

# The Three Dimensional Way to Sustainability in South America

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Global development has come to a point where many societies become aware of the fact that further advancements can no longer be made without limiting future prospects of the upcoming generations and without acting jointly. Globalization along with its challenges demands for a foresighted behavior and proactive steps right now.

In this context the phrase “sustainable development” has been shaped by Gro Harlem Brundtland in 1987 [1] and claims, in the long run, the balance between the interacting three dimensions of sustainability which incorporate economical, ecological and social issues. Unbalances between any of these dimensions will limit future opportunities of growth. Thereby, public debate about any development proves again and again that neither dimension of sustainability can be regarded detached from the others.

On a global scale, the most recent discussions about sustainability focus on climate change. Economic growth mainly in industrialized countries in the past appears to have ended up in or at least accelerated global warming. It is an acute threat to future economical development in most industrialized and developing countries in the world which will increasingly be affected by droughts, floodings or other extreme climate phenomena. Even the social dimension will be affected when, as a result of climate change, regions will lack essential resources and thus become uninhabitable.

The following essay was written by an anonymous student for his application in the South American Business Forum 2007, “Positioning Strategies for Sustainable Development”.

The essay is published with the author’s permission and is allowed to be quoted using the South American Business Forum ([www.sabf.org.ar](http://www.sabf.org.ar)) as reference. However, latest examples from South America show the ubiquity of sustainability matters in daily life and the necessity of conjoint, cross-national efforts to counteract.

One example is the intention of Barrick Gold Corporation to build up a new gold mine in the Pascua-Lama region (Chile/Argentina). Irrespective of the

truth and validity of different opinions about this controversially discussed project it might become a prime example for long-term unbalanced growth. On the one hand, Barrick provides thousands of jobs through the mining project which ensures current economic growth of the region. On the other hand, they intend to move glaciers that are indispensable sources of fresh water and make life possible in that place. These glaciers are said to be destroyed and water supply to the population be at risk. Consequently, future generations will be limited in fresh water supply. Even if people are employed today, the mine only has a restricted life cycle. In the future, people in the Pascua- Lama region both might lose their jobs and lack water supply. Economic growth then has led to ecological deterioration which subsequently limits future economic growth and social standing of the population both in Chile and Argentina. [2] Another example is the recent bumper crop in Argentina [3]. Overloaded infrastructure and discontented farmers or carriers can easily lead to riots and put pressure on the government.

This causes instability which in turn makes the country less attractive for outside investors as credit ratings will be reduced. Consequently, job opportunities might decrease thus backing dissatisfaction of the population. This chain will continue and end up in a vicious circle where one aspect worsens the other and inverse.

This downside trend might also be supported by poverty which affects about 27% of Argentineans and the growing gap between the upper and lower classes throughout South America [4]. Growing dissatisfaction among people who cannot even meet their basic needs, envy and lack of jobs can lead to riots again with consequences as stated above.

As the examples show, positioning strategies for sustainable development must not only focus on one single dimension. It is in the nature that each activity in one dimension affects the others in a certain way. The challenge today is to find a win-win-situation for each action where the desired goal can be reached with minimum limitation to other dimensions.

Speaking for South America, it is now time to establish a framework for long-term sustainable development where all countries take part and bring in their individual advantages of location. Raw material supply, labor, food and water supply thereby appear to be among the main factors of success for future growth in the countries of Latin America. By creating common markets, countries that lack one specific factor can take profit of others and inverse while

securing common growth.

In terms of raw material supply and labor, two areas can be distinguished which are firstly energy feedstocks and secondly other natural resources. As to energy feedstocks, South America as a whole is well- equipped for becoming independent from exhaustible raw materials through its geographical position. Although there is still no considerable lack of energy feedstocks, these will run dry one day. Renewables provide great opportunities to substitute the exhaustibles in the long run. Not only will South America be able to remain independent from energy imports. Supported by its climatic conditions it might even continue exporting surplus energy as already done today. Wind power plants are especially profitable in the coastal areas. Despite being used intensively in Patagonia, they are not yet established on a large scale in Latin America. Photovoltaic energy – through high solar irradiation in South America – supports the substitution of exhaustible raw materials in the same manner. As well as wind power, it even offers chances for remote areas and reduces the expenditures for energy distribution infrastructure. Alongside with these effects, setting up renewable energies leads to remarkable amounts of new jobs, as the examples of other nations show. These help cut unemployment rates, improve satisfaction of the population and increase the purchasing power which in turn improves other industrial sectors.

As to other natural resources different approaches like recycling or remanufacturing technologies have already been successfully implemented in many countries worldwide and prove to be a suitable strategy for sustainable development. Recycling is the process of “reuse or recovery of products, parts of products and materials in the form of cycles” [5] whereas remanufacturing is the process of “recycling by manufacturing ‘good as new’ products from used products” [6]. Remanufacturing is state-of-the-art in automotive components and well established in a whole range of applications and offers numerous advantages for each dimension of sustainability. It is even said to be the most efficient and effective way of recycling [6]. By implementing closed loop processes which recover used or defective products, natural resources both in terms of material requirements and energy consumption are saved and become available for other applications. Besides cutting down the demand for natural resources and associated environmental impacts, remanufacturing has the ability to create jobs for a long- term period. The remanufacturing industry in the United States

alone accounts for more than 70.000 companies and 500.000 direct employees [7]. Even in South America, billions of automotive components, domestic appliances or any other product demand for end-of-life treatment and open up great opportunities for promoters of enterprises. These businesses are able to improve prospects of large parts of the population, enhance wealth of both employees and country with all secondary effects like satisfied residents, better credit ratings and attractiveness for investors etc.

In terms of food South American agriculture can take profit of the need for food of the continuously growing world population which has already been practiced by the recent increase of soy production. Additionally, countries of Latin America are among the biggest producers and exporters of wheat (e.g. Argentina), fresh fruit (e.g. Chile), meat and wool and might back future development in South America as global demand increases.

Through its dependency on agriculture both today and in the scenario as described above, one of the most important resources for South America is fresh water. In this regard global warming again is among the main threats as it is said to support El Niño which bring droughts in large parts of the easterly areas of Latin America and lead to bad harvests. Melting of glaciers through rising mean temperatures might also restrict long-term availability of fresh water. The use of toxins and contaminations from polluting businesses mark another danger. It is indispensable to pursuit legal regulations for waste movements of hazardous substances, treatment of sewage, use of pesticides etc. and check compliance of agriculture, industry and the private sector. Therefore, the availability of clean water must be guaranteed as it is of such tremendous importance to agriculture, economy and the continent both today and in the future. Sustainable development can only succeed if each dimension along with its interactions is considered and growth takes place in a balanced way. Precedent mistakes made by countries all over the world and examples from South America emphasize the necessity of sustainable development and warn against repetition.

Renewable energy resources open up one opportunity on the way to reach these goals. Another very promising strategy represents the thorough implementation of the recycling and remanufacturing industry, which is already well-established in many countries throughout the world and accounts for a considerable business volume. Jobs will be created, dependency on imports be reduced, exports be increased and cash flow into South America be improved.

All this betters the liquidity of South America thus attracting investors from other branches. Due to its dependency on fresh water, many countries of Latin America must take care of longterm availability in order to guarantee future supply for both citizens and particularly for agricultural purposes.

However, the realization of any positioning strategy for sustainable development and its success in the countries of South America is a matter of politics. It is up to governments to create common markets following examples like the European Union where many countries benefit from one another through the absence of trade barriers, knowledge transfer, common trade policies and foreign policies. Politicians in Latin America must now set up the corresponding framework and adequate incentives in order to secure and advance the continent's strength and competitiveness.

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