NATURAL DISASTERS AND THEIR IMPACT ON THE REGION

In 1998, Latin America and the Caribbean suffered the onslaughts of nature as rarely before in the region’s history. “El Niño” once again struck several countries, possibly with greater force than at any time since the mid-sixteenth century. In September, Hurricane Georges lashed several Caribbean islands, and a month later Hurricane Mitch ravaged Central America in the worst natural disaster suffered by some of the countries of the isthmus this century. The scale of these disasters, and the kinds of damage they caused, showed the region’s extreme vulnerability to such events and underlined the indissoluble link between development, environmental sustainability and the risk of catastrophic damage.

The governments most affected by these disasters approached ECLAC – either directly or through the United Nations Development Programme (UNDP) – for advice in assessing damage and working out proposals for rehabilitation and reconstruction. Missions co-ordinated by ECLAC were sent to seven countries. Each of these missions prepared a detailed report for the government in question, based on a methodology developed by the Commission over more than 25 years of work analysing the socio-economic effects of natural disasters.

The Pacific coasts of South America, Central America and the Caribbean are particularly prone to natural catastrophes. In the early 1990s it was estimated that hydro-meteorological, seismic and vulcanological disasters caused losses of at least US$ 1.5 billion annually in the subregion, and claimed nearly 6,000 lives. ECLAC’s reports to the governments therefore put special emphasis on the need to draw lessons from these most recent, and especially severe, events.

El Niño struck first. The product of alternating warm and cold temperatures in the Pacific Ocean, it affected the region with unusual intensity from the first quarter of 1997, causing damage in the Andean region (continued on page 3).
n recent years, the world economy has been undergoing intensive globalization. This offers opportunities for development, but also limits the scope of national policies. Many reforms and different modes of relationship with the outside world are being adopted across the planet in the name of globalization.

But to jump to the conclusion that this means the “end of geography” or “the end of history” is misguided and risky. Globalization is intense, but partial; heterogeneous and unequal. It is not new, and has experienced marked ups and downs over time. In some respects it has gone too far and, in others, not far enough.

International trade and foreign direct investment (FDI) are still notoriously less than domestic trade and national investment. World FDI, for example, represents under 10% of investment in production, while exports make up only some 15% of world GDP.

Patterns of consumption have become more uniform, but not consumption levels. Average incomes in Latin America are 80% lower than in the developed countries; and since inequality is obviously greater here than there, most people in the middle and lower classes of our countries are even further removed from their counterparts in the developed nations.

At the same time, we are again witnessing one of the recurrent crises and waves of destabilization that afflict the world economy. How far we are from the end of history, and how many tasks of construction and change await us if we are to progress towards the future!

Globalization undoubtedly offers many opportunities, but it also brings dangers of national disintegration and exacerbated inequality. If carried out ideologically, the result is that the highest-income sectors in our countries become more and more integrated into the most developed economies, while our societies disintegrate in the process.

As a result, it is completely true that our countries should continue to promote trade and greater integration into the world economy. But this is not a panacea, nor an end in itself; there is no single way of going about it, and it is not without costs and risks. This is why the exact nature of national policies and national, and regional, integration efforts is so important.

The great challenge for Latin America is to move ahead with globalization while strengthening national integration, affirming the region’s identity, filtering out destabilizing elements and, as a matter of priority, selecting those factors that help improve the quality of life and bring about integral and equitable development.

This is no easy task. The region faces four challenges in relation to economic globalization:

1. **Finding ways of increasing its presence in foreign markets that will also enhance internal integration and stimulate a more equitable distribution of productivity.**

2. **Exporting more goods, but better.** The recent experience of small economies shows that the advantages of specialization and scale offered by exports have been one of the main driving factors behind their success. Our exports, however, are still very much based on traditional natural resources, whose prices are falling and unstable.

3. **Concentrating on Latin American integration.** Today, there are signs of economic and political danger in the region. But its potential for future growth, rich in reciprocal exports of increasing added value, is enormous.

4. **Achieving sustainable macroeconomic stability as a basis for development.** Put briefly, this means that instead of opting passively for indiscriminate unilateral liberalization, we can act positively to improve the quality of our integration into the international economy and, within our national economies, create a more favourable environment for investment in production and increased productivity (which should also be better distributed in the world of labour and among small and medium-sized enterprises). Such an effort requires sustainable macroeconomic balances, functional for development, and a will to move forward in developing markets in long-term capital, technology and workforce training.

The author is the Chief Regional Adviser to ECLAC.
that has so far exceeded US$ 7.54 billion.

In Ecuador, excessive rainfall (which in the port of Guayaquil reached an annual total of over 4000 millimetres, a level occurring only once every 500 years) caused flooding, destroyed crops and town centres, triggered landslides, harmed marine fauna and gave rise to a wave of migration with far-reaching consequences. Sixty percent of the population suffered a deterioration in living conditions and 286 people died. Damage is estimated at US$ 2.87 billion and will produce a drop of US$ 660 million in the balance of payments, as well as a fall in the growth rate from 3.5% to 1.0%.

In Costa Rica, an estimated 65% of the population was indirectly affected, while 27% suffered more severe hardship. Damage amounted to US$ 91 million, affecting agriculture, animal husbandry and fishing most of all.

Hurricane Georges was the most destructive of ten tropical cyclones that formed between August and September in the Atlantic Caribbean region. With winds of up to 150 miles per hour, it crossed the islands of Antigua and Puerto Rico, then hit the Dominican Republic, where it caused 235 deaths, injured another 595 people, created 300,000 refugees and left damage estimated at US$ 2.19 billion. The next day, it continued its path of destruction in Haiti, Cuba and the state of Florida in the USA. Damage in the Dominican Republic amounted to the equivalent of 14% of the country’s gross domestic product in 1997 and nearly half that year’s exports.

But the most concentrated destruction was caused in Central America by Hurricane Mitch, which affected Honduras, Nicaragua, El Salvador, Guatemala and Costa Rica, killing 9,214 people, injuring 12,845 and affecting 10.9% of the population of this area, which is only just beginning to recover from decades of armed conflict. Missions coordinated by ECLAC analysed the situation in all of these countries, estimating direct and indirect damage at US$ 6 billion.

Honduras was the country worst affected. Mitch raged over its territory for more than two days, causing rivers to flood to levels unseen this century. The storm took a toll of 5,657 lives, 12,275 injured and had primary or secondary effects on more than 24.2% of the population of this area, which is only just beginning to recover from decades of armed conflict. Missions coordinated by ECLAC analysed the situation in all of these countries, estimating direct and indirect damage at US$ 6 billion.

ECLAC stresses that contributions from the international community will be necessary if these goals are to be achieved, as they are beyond the capacity of the countries themselves. Just as many countries sent practical aid in the immediate aftermath of the disasters, their continued solidarity and that of the world’s financial organizations, through foreign debt relief and other means, will be vital in the future. There will also be a need for cooperation with subregional projects in Central America aimed at reducing the area’s vulnerability to natural disasters of all kinds.

For more information on documents relating to these natural disasters in Latin America, consult the ECLAC Document Distribution Unit, publications@eclac.cl.
Traffic congestion is not a new problem, but in the last few years it has worsened considerably in many Latin American and the Caribbean cities, due to a substantial increase in the ownership and use of cars. No adequate solution to the problem has yet been found. The best approach appears to consist in a package of measures.

Macroeconomic changes in the region have brought vehicle prices down, while raising the incomes of many citizens, especially the middle class. Many people are now in a position to buy a car for the first time in their lives, if only second-hand.

In cities such as Lima or Santiago, the number of vehicles on the road has grown by almost 9% a year. In 1996, there were 3.77 million cars registered in the Municipality of Sao Paulo, a ratio of 0.37 per person, similar to that in some cities in the industrialized countries. Traffic flow in Sao Paulo now reaches an average speed of no more than 19 kph at any time of day; and at peak times this is obviously much less.

Who is worst affected?

Those most affected by increasing traffic belong to two groups: a relatively small number of wealthy citizens who are now having to share limited road space with the new motorists; and the great majority who continue to travel by bus, either because they do not have a car or driving licence, or because they have nowhere to park.

For this second group, congestion is costly not only in time but also in money, since the lower productivity of buses, drivers and conductors is translated into higher fares. In practically all of the region’s larger cities, more people still travel by bus than by car.

The root of the problem lies in the fact that when a vehicle enters an already congested road it delays others, thus increasing maintenance and fuel costs and, above all, wasting more time. In cities such as Lima or Santiago, the value placed on their personal time by motorists is as much as US$ 8 an hour. While all motorists incur increased costs for others, they do not pay the marginal social cost for their occupation of the road. In other words, there is no efficient system of charging for road use.
Road tolls should be introduced together with measures to ensure they do not lead to any deterioration of the urban environment, such as the destruction of green areas or of older buildings of architectural importance, by making space available for new roads or encouraging urban activity to spread beyond traditionally congested areas.

**What should not be done**

New road building, a measure frequently suggested to relieve rush-hour traffic congestion, is definitely not a solution. The extra capacity tends to be used by motorists who previously made their journeys at other times, to other destinations, or by other means. Moreover, democratization and growing cultural maturity in Latin America now makes it very difficult, if not impossible, to run new roads through sectors that are already consolidated.

The construction of metro systems is some help, but once again does not provide lasting relief. At first, road space is freed in the rush hours as journeys are transferred from road to rail, and parking spaces are also freed. But the scanty space made available is soon taken over by other motorists, and congestion tends to revert to levels approaching those before the metro was brought into service.

Stricter control of parking is another possibility, either through surcharges or restrictions on the number of places available. However, unlike road tolls, this affects the convenience of vehicles at their destination rather than on the road, where congestion is generated, and is thus a relatively blunt instrument. Nor does it offer hopeful prospects for a quick solution without drastic change in legislation.

The case of Santiago illustrates this point. In the city centre, 13% of parking is on the streets with parking meters, where the authorities can easily take action. But the remaining 87% of parking places are in parking lots, private buildings or spaces made available by the authorities, and is much less easy to control.

The problem of urban congestion occupies an important place in the work of ECLAC’s Transport Unit. Although we recognize the practical limitations of road tolls, which are used only in Singapore and the Norwegian city of Trondheim, we would tend to support it among the possible options. But, as noted already, the best approach consists of a package of measures of the types we have described.

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The author is an urban transport economist with the Transport Unit of ECLAC.
financing. They are also called upon to fulfil innumerable sociopolitical functions.

In the author’s view, a port revenue-generating policy has direct repercussions on a country’s economy. High port costs reduce the level of national economic activity and may even create shortages of essential goods. He cites the example of Port-au-Prince, in Haiti, where in 1997, because of the inefficiency of the system, it cost US$ 985 to load a 20-foot container, compared with US$ 125 in European ports.

**Characteristics of a modern port**

What should a modern state-run port be like? “Private firms should take part in providing services and facilities, the labour force should be very well trained and responsive to market signals, machinery and equipment should be modern, access for maritime transport should be adequate, and there should be electronic document transmission systems”, says Burkhalter.

And how is this goal to be achieved? “Governments should adopt a regulatory framework establishing a basis for private participation in the provision of services, machinery and facilities, and in labour reform of a commercial nature. At the same time, they should retain sufficient control over port activities to ensure that no group can insulate itself from market forces, impose monopolistic charges or ignore externalities such as the marine environment”, he suggests.

Without competition, privatization merely results in the transfer of absolute control from the state to the private sector. In the Peruvian port of Callao, for example, workers made important wage concessions, but the resulting gains were retained by the shipping agents rather than being reflected in the port dues charged. “Efforts to improve a port’s efficiency fail when one group gives up certain privileges and they are taken over by, or allowed to fall into the hands of, another group,” comments the ECLAC expert.

**Compensation of workers**

Perhaps one of the most difficult changes to bring about is the liberalization of the labour force, as dockers are well placed to exert political influence. It is important to break down the myth that new regimes mean high social costs, and that port workers will bear the whole burden of adjustment, Burkhalter argues.

Governments that have carried out privatizations and/or labour reforms have paid large amounts of compensation to workers to reduce the costs of moving from one job to another. In 1981, the Chilean Government paid out US$ 30 million in compensation, an average of US$ 14,300 per worker, with rates ranging from US$ 10,000 to US$ 20,000; in 1991, Colombia allocated US$ 50 million for the compensation of 8000 dockers; Mexico spent US$ 30 million to liquidate collective agreements which granted dockers exclusive rights to handle cargo. Ecuador estimates it will need some US$ 40 million.

In Chile, Burkhalter argues, experience shows that the major obstacles to modernization were not the lack of advanced technology or investment capital, but incompetent port administration and overmanning. He calculates that, if 1981 productivity levels had been maintained, it would have been impossible to move nearly 12 million tons of fruit, general cargo and forestry products currently being handled without enlarging the installations in the country’s main ports at a cost of more than US$ 500 million.

The author is optimistic about the prospects for port privatization and concludes that the experience of state-run ports from Argentina and Panama to Malaysia and New Zealand send a positive message. But he also warns that there is one thing that governments must not do: believe they can escape the demands of the global economy or that these demands do not apply to them because they are a special case.

This article is based on a book by Larry Burkhalter Privatización portuaria: bases, opciones y consecuencias, LC/G.2045-P, to be published later this year.
Argentina is a pioneer in Latin America in the hydrocarbon sector, where it has made far-reaching and very rapid changes. Prospects of attracting new investment are now very promising. The changes began in 1990 with market deregulation and the privatization of large state-owned companies. The results of the reform have been positive, and the indicators for reserves, production, costs, refining and foreign trade show notable improvement.

This renovation process, including its historical background and the challenges it faces in the future, are the subject of the study “Determinantes de la inversión en el sector petrolero y gas de la Argentina”, by Nicolás Gadano, published as No. 7 in the ECLAC series, Reformas Económicas.

The highly competitive conditions of today’s world economy have brought a marked trend towards internationalization. This can be seen in foreign trade operations in general, in foreign investment in Argentina, and in a new willingness to invest abroad by those Argentinian companies which have managed to survive.

**Argentinian companies are going international**

Internationalization has put intense pressure on private Argentine companies, which are small by world oil industry standards, forcing many of them to sell out.

Yacimientos Petrolíferos Fiscales (YPF) and Pérez Companc are two of those which have not been absorbed by third parties. On the contrary, they have extended production and exploration to other Latin American countries, such as Bolivia, Brazil, Colombia, Chile, Ecuador, Guatemala, Peru and Venezuela.

The ECLAC study found common denominators in the forms of vertical integration adopted by the oil companies, from oil and gas production to petrochemicals and electricity generation. As an example, Gadano mentions the case of YPF, which acquired Petroquímica La Plata, has a stake in the Polo de Bahía Blanca and is developing two petrochemical projects, Mega and Profértil. In the electricity market, YPF has cogeneration projects in some of its refineries and in the Polo Petroquímico de Bahía Blanca. Pérez Companc has done something similar.

**Scarcity of new oil wells**

Between 1998 and 2000, the hydrocarbon sector will receive US$ 12.8 billion in direct investment, most of which will go to gas, given its relative abundance and the prospects for exporting it to neighbouring countries.

According to Gadano, the challenge for oil production in the next few years will be to increase, or at least maintain, the levels of production achieved so far. In spite of considerable investment in exploration, no large wells have been discovered.

He suggests that any fall of production due to the lack of new wells may be taken as a sign that the deregulation and privatization process itself has failed, undermining the existing consensus on the basic rules governing the sector.

Noting the challenges facing the hydrocarbons sector in Argentina for the future, Gadano argues the need to “find new incentives to step up investment in exploration, which is so essential if a reasonable horizon of reserves is to be maintained”. The new Hydrocarbons Act, as it comes into force, offers a good opportunity to achieve this, by bringing greater flexibility into the taxation of private concessions. In the marketing of fuel, on the other hand, deregulation “is not yet translating into full levels of competition, to the detriment of consumers”. This situation could be improved through “the consolidation of new competitors, regularization of imports, and consumer education”.

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*This article is based on “Determinantes de la inversión en el sector petrolero y gas de la Argentina”, by Nicolás Gadano, No. 7 in the ECLAC series, Reformas Económicas, LC/L.1154, 1998.*

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### Argentina: Projected direct investment, 1998-2000

( in millions of dollars)

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<th>Expansion</th>
<th></th>
<th>Greenfield</th>
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<td>Petroleum and gas products</td>
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<td>37</td>
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<td>Gas (transport and distribution)</td>
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<td>240</td>
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<td>485</td>
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<td>Oil pipelines, gas pipelines</td>
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<td>517</td>
<td>222</td>
<td>0</td>
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<td>Oil and gas (extraction)</td>
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<td>131</td>
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<td>Petrochemicals</td>
<td>859</td>
<td>186</td>
<td>655</td>
<td>1,033</td>
<td>46</td>
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<td>Total</td>
<td>5,359</td>
<td>2,199</td>
<td>2,304</td>
<td>1,908</td>
<td>716</td>
<td>340</td>
<td>12,826</td>
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</table>

Source: Production Research Centre, Secretariat of Industry, Commerce and Mining, Argentina.

3 Social Dimensions of Economic Development and Productivity: Inequality and Social Performance, LC/R.1873, English. Essays on the need to achieve social development as a necessary condition for sustainable economic development. Enquiries to: bcarlson@eclac.cl

4 Guidelines for the Identification and Formulation of Urban Roadway System Projects, LC/IP/L.131, English and Spanish. A practical handbook on identifying, preparing and evaluating urban road projects. Enquiries to: jbullemore@eclac.cl

5 El régimen de contratación petrolera de América Latina en la década de los noventa (Cuadernos de la CEPAL No. 84), LC/G.2025-P, Spanish. Discusses the most important changes in oil legislation in ten countries over recent decades. US$ 8.

6 Las debilidades del marco regulatorio eléctrico en materia de los derechos del consumidor (ECLAC series, Medio ambiente y desarrollo, No. 14), LC/L.1164, Spanish. Analyses progress and shortcomings in meeting the rights of electricity consumers in Chile.

7 El factor institucional en reformas a las políticas de crédito y financiamiento de empresas de menor tamaño: la experiencia colombiana reciente (ECLAC series, Financiamiento del desarrollo, No. 75), LC/L.1163, Spanish.

8 Países industrializados: resumen de las proyecciones 1998-9, LC/R.1875, Spanish. Enquiries to: gryd@eclac.cl

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**FUTURE EVENTS**

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<th>MONTH</th>
<th>FUTURE EVENTS</th>
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<td>March</td>
<td>Meeting of Experts of the Automotive Production Cluster “Industrial Restructuring and International Competitiveness in Latin America and the Caribbean”, ECLAC/IDRC project.</td>
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<td>Meeting of Directors of Statistics from the Americas, ECLAC.</td>
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<td>Globalization of Financial Markets and Its Effects on the Developing Countries ECLAC/Jacques Maritain Institute</td>
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<td>march-April</td>
<td>Ford Project workshop on Successful Countries and Financial Crises, ECLAC</td>
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<td>April</td>
<td>Fifth Meeting of Government Trade Policy Officers, ALADI/ECLAC/SELA</td>
<td>Lima, Peru</td>
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<td>Course-workshop on port modernization, ECLAC</td>
<td>Dominican Rep. and Cuba</td>
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<td>May</td>
<td>Second symposium on Regulation and Monitoring of Transport in Latin America, ECLAC/GEIPOT</td>
<td>Brasilia, Brazil</td>
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<td>Third Regional Workshop of the Programme to Improve Surveys of Living Conditions in Latin America and the Caribbean (MECOVI) on “Measurement of Spending in Household Surveys”, ECLAC/IDB/World Bank/INEGI</td>
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<td>Social aspects of high seas fishing, ECLAC</td>
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<td>United Nations Regional Interagency Coordination Meeting, ECLAC</td>
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