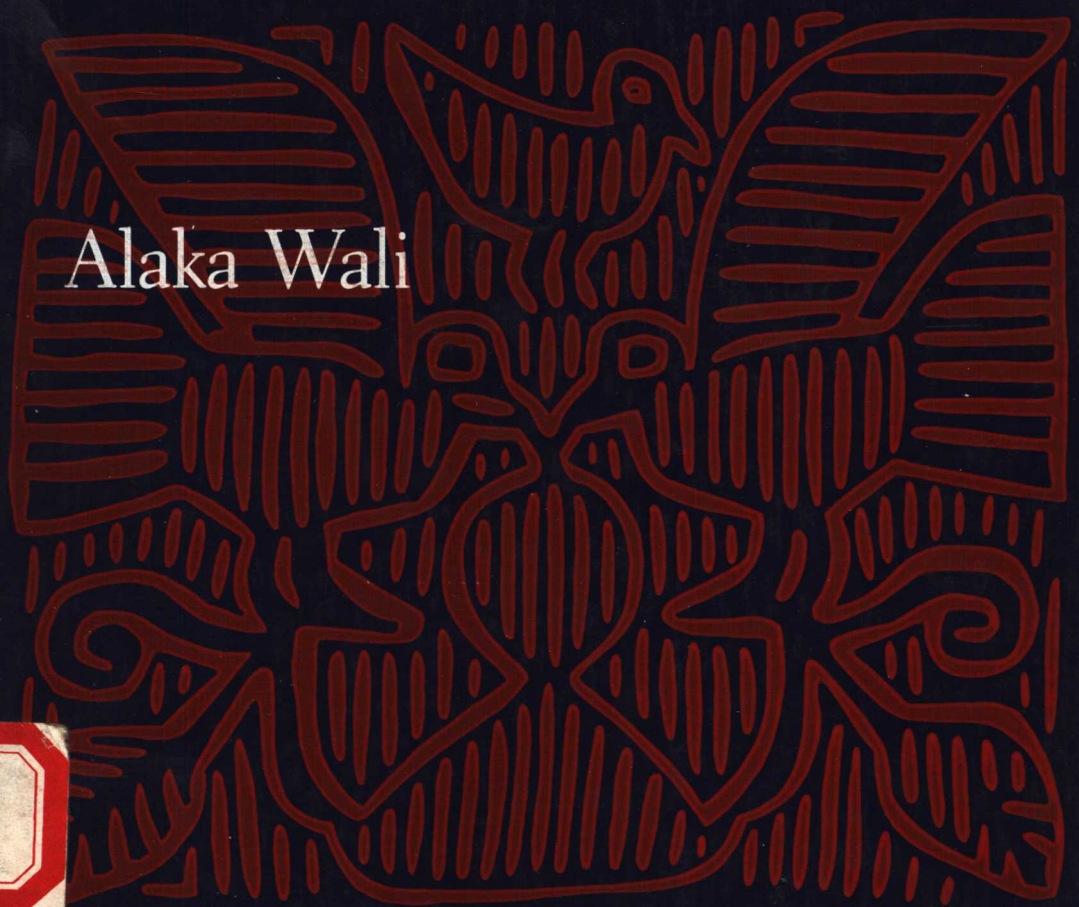
KILOWATTS and CRISIS

Hydroelectric Power and Social Dislocation in Eastern Panama



Alaka Wali

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Hydroelectric Power and Social Dislocation in Eastern Panama

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Kilowatts and Crisis

Development, Conflict, and Social Change Series

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Michigan State University
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To my parents

Kameshwar C. Wali and Kashi Wali

and to my husband, Richard Hubbard

with love and gratitude

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This book, I hope, fulfills my promise to tell their story--the pain of resettlement and the courage with which they responded to the threat to their land and livelihood.

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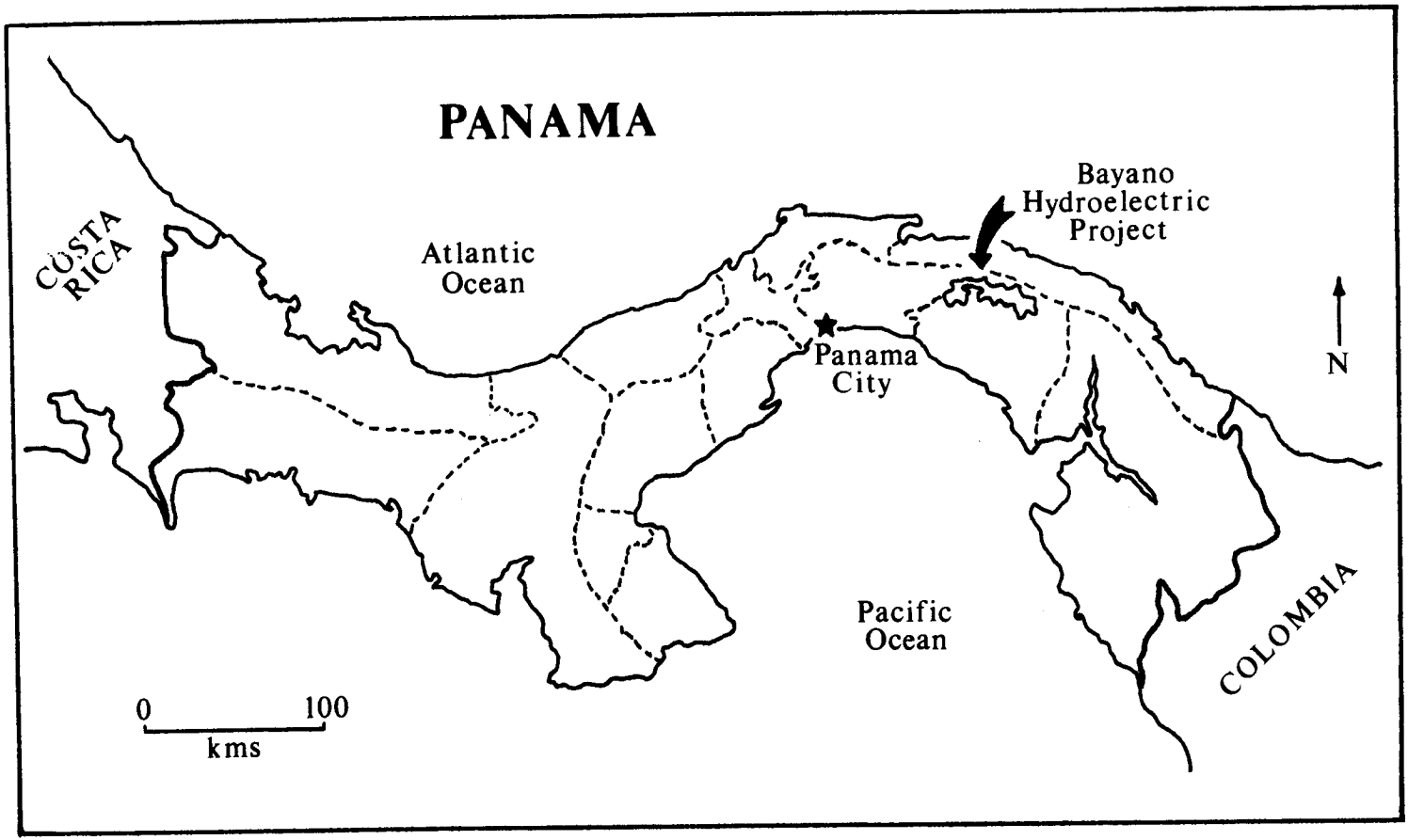
As grateful as I am to all these people, I take full responsibility for the contents of this book.

Technical Note

I have tried to keep at a minimum the use of Kuna, Emberá and Spanish words to facilitate reading. Where their use is unavoidable, I have underlined them and defined them at their first appearance. After that, they appear as regular text. Kuna orthography follows Howe (1986). Kuna vowels are pronounced as those of Spanish. The p, t, and k are pronounced similarly to the English b, d, and g. The pp, tt, and kk are pronounced similarly to the English p, t, and k.

While the locales have not been disguised, the names of individuals (except public figures) have been changed to protect their privacy.

All translations of quotes from Spanish and Kuna statements, published articles and documents are mine.


PANAMA
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Contents

1

Introduction: The Bayano Hydroelectric Complex

On a muggy day in March of 1976, under gathering rainclouds, a large crowd of Panamanian government officials, international dignitaries, diplomats, and local citizens congregated at the top of a massive concrete and steel structure, gleaming and cold in the midst of the lush tropical forest of eastern Panama, part of the region known as the Darién. The Bayano Hydroelectric Complex, one of four hydroelectric development projects planned by the Panamanian government, was complete at last. Below the crowd the turbulent waters of the Bayano River, one of three major rivers of the Darién, rushed through the deforested basin which was to be the dam's reservoir towards the soon-to-be closed gates of the huge dam.

After numerous and lengthy ceremonial speeches marking the event, the gates of the dam finally began to close. As water filled the reservoir, General Omar Torrijos, the country's charismatic, popular leader ran down the hill and jumped fully-clothed into the newly-forming lake.

The act symbolized the importance of the dam for Panama's government and its economic strategy under Torrijos. That strategy called for increased industrialization and diversification based on exploitation of natural resources. Harnessing the energy of Panama's untapped rivers, mining the earth for copper, drilling for oil, and harvesting timber were all parts of the development dream that would make Panama a prosperous nation. The Bayano Dam, already in the planning stages when Torrijos assumed control in a military coup d'etat in 1968, was a major stride towards making the dream come true.

Yet, six months after the inaugural, the Bayano Dam was already in trouble. An unforeseen drought prevented the reservoir from rising to its anticipated level. Instead of the beautiful lake envisioned by the dam's planners that would draw tourists, and irrigate carefully cultivated fields while it powered two massive

turbines, the Bayano reservoir for the most part was a muddy swamp. Even in those parts of the basin which filled to predicted levels problems proliferated. Problems such as the fast growth of deadly water-lettuce which made navigation difficult and served as a breeding ground for mosquitos; and the death of a large quantity of fish because of a noxious gas that formed when uncleared vegetation left under the water rotted.

Technical problems abounded as well. Rumors abounded from the government's critics that the dam's construction was flawed, while energy officials worried that it would not meet the planned electrical-generation capacity. But the largest problem was the bitter hostility of the region's residents, some four thousand of whom had been forcibly resettled in the year prior to the dam's closing.

Early in 1977, for example, the Kuna Indians who had lost 80 percent of their reserve land to the lake staged a vigorous protest against the government's resettlement authority. Angered by the delay in the delivery of promised compensation payments, they put a chain across the bridge that spanned the Bayano lake at its narrowest point. This effectively prevented lumber and construction trucks from passing through on the Pan American highway. The act was designed to draw immediate attention to what the Kuna felt was a grievous injustice.

Further down the road beyond the bridge, the Emberá Indians had been resettled into two communities within the forestal reserve around the lake. About five hundred Emberá had migrated into the Bayano region during the 1940s and 1950s from the eastern sector of the Darién. The Emberá had also not received their full compensation and sent numerous delegations to confront the responsible officials. Meanwhile, there were also ongoing disputes between the resettlement authority and several families who refused to move to the sites that had been designated for Emberá resettlement. Officials, in an attempt to maintain control, threatened to evict all the Emberá from the region if the families did not resettle.

Meanwhile, "colonist"[1] families who had been resettled out of the area, started to return, often sneaking across the bridge during the night, to bypass the guard set up to prevent their reentry. The colonists were smallholder farmers who had come to the Darién from land-scarce Western Panama. Two thousand of them had been compensated and resettled out of the Bayano. When they discovered however that the lake had not flooded all their old lands and that the Pan American Highway was to be extended east into "untapped regions," they returned, illegally, to the Bayano. They resented their government's dictates about where they could and could not settle, and the prohibitions against clearing the forest.

What were the causes of this hostility on the part of the region's residents? Why did this carefully planned development project constructed with international technical and financial assistance fail to meet its planned objectives and what were the consequences for the region and for the nation? These are the questions this book answers. In telling the story of the Bayano Hydroelectric Complex, the book takes into account both local-level consequences and national motivations, costs and benefits. This approach provides a more holistic analysis of the development project.

The regional problems caused by the dam--principally massive environmental change and forced resettlement--are now familiar topics of debate among students and practitioners of the development process. The impact of large dams has generated a good deal of recent literature (c.f. Goldsmith and Hildyard 1984), conferences and political action. In particular, tropical deforestation often associated with dam projects has become a *cause celebre* in the past eight years as international environmental protection organizations have publicized its spread and fought against its occurrence (see Caufield 1985, Gradwohl 1988, Schwartzmann 1986). The primary concern for these organizations has been the loss of the varied species of flora and fauna who live in this environment. Research on the nature of tropical forest ecology has proliferated in the last decade and has pointed out the fragility of the tropical ecosystems, and their overall importance to the world ecology.

Complementary to the ecological research has been the social scientific research on the causes of deforestation. This research clearly links economic development processes with increased deforestation of tropical ecosystems. Until the 1960s, Latin American countries pursued economic development strategies (such as rapid industrialization and import substitution) that did not require extensive use of the tropical forest zones. When these programs failed to generate economic growth, countries turned to export-oriented policies that relied on exploiting the untapped reserves of land and natural resources. These new policies provided incentives to transnational corporations to explore for and exploit the resources of the tropical forest zones. Peru and Ecuador granted rights for oil exploration in the Amazon, while Brazil granted concessions to many corporations for everything from rubber plantations, to cattle ranches (Davis 1977). In Mexico and Central America, meanwhile, cattle ranching became the prime cause of deforestation, as the international demand for beef boomed (Leonard 1987, Nations 1980, Nations and Komer 1982).

In the Bayano, the construction of the dam and road accelerated regional deforestation by facilitating access to the region and its resources. The dam construction acted as an incentive for both the government and private entrepreneurs to exploit the valuable lumber of the forest and establish cattle ranches. The Bayano case material presented here supports recent studies that indicate that roads forged to extract lumber become access points for colonists who then clear extensive tracts of land for pasture (see Hecht 1982, Partridge and Schumann 1988).

While tropical deforestation has become a major environmental issue, forced resettlement caused by development projects has become a major social issue. Current estimates are that as many as one million people have been subject to forced resettlement worldwide in the past decade. Yet, detailed studies of forced resettlement are relatively few. Little work, for example, has been done on the social impact of dams in the industrialized nations (Scudder 1973; but notable exceptions include Lawson 1982). Most of the studies that have been done examine the impact of dams in Africa. Here, during the 1950s and 1960s, large scale dam construction was carried out in a number of countries (Rubin and Warren 1968). Social scientists carried out intensive studies of the following projects: Kariba Dam in Zambia (Colson 1971, Scudder 1972), Volta Dam in

Ghana (Chambers 1970), Aswan High Dam in Egypt (Fahim 1983), and Kainji Dam in Nigeria (Visser 1970). Studies of Latin American dam projects include those in Brazil (Aspelin 1981, and Goodland 1978), Peru (Doughty 1972), Guyana (Bennett, G.n.d., Henningsgaard) and Mexico (Bartolome and Barabas 1973, Partridge et. al. 1982, and Polman 1964). In Asia and the Pacific, there are studies of the potential impact of resettlement of the proposed Narmada Dam in India (Varma 1987), the Purari Project in Papua New Guinea (Pardy 1978) and the Chico River project in the Philippines (Drucker 1983, Goldsmith and Hildyard 1984, Pardy 1978, Wright n.d.).

The early studies concentrated on the generally negative impact of forced resettlement on local populations. The work was usually carried out as a complement to the efforts of national governments to design resettlement schemes (Brokensha 1964, Colson 1971, Gonzalez 1972, Scudder and Brokensha 1968).

The practical objective of the documentation of the negative consequences of forced resettlement has been to point to the need for more careful understanding of the social aspects in conjunction with other technical considerations. The assumption of most of these studies has been that if resettlement was more carefully planned and implemented, the consequences for local people would not have been so disastrous. The Bayano Dam material questions this assumption. Unlike many of the early dam projects, the Bayano project involved a significant social analysis component. Relatively early on, resettlement plans were designed that incorporated the provision of compensation to affected people and the guarantee of social services. Yet, as described here, plans went awry for reasons that range from mistakes made during implementation to larger structural problems embedded in the macrodevelopment policies pursued.

While geared to solving specific problems with respect to resettlement, these studies also made important theoretical contributions. As Scudder (1975) pointed out, studies of forced resettlement offer opportunities to examine changes in the economic activities, social structure, and social organization of the affected populace.

Early on, Brokensha (1964) indicated the need for a sociology of resettlement that would discover similarities and differences among schemes. But, such a sociology in only now beginning to emerge (c.f. Scudder and Colson 1982). Oliver-Smith and Hansen (1982) pointed out that faced with forced mobilization, communities became more conservative of traditional practices, kinship ties and political structures.

The Bayano case presents difficulties for this model. Here, the situation was complicated by the heterogeneity of the population. While some residents did tend towards the conservation of customs and social patterns (similar to the "closed-system" response delineated by Scudder 1973), others took advantage of new opportunities to exploit new resources (see Partridge's description of the Papaloapan situation, 1982). But even among those who tried to maintain or conserve cultural traditions, the process was not one of replication of the old system. The cultural forms themselves were changed as a result of the resettlement and associated events. In the case of the forced resettlement of the

Kuna, Emberá and colonists, displacement and disruption contributed to the emergence of ethnicity as a political force in inter-group relationships.

The concept of ethnicity is recent in its formulation. From very early discussions of ethnic identity as a "primordial" element of group formation (Glazer and Moynihan 1970), through attempts to characterize "plural societies" (Furnivall 1948, Smith 1965), to current debates on the relationship between ethnic and class forms of stratification (Bonacich 1979, Stoler 1985, Van den Berghe 1975, Vincent 1974, Wasserstrom 1983), social scientists have struggled to place the concept in perspective and proscribe its utility.

The cited literature reveals that ethnic relationships become important when people are confronted with changes in labor patterns, displacement from traditional homelands or state-level attempts to confine them to certain territories. Yet, if the material reality of ethnic differentiation is important, so too is the ideological component--the use of ethnicity as a political strategy--as people respond to conflict and domination. A recent statement of this perspective by Bourgois (1988:329) is useful:

> Ethnicity is significant in a given individual's life because it bears a relationship to a structure of power relations. It is not merely a fascinating pile of pretty clothes, dance steps, spicy foods, and exotic sounds... If we accept a common sense definition of ideology as a charged belief system in a matrix of power relations, then ethnicity is interesting and socially relevant as a form of ideological expression, that is, as part of a social process of confrontation.

The Kuna and Emberá attempted to maintain rights to land by using their status as the "indigenous" inhabitants. They revitalized certain cultural traits and publicly presented an ethnic discourse in order to persuade government officials of the legitimacy of their claim. The conflict that ensued between the groups was one of the most significant local consequences of the resettlement process.

For the colonists, the problem was different. They could not use the ethnic strategy to claim land. The colonists not only competed with the indigenous groups for land but also among themselves, which led to a process of increased inequity in the distribution of and access to resources. The regional events described in the book, then, discuss the emerging forms of stratification and their impact on the social and political life of the affected people.

The story told here also foreshadows the current national political and economic crisis in Panama. In 1988, twenty years after the initiation of the Torrijos revolution, it is clear that Panama's economy remains vulnerable to international forces. The National Guard (known as the National Defense Force since 1983) and its leader, General Manuel Noriega (who has dubbed himself Torrijos' heir-apparent), no longer enjoy the level of popular support that they did in Torrijos' time.

The economic problems are evident in the lack of real growth per capita output has remained unchanged since 1980, and GNP has stagnated since 1982 according to a 1985 World Bank Country study), in the lack of diversification (the public sector and the internationally-oriented service sector dominate the economy much as they have done since independence from Colombia), and in the