

Abstracts

Blaming It on the Weather: The Role of “Inclement” Rainfall in Society-Nature Relations in Liberal Costa Rica (1860-1940)

Anthony Goebel Mc Dermott, Ronny J. Viales Hurtado

This article seeks to shed light on some of the many possible interactions between changes in rainfall regime, one of the climatic factors with the greatest bearing on the history of human society, and the economic and socio-environmental dynamics of Costa Rica. While Costa Rica was developing into a Nation-State and defining its role as an agricultural exporter in the global market, new liaisons with the biophysical environment were being developed, guided by the irresistible ideology of “progress”. Significantly, this time period largely coincides with of current process of institutionalization of science in Costa Rica, and the State’s urgent need to understand the specific features of the country’s rainfall regime in connection with its efforts of expansion and diversification of commercial farming, given the indisputable impact of precipitations on the agricultural sector and infrastructure development, both pivotal elements of the liberal economic project. Parting from this contextual base, the article seeks to analyze the operative capacity of this “modern”, “scientific”, and “macroeconomic” vision of rainfall and its effects, the unequal and socially differentiated character of institutional response in the face of floods and other “disasters”, as well as the concomitant “culpability” discourse placing the blame for these disasters on Nature as a means to justify the priority given to “national” infrastructure over the needs and wishes of many citizens. We will also briefly look at promising themes for future research, such as the relationship between climate and property value, as well as the impact of rainfall on the performance of the agro-export model, the economic basis of liberal Costa Rica.

Environmental Change and Chronic Famine in Manbhum, Bengal District, 1860-1910

Nirmal Kumar Mahato

The present paper examines the chronic occurrence of famine in Manbhum after the 1860s due to environmental degradation. Colonial intervention from the late 18th century onwards led to a process of transformation of the area. Eco-

logical intervention was the prime factor behind this transformation. The agrarian conquest of Manbhum in the 19th century not only changed the local land use pattern, it transformed the agrarian structure and led to deforestation. The increase in commodity production and the expansion of monoculture badly shook the ecological balance of the area. Environmental change ultimately led to water and nutritional crises. The denudation of forests deprived people of alternative food sources during scarcity. Though the British idea of progress was based on agricultural advancement, this was carried out at the expense of the forest and was quite unsuited to the characteristics of the area. In general, monocultures of short-lived annual plants, a typical agricultural strategy in temperate zones, are inappropriate for tropical regions. The sustainable economy of the local *adivasis* (aboriginals) was permanently destabilised, and the district made vulnerable to famine. In the late 19th century the area faced several harsh famines. The *adivasis* tried to survive on the products of what was left of the jungle as their paddy crops failed. They not only collected starchy root tubers such as *pan alu*, a wild variety of *ole* (*amorphophallus campanulatus* [Araceae]), and others, and the flowers of the *mahua* (*Madhuca indica*, Gmelin [Combretaceae]) as a primary food source from forests, and tamarind leaves (*Tamarindus indica* L., Family Leguminosae) as spice, but also cultivated indigenous low-cost cereals such as *eri*, *gundlu*, *marua*, *sama*, and others for survival. These cereals, although their yields were low, could be cultivated even under drought conditions because of their low water requirements (*jowar*, *bazra* and *ragi* were also used for the same purpose).

Looking Back to Move Forward: Using History to Understand the Consensual Forest Management Model in the Terai, Nepal **Poshendra Satyal Pravat**

Forest management policy in Nepal's Terai region has witnessed increasing conflicts and contested debates, particularly over who should manage the region's valuable forests. While the government advocates collaborative management in the form of a partnership between the government itself and the local communities, community forestry activists oppose this model and argue instead for total community control of local forests. One way of overcoming this policy impasse is to look back and reflect on how past forest politics and policy affected local people and forests. This paper attempts to explore historically the impacts of past forest politics and policy on social equity and ecology, in hopes to provide an insightful opening to a more reasoned discussion. It is suggested that past forest politics and policies may continue to influence the forest bureaucracy in Nepal and, hence, shape present-day forest management in the Terai. The paper argues that Terai forestry has historically been an inequitable sector, principally benefiting the state and the ruling class, with ordinary Nepali people not receiving a fair share of the benefits. In the context of the rapidly changing political transformation in Nepal, with major political actors, including the Maoists, agreeing to a major restruc-

turing of the state, the paper argues that it would be a blunder to overlook the history of Terai forestry, in particular issues that have a bearing upon transparent and accountable forest governance. It is argued that more open, proactive and deliberative dialogue between the various stakeholders of Terai forestry is the key to exploring and understanding the intricacies of the consensual model of forest management in the region.

Limitations of Environmental Success Without Successful Environmental Policy

Paula Schönach

After the Second World War, Helsinki experienced decades of modernization and rising living standards, but also the adverse consequences of modern urban life. Air pollution from energy generation, industries, waste incineration and traffic became increasingly obvious from the late 1950s onward. Scientific uncertainty about the nature and severity of the problem, together with a lack of appropriate legal tools to combat air pollution, resulted in the failure of city officials' attempts to deal effectively with polluters. Hegemonic attitudes concerning the nation's economic future led to reluctance to demand costly air-protection measures – pollution was partly accepted as the price to pay for higher living standards. Paradoxically, in spite of this, the air quality in Helsinki eventually improved remarkably, after having been at its worst in the late 1960s. The main causes of this development – the transition to district heating and the relocation of polluting industries away from Helsinki – were a consequence of economic calculations in the context of an energy supply crisis and the specific geographic limitations of the city. The city's improved air quality was a result of partial problem displacement combined with economically motivated structural changes. This paper examines the reasons for this environmentally advantageous outcome, which was achieved in the absence of a particularly successful environmental policy.

Responses to Air Pollution Based on Historical and Current Policies in the EU and ASEAN

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This review paper focuses on an important new question: how can climate change affect maritime and other cities of Southeast Asia, and what challenges and possible responses can be identified based on historical and current regional policies and action, especially with regard to air pollution? This review was undertaken as part of the ISDP and ISEAS sponsored initiative: *Regional Cooperation in Environmental Protection: Lessons from Two Regions (EU and ASEAN)*. We examined the cases of the EU and ASEAN policies for the protection of air quality from a scientific practitioner's point of view. We seek to ascertain if ASEAN can respond to regional human-induced environmental problems given existing problems of

national sovereignty and the interest-based character of ASEAN-type associations, since ASEAN's goal, in contrast to that of the EU, has been regional cooperation rather than regional integration. Both regions are responding differently to climate change and the global economic and environmental realities resulting from, or arising in reaction to, their policies (or lack thereof). While the EU and ASEAN can and should learn from one another and their relations have been the subject of studies (see for example), there are still challenges to be addressed to effectively drive improvement of critical regional (air) pollution issues that may ultimately impact health and productivity. Each regional organization has in its own manner made exemplary efforts towards resolving environmental degradation within its own region and taken efforts to make a positive international impact, but there is still the need for international treaties and more local efforts to empower the regional visions. Our aim is to highlight the status of the respective policy frameworks and exemplify areas in which we can learn from one another in the field of air pollution, given its global relevance for climate change. We conclude by suggesting a strategic summary framework for future action. This paper is *not* meant to be a history of either EU or ASEAN policy; for this, the reader is referred instead to appropriate literature, most notably the *EU Environmental Policy Handbook*, especially the air quality chapter (3) with excellent background information on European Atmospheric Environment Policy.