

# Latin American 2030 Scenarios

## 1. INTRODUCTION

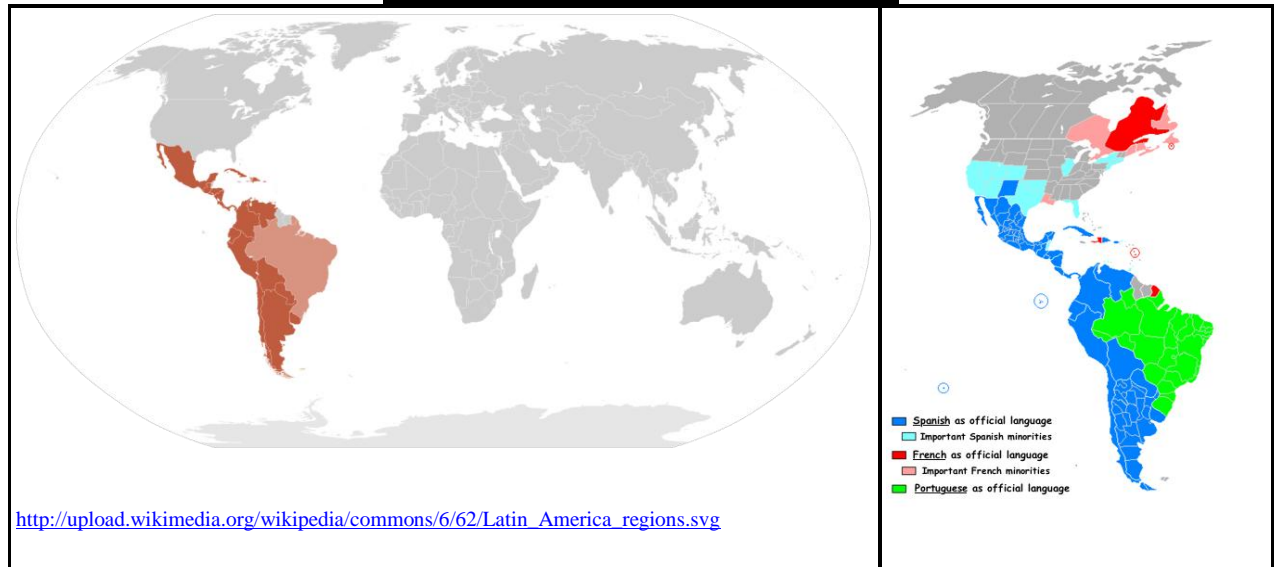
Between 2010 and 2030, most countries of Latin America are commemorating 200 years of independence in multiple bicentennial celebrations across the region. As these countries look back over their first two centuries, it seems appropriate to take this opportunity to explore some future possibilities for Latin America. The last 200 years serve as a basis to think about the future 20 years.

Scenario analysis has become popular in many places around the world since the middle of last century. US futurist Herman Kahn and other experts at RAND Corporation developed several scenarios after World War II. The Club of Rome also made some computer models and scenario projections in *The Limits to Growth* in 1972. At about the same time, before the Arab oil shock of 1973, Shell also published some energy scenarios considering major increases in oil prices. Similarly, Amilcar Herrera and other Latin American experts designed the Bariloche models in order to consider regional scenarios in the 1970s.

In the 21<sup>st</sup> century, many other entities, from companies, cities and countries to larger regions have also used scenario analysis for several policy decisions. The National Intelligence Council (NIC) of the United States of America (USA) has published scenarios for the USA and most world regions. The World Economic Forum (WEF) also has been publishing many industry and country scenarios, including those for China, India and Russia. However, no major Latin American scenarios have internally been developed in the region during the last few years, and the bicentennial celebrations are a good opportunity to propose some scenarios for the next two decades.

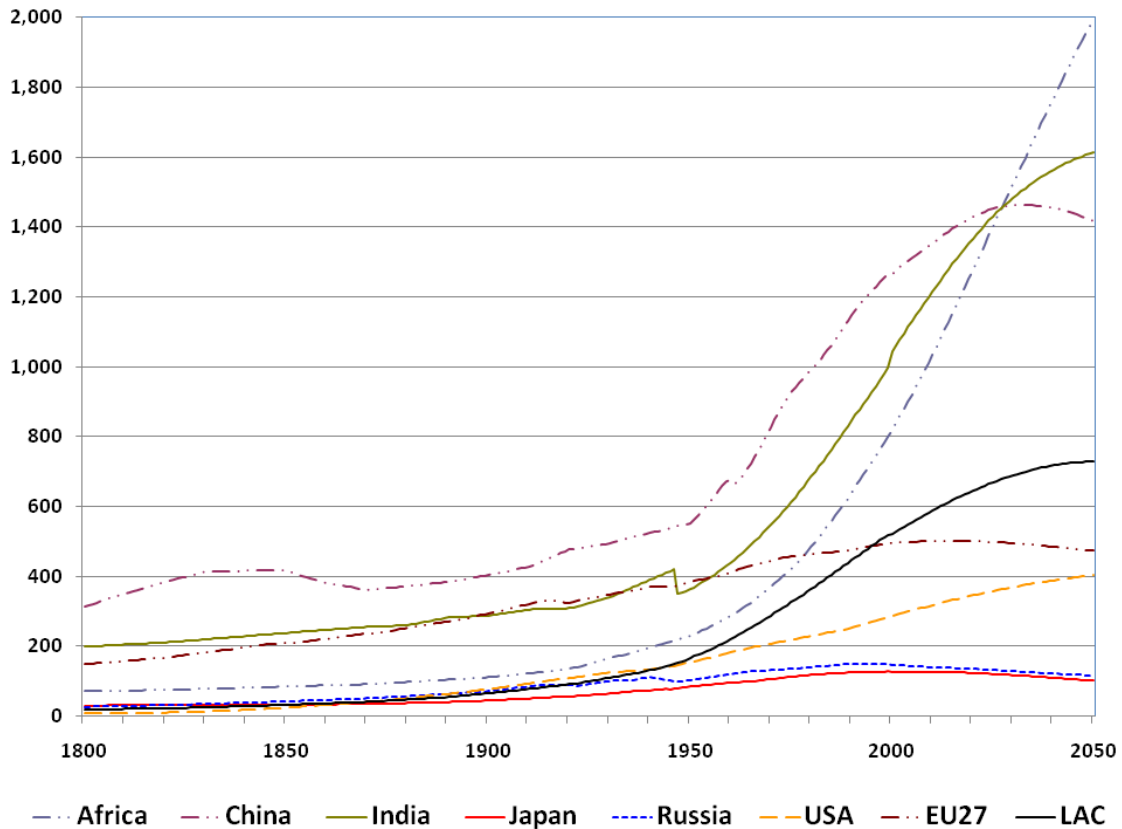
Latin America is a major world region encompassing what is normally considered Mexico, the Caribbean, Central America and South America. Most countries in the region became independent following the French invasions of Portugal and Spain by Napoleon I in the early 1800s. The region was then usually called Ibero-America, a term still used mainly in Portugal and Spain, but Napoleon III supported the term “Latin America” during the French invasion of Mexico in the 1860s. The term “Latin America” was also sometimes applied to include other French former colonies from Canada to the Caribbean, and was employed by some intellectuals who linked the region to the linguistic roots of French, Portuguese and Spanish in Latin (see Figure 1). Thus, linguistically, Latin America is an even larger geographical area that could also include some parts of the USA, which has become the second largest Spanish-speaking country in the world (only after Mexico and ahead of Spain). “Latinos” or “Hispanics” today represent close to 13% of the US population and they are the single largest US minority.

**Figure 1: Latin America in the World**



The total population of Latin America proper, from Mexico and the Caribbean to Argentina and Chile, has grown considerably during the last two centuries (after having been significantly reduced in the decades immediately after the first arrivals of the Europeans who brought diseases that did not exist in the region, decimating unknowingly large groups of indigenous groups). The Latin American population stood at around 576 million people in 2010 and is expected to stabilize in the second half of the 21<sup>st</sup> century at over 730 million inhabitants. In a global context, the populations of the European Union (currently at 27 members), Japan and Russia are already declining. The population of China will also begin shrinking in the 2030s, and India will then overtake China as the most populous country in the world (see Figure 2). Finally, the population of Africa will keep on rising until the end of this century, when it is expected to stabilize as well.

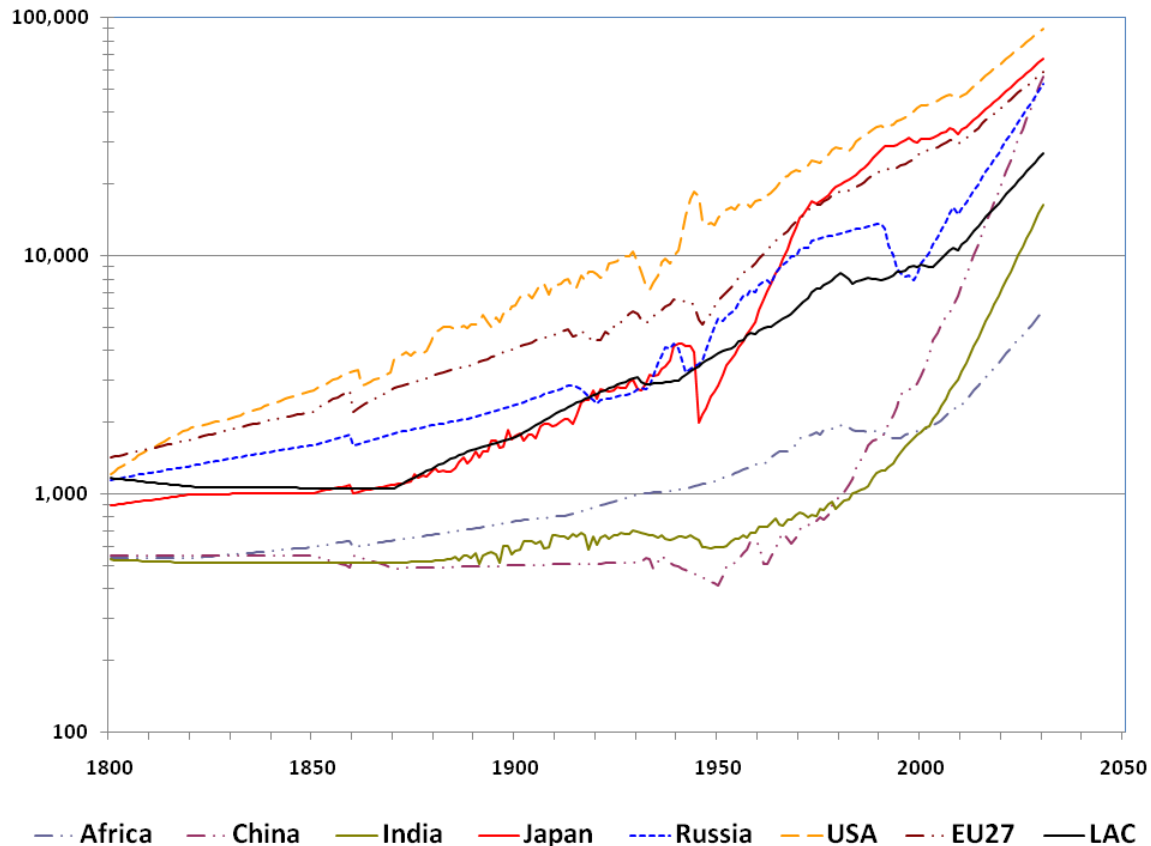
**Figure 2: Comparative Evolution of Population (linear scale)  
(Historic and Projections: 1800 – 2050)**



Note: The population projections correspond to the "medium variant" by the UN

In terms of economic development, Latin America was a relatively wealthy region at the start of the 19<sup>th</sup> century. In fact, some parts of Latin America were richer than the nascent USA. The Dominican Republic, Mexico and Peru had universities almost two centuries before Harvard was founded. Haiti was a very wealthy colony in 1800, richer than many parts of the USA then. Latin America was at par with most of Europe, and it was richer than Africa, China, India and Japan. In fact, even at the beginning of the 20<sup>th</sup> century, Argentina was still one the 10 wealthiest countries in the world, and many poor Chinese and Japanese emigrated to richer Latin American countries like Brazil, Mexico and Peru. However, by the beginning of the 21<sup>st</sup> century, Latin America fell behind and many countries in East Asia had overtaken it. If current trends continue, China will overtake Latin America in terms of GDP per capita in the 2020s (see Figure 3).

**Figure 3: Comparative Evolution of GDP per Capita (GDPc, logarithmic scale)  
(Historic and Projections: 1800 – 2030)**



Note: The GDP per capita projections are an extrapolation to 2030 using the same growth forecast 2011-2015 by the IMF

Figures 2 and 3 show respectively single-point projections for the population to 2050 according to the UN and for the GDP per capita to 2030 extrapolating the 2011-2015 forecasts by the IMF. Population forecasts are easier than GDP forecasts since they are smoother and more predictable, as the curves in Figures 2 and 3 exemplify. Thus is also why the UN has population forecasts to the year 2050 (in fact, the UN even has very long demographic projections up to the year 2300), but the IMF only has 5-year forecasts, that have been extrapolated here until the year 2030.

Table 1 compares Latin America and other major countries and regions in the world according to their land area, population density, population forecasts to 2050 and GDP forecasts to 2030, both total GDP and GDP per capita. Since China is developing so fast, and if the rates of growth continue, it will overtake Russia and Latin America, while India will also get closer to Latin America by 2030.

**Table 1: Latin America in the Global Context  
(Comparison with other Regions)**

Country/ /Region	Area (Million Km2)	Population density (People/Km2)		Population (Million people)		GDP (PPP, Billion US\$ 2010)		GDPc (PPP, Thousand US\$ 2010)	
		2010	2050	2010	2050	2010	2030	2010	2030
<b>Africa</b>	30.222	37	66	988	1,998	2,348	11,686	2.376	5.849
<b>China</b>	9.641	139	147	1,337	1,417	10,051	80,097	7.518	56.526
<b>India</b>	3.287	359	491	1,181	1,614	3,887	26,418	3.291	16.368
<b>Japan</b>	0.378	336	270	127	102	4,296	6,878	33.828	67.434
<b>Russia</b>	17.075	8	7	141	116	2,229	6,087	15.807	52.478
<b>USA</b>	9.827	32	41	312	404	14,705	36,373	47.132	90.034
<b>EU27</b>	4.325	116	109	501	473	15,213	28,016	30.367	59.230
<b>LAC</b>	21.070	27	35	576	729	6,444	19,650	11.188	26.955
<b>World (land)</b>	<b>148.940</b>	<b>46</b>	<b>67</b>	<b>6,909</b>	<b>9,150</b>	<b>74,004</b>	<b>240,246</b>	<b>10.711</b>	<b>26.256</b>

Notes: (1) The numbers do not add since not all the countries/regions have been included in this table. (2) The population projections correspond to the "medium variant" by the UN and the GDP per capita projections are an extrapolation to 2030 using the same growth forecast 2011-2015 by the IMF

Thinking beyond the GDP, and certainly including more than economics, we can use a STEEP (Society-Technology-Economics-Ecology-Politics) analysis in order to consider other variables. The GDP is an important variable but certainly not enough, and an analysis using only the GDP is too simplistic. Therefore, we can also consider the HDI (Human Development Index) developed by the UNDP (United Nations Development Program) and other variables. Table 2 shows some of the variables included during the Delphi Survey for this Latin America 2030 study. It is useful to analyze the "best" and "worst" values for each variable, both in Latin America and in the world, as well as the corresponding average values.

**Table 2: Comparative Best and Worst Cases for International Indexes (2010)**  
**(Economics-Society-Ecology-Politics-Technology)**

Variable/Indicator/Index	World Worst	Latin American Worst	World Average	Latin American Average	Latin American Best	World Best
Society: HDI (from 0 worst to 1.000 best)	0.140 (Zimbabwe)	0.404 (Haiti)	0.624	0.704	0.783 (Chile)	0.938 (Norway)
Technology: E-Readiness Index (from 0 worst to 10 best)	2.97 (Azerbaijan)	3.97 (Ecuador)	4.30	5.40	6.49 (Chile)	8.87 (Denmark)
Economics: GDPc (PPP, Thousand US\$ 2010)	340 (D.R. Congo)	1.121 (Haiti)	10.711	11.188	19.600 (Puerto Rico)	88.232 (Qatar)
Environment: CO2 emissions per capita (Tons/person)	55.5 (Qatar)	6.0 (Venezuela)	4.6	3.7	0.2 (Haiti)	0.0 (Mali)
Politics: Corruption Index (from 0 worst to 10 best)	1.1 (Somalia)	2.0 (Venezuela)	3.3	3.6	7.2 (Chile)	9.3 (Denmark)

Notes: (1) The best and worst values correspond to the latest information of the countries with available data in 2010. (2) The Latin American and world averages and based on population-weighted values

Considering multiple variables gives a broader spectrum to study the future of Latin America, both in terms of itself and also in comparison with other regions and countries around the world. Latin American nations have fallen behind several other countries in the last 200 years, what could happen in the next 20 years?

Will the situation in Latin America become better or worse in the coming two decades? In fact, different scenarios actually consider both possibilities. Diverse variables have to be analyzed in order to avoid the worst and reach the best alternatives.

## **2. METHODOLOGY**

The Millennium Project initiated a multi-year study about the future of Latin America in 2009. This coincides with the expected multiple bicentennial independence celebrations throughout the region. The first phase of this study consisted of a Real-Time Delphi (RTD) survey during 2009 – 2010, and this second RTD is designed to integrate the results of the first in the form of 2030 Latin American scenarios.

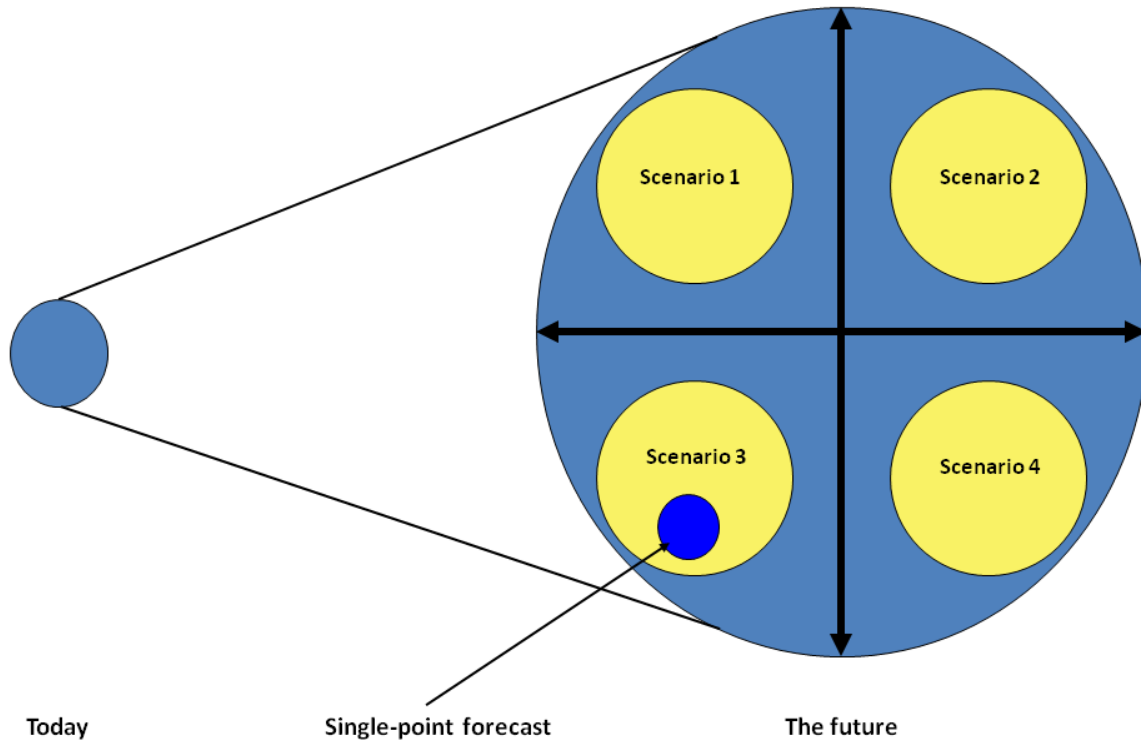
In the earlier study, The Millennium Project Nodes in Latin America designed a Real-Time Delphi to collect judgments of knowledgeable individuals about the likelihood and significance of diverse international and regional developments that might affect Latin America over the next 20 years, and the potential course of variables important to the region. The other Nodes of the Millennium Project around the world also helped identify additional experts to give an “outsider” view of Latin America. The Real-Time Delphi was distributed in three languages (English, Portuguese and Spanish) and had a total of 92 questions, divided as follows:

1. International Developments (questions 1 to 38)
2. Geopolitical Influence (questions 39 to 52)
3. Latin American Developments (questions 53 to 82)
4. Scenario Axes (questions 83 to 87)
5. Main Variables (questions 88 to 92)

Over 550 people from about 60 countries participated during a seven-week period. About 30% identified their gender as female. By country, the top participation was from Brazil at 19%, followed by Argentina at 15%, Mexico at 13%, Peru at 13%, and the United States at 12%. The Real-Time Delphi helped to identify some developments with high likelihood and high significance (called “good bets”) and some others with relatively low likelihood but high significance (called “surprises”). Additionally, the experts corroborated the “rise” of China and the positioning of Brazil as the most influential Latin American country. The results of the Delphi survey ([http://www.millennium-project.org/millennium/RTD\\_LA2030/LatinAmerica2030DelphiSurveyLong.pdf](http://www.millennium-project.org/millennium/RTD_LA2030/LatinAmerica2030DelphiSurveyLong.pdf)) and a compilation of the answers by the Delphi participants ([http://www.millennium-project.org/millennium/RTD\\_LA2030/LatinAmerica2030DelphiSurveyAppendix.pdf](http://www.millennium-project.org/millennium/RTD_LA2030/LatinAmerica2030DelphiSurveyAppendix.pdf)) can both be seen online.

After the conclusion and review of the Real-Time Delphi results, the Latin American Nodes of The Millennium Project decided to create four scenarios for Latin America 2030 using a techno-economic axis and a socio-political axis. Using these standard but simple axes allows the design of a scenario matrix that can be easily visualized. First of all, scenarios allow consideration of many more different possibilities than a single-point forecast. This is a major advantage of the use of multiple scenarios, that is, increasing the range of possible futures to be analyzed, as shown in Figure 4.

Figure 4: Single-point Forecast versus Scenarios



Furthermore, the stories behind the scenarios help to identify additional factors and broaden the vision of what might be possible, even if not very probable. Finally, some scenarios might even reflect single “wild card” events (or the “surprises” identified in the previous Real-Time Delphi) that might have high impact or significant consequences.

Figure 5 shows the four scenarios created using the techno-economic axis in the vertical position and the socio-political axis in the horizontal position. We thus call:

Scenario 1 – “Mañana” is Today: Latin American Success

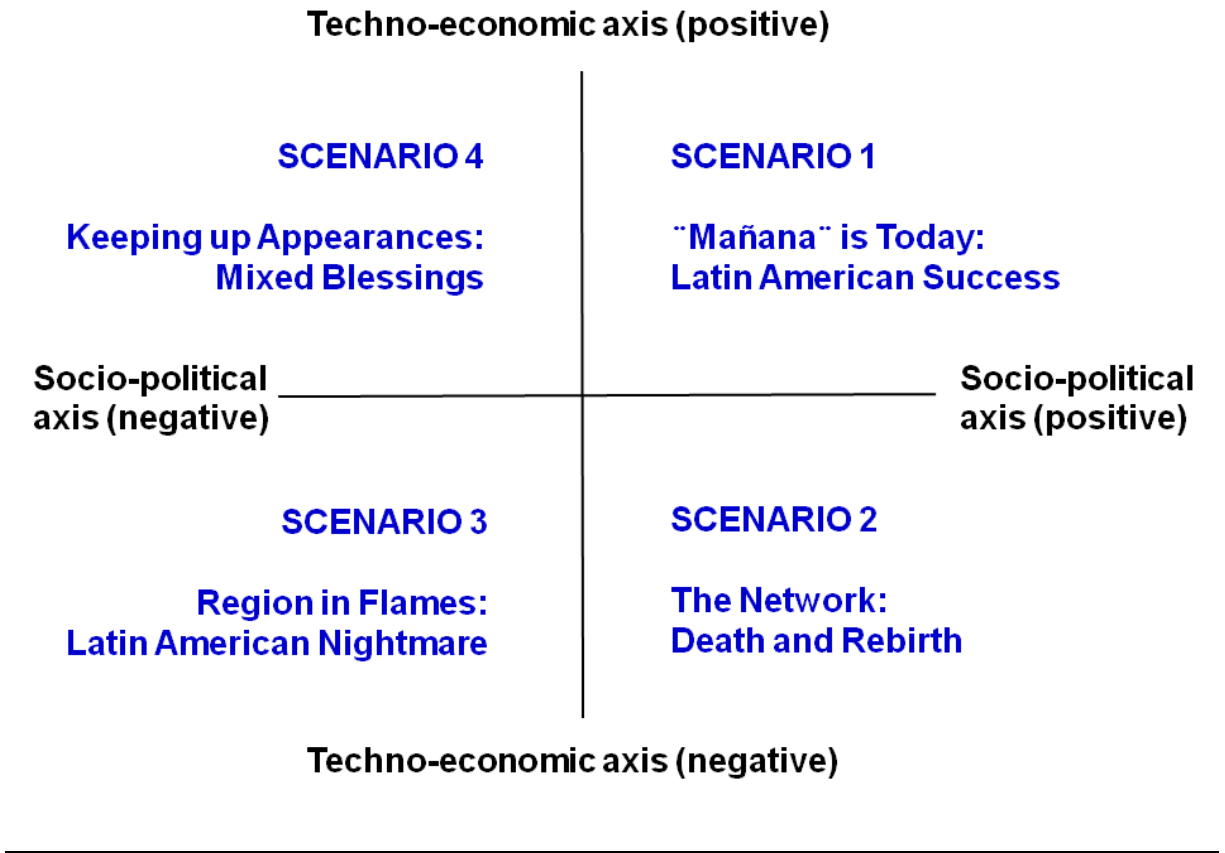
Scenario 2 – Keeping up Appearances: Mixed Blessings

Scenario 3 – Region in Flames: Latin American Nightmare

Scenario 4 – The Network: Death and Rebirth

Each scenario builds upon the information gathered during the Real-Time-Delphi and the direct feedback received from other Millennium Project Nodes.

Figure 2: Scenario Matrix



Different Latin American Nodes of The Millennium Project coordinated each scenario, including several "fill-in-the-blank" questions, that the participants are now asked to complete in the following scenario drafts. Based on your feedback, each scenario will be rewritten to best incorporate all additional input.