Emergency and institutional crisis in Peru during El Niño 1982—1983

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From December 1982 through July 1983, Peru was plagued by disastrous consequences of El Niño/Southern Oscillation phenomenon. While the northern part of the country was devastated by torrential rains and floods, central Andean Peru endured landslides and flash floods, the southern Altiplano suffered a severe drought. Hazard preparedness was nonexistent, and official disaster relief uncoordinated and slow in coming. Administrative inefficiency magnified the stress upon the populations under disaster conditions. Provisions of disaster training from specialized international organizations is recommended as a preventive measure and as a policy to improve catastrophe-coping abilities in developing nations.

Key words: El Niño; Floods; Drought; Refugees; Hazard preparedness; Emergency; International assistance; Political crisis.

In a recent paper on the global effects of the El Niño/Southern Oscillation 1982—1983, Michael Giantz (1984) observed that natural events alone are seldom to be blamed for the malaises affecting a society, since the occurrence of a natural hazard usually has concomitants that tend to maximize its actual impact. Specifically, there may exist social conditions, administrative tangles, economic disparities or organizational negligence that contribute to heighten the negative effects of a natural catastrophe, making it necessary to analyze it within the framework of its societal and administrative context.

Until recently most of the reports on the ecological and environmental effects of El Niño 1982—1983 in Peru have stressed the dramatic externalities of the event, because they were serious enough to alter the ecological balance and severely damage the country’s economy and public works. Beyond these effects there were other sequels to the hazard that placed in jeopardy the precarious sociopolitical conditions of the country. References to these conditions will be made in this paper to emphasize the role played by official shortcomings and lack of hazard-preparedness as aggravating circumstances for the structural damages caused by the natural phenomenon itself.

THE USUAL EFFECTS OF EL NIÑO OCCURRENCES

For the sake of convenience, the effects of an El Niño occurrence can be categorized as environmental, ecological, economic and institutional (Fig. 1).

Considered as a whole, the environmental-economic crisis represented by an El Niño occurrence causes a depression in Peru’s sensitive economy, dependent as it is on the exploitation of primary resources: fish and agricultural products. Destruction of public works (roads, irrigation works, bridges, dams) imposes a severe toll on public finances already exhausted by the contraction of revenues from primary exports. Funds to cope with social emergencies, such as attention to affected populations, medical campaigns to prevent plague outbreaks or relocation programmes — if at all existent — become depleted rapidly, and seldom are provisions made for a fast and effective allocation of relief funds. Insurance against structural and crop damages produced by natural hazards is nonexistent, and no contingency funds to relieve agricultural losses have been earmarked by the state. Recovery from a hazardous event is, thus, usually entrusted to the healing powers of nature and to the internal economy’s ability to absorb the incurred losses. Reconstruction proceeds at a very slow pace, with the most evident damages being repaired first; the less evident being left for “mañana” and finally completely forgotten. Patch-up, rather than corrective repair, is the usual response to structural damage so that, in the event of another El Niño, the destruction is repeated and invested funds are wasted.

These practices have recurred in Peru during recent El Niño events, particularly in 1957 and 1972—1973, but during 1982—1983 the negative effects were significantly magnified.

INSTITUTIONAL BACKGROUND OF THE 1982—1983 ECOCOLOGICAL CRISIS

In 1980, General Oscar Molina relinquished his rule, ending thirteen years of military government. From 1968 to 1974, the populist-military regime of General Velasco Alvarado had introduced rigorous socioeconomic reforms, such as the agrarian reform which though transforming the land tenure patterns in northern Peru, also caused a reduction in the productivity of sugar cane, cotton and coffee destined for export. The nationalization of the fishing industry — a move promoted by the fishing crisis caused by the 1972 El Niño — was revoked by his successor, General Morales Bermudez. However, the blow suffered by the fish stocks had lasting effects on the already overexploited fish population of the Humboldt Current and the fish landings of the 1960s have not been reached again.

Disasters/9/1/1985
The failure of successive military administrations to restore the levels of national productivity achieved during the 1960s and early 1970s forced the military to relinquish their power, leaving behind fiscal burdens and economic malaise for their civilian successors. Thus, even though the election of Fernando Belaunde Terry signalled a return to democratic rule, the decayed state of the national finances, rampaging inflation and a declining productivity in all areas of the economy fostered discontent among the workers and middle class which vented itself in strikes, civil disobedience and outright opposition to the administration of Belaunde Terry. Between 1981 and 1983, copper miners staged wildcat strikes that depressed copper exports. Early in 1983, in an unprecedented manner, the national police force, Guardia Civil, mutinied in protest of meagre salaries. Capitalizing on the lack of authority of the government and on the lack of morale among police and armed forces, the Sendero Luminoso (The Shining Path), a Maoist guerrilla group that had been active in rural areas and villages of the mountainous Department of Ayacucho, extended their terrorist acts to larger urban centres and even into Greater Lima. The government therefore faced a grave economic, social and institutional crisis, adding to the vulnerability of large sections of the population.

THE IMPACT OF EL NIÑO 1982—1983

In the midst of this parlous sociopolitical situation Peru was struck by the 1982—1983 El Niño. The concentrated rains began to swell the rivers of arid northern Peru in January of 1983, destroying riverine hamlets, roads, bridges and water works. The cotton and sugar cane producing oases were silted or damaged by erosion. The Panamerican Highway, the vital artery that connects the coastal centres of northern Peru, remained impracticable in several sectors from January until November of 1983. Communications with northern cities like Talara and Tumbes had to be made by sea, often — for lack of seaworthy vessels — under precarious circumstances. Lives were lost as boats capsized when crossing swollen streams or when caught by gales on coastal waters. The prices of staple foods rose to levels that made them unattainable for the poor. Drinking water was sold at close to U.S.$0.50 a gallon in the city of Talara, and the price of a pound of sugar reached U.S.$0.70 in some urban centres of northern Peru, a region famous for its sugar production. The humid and warm weather favoured the spread of intestinal diseases, tuberculosis and typhoid. In some rural places, the infant population was affected by outbreaks of leishmaniasis, while the multiplication of mosquitoes and other insects spread malaria and skin ailments (Caviedes, 1984).

In mountainous areas of central Peru the torrential rains that fell from January until July of 1983, caused landslides (huaycos) which erased mountain roads and cut communication with coastal towns. Landslides and avalanches ruptured tap water lines and clogged reservoirs: muddy drinking water issued from the faucets in Lima until June of 1983.

The Altiplano region of southern Peru and Bolivia — an area around Lake Titicaca — had already suffered, since
1981, from scant summer rains that caused starvation of cattle and llamas, and failure of summer crops: alfalfa and potatoes (Jackson, 1984). Since mid-1982, famine was widespread among Indian villagers, with instances of children being sold to better-off families to escape starvation in their own desperate households. The drought continued during El Niño.

The lack of fish in the Peruvian waters brought to a standstill the production of fishmeal by the numerous fish processing plants scattered among the coastal towns of central Peru, with the ensuing increase in unemployment and crime.

In the agricultural sector the extent of the damage was no less impressive. According to the estimates of Oscar Valdivia, an expert in public finances and agricultural planning, the agriculture of Peru suffered losses of U.S. $244 million during 1982—1983. The U.S.$465 million that accounted for destroyed roads, water works and structures is nearing the nation's public works budget for the next four years (Valdivia, 1983). In northern Peru, silting and oversaturated soils caused failure of the crops that were started between August and November of 1982, such as cotton, rice and potatoes (known as the campaña larga, the long crop) to a total of U.S.$90 million. The fate of the crop of the campaña chica (the short crop, consisting of corn and sorghum) is still in doubt by mid-1983.

With most of the land of northern Peru having been expropriated under Velasco Alvarado, agriculture has been managed almost exclusively by small farmers or peasant co-operatives who lack the financial solvency to absorb the losses inflicted by the torrential rains and floods. In view of the prevailing economic crisis it can be well understood that funds for crop-loss compensation and damage repairs after the catastrophe were not among the top priorities of the Belaunde Terry administration.

EMERGENCY AND LACK OF PREPAREDNESS

Beleaguered as the government was by economic difficulty, terrorist activities, civil disobedience and popular unrest, the reaction of the administration was uncoordinated and ineffective; initial moves to assess the situation were not followed by efficient relief measures, relocation or curtailment of disease. Media reports, assessments by representatives of international relief organizations and the author's own field observations support these criticisms.

When roads and bridges were destroyed by high waters, no provisions were made to build emergency pontoon-bridges or to establish alternative routes of access. Many northern highway workshops had no repair parts for tractors and bulldozers, and, at times, even no money for gasoline. Damaged tracts of the Panamerican Highway were slowly repaired by crews working with shovels and pickaxes, and during all that time no warning signs were erected to indicate hazardous sites. It must be remarked here that those most affected by this were not the affluent citizens of Lima but the provincial motorists, who saw their cars and trucks — their essential working tools — fall apart due to the catastrophic road conditions. Military airplanes were used to take public figures to where they would be exposed to the public rather than concentrating on transporting needed medications, tents or essential food stuffs.

Once the dimension of the Peruvian disaster was known internationally, relief aid, clothing, drugs and food were sent from western Europe, North America, Japan and some South American neighbours. Most of these items arrived in Callao, the main port of the country, but much of this help never found its way to where it was most needed. Improvised emergency shelters for victims of floodings and avalanches — if erected at all — were left unattended by health officials for months, the only help forthcoming was from volunteers of the national chapter of the Red Cross who, although acting with the best of intentions, were critically short of medication and supplies. In July 1983, when the author was visiting the area, outbreaks of typhoid in the river oases of Tumbes, Chira, Piura and Taimy were still not brought under control and widely advertised in the national media (La República, 10th July 1983, pp. 5—6). In damaged villages along the rivers Motupe and Taymi, the adobe walls of cemetery niches had collapsed under the action of concentrated rains, and, in many instances, coffins were unearthed (see Fig. 2).

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**Fig. 2. Unearthed coffins at the cemetery of Mochumi, Taymi Valley.**
In the lower course of the Piura River, peasants from the riverine areas erected huts out of willow branches and cartons that spread for miles along the route from Catacaos to Sechura. On the beach of Paita, destitute families who had seen their houses washed away by flash floods sought shelter on abandoned or stranded fishing boats (Fig. 3). In the remains of the village of Lagunas, on the mouth of the Zaña river, former independent sugar planters still lived in tents or shacks months after the floods and rains. Their incipient neighbouring vegetable gardens attested to their intention to stay for longer in these improvised settlements, since no help arrived from the local or national governments, notwithstanding the promises of prompt relocation by officials during their repeated visits (Fig. 4). The author wants to stress that these circumstances were observed by himself in communities located in, or close to, frequented routes and in places that he knew to be hazardous on the basis of comparable observations conducted during El Niño 1972—1973 (Caviedes, 1975). Similar, or perhaps even worse, damage might be found in remote villages with difficult access, with even less chance of attracting government attention and assistance.

PROMOTING HAZARD PREPAREDNESS IN PERU: A CONCLUSION

It emerges from the circumstances outlined above that the damage caused by the most impressive El Niño of this century were magnified by the state of economic prostration and by the administrative disarray prevailing in the country at the time. It cannot be ignored that Peru is a country constantly beset by natural hazards and that, therefore, many of the numerous sequels of the phenomenon (concentrated rains, floods, epidemics, road destruction, droughts, lack of staples) can be expected again. Repeated warnings, voiced by as reputable bodies as the Bar of Peruvian Civil Engineers, as to the destructive effects of high waters, concentrated rains and flash floods and to the precautionary measures that should be taken by governmental agencies to protect populations and public works in many coastal oases and mountain villages went unheeded by local and national authorities (Colegio de Ingenieros del Perú, 1982). Unless similar warnings are heeded in the future, the devastating impact of El Niño 1982—1983 will be repeated.

Such a negative assessment of the situation is, however, incongruent with the postulates and relevance of natural hazard research. Not in vain do there exist international bodies such as UNDRO (The United Nations Disaster Relief Organization), OFDA (The United States Office of Foreign Disaster Assistance) and specialized offices to deal with epidemics and plague outbreaks within PAHO (Pan-American Health Organization), (Davidson and McKelvey, 1983), which are prepared to help in catastrophic events and to train local officers to cope with such situations. Peru is a case in which it is necessary to train governmental personnel in matters of disaster prevention and hazard preparedness according to their own needs and within the framework of their geography (Carter, 1983). Failing a national policy of disaster training it should be
possible to brief the country’s authorities about the appropriateness of such training within the framework of international assistance. For instance, the indebted government of Belaúnde Terry has requested new loans and renegotiations of older ones from the World Bank and International Monetary Fund, citing as a cause the disasters of 1982—1983. If the reasons are legitimate, loans for these purposes could be granted on condition that appropriate national agencies, assisted by specialized international organizations, should be instituted by the Government as a proof of its serious commitment to disaster preparedness. By no means should such action be considered as an imposition by foreign organizations on a sovereign nation, but as an act that confers greater weight to internal demands for improved hazard preparedness and administrative organizations to cope with disasters. In this context should be mentioned the plea of spokesmen of the Peruvian Bar of Civil Engineers:

The cyclical character of the natural phenomena in Peru calls for the formulation of a serious and realistic planning and prevention policy. It necessitates the concentration of all available national resources and the mobilization of the whole country to take the measures that would combine solidarity with distributive justice.

Colegio de Ingenieros del Perú, 1982

REFERENCES


