, Wilson “Navidad todos los días”, Boletín de Coyuntura No. 14, USFQ, 2010 and other texts cited in this article.

institution had a significant role in productive and export development during the following decade.

With this historical background, the Government Plan for the 2000-2003 period (Plan de gobierno 2000-2003 “Por un Nuevo País”), mentions it came about as a response to demands from different societal groups for a development plan with national objectives. This plan mentions the need for technological development and the reactivation of production, but in general terms without specifying policies and goals for these or other objectives. In this context, CORPEI (created in 1997), put in place both the Plan Nacional de Promoción de Exportaciones 2001-2010 and the Plan Nacional de Promoción de Inversiones 2001-2010 (national plans for the promotion of exports and investments respectively, for the 2001-2010 period), which were declared State official policy by executive decree in 2002. Among the specific objectives of the national plan for the promotion of exports was the diversification of exports. The specific goal regarding diversification was to add 2 export products per year to Ecuador’s export basket of goods, and that each new export product would represent at least 1% of the value of the country’s total non-oil exports. Another goal was that non-oil exports should grow at 7% annually.

During 2003 through 2006, the development strategy based on the promotion of exports and investments which was put forth beginning with the LEXI in 1997, remained more or less unchanged. According to the WTO, “One of the trade policy objectives in the Medium-Term Government Plan 2003-2007 is to "promote the country's international economic and trade integration by strengthening the export promotion and investment system and by supporting strategic production sectors". This objective is among the targets set by the Government for improving production and productivity, which is one of the five pillars of the 2003-2007 Government Plan.” (WTO, 2005). That is, integration with the world economy, specially related to export and investment promotion, was essential to the public policy strategic interests of the government at the time.

In the year 2003, the Consejo Nacional de Competitividad (National Competitiveness Council) that had been created after the economy’s dollarization in 2001 (in response to the newly felt urgency to increase international competitiveness after adopting this monetary regime and in the context of Ecuador’s open economy), was transferred to the Presidency of the Republic, to show the government’s support to the competitiveness policies, strategies and goals, defined in the “Agenda Ecuador Compite 2003-2007” (Ecuador Competitiveness Agenda 2003-2007). This competitiveness agenda defined 8 pillars for competitiveness: macroeconomic stability, institutions/stability of the law, human capital, government, infrastructure, trade openness, financing and technology. In the year 2005, this entity was re-launched as the Consejo Nacional para la Reactivación de la Producción y la Conpetitividad (National Production reactivation and competitiveness Council) with different member integration and affiliations, and with a revised competitiveness agenda.

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7 Asociación latinoamericana de integración (ALADI) “Seminario taller entre los responsables de la promoción de exportaciones de los países miembros de ALADI”, 2001.
9 National Planning and Development Secretariat (undated).
It is worth mentioning that Ecuador did not have an explicit industrialization policy during the 1990’s and up to 2006, and as is pointed out by UNIDO\textsuperscript{10}, it can be inferred from the competitiveness agenda put forth by the government, that it was believed that industrialization was fundamentally related to trade openness. UNIDO mentions that the programs envisioned by the trade openness pillar of the competitiveness agenda were put under the direction and coordination of the Ministry of Industry. Summarizing, the development strategy during the 2000-2006 period seems to be one of export and investment promotion.

2) 2007-2011 period

The second period in terms of development strategy and diversification policies in Ecuador, was marked by immense political and social change, as the government that was elected in 2007, marked a clear separation from what it considered the neoliberal and pro-market policies of the last decades, and adopted an overall development strategy that views government regulation and intervention as necessary to correct what markets could not achieve on their own. This change in public policy strategy was denominated “revolución ciudadana” (citizen’s revolution). The pro market and liberalization policies of the past were blamed for the social and economic inequality among citizens, territories, and productive units of different size or characteristics, as well as for the poor performance of the country in terms of economic growth and competitiveness in comparison to other countries.

The national development strategy is mainly delineated in the Constitution, the National Plan for Good Living (Plan Nacional del Buen Vivir (PNBV) 2009-2013), the Productive Transformation Agenda (Agenda de Transformación Productiva (ATP)), and the Production Code (Código de la Producción). It’s conceptually based on the idea that the State must be actively involved in providing access to all citizens to resources and means for productive development (technology, financing, land, knowledge, infrastructure, etc.), providing preferential treatment to traditionally excluded sectors.

The vision presented above is contained in the ATP in terms of a thorough diagnostic of the gaps that exist among: territories, firms of different size, and economic sectors respectively in terms of exports, value added, productivity, poverty, training to workers, wages, etc., finding a deep structural heterogeneity in Ecuadorean society. The solution that the ATP proposes is a productive transformation (promotion of new activities with more value added, that is more knowledge content), but inclusive of firms, territories and sectors that are currently excluded from knowledge and productive opportunities. For that it defines: 1) productive transformation strategies, 2) territorial development strategies, and 3) sectorial and horizontal public policies, as well as “emblematic” programs to achieve the strategies. The Production Code is an effort to implement through law, several public policy tools that the State will utilize in order to achieve the productive transformation that is proposed in the ATP.


\textsuperscript{10} UNIDO, Independent Evaluation of the Integrated Programme (IP) of UNIDO in Ecuador “Sustainable Improvement of Industrial Competitiveness”; 2006.
The new government established a National Development Plan for the 2007-2010 period (Plan Nacional de Desarrollo 2007-2010) which was updated with the publication of the Plan Nacional del Buen Vivir (PNBV) (National Plan for Good Living) for the 2009-2013 period. The new constitution approved in 2008 by national referendum, in its article 280, establishes that all public policies, programs and projects, as well as the government budget should be subjected to the National Development Plan, as well as the coordination among the national government and local autonomous governments. The new Constitution considers the role and objective of government and planning, to achieve citizens “buen vivir” (good living).

The PNBV states that the previous development strategy was based on stabilization policies to reduce inflation and government deficits, thought to be the only means to achieve economic growth; while redistribution was left to occur by itself through market forces and charitable or welfare assistance programs from the State that were not directed to solving the root problem of inequality. In this context, the current government considers that wealth accumulated through crude oil exports, Ecuador’s main export for the last 4 decades (which is State owned), has not been redistributed by successive governments, and therefore wealth only accumulated in the hands of businessmen and landowners who were able to export primary agricultural goods (PNBV, page 93). The liberalization of the economy and its dollarization in the year 2000 were viewed as processes that only deepened wealth concentration in the hands of these socio-economic elites, as well as importers.

i) The new development strategy:

The 2009-2013 PNBV states as an imperative the abandonment of the agro-primary export model, based on the fact that the country’s greatest comparative advantage is its biodiversity. It acknowledges that currently the country and its citizens lack the knowledge and the industries required to exploit this biodiversity in a way that simultaneously creates value added and material well-being for all citizens involved in production activities, and also assuring sustainability through the use of environmentally friendly methods and techniques. Therefore, it delineates that the development strategy will be based on deliberately constructing and motivating the creation of knowledge, information, science, technology, and innovation (PNBV, page 95). Also, given the diagnostic of failure of the agro-primary export model and liberalization of the past, the PNBV 2009-2013 proposes a different model of accumulation, wealth creation and distribution, divided in 4 distinct stages of economic development.
The PNBV states that given Ecuador’s citizens high level of unmet basic needs, *the new model of accumulation will be one of “endogenous development with strategic insertion into the world, in order to satisfy basic needs”* (PNBV, page 94). The first stage is one of transition in terms of “accumulation” still depending on primary exports, but where there would be a transformation in terms of redistribution of these resources, which would be used to finance: a process of *selective substitution of imports, impulse of the tourist sector, and strategic public investment targeted at promoting systemic productivity enhancement*. These are considered the basis for constructing the national industry and transforming the “energy production matrix”, in favor of environmentally friendly and efficient new energy resources. In this phase of development, the sectors that are labor intensive, those related to “seguridad alimentaria” (food security) and satisfaction of basic needs, and activities of the “economía social y solidaria (ESS) (social and solidary economy) will be granted protection.

In the second phase, the PNBV expects the relative weight of new industries in the economy to have increased, and that there is continued support and consolidation of the ESS and communitarian ecotourism as wealth creation alternatives, as well as an alliance between universities, firms (private or public) and research institutes with regards to investment in R&D, and support of infant industries. The third phase is one in which the relative share of industry in the economy is expected to be similar to that of the primary sector, and where the industrial sector is able to export as well as to satisfy domestic market demands (what the PNBV denominates the consolidation of strategic diversification and substitution of exports). There would be continuous investment in science and technology, in order to spur innovation.

**ii) The PNBV’s strategies and objectives related to economic diversification:**

The PNBV presents 12 objectives oriented towards citizens achieving good-living, and the 12 strategies for the 2009-2013 period, aimed at creating the foundation for the new accumulation and redistribution model of endogenous development the government has decided to implement. We present here a summary of the development strategies and objectives that are directly related to the diversification of both production and exports.

*Strategy No. 2 (“Transformation of the economy’s specialization pattern, through selective import substitution for “Good Living”):* This strategy explicitly states the need to abandon the primary-extractivist export accumulation model of the past, in favor of infant industries, that satisfy basic needs, in harmony with the ecosystem. But it isn’t considered a traditional industrialization process, because the ESS will be particularly encouraged in this process, so that industrialization in itself is considered a component that will support the development of economic capabilities in this “non-capitalist” type of proprietors.

*Strategy No. 3 (Increase in real productivity and diversification of exports, exporters and export markets):* An increase in real productivity according to the PNBV occurs when higher production levels are achieved when utilizing the same amount of labor force with a lower impact on the ecosystem. The PNBV states that this objective together, with diversifying exports, exporters and export markets will be met in the medium and long term, and that to achieve it, it is necessary to invest during the 2009-2013 period in: encouraging clean and more efficient technologies; develop more and better specialized abilities in the labor force; stimulating value added incorporation in export goods; increasing productivity through the expansion of production linkages, creating production “enclaves” and industrial complexes, infrastructure and other conditions that allow the
insertion of non-traditional goods in Ecuador's export basket; export promotion in infant industries of the secondary and tertiary sector; and promoting de-concentration and diversification of production in order to achieve an even development of all territories, focusing on satisfying local needs.

**Strategy No. 4. (Strategic insertion in the world and Latin American integration):** trade policy in the PNBV is viewed as an instrument for diversification of export market niches and of the export supply, towards goods with increased value added. Any rules agreed upon with other countries will pursue not only tariff reduction but fair trade, taking into account social, environmental and intergenerational responsibility in what the government denominates “Acuerdos Comerciales para el desarrollo” (Trade agreements for development). Subsidies, tariffs and safeguards, will be used for the selective substitution of imports, and in the medium term, the goal is the selective substitution of exports.

**Strategy No. 5 (Transformation of tertiary education and knowledge transfer through science, technology and innovation):** The PNBV contemplates university research as an instrument through which to move away from an extractive and primary goods exporter type economy. Given the country’s lag in research, international cooperation and FDI should transfer technology and knowledge to enhance the industrialization process. University research should be linked with public research institutes in order to execute applied research to be used in strengthening national industry. Given the country’s comparative advantage in biodiversity, universities and research institutes should put emphasis on developing knowledge and research related to the natural resources that are present in each territory, and develop educational programs according to these comparative advantages, and in accordance with the strategy of selective substitution of imports, basic needs satisfaction and diversification of exports, exporters, and export markets.

**Strategy No. 10: (Sustainability, conservation, and knowledge of the natural patrimony and promotion of communitarian tourism):** The PNBV envisions the encouragement of nature oriented tourism, especially tourism with a communitarian or community base, as part of the development strategy. The government considers this a “green” industry that can create jobs and redistribute wealth, and that in turn requires the development of specialized inputs such as: infrastructure, training of a specialized labor force, and natural spaces management plans, etc.

**Objective 11: Establish a social, solidary and sustainable economic system.**

Objective 11 of the PNBV states that Ecuador will implement a social and solidary market economy, in which economic relations will be subordinated to the higher goal of achieving the “good living” of its citizens. This objective is composed of 13 public policies. The most relevant in terms of achieving diversification of production and exports are:

1. **Policy 11.1** “boost an endogenous economy to achieve good living, that is sustainable and evenly distributed territorially, that tends towards transformation, diversification and productive specialization”.
2. **Policy 11.2** “promote the activity of associative SME’s and generate demand for their goods and services”.
3. **Policy 11.3** “promote the conditions of production that assure the nation’s food security”.
4. **Policy 11.7:** “promote adequate conditions for domestic and foreign trade, considering their interrelationships with production and with citizens living conditions”.
The PNBV includes goals for Objective 11; these are target indicators that must be met gradually up to the year 2013. These target indicators are diverse, and include both sectorial and macroeconomic indicators which are not classified, and more over not always conceptually linked to a specific policy within the 13 public policies that are stated in Objective 11. Besides, these target indicators do not coincide with the “macro goals” (macro metas) that were stated in the ATP. With this limitation in mind, we present a list of the target indicators of Objective 11 of the PNBV and macro-goals of the ATP, which were considered most relevant for economic and export diversification policies.

Macro-goals of the ATP:
9) number of firms in the economy (8225 in 2010 and 8658 in 2013)
10) manufactured/industrial exports as a percentage of non-oil exports (39% in 2010, 49% in 2013)
11) number of exported goods (4010 in 2010 and 4691 in 2013)
12) number of export markets (169 in 2010 and 174 in 2013)
13) number of exporters (5172 en 2010 y 6589 en 2013)

Goals for Objective 11 of the PNBV:
1) Goal 11.1.1. Reduce the product concentration of exports to 0.72 by the year 2013
2) Goal 11.1.2. Obtain a 5% annual growth rate of non-oil industrial GDP by 2013.
3) Goal 11.6.1. Reduce 0.06 points in exporter concentration of exports by 2013
4) Goal 11.11.1. Reach a 15.1% share of tourism in total non-oil exports of goods and services by 2013.
5) Goal 11.2.1. Increase the share of microenterprises, small and medium firms to 45% of the value of public procurements by the year 2013.

b) Production, Trade and Investment Code:

The most relevant legal framework that has been put into place to give fulfillment to the policies put forward in Objective 11 is the “Código de la Producción, comercio e inversiones” (Production, trade and investment Code). This Code was established as law on December 2010, and has, according to the Ministerio de Coordinación de Producción, Empleo y Competitividad (MCPEC) (Coordination Ministry of Production, Employment and Competitiveness), as its main objective “to regulate the productive process in all its stages, promote increased value added production and transform the production matrix” (FAQ's about the Code, MCPEC web page).

Consistent with the ATP and the Constitution, the Code seeks to achieve: 1) a productive transformation such that Ecuador’s economy produces increased value added goods and services that are produced in an energy efficient way that protects the environment, thus ending the dependency with respect to the production and export of primary goods; 2) a democratic productive transformation that is inclusive of territories, human groups and firms traditionally excluded from economic development. Specifically, the Code seeks to provide these agents with tools with which to facilitate their access to different factors or means of production, so that they can in turn increase their productivity and access the internal and international markets. The institutional structure created by the Code as well as the public policies and instruments it puts into place to achieve its goals are described in the following section.
3. Main factors that played a central role in shaping the current economic structure and the export mix.

The current economic structure and export mix, can be traced to various circumstances. The most obvious of all is the geographical location of the country and its relative abundance of natural resources, which has allowed the development of mining, agricultural products, and seafood products. However, other important factors have been the institutional and economic policy environment.

The industrial structure that is currently present in Ecuador, began shaping itself during the 1970’s, when an incipient industrialization process began as a result of the deliberate effort by the military dictatorship of the time, to substitute imports and industrialize the nation in order to reduce social injustice, poverty and dependence on primary goods for export. Economic policy focused on giving all kinds of incentives to industrial activity; such as high import tariffs for competing goods, low import tariffs and lower differential exchange rates for the import of capital goods and raw materials used by industry, and preferential loans. This model collapsed when the country fell into the external debt crisis of 1981-1982 and there was no access to international loans and the export revenues from oil exports were insufficient to repay loans acquired by government and firms, which had acquired loans denominated in foreign currency. Also, the system had created industrial firms that used capital goods and technologies designed for larger markets, and since Ecuador had a small market, scale economies were not reached and therefore real wages and employment did not increase as had been expected by the “nationalist revolutionary” government.

During the 1980’s and 1990’s, the “promoter” or “developer” type State was dismantled through the elimination or down-sizing of several planning and development oriented entities such that the State lost most of its tools for intervention in enhancing or promoting productive development. In 1998, the National Development Council (Junta Nacional de Planificación) was eliminated and replaced by the Planning Office of the Presidency (Oficina de Planificación de la Presidencia de la República (ODEPLAN)) which had no institutional relevance in the following years. Other entities that were eliminated were the Center for Industrial Development (Centro de Desarrollo Industrial (CENDES), the Ecuadorian Commission for Capital Goods (CEBCA), etc. The National Council for Science and Technology (CONACYT) was replaced with the National Secretariat of Science and Technology (SENACYT) and the Foundation for Science and Technology (FUNDACYT). The legal framework for promoting small industry was also dismantled (Ferraro and Stumpo 2010) in the early 1990’s. At the same time, the economy was liberalized through tariff reductions since the end of the 1980’s, and also regionalism was embraced through the Andean free trade zone created in 1993. Dollarization in the year 2000 further increased the pressures to promote exports and competitiveness, as economic openness was considered necessary for development. This in turn, especially in the last decade, put pressures on the State to foster exports and competitiveness but in the context of an institutional structure that had already been dismantled during the previous decades. Constant institutional and organizational changes, lack of national planning or of a national development strategy seems to have been the result of this economic and institutional context, made worse by great political instability during the 1990’s and up to 2006. Thus, productive diversification in the 1990’s and up to 2006, was subordinated to the dictates of comparative advantage in an open economy, but in spite of the dismantling of the promoter State, the country benefited from having many export barriers removed by State promotion of exports which was apparently the type of support the State was able to implement.
effectively (at least partially) during this period, particularly after 1997 with the creation of CORPEI.

III. Analysis of policy outputs:

1) Institutional arrangements for the implementation of diversification policy (1997-2006):

(a) Export and investment promotion:

As mentioned before, since the 1990’s and especially since 1997 to 2006, investment and export promotion and integration to world markets was Ecuador’s development strategy. The passing of LEXI defined the institutional structure in charge of trade and investment policy. This law created the Consejo de Comercio Exterior e Inversiones, COMEXI (Trade and Investment Council); the Sistema Ecuatoriano de Promoción Externa (Ecuadorean system for Foreign Promotion); and the Corporación de Promoción de Exportaciones e Inversiones, CORPEI (Corporation for the Promotion of Exports and Investments).

COMEXI was entrusted with designing trade and investment policy and it was an entity composed of both private and public officials. It must be noted that the presence of the private sector in this policy designing board was a permanently debated issue in Ecuador, as it was considered by some as a way for the private sector to capture trade policy in favor of its own particular interests, which could not necessarily coincide with national interests” (Ramirez, 2006). Comexi was responsible for establishing its policies according to the principles of free trade, the international context, signed international treaties and development plans at the national and sectorial level (Aladi, op. cit. 2001).

The Ecuadorean System for Foreign Promotion was composed according to LEXI, by CORPEI and its Foreign Network (which was formed by the Trade Services unit of the Foreign Trade, Industry and Fishery Ministry; and the Foreign Service of the Republic). CORPEI was entrusted with the design and execution of the non-financial promotion of exports and investments and with the leadership of the System; according to LEXI, it had to do the following:

- Execute the non-financial promotion of exports within and outside the country, by rendering services in the following areas: information, training, technical assistance, market development, promotion in foreign markets, and others that could aid in the diversification and increase of Ecuador’s export supply and its promotion;

- Support exporter’s efforts in the following areas:

  a. Diversification of markets, products and exports
  b. Increase in both value added and volume of exported goods.
  c. Identification of new products and services that have export potential
  d. Insertion of Ecuadorian firms and products in international trading systems.

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Ramirez, Diego, “Proyecto para fortalecimiento y mejora de la organización del trabajo del Consejo de comercio exterior e inversiones”. Report prepared for the “Programa de Apoyo a la Gestión del Comercio Exterior” (Program to support foreign trade administration), BID-MICIP, 2006.
e. Guide the promotion of investment in the country, through programs such as disseminating Ecuador’s image internationally, organizing investment promotional events, etc.;
f. Organize and direct a Foreign Trade Network for export and investment promotion;
g. Stimulate the formation of exporter consortiums

(b) Competitiveness policies and industrial policy:

Increasing firm competitiveness was considered a priority since the economy was legally dollarized in the year 2000, and the new monetary regime in the context of a largely open economy increased pressures derived from foreign firm competition. This increased competitiveness was to be established on the basis of higher productivity and quality of production. For that purpose, the Consejo Nacional de Competividad (CNC) (National Competitiveness Council) was created in July 2001. The Vice-Ministry of Competitiveness (within the Ministry of Trade, Industry and Fishery) was in charge of planning the National Competitiveness Agenda (Agenda Nacional de Competitividad) and presided over the CNC.

It is reasonable to hypothesize that this entity suffered from significant institutional weaknesses, as can be inferred from the several institutional changes that it went through during the years. For example, in March 2002, the Ministry of Trade, Industry and Fishery signed an Integrated Program cooperation with UNIDO, “Sustainable Improvement of Industrial Competitiveness“, which had among others, the objective of supporting the activities of the recently created CNC. However, in 2003, the CNC’s direction was removed from this Ministry, so the cooperation efforts of UNIDO regarding evaluation and strengthening of the CNC, were abandoned (UNIDO, op. cit. 2006). In this year the CNC was ascribed to the Presidency of the Republic. Even though it was transferred to the Presidency as a signal of political strengthening of competitiveness policies, and that it launched the Agenda Ecuador Compite (2003-2007) (Ecuador Competitive Agenda 2003-2007), according to UNIDO, it was unable to implement it effectively due to the fact that its policies were conditioned by or subordinated to macroeconomic stabilization policies (UNIDO, op. cit. 2006).

In September 2005, the CNC underwent another transformation, becoming the Council for Production Recovery and Competitiveness (Consejo Nacional para la reactivación de la producción y la competitividad). This new competitiveness council was created taking into consideration several recommendations made by a UNIDO consultant, with the intention of strengthening the executive capacity of the Council, and the political strength of its decisions as well as taking advantage of the knowledge and capacity of the private sector. Therefore, the Council’s composition was changed in order to include new members: CORPEI and also representatives from the private sector (various chambers of commerce, exports, industry, agriculture, small industrial firms, fishing and aquiculture). The President of Ecuador presided over it and 9 Ministers were part of it. Also, the presidential decree that created the new Council established that its decisions were to be followed obligatorily and to be executed immediately. However, as of 2006, an independent evaluation of the UNIDO integrated program of cooperation with Ecuador refers the lack of advances in terms of having a defined industrial competitiveness policy in Ecuador, prompting a recommendation for extending the integrated program to a second phase.
With regards to policies to support SME’s, a lack of integrated articulated efforts on the part of the State also seemed to be the situation during the period being analyzed. For example Cely (2006) states that before 2005 there was no State policy to improve SME’s productivity that would articulate programs and initiatives undertaken by different institutions. It mentions the efforts by the CNC to promote dialogue between the relevant actors, result of which a policy was enacted in 2005 which sought to promote SME’s productivity, their productive integration and their internationalization. Besides, a fund for SME’s development was created during the first quarter of 2005 but as of October 2006 was still not operative. The author concludes it was necessary at the time to integrate the isolated efforts of several entities in one comprehensive SME policy that would articulate all the support State mechanisms that were being administered in isolation by different institutions: training, financing, innovation, productivity, exporting capacity, etc.

(c) Business/productive development programs and impact on diversification:

In this volatile institutional environment, it is apparent that there was not the most appropriate environment for fostering competitiveness or defining and executing an industrial policy. This is further confirmed by the fact that various studies coincide in identifying the poor quality of information regarding business development programs that were put into place during the first half of the last decade as well as the lack of clarification of roles, responsibilities, and coordination among public entities. Multiplica, 2005 mentions that information about business development programs for the 1999-2003 period, is disperse, not found in comparable homogeneous terms, simply absent, or the recipient as well as the donor or giving entity are unwilling to share information related to their programs. UNIDO, 2006 states that there were no self-evaluation, and monitoring of the integrated program that UNIDO performed in Ecuador with the Ministry of Trade, Industry, and Fishery as its technical counterpart, as well as a lack of coordination between this Ministry and other entities like Corpei, in components of the program where there could be synergies. Ferraro y Stumpo, 2010 mention that in Ecuador, programs in favor of the development of small and medium enterprises are characterized by lack of coordination and continuity based on a study done in the year 2007.

With this limitations in mind in terms of available information about business development programs, in Annex 1 is a list of business development programs, the entities that performed them, their objective, and information on their impact (when available), based on different information sources. It is an attempt to give a clearer picture of the kinds of policies that could have impacted diversification during this time period, through the creation of different inputs. In general it can be said that most of these programs were focused on reducing barriers to exports, especially providing non-financial promotion of export services and technical assistance to smaller size firms.

2) Institutional arrangements for the implementation of diversification policy (2007-2011):

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As discussed in the previous section, the 2007-2011 period marks a turnaround of the development strategy that had been followed in the past beginning in the 1990’s. First of all, the planning capacity of the State was strengthened by elevating the State national planning entity (Secretaría Nacional de Planificación y Desarrollo) SENPLADES to the rank of Ministry. This entity elaborated the PNBV discussed in the previous section.

In 2007, the Production Coordination Ministry (Ministerio Coordinador de la Producción) was created through executive decree 117A, and was entrusted with the task of arranging and coordinating policies and actions that public entities adopt with regards to production. In 2008, the tasks of the former Consejo Nacional para la reactivación de la producción y la competitividad (CNPC) were re-assigned to this Ministry (executive decree 1450), and in 2009, the coordinating tasks which were being performed by the Ministry of Industry and Competitiveness are also re-assigned to it (executive decree 1558). Finally, executive decree number 46 of september 2009 amplifies the Ministry’s work scope once again, denominating it Ministerio Coordinador de la Producción, Empleo y Competitividad (MCPEC) (Production, Employment, and Competitiveness Coordinating Ministry), Thus, currently, the MCPEC is entrusted with the responsibility of coordinating public policy related to production, employment and competitiveness.

The remaining institutional structure for the design and implementation of public policies relative to productive development, are outlined in the Production Code. Below a summary of the 6 sections of the Code is presented, highlighting the institutional framework established by the Code with respect to productive development public policies, as well as the policies and instruments that are created for the achievement of the Code’s objectives and that are more relevant to productive and export diversification.

1) SECTION I Productive development, mechanisms and institutions in charge: creates the Sectorial Council of Production (Consejo Sectorial de la Producción (CSP)), entity that will establish the productive development and investment promotion policies. It is composed by all the State entities that are under the MCPEC’s coordination. Additionally the law creates the Advisory Council for Productive Development and International Trade (Consejo Consultivo de Desarrollo Productivo y Comercio Exterior), composed by representatives of: the private, mixed economy, and popular and solidary sectors; autonomous local and regional governments (“gobiernos autónomos descentralizados” (GAD’s)); universities, workers, etc. This Advisory Council is in charge of proposing or suggesting guidelines for productive development, investment and international trade policies, to the CSP. It creates the “sistema de innovación, capacitación y emprendimiento” (System of innovation, training and entrepreneurship) that is a virtual window that concentrates all the public and private instruments available for the promotion of innovation, training and entrepreneurship; this system would be planned and prioritized based on an annual plan of technical training the CSP is responsible for enacting. This section of the Code also determines that the State has the power to invest temporarily in the establishment of risk capitals.

2) SECTION II Development of productive investment and its instruments: The CSP will establish policies to promote the peoples, solidary, and communitarian economy and give it democratic access to factors of production through programs and projects. The competent government institutions in this area will present annual reports to the CSP about their programs. This section also defines 3 types of tributary-fiscal incentives for investments, which are of cumulative nature: 1) general, 2) sectorial and for equitable regional development, and 3) for depressed areas. These incentives are described in detail in the following subsection. The law
states that the government may authorize the establishment of Special Areas for Economic Development (Zonas Especiales de Desarrollo Económico (ZEDE’s)), as customs destination areas in delimited geographical spaces, in which new investments can be undertaken and enjoy special treatment in international trade, tributary and financial matters. The ZEDE’s possible geographical locations will be determined by the MCPEC and the entity in charge of national planning, and can be of 3 types: 1) for transfer and technological disaggregation activities and innovation, 2) innovative industrial business undertakings mainly for the production of goods for export or import substitution, and 3) to develop logistic services. A more precise description of the ZEDE’s is included in the next subsection.

3) SECTION III: Entrepreneurial development of micro, small and medium size firms (MIPYMES) and production democratization: The CSP is given the responsibility of coordinating public policies of ministries in favor of micro enterprises and SME’s (MIPYMES), approving the policies and programs, and monitoring and evaluating the management of the entities responsible for executing these. It is also in charge of approving the annual budget of prioritized plans and programs. Public procurement is established as a mechanism for the productive development of MIPYMES and of the popular and solidary economy (EPS), which must be applied by public entities obligatorily. The CSP must design and supervise the execution of a policy of “democratization” of the productive transformation, through programs that provide access to factors of production like land, capital and technology. The Code contemplates different mechanisms to achieve this democratization. The Code creates the National Fund of Guarantees to facilitate MIPYMES access to financing and determines that the government will create a venture or risk capital program to benefit this group. Public investment in economically depressed areas will be a priority.

4) SECTION IV: International trade: instruments and regulation entities: This section creates the Comité de Comercio exterior (COMEX) (International Trade Committee) composed by representatives of public entities, and is in charge of approving national trade policies both general and sectorial; it is also responsible for export promotion and for designating the entities in charge of implementation. The COMEX may adopt trade protection measures, and it is contemplated that the State will promote exports through access to preferential tariff programs, drawback, loan programs, business intelligence data, training, promotion in international markets, the establishment of an export insurance mechanism, among others. The law creates the Instituto de Promoción de Exportaciones e Inversiones Extranjeras (Institute for the promotion of exports and foreign investment), affiliated to the ministry in charge of international trade policy. The MCPEC is the entity that presides over the COMEX and the policies dictated by the COMEX will be subjected to the policies and productive development strategies established by the CSP.

5) SECTION V: Systemic competitiveness and facilitation of customs procedures: The State will control the national share in public procurements and in investment projects in strategic sectors. Customs processes will be undertaken electronically, simplified, and follow international best practices.

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15 The COMEX replaces COMEXI, and effectively eliminates direct private sector involvement in the approval of trade policy. Also, COMEXI was in charge of approving both foreign trade and investment policy whereas the new COMEX is only in charge of foreign trade policy.

16 Thus, this Institute effectively replaced CORPEI, which was the entity responsible for export promotion, as well as investment promotion since 1997.
6) SECTION VI: Sustainability of production and its relation to the ecosystem: The Code establishes tax incentives that promote “clean production” and energy efficiency.

a) Institutional capacities:

The Production and Investment Code and its accompanying regulations of procedures, defines a clear organizational structure, and responsibilities for each institution, regarding productive development policies. This new institutional structure seems to be an advancement compared to the recent past, characterized by scattered, uncoordinated and duplicated efforts, in which there was an absence of a productive development plan to which all public entities had to align themselves with. At least formally, all must now align themselves with the objectives of the PNBV, the ATP, and the Production Code, under the coordination of the MCPEC. The MCPEC seems to be an organization with high technical capacities, as can be deduced from several indicative signs: the unifying technical coherence and the leadership put into the creation of the ATP and the Production Code and its accompanying regulations (this body of law was amply discussed with the private, public and academic sectors of the country); the creation and implementation of innovative programs for entrepreneurship and promoting innovation (see the following subsection); the development of methodologies for different purposes such as: prioritizing production sectors that will receive specific State incentives, monitoring and evaluating the entities it is in charge of coordinating, defining what is an economically depressed area, etc.; its leadership in conducting dialogues at the national and regional levels; and the high level of transparency in terms of information that is available to the public.

In terms of transparency and making information readily available to the public, in the case of the Ministry of Production (MIPRO) and the Ministry of Agriculture (MAGAP) (entities coordinated by the MCPEC), the information about the programs and projects they execute is in many cases scattered, confusing, and incomplete, in the official documentation that is shown in their web pages. This makes it difficult to discern how their programs operate, which are currently active and which aren’t, as well as their main characteristics. Also, these sectorial ministries don’t have open discussion forums about their policies or information about their budget, as the MCPEC does. This may be indicative of institutional weaknesses in these entities.

Another possible weakness of this institutional structure is that the results of internal or external evaluations to the programs or projects implemented by the MCPEC or the entities under its coordination are not currently available at least in the MCPEC’s web page. Moreover, there is no provision in the Production Code or its rules of procedure that assures independent evaluations of these programs, and accountability in these terms to civil society such that the specific impact, effectiveness and efficiency of all the government interventions in the realm of productive development are known by the public. The Code does determine that all programs and projects must establish specific targets, indicators, etc. that will be monitored or approved by the CSP but it doesn’t contemplate independent external evaluations of its interventions.

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17 Ministerio de coordinación de la producción, empleo y competitividad (MCPEC). “Metodología general de control y seguimiento a la gestión de las instituciones coordinadas por el MCPEC”, 2010.

18 The MCPEC’s has a transparency policy regarding its objectives, strategies, policies, work tools, budget, etc., and is open to suggestions about its work. It is possible to infer this from its Ethics Code (Código de Ética) that guarantees access to public information (Chapter V article 14), the quantity and quality of the information it provides and the public discussion forums it has created in its official web page.
The creation of the Institute for the promotion of exports and foreign investment in the Production Code, could potentially cause obstacles to achieving an effective performance in these areas, because this Institute that replaced CORPEI does not necessarily have the experienced and knowledgeable human resources that CORPEI developed over 14 years of experience working with both the private and public sectors, as well as with foreign entities. If the knowledge, methodologies, and infrastructure of CORPEI are adequately transferred and adopted by this Institute, there shouldn’t be a loss in terms of the services that Corpei had been offering over the years.

In terms of budget resources in order to execute its planned interventions, the CSP was allocated USD 1,096.2 million for its annual investment program of 2011. But the budget as of August 2011 and forecasted by SENPLADES (National Planning and Development Secretariat) for the remaining extent of the year, reached a smaller amount (USD 667.1 million). Approximately USD 241.9 million of this budget reduction is explained by the reduction in the budget allocated to the Ministry of Transport and Public Works (MTOP) which is the entity with the largest share in the CSP budget (79%) in this year and also in previous years. It is not possible with available data to discern if this diminished budget actually spent up to August and forecasted to December 2011, is reflective of less resources allocated by the national government to the CSP, or to under execution of programs by the MCPEC and/or by the entities coordinated by MCPEC which compose the CSP.

b) Business/productive development programs

The new development strategy adopted in 2007 has meant as analyzed above, a series of institutional changes (at least in the structure of entities and decision making process for productive development policies). It has also meant a significant change in the kinds of programs and incentives for productive development that the State is making readily available. These programs are being executed in some cases directly by the MCPEC, and others by their coordinated entities. A summary of the objectives and main characteristics of the programs being executed by MCPEC and its coordinated entities, which are considered to have the most linkage with production or export diversification, is presented in Annex 2. It should be mentioned that as described above, in the case of MIPRO and MAGAP the information that is available is not always complete or clear, compared to the case of the programs implemented by MCPEC, so this Annex also reflects those limitations with regards to availability of information.

Aside from the specificities of each program, there are some general characteristics of these programs that differentiate them from the programs of previous years. One is that there are sectorial or preferential incentives for productive sectors that are considered a priority; these sectors are listed in the procedural rules of the Production Code, and are 18 sectors considered most relevant for the development strategy of import substitution and export promotion. Another characteristic is that these programs, consistent with the concepts put forth in the ATP, the PNBV, and the Constitution, is that in many cases these give special or preferential incentives to

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19 Data provided by SENPLADES, public investment secretariat.
20 The entities under the MCPEC’s coordination are: Ministry of Production (MIPRO), Ministry of Agriculture (MAGAP), Ministry of Labor Relations, Ministry of Transport and Public Works (MTOP), National Council of Training (CNCF), Ecuadorean Institute of Intellectual Property (IEPI), Ministry of Tourism (MINTUR), National Institute of Agricultural Research (INIAP), Ecuadorean Agency for the Assurance of the Quality of Agriculture (AGROCALIDAD), as well as port authorities and the civil aviation authority.
investments or productive development activities in economically depressed zones, or that are performed by smaller sized firms or farmers. This is a deliberate attempt to amplify the opportunities of access to modern economic circuits of population segments that for any reason have been excluded in the past. Also, it is worth mentioning that particularly in the case of the MCPEC, there are now several programs that co-finance prefeasibility projects, innovative activities, costs related to the introduction of product, process, organization, or marketing innovations, risk capital, and entrepreneurship activities. This shows an increased focus on innovation and entrepreneurship compared to the programs that were available before 2007.

In addition to the programs presented in Annex 2, the MCPEC has promoted the elaboration of production transformation agendas in each of the 7 territories in which the country has been divided for planning purposes, and also agendas at the level of provinces (Territorial Productive Transformation Agendas (Agendas para la Transformación Productiva Territorial (ATPT’s))). These territorial agendas are public information on the MCPEC’s web page, and are an attempt to complement and coordinate the policies at the national level with the needs and realities and policies of different regions or territories. These ATPT’s have different levels of completion and comprehensiveness among them but in general they contain a description of the territory, its economic activities and relevant institutions, define priority production sectors and a vision for the territory in terms of productive development, and finally, actions and responsible institutions of taking those actions in order to promote productive development in the province or territory.

IV. Assessment of Policy Outcomes

1) Dependence of the Ecuadorean economy on primary goods/resource sector:

Ecuador’s dependence on the production and particularly, the export of primary goods derived from the exploitation of natural resources has been a structural feature of the economy for many decades. As a percentage of GDP, primary and extractive sectors, accounted for 25.1% of GDP as of 1993, and even though by 2003 this share had fallen to 16.3% (due to the decrease in the share of the agriculture, livestock, hunting and forestry sector), in 2010 it had jumped again to 21.6% as a result of the increased share of the mining sector in GDP, due to the increase in crude oil production and export volumes since 2004. On the other hand, industry has decreased its share in GDP significantly, from 18.0% in 1993 to only 10.8% in 2010. This could be a first sign of a poor product diversification capacity, since industry is the sector in which value added can be increased through the incorporation of knowledge to production, and in which new products can be generated through innovative activities.

| Table 5 |
| Sectorial share of GDP: Primary sector and industry |

<table>
<thead>
<tr>
<th></th>
<th>1993</th>
<th>2003</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture, livestock hunting and forestry</td>
<td>14.4%</td>
<td>7.0%</td>
<td>5.9%</td>
</tr>
<tr>
<td>Fishing</td>
<td>3.7%</td>
<td>0.9%</td>
<td>0.7%</td>
</tr>
<tr>
<td>Mining</td>
<td>8.5%</td>
<td>15.0%</td>
<td></td>
</tr>
</tbody>
</table>
Even though the share of primary goods in total exports decreased more than 10 percentage points between 1992 and 2002, the country’s dependence on primary goods for export revenue is still significant, standing at 77.3% as of 2010. It is worth noting that industrial goods exports accelerated their growth rate since 1993, year in which the free trade zone between Andean nations was established in full, and where most of Ecuador’s industrial goods are exported. Since that initial thrust, they have grown more or less steadily at a 15.3% average annual growth rate.

Table 6
Primary and industrial goods share of total exports

<table>
<thead>
<tr>
<th>Year</th>
<th>PRIMARY GOODS</th>
<th>INDUSTRIAL GOODS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992</td>
<td>87.9%</td>
<td>12.1%</td>
</tr>
<tr>
<td>2002</td>
<td>74.0%</td>
<td>26.0%</td>
</tr>
<tr>
<td>2010</td>
<td>77.3%</td>
<td>22.7%</td>
</tr>
<tr>
<td>Average annual growth rate 1993-2001</td>
<td>3.6%</td>
<td>15.3%</td>
</tr>
<tr>
<td>Average annual growth rate 2002-2010</td>
<td>18.2%</td>
<td>15.3%</td>
</tr>
</tbody>
</table>

2) Diversification of industrial production

We have already seen that as of 2010 approximately 21.6% of GDP is produced by primary and extractive sectors, and that industry’s share in GDP, has fallen from 18% in 1993 to 10.8% in 2010. This slow growth or reduced dynamism of industry that occurred during the 1990’s could have produced a larger concentration within the manufacturing sector, as different industrial sectors apparently stagnated at least relative to other sectors of the economy. Given that innovation in the industrial sector can produce knowledge and productive linkage spillovers and externalities, it is relevant to analyze if the concentration of the economy within the industrial sector has changed during this time period. For that purpose, we have analyzed the number of active production
Within the industrial sector classified according to their technological sophistication for a period in which information was available (1995-2005).

| Table 7 | Industrial sector: Number of active production sectors and concentration of value added |
|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|
| | Number of 4 digit level activities (ISIC) | Number of active 4 digit level activities (1995) | Number of active 4 digit level activities (2005) | HHI 1995 | HHI 2005 |
|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|
| Resource based manufacturing | 31 | 29 | 29 | 0.298 | 0.282 |
| Low technology manufacturing | 38 | 31 | 32 | 0.093 | 0.099 |
| Medium and high technology manufacturing | 58 | 43 | 38 | 0.052 | 0.055 |
| Total 4 digit industrial/manufacturing sectors | 127 | 103 | 99 | 0.157 | 0.156 |

Source: Industrial Statistics Database INDSTAT of UNIDO.

First of all, the level of concentration of value added in the industrial sector could be considered low (HHI is 0.15) and stable between 1995 and 2005. The highest concentration of value added within the industrial sector, as measured by the HHI, is in resource based manufacturing. This subsector of industry has also kept the same number of active lines of production between 1995 and 2005, reporting value added for 29 of the 31 production sectors listed in the Industrial Standard International Classification (ISIC). In the case of low technology manufacturing, even though there is one more active line of production in 2005 relative to 1995, concentration of value added remains basically the same in 2005 as it was in 1995. In medium and high technology manufacturing, Ecuador shows less diversification in terms of production active lines in 2005, with 5 less active production lines compared to 1995, but concentration levels (HHI indexes) remain unchanged.

As can be seen in the following graph, approximately 70% of manufacturing value added corresponds to natural resource based manufacturing, on average between 1995 and 2005. Low technology manufacturing has a more or less constant share of approximately 20% and the remaining 10% share corresponds to medium and high technology industries. This concentration in natural resource based manufacturing is higher than in Colombia (45% share of value added on average in 2000-2005), where medium and high tech manufacturing has an average share of 30%, and the remaining 25% is low technology manufacturing. Overall, there are no signs of increasing diversification of value added within the industrial sector between 1995 and 2005, since concentration levels remain basically the same during this time period. Also, in terms of diversifying the number of industrial activities that are present in the country, there seems to be a

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21 A production line is defined as an industrial activity at the 4-digit level of ISIC. Active production lines are defined as the ones reporting any amount of value added in a particular year.
22 Industrial activities at the 4-digit level of ISIC were classified according to their technological sophistication using the classification of industrial activities of UNIDO.
loss of production lines, stemming from the loss of active production lines in the medium and high technology manufacturing sector\textsuperscript{23}. Sophistication levels of value added also don’t appear to be changing, at least up to 2005.

Graph 1
Ecuador: Share of industrial value added by technological sophistication of industries

3) Diversification of exports

As mentioned before, even though the share of primary exports in total exports has decreased approximately 10 percentage points since 1992, total exports are still highly concentrated in primary goods. These aggregate export shares do not let us see the extent to which the economy has been able or not to diversify its export structure in terms of “discovering” or “incorporating” new products into its export basket and in what kinds of products it has been able to do this or not.

Below we present the number of goods (consignments) exported for selected years. It is worth noting that since 1990, the highest period of export diversification measured by the annual growth rate of the number of exported goods, is the period between 1990 and 1995. It is hypothesized that the high growth rate experimented in the 1990-1995 period can be traced to the establishment of the Andean free trade zone beginning in 1993, which created opportunities for new, especially industrial goods to be produced in Ecuador and exported to other Andean countries. The Andean region is the most important export market for Ecuador for manufactured goods, more so in the case of medium and high technology manufactured goods\textsuperscript{24}. The 2002-2007

\textsuperscript{23} Colombia had both in 1995 and 2005, 49 “active” production lines in the medium and high technology industrial sector, which would suggest a more diversified and sophisticated production structure compared to Ecuador (Freire, op. cit. 2010).

\textsuperscript{24} Between 1990 and 2001, the share of the Andean region in medium technology manufactured exports increased from 61.1% to 82.3%. By 2009, this share was 79.9%.
period was the second most successful period in terms of diversifying the number of goods exported.

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of consignments exported (total)</th>
<th>Number of consignments exported (&gt; USD 50 thousand)</th>
<th>Annual growth rate between periods (consignments &gt; USD 50 thousand)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>445</td>
<td>200</td>
<td>n.a.</td>
</tr>
<tr>
<td>1995</td>
<td>1738</td>
<td>570</td>
<td>1990/1995 23.3%</td>
</tr>
<tr>
<td>2002</td>
<td>1753</td>
<td>700</td>
<td>1995/2002 3.0%</td>
</tr>
<tr>
<td>2007</td>
<td>3093</td>
<td>1109</td>
<td>2002/2007 9.6%</td>
</tr>
<tr>
<td>2010</td>
<td>3166</td>
<td>1136</td>
<td>2007/2010 0.8%</td>
</tr>
</tbody>
</table>


It is desirable not only to discover new export products in a country that is in the stage of development and income level of Ecuador, but also to diversify the monetary value of exports, such that the country is not excessively dependent in terms of export revenue on a small number of export products. The HHI for the selected years in the 1990-2010 period can give us evidence related to the evolution of diversification in this sense.

<table>
<thead>
<tr>
<th>Year</th>
<th>HHI for consignments exported (&gt; USD 50 thousand)</th>
<th>Absolute change in HHI between periods</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>0.2643</td>
<td>n.a.</td>
</tr>
<tr>
<td>1995</td>
<td>0.1654</td>
<td>1990/1995 -0.0989</td>
</tr>
<tr>
<td>2002</td>
<td>0.1751</td>
<td>1995/2002 0.0097</td>
</tr>
<tr>
<td>2007</td>
<td>0.2820</td>
<td>2002/2007 0.1069</td>
</tr>
<tr>
<td>2010</td>
<td>0.2789</td>
<td>2007/2010 -0.0031</td>
</tr>
</tbody>
</table>

We can see in the table above that between 1990 and 1995 exports became less concentrated, as the HHI fell by approximately 10 points. This was a period in which the number of exported goods (above USD 50 thousand) almost tripled (see Table 8), so apparently the discovery of new export products aided in the diversification of the value of exports. In the 2002-2007 period however, even though the number of exported goods grew at an annual rate of 9.6%, concentration of the value of exports at the end of that period had risen to 0.2820 that is, even higher than the one prevalent in 1990. This higher concentration can be mainly explained by the increase in crude oil exports since 2003, made possible by the construction of the heavy crude oil pipeline and the increase in crude oil prices in the international market. Crude oil went from representing 36.5% of total exports in 2002, to 51.2% of total exports in 2007. Thus, concentration levels of the value of exports would have been probably even worse if new products hadn’t entered the export basket during this period25. In 2010, concentration remains high at a 0.2789 HHI and the growth rate of the number of exported goods between 2007 and 2010 was almost null.

It is interesting to analyze in what kinds of products Ecuador has been able to diversify its exports. First of all, we have already seen that primary exports account for 77% of total exports as of 2010, and especially in the 2002-2010 period, compared to the previous decade primary goods have been growing rapidly at an annual growth rate of 17.5% mostly related to the growth of oil exports (Table 10). Natural resource based manufactures have the next largest share, 13.1% in 2010, which has increased since 1990 due to their high base value in that year, even though they grew at lower annual rates than other type of manufactured exports. It is worth noting that medium technology manufacture exports are the most dynamic group of exports, with higher annual growth rates in both 1990-2002 and 2002-2010 than any other category of goods, but given that these had a lower base value to start with at 1990 their share in total exports is still a meager 4.2% in 2010. High technology manufactured exports have an almost negligible share in total exports as can be seen in the table below; besides, in the 2002-2010 period, the annual growth rate of these type of exports has decreased approximately 5 percentage points compared to 1990-2002.

Table 10

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
<td>2421.3</td>
<td>3770</td>
<td>13687.6</td>
<td>89.0%</td>
<td>78.6%</td>
<td>3.8%</td>
<td>17.5%</td>
</tr>
<tr>
<td>Natural resource based</td>
<td>249.4</td>
<td>864.5</td>
<td>2282.8</td>
<td>9.2%</td>
<td>13.1%</td>
<td>10.9%</td>
<td>12.9%</td>
</tr>
<tr>
<td>manufactures</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low technology manufactures</td>
<td>31.9</td>
<td>173.7</td>
<td>593.7</td>
<td>1.2%</td>
<td>3.4%</td>
<td>15.2%</td>
<td>16.6%</td>
</tr>
<tr>
<td>Medium technology manufactures</td>
<td>12.4</td>
<td>165.7</td>
<td>724.8</td>
<td>0.5%</td>
<td>4.2%</td>
<td>24.1%</td>
<td>20.3%</td>
</tr>
<tr>
<td>High technology</td>
<td>6.0</td>
<td>44.9</td>
<td>122.9</td>
<td>0.2%</td>
<td>0.7%</td>
<td>18.3%</td>
<td>13.4%</td>
</tr>
</tbody>
</table>

25 A study by CAF (Camino a la transformación productiva en América Latina, 2006) calculates the HHI for Ecuador and other countries since the early 70’s up to the year 2004, both with and without new export activities. New export activities in that particular analysis are defined as export products introduced into the export basket after the period 1970-1974. In Ecuador, we can see that the HHI would have been higher, particularly since the 1990’s and especially since the year 2000, if it wouldn’t have been for new export activities.
manufactures

<table>
<thead>
<tr>
<th>Total exports</th>
<th>2721.0</th>
<th>5018.8</th>
<th>17411.8</th>
<th>100%</th>
<th>100%</th>
</tr>
</thead>
</table>

Source: Banco Central del Ecuador. Foreign trade database, unpublished data. Trade data classified according to the 12-digit code Nandina classification of products. The aggregation per technological sophistication was done using the first 6 digit codes of Nandina which constitute the international Harmonized System (HS) classification, and then utilizing the correspondence of the HS code with the technological classification of products provided by Unido. When no 6 digit correspondence was found, the 5 digit or the 4 digit correspondence was used.

The above data also reveal high concentration of manufactured exports in natural resource based manufactures, as can be seen in more detail in the Table below. In 2010%, 61.3% of manufactures exports are natural resource based manufactures, but it must be emphasized that this is approximately 22 percentage points below the high dependence on this kind of manufactured exports in the year 1990. Complementarily, low technology manufactures, and especially, medium technology manufactures are the ones that have increased their share, with medium technology manufactures accounting for almost 20% of manufacture exports in 2010. It is worth mentioning too, that the annual growth rate of the number of exported goods has fallen in all categories of manufactures in the 2002-2010 period compared to 1990-2002, such that the export diversification process in manufacturing apparently slowed down during this last decade. This deceleration is more prevalent in natural resource based manufactures and low technology manufactures exports.

Table 11

<table>
<thead>
<tr>
<th>Manufactures exports by technological sophistication: 1990-2010</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Share of total manufacture exports 1990</strong></td>
</tr>
<tr>
<td>Natural resource based manufactures</td>
</tr>
<tr>
<td>Low technology manufactures</td>
</tr>
<tr>
<td>Medium technology manufactures</td>
</tr>
<tr>
<td>High technology manufactures</td>
</tr>
<tr>
<td>Total manufactures exports</td>
</tr>
</tbody>
</table>

Source: Banco Central del Ecuador. Foreign trade database, unpublished data. Trade data classified according to the 12-digit code Nandina classification of products. The aggregation per technological sophistication was done using the first 6 digit codes of Nandina which constitute the international Harmonized System (HS) classification, and then utilizing the correspondence of the HS code with the technological classification of products provided by Unido. When no 6 digit correspondence was found, the 5 digit or the 4 digit correspondence was used.

4) Micro evidence and case studies about export diversification in Ecuador:
The study by CAF (2006) finds that from a sectorial perspective, in Ecuador new export activities that appeared between the period 1990-2004 were mostly (91.1% of them) activities that belonged to “traditional” export “sectors”. Also, this new activities that appeared in traditional export sectors, contribute 97.2% of the growth rate of new export activities in general during this period of analysis. Traditional export sectors in the CAF study refer to 2 digit harmonized system categories in which the country already had exports before the 1990-2004 period, and non-traditional export sectors refer to the same 2 digit harmonized system categories, but in which the country had no previous exporting experience before that same period. Export “activities” refer to 4 digit harmonized system categories of products, within each “sector”. According to the data presented by CAF, this is no different from what is observed in other Latin American and also developed countries included in their study. This is intuitive in the sense that it is to be expected for it to be easier for any country to move into new activities for which there are inputs such as technology, human capital, infrastructure, already in existence that serve similar activities, in contrast to moving into completely different type of activities for which available inputs may not be well suited. Haussman and others have argued this idea to a large extent.

Regarding case studies for the case of Ecuador, CAF 2006 (based on Parreño, 2006) presents evidence for the flower sector and the tuna sector about the factors that determined the surge of these sectors. Both are relevant sectors for export revenues in Ecuador; tuna manufactured products alone accounted for 14.1% of natural resource based manufactures exports in 2010.

Parreño, 2006 states that the tuna sector is a sector with a high degree of “coverage” of “possible” production lines, since at 4 digit level export activities it shows continued growth of production in diverse lines of manufactured production since the 1990’s. This industry began in the 1980’s, and the pioneers in the business were 3 multinational firms and 1 domestic firm. An international shock benefited the industry’s apparition since consumers in international markets were rejecting tuna from California because of what were considered bad tuna fishing practices. He adds that the sector has had access to credit, both domestically and internationally, and that additionally, its activity has led to private investments in many associated activities such as construction of embarkations, installations in which to process the product, R&D activities for the sector, etc. and considers that private initiative has played a fundamental role in its development in general. The sector also shows a high level of cooperation and collective action among firms; jointly, firms in the cluster adopted food safety processes as well as best practice and quality systems including health and sanitary inspections on embarkations (Roncancio, 2006). The public sector contributed with facilitating the process initiated by the cluster to obtain sanitary/health certifications. Additionally, in the year 2000 the State delegated to the private sector from the tuna and other seafood industries, the administration of a training center, which became a catalyst for training human resources and developing R&D and other technical services the industry required.

In the case of flowers, which represent 4.4% of primary exports as of 2010, the industry began in 1982, by domestic investors that were supported by Colombian technical advisors and only 2 flower varieties were produced at the time. Parreño (2006) mentions that in less than a decade, the industry was able to cut off foreign technical advice and began self-training and education through participation in international events, related to technology and inputs for the sector. Now the sector produces many flower varieties. The sector was benefited by preferential tariff treatment under the Andean Trade Preference Act (ATPA), from 1991 to 2001, and the Andean Trade Promotion and Drug Eradication Act (ATPDEA) since 2002, that allowed the product to enter free of tariffs to the United States. Also, according to Parreño (2006), the sector also benefited from the services rendered by CORPEI, in the areas of market intelligence, information about
bureaucratic processes, prices, new markets, events, training, etc., which mitigated the market information failures that affected the sector. The other aspect in which the State played a role was by providing subsidized transport services for flowers in the initial phase of this sector through the state owned airline, since the private sector did not provide the transport services the flower growers required at the time.

Stratega, op. cit. 2007, studies 5 export “discoveries” in Ecuador (canned tuna, broccoli, mangoes, flowers and palm hearts). The role of the State in overcoming barriers to the discovery of these products was found to be: the elimination of trade barriers through ATPDEA in the case of palm of hearts, flowers, mangos and tuna (in airtight containers); CORPEI services such as market information, market promotion and intelligence, and technical assistance to resolve phytosanitary, productivity or technical problems, many times working in cooperation with private business associations and chambers, and access to finance through CFN (public development bank), among the most important.

V. Policy recommendations and advocacy:

Export diversification targets have been partially met in Ecuador. Non-oil exports had an average annual growth rate of 12.5% during 2001-2010, above the 7% annual growth that had been set as a target in the National Plan for the Promotion of Exports at the beginning of the decade. On the other hand, the ATP determined as a goal to have 4010 exported goods by 2010, and by 2010 the number of exported goods was 3166 of which only 1136 had an export value of USD 50 thousand or more. Notwithstanding the diversification effort that did produce some results mainly through export promotion policies until 2006, exports are still highly concentrated in value terms in few especially primary goods.

The institutional framework created in the Production Code assigns to the CSP the responsibilities of defining productive development and investment policies according to the objectives of the ATP and the PNBV, approving plans, programs and budgets of ministries that integrate it, defining priority programs and establishing monitoring mechanisms. Public entities have the obligation to coordinate under CSP guidelines their programs for innovation, training and entrepreneurship. This seems adequate since it draws clear lines in terms of organization and responsibilities regarding public policies in this area, which could facilitate overcoming problems such as lack of coordination, disperse efforts and duplication of human and financial resources. In this context, we present some policy recommendations that could potentially aid to increase the effectiveness of diversification policies and productive development policies.

1) **Determine goals for product and export diversification in a homogeneous fashion such that these goals are shared among all government institutions and in all government publications:** It is clear that diversification of products and export is an essential element of the current development strategy, but the specific goals for diversification are not clearly defined. The target indicators that pertain to objective 11 of the PNBV 2009-2013 are not categorized by policy and in many cases are not conceptually articulated to the policies of objective 11. In some cases, these indicators are not defined and it is not known how the base line was calculated; for example Goal 11.1.1 of the PNBV is to “Reduce the product concentration of exports to 0.72 by the year 2013” but

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26 For example, a target indicator is increasing oil production to 500,5 thousand barrels per day up to 2013, but the policies of objective 11 do not include as a priority the increase of oil production. In fact, the policies explicitly state the need to diversify the economy away from the primary-extractive model of the past.
it is not known what that figure is referring to. On the other hand, the ATP determines macro
goals which are different to the target indicators of the PNBV, even though these documents are
coherent with each other in conceptual terms. Even though there are conceptual similarities in
some target indicators the target indicators themselves are not the same. Also, these national
goals should take into account or be consistent with goals at the level of regions and territories, or
sectors of production; the ATPT’s and the PMC’s for example, even though they currently do not
have explicit diversification targets, could serve as inputs for the national goals since theoretically,
these territorial and sectorial agendas have more detailed information about the needs and the
capacities of each territory and sector.

2) Establishing legal and procedural provisions for independent evaluations of the programs and
projects that are executed by the MCPEC and its coordinated entities: The Production Code
determines that all programs and instruments for productive development of the sectorial
ministries must establish baselines and clear indicators for productivity, associativity,
internationalization, quality improvement, access to new markets, development of new products,
etc., and report monthly to the Technical Secretariat of the CSP a list of the beneficiaries of their
programs. It is positive to have clear indicators for all programs and instruments executed by the
CSP and its coordinated entities, and that these be monitored by the CSP. However, there are no
explicit rules for independent evaluations of the relevance, efficiency and impact of these
productive development programs. Rules of this type, and complementary rules that assure
accountability through the transparency of the results of the evaluations with all members of
society, could contribute to improve programs and projects or the institutional capacities of the
executing organizations, as required.

3) Establishing legal and procedural rules regarding accountability and transparency of programs
and projects for productive development, in terms of budget execution and impact: As mentioned
in this report the MCPEC applies a policy of transparency with regards to its objectives, strategies,
policies, work tools, budget, etc., and has consistently promoted dialogue with relevant
stakeholders. However, this strength in terms of transparency could be improved if the budget
information that it discloses offered information linking its budget (as well as that of its
coordinated entities) to its different programs and projects, and for each program or project, to
the accomplishment of the activities and results that were originally set out to achieve. In the
budget information now disclosed by the MCPEC, expenditures are categorized broadly, according
to the main programs that are executed by MCPEC, and in other cases, in broad categories like
“Apuestas productivas” (Productive Bets) without it being possible to make the link between the
budget, its execution, and the specific programs and projects that are being financed. There is
almost no information on MCPEC’s web page, about the target goals or indicators of success for its
programs and projects, as well as of their actual results and impacts, or independent evaluations
of these programs or projects or those of its coordinated entities. A policy recommendation in
this regard, is that there should be explicit transparency laws that assure the periodic publication
of the target indicators per program or project, and that the budget must be shown in a way that
is clearly linked to these programs and projects and its planned activities, and shown in a
comprehensible fashion to the public.

4) Institutionalizing participatory dialogues among stakeholders at regional and sectorial levels,
and procedural rules that facilitate monitoring, transparency and accountability of their
production agendas:
The current development strategy has emphasized promoting dialogue among different segments of society and the government, in the definition of the development strategy itself and of the public policies that will be used to achieve the objectives of the development plan. The MCPEC has been the entity that has led this process and that has encouraged participatory dialogue among public and private entities, government authorities, universities, etc., in the construction of the ATP, the ATPT’s, PMC’s and the Production Code. The MCPEC has also appointed Zonal Management offices in charge of monitoring the application of the policies, plans, and agreements reached by all relevant stakeholders in each geographical region, to ensure the implementation of the production agendas at the regional level.

The policy recommendation in this aspect is to replicate the kind of permanent institutional mechanisms for participatory dialogue that exist at the national level (like the Advisory council of Productive Development and International Trade) at the regional and sectorial levels, so that there is continuity to the programs, projects and instruments agreed upon in the ATPT’s and the PMC’s, and that these become dynamic instruments that adapt to the changing needs of territories and different production sectors. Also, just as transparency and accountability is recommended at the national level for the programs and projects of the MCPEC’s and its coordinated entities, it is also desirable to have procedural rules that creates monitoring, transparency and accountability to the public, of the territorial and sectorial production agendas. For example, at the moment, ATPT’s and PMC’s show different levels of completion and comprehensiveness and this makes it hard for the general public to know if the planned activities have been taken, or in some cases to identify what are the planned activities, or the concrete programs that have been designed to address the obstacles for productive development.

Another suggestion in this context is that there should be independent studies at the territorial and sectorial levels, periodically done, that evaluate if the mechanisms of participatory dialogue are effective, how they could be improved, and what institutional capacities should be strengthened, and what has been the impact of different policies in terms of generating innovative activities, and dynamic, innovation systems at the sectorial or territorial levels. This could be relevant in terms of knowing if the public interventions are creating more innovative communities and guide how interventions should be adapted to changing circumstances. Periodic innovation surveys and studies of regional or sectorial innovation systems can be done to serve this purpose.

5) Creating a system of information related to product and export diversification that supports informed discussions and dialogue about policies, programs and instruments to promote the diversification process: A system of indicators, with information on goods produced and exported by each region, that can be shared by all stakeholders and government at all levels, could aid in the process of developing strategies for productive development and diversification in particular, at territorial and sector levels. It could also include information extracted from innovation surveys (data on innovative activities and its determinants fundamentally), and become “innovation observatories” at both the national and regional levels. This system could be complementary to INFOPRODUCE (the webpage tool in the MCPEC that offers information about incentives and programs at the national and territorial levels although it still seems unfinished), and to the Unique Registry of micro, small and medium firms (Registro Único de MIPYMES (RUM)), that will be created according to the Production Code, and whose purpose is to create a database with

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27 PMC’s are Programs for Competitive Improvement of sectors or value chains based on agreements among stakeholders about the actions to take in order to remove obstacles for the productive development of the sector or the value chain.
information about micro, small and medium firms that will be available to all, and will include information about services for productive development and programs that benefit this sector.

6) Strengthening institutional capacities beyond the MCPEC: The MCPEC apparently has sufficient technical and institutional capacity; however, the same technical and institutional capacity is not apparent in the case of MIPRO and MAGAP, 2 of the most important entities it coordinates. This seems to be the case in terms of transparency and accountability, as mentioned in this report. MAGAP itself, in the document that describes the project Competitividad Agropecuaria y Desarrollo Rural Sostenible (CADERS), January 2010, states that the agricultural sector has suffered the impact of the absence of planning strategies since in the past there was no policy unit or division to support the implementation, monitoring, evaluation and impact of policies, strategies and plans in favor of the agricultural sector. The obvious policy recommendation is to support all efforts to strengthen the institutional capacities of these sectorial ministries or other public entities, including the training of its human resources so that it develops technical strength through time.

Opportunities for advocacy in favor of these or other policy recommendations are given first and foremost by the MCPEC’s openness and willingness to promote dialogue related to productive and investment development policies. The Advisory Council to the CSP is also an instance in which policy recommendations could be presented. Given the composition of this Advisory Council, it would be expected that its members would be interested in promoting or taking forward proposals related to improving efficacy of diversification policies through independent evaluation of programs, transparency and accountability to the public of the impact of these programs, institutionalizing dialogue at the regional or sectorial levels, and creating a system of information on production and exports. Local or regional governments and the Zonal Management offices of the MCPEC are key stakeholders too in terms of advancing these kinds of proposals. These entities could be especially interested in proposals regarding institutionalizing dialogue or communication channels at the regional levels, accountability and transparency and relevance and impact evaluation at those levels, and a system of information of production that could aid policymakers and the private sector to make decisions, interact, and coordinate with each other. Universities and independent think tanks can also be stakeholders interested in promoting the creation of a system of information of production, exports, and innovative activities (innovation observatories) since it is directly related to their essential functions of research and analysis.
## Annex 1

<table>
<thead>
<tr>
<th>Program</th>
<th>General Objective/characteristics</th>
<th>Benefited sectors/impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrated Programme of UNIDO (2nd. Component: Assistance to SME’s through clusters, ongoing improvement and sectorial support) Technical counterpart: MICIP (Ministry of Industry, Trade, Integration and Fishing) Source: UNIDO, 2006.</td>
<td>Technical assistance to SMEs for: 1) improve production process performance; 2) create supply of technical assistance in the region; 3) technical training in cluster development; 4) creation of business networks; 5) creation of sectorial common services.</td>
<td>Leather and footwear cluster in Ambato; textile and clothing cluster in Atuntaqui. Successful in terms of creating SME’s networks that are involved in several joint efforts (such as the launch of a new product), increased productivity, sales, interaction with local institutions and government, etc.</td>
</tr>
<tr>
<td>Program of innovation and business learning FOCEX. Implemented by CORPEI Source: MULTIPLICA, op. cit., 2004</td>
<td>Promotion of direct and indirect linking of firms to international markets. Through shared funding mechanism, it mostly financed consulting services (42% of the total funds) and trade promotion (37%). Mostly benefited firms with sales up to USD 3 million.</td>
<td>Positive impact generated on improving quality of production, client diversification and employment; did not succeed in increasing exports, exporting firms, introducing new goods or diversifying markets.</td>
</tr>
<tr>
<td>Foreign Trade and Integration Project-Program for the continuous improvement of quality and competitiveness of SME’s (PMC-PYMES). Implemented by MICIP and CORPEI with World Bank funds (duration 2 years since 1999) Sources: MULTIPLICA, op. cit., 2004 and Ferraro and Stumpo, op. cit., 2010</td>
<td>To promote economic growth through promoting foreign trade and integration to the world economy. A part of the program was targeted to SME’s through shared fund mechanism for productive and commercial processes improvement, by means of technical assistance. Aim was to strengthen SME’s exporting capacity.</td>
<td>Firms with export potential were selected. The Project disbursed USD 14 million to CORPEI for technical assistance for 670 firms of all sizes. USD 4 million were given to assist 11000 small producers and microbusinesses. The SME component succeeded in that 75% of the benefited firms implemented a continuous improvement certified process that increased quality, productivity</td>
</tr>
<tr>
<td><strong>Corporación Financiera Nacional CFN (National Finance Corporation).</strong></td>
<td><strong>Resources provided by multilateral financial institutions.</strong></td>
<td></td>
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<tr>
<td>---</td>
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<td></td>
</tr>
<tr>
<td><strong>Second tier loan system of Corporación Financiera Nacional CFN (National Finance Corporation).</strong></td>
<td><strong>Resources provided by multilateral financial institutions.</strong></td>
<td></td>
</tr>
<tr>
<td><strong>CORPEI non-financial promotion of exports</strong></td>
<td><strong>Provided services for the non-financial promotion of exports</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Examples of impact on export discoveries and reduced costs.</strong></td>
<td><strong>250 SME’s exporting or potentially exporting firms.</strong> The 14 million euro program emphasized strengthening sectorial associations, and also State institutions, providing quality and certification services, as well as the State’s trade negotiating abilities. Considered a successful program.**</td>
<td></td>
</tr>
</tbody>
</table>

The program aimed to strengthen SME’s capacity to export, and it had 4 subcomponents: 1) access to European markets, 2) strengthening of associations 3) promotion and development of quality, 4) technical assistance in foreign trade and investment issues.

The CFN provided loans to agribusiness and export activities up to 1998, but because of collection problems and inefficiency, it reduced its coverage. The amount lent by CFN was (approximately) USD 570 million in 1998 falling to USD 100 million by 2005. In the case of 5 export products that were “discovered” during the 1990’s, CFN provided loans in their consolidation phase, playing an important role in the diffusion process of these “discoveries” from the pioneer to other producers.

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30 These 5 export products are canned tuna, broccoli, mangoes, flowers and palm heart. These are significant products in Ecuador’s export basket in terms of their share of exports and dynamism.

31 Nevertheless, according to Stratega, op.cit., 2007, the producers of these 5 export products, encountered problems with CFN financing. For example, in the case of mangoes, the financial conditions of the loans were not compatible with the time necessary for a plantation to be in production such that the industry had serious financial problems for some years. Palm of heart producers also mentioned that not all entrepreneurs could access loans because of the guarantees required in excess of the loan value, etc.

and investment, such as: participation in trade missions and fairs, sectorial technical assistance to comply with market requirements, supporting private sector in efforts to open new markets, information services in areas such as: market intelligence, regulations, procedures in export markets, prices, new markets, training, etc. Additionally CORPEI had specific programs for some products.

diffusion: 1) broccoli: CORPEI co-financed study and diffusion of best practices in production; technical assistance to foster integration among producers to comply with quality standards, strengthening of business development services provided by broccoli growers association, etc., 2) mangoes: co-financing to phytosanitary agency (SESA) to comply with export market requirements, 3) flowers: market development and business promotion services, 4) tuna: market intelligence, co-financing of promotion activities, setting of quality and certification program to comply with export requirements.

Annex 2

Programs executed by the Production, Employment and Competitiveness Coordination Ministry (MCPEC)

<table>
<thead>
<tr>
<th>Program</th>
<th>General Objective</th>
<th>Benefited sectors/impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>A) Innova Ecuador</td>
<td>Composed of 2 contestable funds subprograms: 1) Innovaempresa: co-fines up to 75% of a product, process, organization, or marketing innovation 2) Innovaconocimiento: finances activities that seek to generate technological changes and innovations to increase productivity/competitiveness of a sector, such as: technological development, technology transfer, expert seminars on</td>
<td>1) Firms and individuals with market presence/professional activities for at least 2 years (Infoproduce). 2) Corporations, associations or chambers that represent a productive sector; non-profit civil society organizations; for profit firms provided they are willing to accept the immediate diffusion of the newly generated knowledge</td>
</tr>
</tbody>
</table>
sectorial innovation, technological diagnostic or prospective technological studies.

**B) Emprende-Ecuador**

Develop a support system for dynamic entrepreneurship that contributes to the democratization of business development opportunities, and promotes *diversification* and productive transformation of the nation.

| Contestable funds for non-refundable co-financing of: business plans, market studies, specialized business consulting, technical validations, prototyping, etc. Co-financing amounts vary according to the size of the venture (micro, small or larger); 100% co-financing in lagging or left behind areas. | Individual or firms (Infoproduce) Projects of sectors and production chains prioritized by the MCPEC will be given preference; the projects must aggregate value, be innovative, or support community groups (Infoproduce) |

**C) Cree-Ecuador-Eje Privado**

Democratize opportunities for accessing productive and business capital, in order to build a society of proprietors that drives productive transformation in Ecuador.

| Capital risk fund, can invest up to 49% of the value of a “productive transformation” project that generates “territorial development” and/or increases the shareholding participation of small shareholders. Amounts of investment: -Minimum: $500,000  -Maximum: $2,000,000 | Firms in which the investment is made must promote the development of territories and/or allow greater citizen participation in the shares of private firms. National firms and firms willing to open their capital to shareholding of workers, suppliers, and communities (Infoproduce) |

**D) Programs of Competitiveness Improvement (Programas de Mejora Competitiva-PMC)**

Improve the competitiveness of specific value chains on the basis of public-private agreements.

| By means of dialogue, public and private sector diagnose the problems or specific obstacles within a value chain, and establish a roadmap that delineates the actions for solution, responsible entities, and dates of execution. | The MCPEC has presented 13 Programs of Competitiveness Improvement (PMC’s) in its web page. |

<table>
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<tr>
<th><strong>Programs executed by the Ministry of Production (MIPRO)</strong></th>
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<tr>
<td><strong>Program</strong></td>
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<td>Fondepyme, subprogram: Producepyme</td>
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</table>
Increase the productivity and competitiveness of micro enterprises, SME’s and artisans, at an individual or associative level, through the promotion of import substitution, increase in productivity, increase in value added and associativity/partnerships.


want to develop a competitiveness business project. Preference will be given to sectors considered to be prioritary. Among other selection criteria, projects are selected on the basis of their impact on employment, import substitution, increase in the nations export supply, promotion of associativity, social inclusion, localization in less developed zones, use or development of new technologies, etc.

### Programs executed by the Ministry of Agriculture (MAGAP)

<table>
<thead>
<tr>
<th>Program</th>
<th>General Objective</th>
<th>Benefited sectors/impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>A) National Program of technological innovation and agricultural productivity (Infoproduce)/Agriculture innovation program (MAGAP Emblematic Programs)</td>
<td>Components of the program: 1. Determine the potential of agricultural land 2. Encouragement of the production and use of improved seeds 3. Promote the use of innovative technologies in order to have sustainable agricultural production 4. Develop capacities and tools to promote agrarian associativity 5. Promote “agrarian revolution schools” (escuelas de la revolución agraria) for training and diffusion to peasant bases (*Nor Infoproduce nor MAGAP give information about how the program works)</td>
<td>Agricultural micro entrepreneur and producer, (Infoproduce); 9 crops considered a priority to the program, that have a 65% share of the agricultural production units (Unidades de producción agrícola (UPA’s)) and 73% of cultivated lands at a national level (MAGAP)</td>
</tr>
<tr>
<td>B) National Program of inclusive agrarian businesses (Programa nacional de negocios rurales inclusivos PRONERI)</td>
<td>Inclusive businesses that incorporate small producers in value chains. The purpose is to provide small producers access to: the market in equitable conditions, technology, credit, irrigation, and promote associativity.</td>
<td>Small agricultural producers; PRONERI has signed agreements and works with 13 anchor companies and 1 associative agrarian firm (updated on 12/07/2011, MAGAP web page, Emblematic Programs, PRONERI)</td>
</tr>
</tbody>
</table>

(*MAGAP doesn’t provide information about how the program works)
| C) Agricultural insurance, (updated on 12/07/2011, MAGAP web page, Emblematic Programs) | Insurance allows recovery of direct costs of production invested in crops, in case of damage because of weather, plagues, etc. The farmer pays 40% of the policy and 60% is covered by the program | -Farmers; 4 types of crops are insurable |
| D) Agricultural competitiveness and agrarian sustainable development project (Proyecto de Competitividad agropecuaria y desarrollo rural sostenible (CADERS)-Componente I (Promoción de Alianzas Productivas) | Contestable funds that co-finance up to 60% of business plans whose purpose is to improve: production, processing, marketing, and managerial capacities of beneficiaries. It may also finance participative planning of beneficiary organizations | Small farmer organizations of specific products in agrarian lands of selected provinces, that have experience and are integrated with a commercial ally (intent to buy letter) |

**Other programs and incentives**

<p>| Special Areas for Economic Development (Zonas especiales de desarrollo económico (ZEDE's)) in delimited territories, that offer fiscal incentives: 5 percentage points lower income tax rate 5 percentage points, 0% tax rate if the Area is in a prioritized sector and an investment outside the urban areas of Quito and Guayaquil, imports do not pay value added tax, tariffs, and tax credit for value added tax paid in domestic purchases, etc. | The objective is productive transformation; 3 types of ZEDE's: 1) for technology transfer, disaggregation and innovation 2) to execute industrial <em>diversification</em> operations, any kind of industrial innovative entrepreneurship that is mainly focused on exporting or import substitution 3) to develop logistical services | Beneficiaries: Entrepreneurs 1) to approve a ZEDE, the CSP will evaluate: area in which it will be installed on the basis of the territorial development priorities of the government, the areas potential with respect to the activities prioritized in the ATP, kind of project, environmental impact, etc. 2) ZEDE’s will receive a performance evaluation each semester of its performance indicators associated to the specific objectives of ZEDE’s and will determine if fiscal incentives |</p>
<table>
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<tr>
<th>Fiscal incentives for investment (general)</th>
<th>Stimulate investment, innovation, and technological innovation and productive “democratization”</th>
<th>1) income tax: 3 percentage points reduction, 10% reduction for profit reinvestment in innovation and technology productive assets, deduction of 100% of purchases of machinery and equipment bought for cleaner production, renewable energy or mitigation of environmental impact, from the tax base 2) exoneration of the tax on the outflow of foreign exchange for the payment of foreign loans, 3) incentives for the opening up of capital and sale of shares</th>
<th>Entrepreneurs, all investments in the country</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiscal incentives for investment (sectorial)</td>
<td>Stimulate investment in economic sectors considered priorities for: changing the power grid, import substitution, export promotion, logistic and commercialization activities of the above (art. 18, procedural rules of the Production Code), and in less developed territories</td>
<td>Total exoneration of income tax for 5 years for new investments in the sectors that are defined as priorities by the Production Code</td>
<td>Entrepreneurs in general that will make an investment in a sector considered a priority in the Production Code, and that will be situated outside of the urban areas of Quito and Guayaquil</td>
</tr>
<tr>
<td>Fiscal incentives to investment in depressed zones</td>
<td>Seeks to stimulate investment in economically depressed zones of the country</td>
<td>Besides the general and sectorial fiscal incentives, investments in economically depressed zones can deduct 100% of their spending in the hiring of new workers for 5 years</td>
<td>Entrepreneurs in general that make new investments in economically depressed zones (economically depressed zones will be determined annually by the CSP on the basis of social and productive development vulnerability indicators)</td>
</tr>
<tr>
<td>Fiscal incentives for medium sized businesses</td>
<td>Encourage innovative activities for developing products, processes, markets, in medium sized firms</td>
<td>Deductions of income tax for spending on: technical training for R&amp;D, technological innovation (up to 1% of the annual payroll), on productivity improvement (up to 1% of sales), international promotion/marketing (up to 50%)</td>
<td>Medium sized firms</td>
</tr>
</tbody>
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