UNDERSTANDING IMPOVERISHMENT

*The Consequences of
Development-Induced Displacement*

Edited by
Christopher McDowell

1996

Berghahn Books
Providence • Oxford

3

Mitigating Social Impoverishment when People are Involuntarily Displaced

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In the previous chapter, Cernea has argued that forced population displacement may lead to eight forms of impoverishment: unemployment, homelessness, landlessness, marginalisation, food insecurity, loss of access to common property, erosion of health status, and social disarticulation (see also Cernea 1990a). Reconfirmed by a wider World Bank review, (World Bank 1994a), each merits preventative measures. This chapter deals with the most conceptually intractable of these problems – that of social impoverishment.[1]

Involuntary population displacement may lead to irreversible social and cultural impoverishment. Resettlement rips routine relations of social time and social space, laying bare critical, but often ignored, dimensions of culture. What is less clear is 'why'? Shamelessly drawing upon my colleagues' work and my experience with resettlement, I offer a prolusion of a theory of social geometry. I argue that involuntary displacement forces people to re-examine primary cultural questions which, under routine circumstances, need not be considered. Key among these is 'where are we'? The social geometry of a people consists of infinite intersections of socially constructed spaces, socially constructed times, and socially constructed person-

ages. And, for many cultures, the geometry also defines 'who are we?' Mitigating social impoverishment begins by reconstructing, in a culturally appropriate manner, the social geometry of the displaced.

Social Impoverishment

Why does involuntary displacement increase the risk of social disorder? When people are refugees from war, famine or natural disasters, social chaos seems macabrely expectable. However, when people are displaced by development projects, social impoverishment seems incongruous, if not grotesque. Provided that relocated persons are granted adequate compensation for lost goods, health care, housing and humanitarian assistance, involuntary resettlement should be little more than a temporary inconvenience. Relatives, friends and neighbours are still alive. Families are not permanently fragmented. New economic opportunities may be provided. Community infrastructure may be upgraded. Movable property may be relocated to the new environs, and exposure to natural hazards reduced. In some cases, some people may be wealthier than they were before.

To their disappointment, politicians, engineers and resettlement specialists have discovered that involuntary resettlement sometimes unravels the underlying social fabric. In resettlement after resettlement, similar patterns reappear (World Bank 1994a, Cernea 1993b). Vital social networks and life-support mechanisms for families are weakened or dismantled. Authority systems are debilitated or collapse. Groups lose their capacity to self-manage. The society suffers a demonstrable reduction in its capacity to cope with uncertainty. It becomes qualitatively less than its previous self. The people may physically persist but the community that was is no more. Social scientists have not reached agreement on what to call this social phenomenon which haunts involuntary resettlement, but I prefer to use Cernea's terminology – social disarticulation (Cernea 1994a).

Discomfort

Despite universal acceptance by resettlement theorists and policy makers that there are social impacts to resettlement and that the negative ones should be avoided, I am uncomfortable with the theoretical underpinnings of resettlement policy, and by extension refugee studies. So-called 'social costs' and 'social impacts' are mentioned again and again without clearly explaining what is meant by 'social'. I am equally uncomfortable with the ease with which only economic actions are prescribed to mitigate social impoverishment. Conven-

tional wisdom is synthesised into prescriptive economic action – holding that social impoverishment, like other forms of impoverishment, can be mitigated by re-establishing disrupted productive activities. Granted that re-establishment of the economy is indispensable to successful economic recovery and poverty abatement, I am still not convinced that destruction of a local economic order is the primary reason for social disarticulations.

Careful examination of the temporal sequencing of resettlement reveals something is amiss. Signs of social disorder appear quite early in the resettlement, often *before* the loss of productive activities, when relocatees are reaping benefits of the temporary employment boom and indemnifications associated with public works. Conversely, communities which are not being resettled undergo transformations of productive activities all the time without the radical social disorder associated with resettlement. Apart from the very serious socio-political consequences associated with the coerciveness of the decision, the fact that people move from one place to another should not lead to the radical social changes which have been witnessed. Nor should we anticipate social changes greater than those normally observed with voluntary migration, trips to the market or visits to a relative. Unlike plants, people move about all the time.

My discomfort increased as I struggled with unanswered, apparently unrelated questions which keep reappearing in resettlement after resettlement, and not coincidentally, in studies of recovery from natural disaster (Oliver-Smith 1986). Why do children seem to recover more quickly than adults? Why do some resettled people return again and again to the shores of a lake covering their inundated home and experience a sense of relief from their visits? And why do disaster victims sometimes refuse to move into shelters, preferring to camp at the location of their former homes? Why do resettlers not occupy houses that architects have carefully modeled after their original houses? And why do resettlers and disaster victims often describe their experience 'like a dream'? I wondered if a focus upon the political and economic dimensions of involuntary resettlement had led us to ignore subtle, important social dimensions of such events – hidden dimensions that might prove crucial to mitigating social impoverishment and, perhaps, facilitate political and economic restoration.

My discomfort could have been easily assuaged if resettlement policy and practice were based on a firm theory of spatial and temporal dislocation which explained why and how social disarticulation occurred. It is not. Fortunately, the building blocks for construction of a powerful theory of social dislocation are scattered

about in the form of bits and pieces of observations, concepts and insights from every conceivable discipline and in all the cracks in between. Outside of the arena of displacement, almost every social scientists worthy of note has probably, at some point, struggled with social definitions of time and space although only a handful have worked on the dysfunctional situation where this order is disrupted.

Social Geometry

For most, culture answers what I prefer to call 'primary questions'. Primary questions are: Who are we? Where are we? Why do people live and die? What are our responsibilities to others and ourselves? In everyday life, the answers are routinely provided, leaving it up to the individual to focus upon tactical problems. How might I move to a more desirable location, how might I make minor adjustments within my own backyard? Life focuses upon repairing broken doors, collecting firewood, getting from one well-known place to another, gaining access to restricted places/situations by performing routine events such as going to school, paying for admissions or working for income to facilitate tactical adjustments to life. The routine culture is what social scientists normally describe. In routine culture, people navigate within a space-time continuum in which they chart their positions within socially constructed time, socially constructed space, and among socially constructed personages.[2]

Victims of involuntary resettlement and natural disasters and refugees experience an unexpected destabilisation of routines. In rural cultures whose group and self-definitions are inexorably inter-locked with their knowledge of their local environment, resettlement can devalue their shared survival skills and lead to what Bartolomé and Barabas(1992) have called 'ethnocide'. From the perspective I am proposing, relocatees are forced to re-examine their primary cultural questions – 'where are we?' And, for most, this means, also re-examining 'who are we?'

Properties of Spatial-Temporal Order

The disruption occurs along multiple dimensions of a culturally arbitrary, but nonetheless meaningful spatial-temporal order. I wish to identify ten salient properties of the social space-time continuum, demonstrate how they appear in displacement situations, and then turn to ways in which this knowledge might be used to mitigate social impoverishment. Although my anthropological training tempts me

2. Social geometry requires the social scientists to remove their disciplinary blinders which needlessly limit their field of view to social organisation.

to draw on exotic spatial-temporal orders (see Fabian 1992), I will try to draw my examples from an English-speaking culture.

Multi-dimensionality. Most cultures command a vast repertoire of concepts and coordinates of time and space which overshadow the mechanistic, equal interval measures (Bock 1968; Sutro and Downing 1988; Hall 1959; Low 1992; Turner 1990). Within the narrow temporal confines of measuring the time of day, Frake (1993) observes great variation in how societies slice time. Culturally specific interval time systems include variations in the numbers of minutes in an hour, Canonical hours, Jewish hours, astrological signs, Saint's Day cycles and Greek hours. The evolution of Western technology is tightly linked with a struggle to create mechanical analogues of socially meaningful time.

Recent first-hand, cross-cultural evidence has revealed rich variations in constructions of time, especially among indigenous people (Layton 1994). These constructions need not depend upon a written tradition. To highlight only the most obvious constructions, consider festival calendars, planting and harvesting calendars, weekly marketing calendars and so on. In many societies, the organisation of time has become a major political resource and its control varies with competing elements of a society (de Pina-Cabral 1994; Males 1994; Elazar 1994; Rutz 1992).

Space and time are socially defined and ordered in many ways. Time may be linear (1993, 1994, 1995) containing within it sets of repetitive, cyclical orders (Monday, Tuesday, Wednesday … night/day, lunar cycles and so on). Temporal-spatial orders may be shared with larger groups (a national festive calendar, Mexico City as the capital), or may be regional (market days and regional fairs), local (patron saint's days, unique historical events, harvest calendars) or even familial (wedding anniversaries). Social geometry shows properties of inclusion both temporally (e.g., second, minute, hour, day, year) and spatially (e.g., yard, neighbourhood, barrio, town, county, state, nation, continent). Orders may also be temporally sequential (baby, child, teenager, adult, old) and spatially sequential (gate, courtyard, entrance, house). Complex orderings may involve a sequential intersection of time, space and personages (baptism, confirmation, first communion, marriage). In brief, it follows that societies have many social geometries – alternative logic constructs of order. A social spatial-temporal continuum may be simultaneously 'occupied'. For example, a person might be in Mexico City, at the doorway to the Virgin of Guadelupe and having a birthday.

Intangibility. Cultural spaces and times are often intangible, but real. They need not occupy the physical universe familiar to an engineer. Imagined spatial orders have more meaning, power and importance in the role of human experience than concretely experienced social orders (Riley 1994). We do not need anthropological fieldwork in the Developing World in order to understand this. Millions of Christians share familiarity with places to which they have never been and may never reach – Calvary and Heaven. Social groups can be expected to hold special rights to times and places – an ownership as socially recognised, and often more respected, than a legal title.

Behavioural ordering. Patterns of social behaviour are associated with culturally recognised spaces and times – be they tangible or not. The particular configurations of the geometry create order in the form of finite expectations for social actors and action. They provide human beings with productive rules for acting appropriately in different situations (Hall 1959; Bock 1968). Catholics, for example, expect a Mass at the hinge of a socially constructed time (Sunday, weddings, funerals, political transitions), place (altar in the Church), and personage (Priest). Remove any of the three elements and something is amiss. Economists quickly learn this when they try to provide rural resettlers with a subsidy for crop losses as a protection against social disorder. Harvest is not simply an output of a commodity. It is the association of familiar people at a particular place in a biotemporal cycle.

Prioritisation. Social geometries are also prioritised. Profound differences have been detected between ordinary and extraordinary spatial and temporal orders (Low and Altman 1992). Times and places, just like people, are frequently ranked with some being more valued than others (weekends > workdays, and Sunday > Monday in Christian societies). Prioritised orders often validate fundamental social values and beliefs. For example, the highest valence possible in the Catholic spatial-temporal order occurs when a high valence time in their religious calendar – Easter, intersects a high valence place in their spatial order – the Vatican, and a high valence personage in the social organisation – the Pope. The high valence geometry – Easter/Vatican/Pope – is linked to the expectation of a message for Peace and Hope directed to the World and a High Mass. Barring the Apocalypse, a thousand Easters from now, the intersection of three dimensions should recreate the same sense of awe among the faithful and tangibly demonstrate the eternalness of the Church.

As groups are threatened with forced relocation, they experience unparalleled disruptions of routine behaviours. Their spatial-tempo-ral geometry fails to answer primary cultural questions. Undoubtedly, there are many possible social responses to this unstable situation. One that I have identified is what I might call the 'high-frequency accentuation' hypothesis. In response to the threat, the group increases the frequency of heretofore occasional, high-priority events – attempting to bind the community together. In June of 1994, I had the opportunity to observe support for my hypothesis in a community being relocated by the Zimapan hydroelectric project. Before relocation, people from the small Catholic community of La Vega moved their village patron saint each year from one private household to another and celebrated a special Mass. Immediately following resettlement, the saint began weekly rather than annual visits, moving from one relocated household to the next as the community struggled to reaffirm and re-establish its identity. Whether or not high-frequency accentuation actually mitigates social impoverishment needs further testing.

Moral ordering. Social status and moral correctness is usually associated with access to or exclusion of certain kinds of people from certain places at certain times. Highly structured inclusion (and exclusion) of categories of people to particular places at particular times is the essence of sacredness. In the south-western United States, Brazil, and among the aborigines of Western Australia, anthropologists have found that indigenous people use spatially anchored narratives for moral teachings (Low 1992; Fabian 1992; Basso 1984). In these cases, spatial attachment need not necessarily require or even be related to legal ownership of place.

Gender, age and rank specificity. Perhaps the most obvious finding of social geometry is that specific behaviours and expectations are associated with people of different age, sex and rank being and *not being* in particular places at particular times. Gender differences change over a lifespan (that is, with time). In U.S. culture, Marcus found that men are 'more likely to replay childhood patterns in terms of layout and form of the house, while women are more likely to do this in relation to furniture or movable objects ' (Marcus 1994). A key element of enculturation, the process of learning a culture, involves distinguishing the spatial-temporal appropriate behaviours of sex, age and rank (Pellow 1994; Douglas 1973). Pellow (1994), following Giddens (1984), has shown how the urban courtyards in Accra, Ghana, provide a place for multiple settings in which social conduct is chronically reproduced and where newcomers, particularly women, may learn urban forms of interaction and gain new identities.

Imbeddeness. Forming the basis of routine interaction, social geometries are often as conservative as they are arbitrary. The seven-day week is the most obvious example of an artificial, mathematical rhythm disassociate with nature that sets the cadence for most of the world's cultural activities. Three of the great religions may differ on what day of the week the cycle peaks, but they share conservative agreement as to the number of days in a week. In both the French and Russian Revolutions, unsuccessful and, for some, fatal attempts were made to change the number of days in a week (Zerubavel 1985).

Imbeddedness is also evident within the lifespan of individual members of the culture. Research on environmental memories has discovered the near universality of fondly remembered childhood places, representing the intersection of culturally constructed time and place (Marcus 1994). In more mobile societies, continuity of environmental memories is more rooted in things – movable, storable, shippable – rather than in attachment to a concrete physical space. This finding is particularly important for those working on urban resettlement. Attachment to objects filled with memories substantially increases with age (Marcus 1994; Csikszentimihalyi and Rochberg-Halton 1981). Resettlement practice, but not theory, has long recognised the need for special consideration of more elderly in a society, who seem more likely to show higher mortality and anomie (Ault 1994).

Dissatisfaction with existing orders. Resettlement practitioners are learning that one-for-one restoration of existing spatial arrangements may not necessarily mitigate social impoverishment. Existing spatial and temporal arrangements are not always optimal. Witness how some people periodically rearrange their personal space. At the resettlement which recently took place at the Aguamilpa hydroelectric dam in western Mexico, architects and anthropologists worked side-by-side to design four different house types which followed traditional, indigenous, Huichol design principles (Guggenheim 1993:221). Guggenheim reports, 'the families hated the new houses.' The designers assumed that the Huichol wanted traditional thatched roofs. In response, a Huichol noted that ' thatch may look very refreshing and folkloric for you who come from far away, but you don't have to live with scorpions falling into your soup every time you sit down to dinner.' Thatch was the best material that they could afford. At the Zimapan hydroelectric dam, I discovered that, at the last minute, several male heads of households hastily rearranged meticulously planned, spatial layouts of houselots in a new community to decrease contact with their mother-in-laws! Nor can one expect intrasociety uniformity of satisfaction. Environmental memory research has found that

some people choose to reproduce the essence of their childhood spatial arrangements in adulthood, while others choose to create a contrasting environment.

Attachment to space and time. Attachment to space and time can be a powerful binding force for displaced social groups. Oliver-Smith's (1986) work on the cultural responses in the aftermath of a 1970 Peruvian earthquake is an exemplar of the widely reported bereavement and symbolic importance of attachment to place and its role in reconstruction of community identity. Similarly, Setha Low (1992) notes that

> the longing of exiled people and refugees to return to their homeland, and the importance of the symbolic existence of that homeland (as in the case of Israel), suggests that loss or destruction of place is as powerful an attachment as its presence.

In a comparable manner, attachment to time, a particular constructed history, may be an equally powerful force for binding people to one another. Evidence of this is emerging in exciting new research on the values indigenous peoples attached to cultural constructs of 'their past' (Layton 1994). Temporal-spatial identification systems may be quite extensive and subtle, extending far beyond small primary groups and settlements. Recent work in southern Mexico shows that culturally constructed time may be encoded into the landscape and take on concrete architectural form. Archaeologists working at the famous ancient city of Monte-Alban found that the length of adjacent ball-courts and the distances between ceremonial sites were proportionate to the ratio of the number of days in the Zapotec astronomical and ceremonial calendars (Peeler and Winter 1993). In a display of genius foreshadowing modern relativity, the Zapotecs have architecturally united their organisation of space and time.

Control, manipulation and recreation. Landscape architect studies have shown that control over meaningful space: manipulation of that space by means of construction, subtle changes, decoration, modification and the recreation of previous settings in the future, help people to define who they are. In urban areas, for example, the ability of the resettled people to recreate the interior of their home in a new apartment, and to find a parallel in the layout of rooms, increased their chances of positively adjusting to a move (Marcus 1994).

Observational Support

If socio-temporal order gives a society predictability and sets priorities and meaning, its destruction may render social life chaotic,

unpredictable and meaninglessness. Involuntary relocation over-loads a society with uncertainties and disorder. In large-scale infra-structure projects, such as hydroelectric dams, spatial-temporal dislocation can begin months before the physical relocation – con-struction work begins, the routine order of daily life and the land-scape is fractured by unscheduled high explosives – creating a demonstrable uneasiness among the population (Inga-Lill Arronson, personal communication 1993). From the perspective of social geometry, social dislocations accompanying involuntary resettle-ment may change some of the spatial-temporal dimensions which define a people's identity, threaten intangible spaces and moral order, modify behavioural orders, set new priorities and have a dif-ferential impact on people depending on their age, sex and rank. Hopefully, resettlement may offer some or all of those being reset-tled an opportunity to correct dissatisfactions with the previous order. I will now examine six discernible patterns.

Relocated and disaster-struck communities show what some might consider an irrational attachment to inexact, prioritised spa-tial-temporal orders. In central Mexico, three adjacent riverine *mes-tizo* peasant communities near the Zimapan Dam were relocated to a nearby arid, riverless plateau. Potable water was piped in from twenty-three kilometres away and no water was available for irri-gation. Early in the project, resettlers were permitted to rename the principal street in their new town. To the surprise of outside observers, they named their principal street River Boulevard. The local resettlement team reported serious conflicts between rival com-munity claims over who had the right to live on the right bank of 'River Street,' in a position identical to their previous location. A few months later, they selected the new name for their arid, hilltop com-munity: Bella Vista del Rio (Beautiful View of the River). But the river is nowhere to be seen.

Cernea offers another example of ingenuous solutions to spatial-temporal distortion. In Fugian Province, China, involuntary resettle-ment gave Chinese peasant families a rare opportunity. Young people from large, extended families could obtain new houseplots, but the issue became 'where'? In the local social geometry, house sites adjacent to the main road were more valuable. Only a few could have choice locations and the potential for internal conflict was evident. The dissatisfaction was rectified by the peasants, who revamped their lottery system to permit the drawing of a cluster of 2-3 housesites (Cernea, personal communication November 1994). The element of chance, which plays a powerful role in social geom-etry, was reintroduced into an over-structured planning exercise.

The power of the continuum – the attachment to prior conceptions of socio-cultural space – has been witnessed again and again in disas-ters. Following the devastation of Hurricane Andrew in 1990, families in Homestead, Florida, preferred to camp among the ruins of their homes rather than accept government shelter – often maintaining precisely the same spatial arrangements in the streets that were pre-sent in their now obliterated apartments. A comparable attachment was witnessed following the 1978 Mexico City earthquake, when fam-ilies camped in front of the rubble of their fallen apartment houses – in some cases maintaining the same spatial referents which they had to their neighbours. Something is occurring which goes beyond a rudimentary defence of what might remain of one's property.

It follows that re-establishment of spatial-temporal prioritisation and order is an important part of the recovery process. An American television network's videotape crew followed one of the 200,000 fam-ilies left homeless by this hurricane – the Lucketts (ABC News 1992). The Lucketts are an extended, sixty-five person matriarchal clan who, before the disaster, occupied sixteen homes in Homestead, Florida. Homeless, without belongings, they were temporarily relo-cated in a high school auditorium. The Luckett clan's women con-centrated on re-establishing the routine organisation of the family, focusing on the children. The women stressed that it was important that the children have 'three meals a day, bath, and get to bed on time.' At the shelter, each part of the family organised a small, per-sonal space. The children's behaviour in their socially defined space was of considerable concern as the mothers struggled to establish where they perceived the children should and should not go within the school auditorium and yard. They made and believed in an unstated contract with the relief officials. The matriarch told the inter-viewer, 'if the children don't get out of line … don't go where they're not supposed to … then we won't get kicked out into the streets.' Re-establishment of temporal priorities was evident when the entire gymnasium of relocatees joined in celebrating what might normally be an insignificant familial ritual – a birthday party, as a human-scale temporal regularity returned to an incomprehensible large disaster.

Social geometry provides insights into another problem. Follow-ing Hurricane Andrew, the Luckett matriarch stumbled through the ruins of what, a week before, had been her home. She described her post-relocation situation 'like a dream in which you wake up'. In June 1994 in central Mexico, I listened to a distraught young wife describing her loss following our visit to a mountain top where we watched a new reservoir slowly flood what had been, for many gen-erations, her family's home. Using almost identical words, she

described her feelings 'like a dream. Someday I will wake up'. In both cases, the women's expressions are more than metaphors. In human experience, dreams are thoughts disoriented in time and space (Friedlander 1940). They represent another geometry which is divorced from the elaborate, ordered conscious geometries which characterise waking life. From the perspective of social geometry, both women's descriptions were correct.

The spatial-temporal order influences which segments of a population will be affected by social dislocation. This sometimes yields unexpected results. Investigations following the devastating 1976 Guatemala earthquake uncovered an unusual age-specific mortality pattern. Eighty per cent of casualties were the penultimate child (Kates 1973). Rural, indigenous Guatemalans suffered heavy casualties. In this culture, it is common for the youngest child to sleep next to the mother, and the penultimate child sleeps with the elder brothers and sisters. The quake struck at 3:05 am on 4 February. The youngest were protected by the parents when the quake hit, but the weakest child, the penultimate child, was the most exposed to danger. Consequently, the socio-spatial and socio-temporal sleeping patterns exposed a particular segment of the population to higher mortality.

For some time, I was puzzled by the apparent resiliency of children to involuntary resettlement and natural disasters. Within days of the disaster, the children of the Luckett clan gleefully played basketball in the relocation camp. Within two weeks of what, to the adults, was a traumatic relocation in Zimapan, Mexico – adults locked themselves in their new suburban-style houses, complete with satellite dishes – children played tag in the new town's streets. I was mistaken. I was not witnessing resiliency, but support for the theory of social geometries. Children have rudimentary spatial-temporal orders (times: play, eat, and rest; space: home, neighbours, street) unaffected by the more complex orders that they will ultimately learn to respect and value. It is a quality which Hotchkiss (1967) identified as the non-person status of a child which permits them almost unrestricted freedom of egress and ingress and, he argues, makes them ideal spies. It is the same quality which makes them more resilient to relocation, since they are less tied to the complex of learned social geometries of adults.

Policy And Other Implications

For over fifteen years, development anthropologists and sociologists – led by their colleagues in the World Bank – have painstakingly crafted a policy framework to mitigate the harmful economic and social impacts of involuntary resettlement (Cernea 1993b; Kardam 1993).[3] An architect of the policy and Senior Advisor on Social Policy at the World Bank notes that resettlement policy has been enhanced by the feedback between theoretical assumptions about change and lessons gleaned from development projects (Cernea 1993b). As feedback and theory have changed, the policy frameworks have been updated and refined (World Bank 1994a). Identification of the eight forms of impoverishment, mentioned at the outset, is a relatively recent example of this knowledge-based policy.

At this point, the theory of social impoverishment seems to be edging ahead of policy development. Presently, resettlement policies pay minimal attention to mitigating spatial dislocation and almost no attention to relieving temporal dislocation. World Bank policy (OD 4.30 para. 7) and OECD guidelines propose identical language – 'reducing dispersion, sustaining existing patterns of group organisation, and retaining access to cultural property (temples, pilgrimage centers, etc.), if necessary through the relocation of that property (OECD 1991).'[4] In the realm of want-to-be policies, the American Anthropological Association White Paper on Involuntary Resettlement goes further, introducing an element of temporality – reducing social costs by making the move as quickly as possible and avoiding temporary holding facilities (American Anthropological Association 1991). In light of the preceding discussion, it is apparent that the policies are culturally unsophisticated. Practice supports this judgement. A simple decision to displace a population to a location proximate to that of origin does not necessarily reduce human and social costs (Lightfoot 1979).

On a positive note, resettlement practitioners who are directly responsible for resettlement operations, as well as many of those who are displaced, are well aware of the dislocation problems that I have identified in this discussion. Some have, with minimal theoretical or policy guidance, forged solutions of their own. In western Mexico, for example, Huichol resettlers worked with anthropologists to record not just sites being inundated, but to create a symbolic reference map for the new sites (Guggenheim 1993:224). In Zimapan, Mexico, the centrality of the bandstand *(kiosk)* to community life was

3. By 1995, the policy framework had been extended to only a few other international donors (BID and OECD) and countries.
4. It remains an untested proposition that the sacredness of a site is linked to its geographic coordinates. Certainly major conflicts in Jeruselum could be resolved if it were possible to move or relocate temples and pilgrimage centres (the physical structures) without regard to their physical location.

recognised, and each of the three communities was provided with a spatial area for performing recurring temporal events. Government engineers wisely postponed a scheduled relocation until after the annual village festival and organised a new festival to celebrate the founding of the new town. The relocation was stressful, but peaceful. Comparable sensitivity is reported on the successful resettlement at the Costa Rican Arenal Hydroelectric project (Partridge 1993).

Drawing policy lessons from these isolated cases is risky. The sensitivity of people to social and temporal displacement varies markedly between, as well as within, groups. Some show minimal disorientation. Others become almost culturally dysfunctional. This variation forces policies to identify groups at high risk. It appears that people with long-standing relationships to their environment, especially indigenous populations, will be more likely to need special attention.

The combination of theoretical findings and development experience strongly suggests that social impoverishment of displaced people can be mitigated by intentionally repairing fractured social geometries. The solution requires that resettlement policy step outside the narrow arena of economic rehabilitation and technological fixes. It requires solid, innovative ethnographic work to complement aerial photography, conventional mapping, demographic surveys and socio-economic censuses. In addition, it requires close scientific collaboration between the displaced and the cultural analyst which can never be accomplished in a windshield visit to a relocation area.

Positive actions to reduce social impoverishment include:

Field Reviews. Policy development will emerge from the interchange of the rich, on-going research into spatial-temporal organisation and the growing practical experiences of resettlement projects. Cases of development-induced displacement should be reviewed to uncover serendipitous or intentional actions which helped people re-establish their social geometry. How did they find (new?) answers to primary cultural questions, especially 'where are we?' and 'who are we?' The results of this rich experience should be codified into systematic social knowledge.

Social geometric analysis. A cross-culturally applicable, rapid-assessment methodology must be developed to discover the social geometries of people to become a part of project planning and execution. Minimally, the method would a) identify and prioritise the times and places which people regard as critical to their society, b) identify intra-group differences which are likely to be effected by social dislocation (e.g., religious, gender or class differences), and c) find areas of dissatisfaction which might provide a potential ray of hope for planning a future following displacement. The methodology might adapt techniques used to study 'attachment to space' to the analysis to understand the social geometric matrix of time/space/person. Likely remodelling candidates for creative adaptation are spatial memory studies, environmental autobiographies, role playing, behavioural mapping and favourite-place analysis, as well as more formal ethnographic methods.

Theory building. Much work remains to refine the theory of social geometries, starting with a synthesis of more than a century of insightful intellectual efforts to understand spatial-temporal organisation which is dispersed throughout many disciplines.

Open dialogues. Awareness of the social impoverishment problem may increase by encouraging in-house discussions and workshops within development agencies and non-governmental organisations. Those to be displaced must also be provided with an opportunity to examine and search for ways to protect what might be heretofore hidden dimensions of their culture.

Refinement of operational indicators for project performance. Social impoverishment indicators of spatial-temporal disruptions should provide 'early warnings' of more serious social and economic dysfunction in a displaced population. Development and monitoring of social-geometric indicators may be injected into project cycles. This would include explicit recognition of the threat of social impoverishment and planning for its mitigation. At minimum, operations would include pre-resettlement social geometry surveys and plans to mitigate social impoverishment in culturally acceptable ways, with full participation of members of the affected population in both the initial study and the reconstruction.

Determination of rates of return. It is highly probable that minimising social impoverishment and economic impoverishment are mutually reinforcing actions. A review might be undertaken to determine if the rates of return of projects which resolved socio-temporal disruptions were higher than the rates of return of those that did not, in a fashion comparable to the classic World Bank study by Kottak (1991).

Conclusion

Each year, another ten million people become involuntarily displaced and risk social impoverishment (World Bank 1994a). Social

impoverishment occurs when the displaced are unable to answer the primary cultural question – 'where are we'? For many, the answer to this question also defines 'who are we?' Reconstruction of the lives of the displaced demands carefully, coordinated economic *and* social action. It requires a theory capable of explaining how displacement leads to social impoverishment. I advocated a theory of social geometry, finding that the answers to primary questions are encoded in the linkage of socially constructed places, socially constructed time and socially constructed personages. This linkage provides a framework for routine and ritual activities. Weaken the framework, and social impoverishment becomes likely. Reconstruct it, and increase the likelihood of meaningful reconstruction of the lives of the displaced.

Bibliography

ABC News (1992) 'Hurricane Andrew: One Family's Struggle', ABC News videotape of Nightline, 1 September 1992.

Aberle, D. (1993) 'The Navajo-Hopi Land Dispute and Navajo Relocation' in Cernea, M. and Guggenheim, S. (eds) *Anthropological Approaches to Resettlement: Policy Practice and Theory*, Boulder, Colorado: Westview Press.

Acreman, M., Pirot, J-Y and Scudder, T. (forthcoming) 'The Role of Artificial Flooding in the Integrated Development of River Basins in Africa' in *Hydrological Management and Wetland Conservation in Africa*, Gland, Switzerland: IUCN/World Conservation Movement.

Adams, W. (1992*) Wasting the Rain: Rivers, People and Planning in Africa*, London: Earthscan Publications.

_____ (1993) 'Development's Deaf Ear: Downstream Users and Water Releases from the Bakalori Dam, Nigeria', *World Development*, Vol. 21 No. 9 pp.1405-1416.

Adu-Aryee, V. (1993) Resettlement in Ghana: From Akosombo to Kpong in Cernea, M. and Guggenheim, S. (eds) *Anthropological Approaches to Resettlement: Policy Practice and Theory*, Boulder, Colorado: Westview Press.

Alvares, C. and Billorey, R. (1987) 'Damning the Narmada: The Politics Behind the Destruction', *The Ecologist*, Vol. 17 Nos. 2/3 pp.62-75.

American Anthropological Association (1991) 'Draft of White Paper on Involuntary Resettlement', Prepared by the AAA Task Force on Involuntary Resettlement, 24 March 1991.

Appa, G. and Sridharan, R. (1992) 'A Report on the Canal Affected People and the Downstream Impact of the Sardar Sarovar Projects', Operational Research Working Paper Series, LSEOR.92.1.

Appell, G. (1985) 'The Bulusu of East Kalimantan: The Consequences of Resettlement', in Appell, G. (ed.) *Modernization and Emergence of a Landless Peasantry, Studies in Third World Societies,* Vol. 33 Williamsburg: College of William and Mary.

ASI (Anti-Slavery International/Anti-Slavery Society) (1983) 'The Philippines: Authoritarian Government, Multinationals and Ancestral Lands' Report 1 in *Indigenous Peoples and Development Series,* London.

ASI (Anti-Slavery International) (1984) 'The Chittagong Hill Tracts: Militarisation, Oppression and the Hill Tribes', in *Indigenous Peoples and Development Series 2,* London.

Aspelin, P. and Coelho dos Santos, S. (1981) 'Indian Areas Threatened by Hydroelectric Projects in Brazil', IWGIA Document 44, Copenhagen.

Ault, S. (1994) 'The Environmental Health Impacts of Resettlement: A Wealth of Systemic Problems, a Dearth of Comprehensive Responses', Lecture at the International Congress of Americanists, 7 July, Uppsala, Sweden.

Autumn, S. (1994) 'Anthropologists, Development and Situated Truth: The Uses of Debate', unpublished Ms.

Awachie, J. (1979) in Welcomme, R. (ed.) 'Fisheries Management in Large Rivers', FAO Technical Paper No. 194 Rome:United Nations Food and Agriculture Organisation.

Baboo, B. (1992) *Technology and Social Transformation: The Case of the Hirakud Multi-Purpose Dam Project in Orissa,* New Delhi, India: Concept Publishing Company.

Bandyopadhyay, J. (1992) 'From Environmental Conflicts to Sustainable Mountain Transformation: Ecological Action in the Garhwal Himalaya', in Dharam, G. and Vivian, J. (eds) *Grassroots Environmental Action,* London: Routledge.

Barabas, A. (1977) 'Chinantec Messianism: The Mediator of the Divine Western Expansion and Indigenous People', Sevilla Casas, E. (ed.) *World Anthropology Series,* The Hague: Mouton Publishers.

Bartolomé, L. (1992) 'Fighting Leviatan: The Articulation and Spread of Local Opposition to Hydrodevelopment in Brazil', 41st Annual Latin American Studies Conference: Involuntary Migration and Resettlement in Latin American, Center of Latin American Studies, University of Florida, Gainesville.

Bartolomé, M. (1992) 'Relocalizaciones de indígenas en América-Latina', 41st Annual Latin American Studies Conference: Involuntary Migration and Resettlement in Latin America, Center of Latin American Studies, University of Florida, Gainesville.

Bartolomé, M. and Barabas, A. (1973) 'Hydraulic Ethnocide: The Mazatec and Chinantec People of Oaxaca, Mexico', Copenhagen: IWGIA.

_____ (1990) 'La presa Cerro de Oro y el Ingeniero El Gran Dios. Relocalización y Etnocidio Chinanteco en México', Col. Presencias nums. 19 y 20, ConsejoNacional para la Cultura y las Artes, Instituto Nacional Indigenista, México.

_____ (1992) 'Antropología y relocalizaciones' *Alternidades,* Vol. 2 No. 4 pp.5-15.

Basso, K. (1984) 'Stalking with stories: Names, Places and Moral Narratives among the Western Apache' in Bruner, E. (ed.) *Text, Play and Story,* Washington, D.C.: American Ethnological Society.

Bauman, Z. (1989), *Modernity and the Holocaust,* Ithaca: Cornell University Press.

Bello, W., Kinley, D. and Elinson, E. (eds) n.d. 'Development Debacle: The World Bank in the Philippines', Institute for Food and Development Policy, Philippine Solidarity Network.

Berman, M. (1982) *All that is Solid Melts into Air,* New York: Simon and Schuster.

Bernstein, H., Crow, B. and Johnson, H. (eds) (1992) *Rural Livelihoods: Crisis and Response,* Oxford: OUP.

Besterman, C. and Roth, M. (1988) 'JESS Report on Land Tenure in the Middle Jubba Valley: Issues and Policy Recommendations', JESS Report No.34, Burlington, Vermont: Associates in Rural Development.

Blair, H. (1978) 'Rural Development, Class Structure and Bureaucracy in Bangladesh', *World Development,* Vol. 6 No.1 pp.65-82.

Bock, P. (1968) *Modern Cultural Anthropology,* New York: Alfred A. Knopf.

Bourassa, R. (1985) *Power from the North,* Ottawa: Prentice-Hall.

Brand, K-W. (1992) 'Aspectos cíclicos de los nuevos movimientossociales, Los Nuevos movimientos Sociales', in Dalton, R. and Kuechler, M. (eds) *Los Nuevos Movimientos Sociales: un reto al orden político,* Generalitat Valenciana: Ediciones Alfons el Manganim.

Brandon, K. and Wells, M. (1992) *People and Parks: Linking Protected Area Management with Local Communities,* Washington, D.C.: The World Bank.

Brokensha, D. and Scudder, T. (1968) 'Resettlement', in Rubin, N. and Warren, M. (eds) *Dams in Africa: An Interdisciplinary Study of Man-Made Lakes in Africa,* London: Frank Cass.

Brown, B. and Perkins, D. (1992) 'Disruptions in Place Attachment', in Low, S. and Altman, I. (eds) *Place Attachment,* New York: Plenum Press.

Burger, J. (1987) *Report from the Frontier: The State of the World's Indigenous Peoples,* London: Zed Books.

Butcher, D. (1971) 'An Operational Manual for Resettlement: A Systematic Approach to the Resettlement Problem Created by Man-Made Lakes, with Special Relevance for West Africa', FAO, Rome.

_____ (1990) 'Review of the Treatment of Environmental Aspects of Bank Energy Projects', The World Bank Industry and Energy Department, PRE Working Paper, March.

Cabañas, S. (1993) 'El Consejo de pueblos nahuas del Alto Balsas (CPNAB): Los primeros años 1989-1992', Cuadernos del Alto Balsas No.1, México: Ediciones GEO.

Carneiro da Cunha, M. (1987) *Os Direitos Do Indio,* São Paulo: Editora Brasiliense.

Cernea, M.M. (1988a) *Involuntary Resettlement in Development Projects: Policy Guidelines in World Bank-Financed Projects,* The World Bank Technical Paper No.80,. Washington, DC.

_____ (1988b) 'Involuntary Resettlement and Development', *Finance and Development,* Vol. 25 No. 3 pp.44-46.

_____ (1989) 'Metropolitan Development and Compulsory Population Relocation: Policy Issues and Project Experiences', *Regional Development Dialogue,* Vol. 10 No. 4.

_____ (1990a) 'Poverty Risks from Population Displacement in Water Resource Projects', Harvard University, HIID, DDP No.355, Cambridge, Mass.

_____ (1990b) 'Internal Refugee Flows and Development-Induced Population Displacement', *Journal of Refugee Studies,* Vol.3 No.4 pp.320-339.

_____ (1991a) *Putting People First: Sociological Variables in Rural Development,* 2nd edn, Oxford: OUP for The World Bank.

_____ (1991b) *Impoverishment Risks From Population Displacement in Water Resources Development: Policy and Operational Issues,* International Workshop on Regional Approaches to Reservoir Development and Management.

_____ (1991c) 'Involuntary Resettlement: Social Research, Policy, and Planning.' in Cernea, M. (ed.) *Putting People First: Sociological Variables in Rural Development,* 2nd edn, Oxford: OUP for The World Bank.

_____ (1992) Re-tooling in Applied Social Investigation for Development Planning: Some Methodological Issues: Some

Methodological Issues in Scrimshaw, N. and Gleason, G. (eds) *Rapid Assessment Procedures (RAP): Qualitative Methodologies for Planning and Evaluation of Health Related Programmes,* the International Nutrition Foundation for Developing Countries.

_____ (1993a) 'Disaster-Related Refugee Flows and Development-Caused Population Displacement' in Cernea, M. and Guggenheim, S. (eds) *Anthropological Approaches to Involuntary Resettlement: Policy, Practice and Theory,* Boulder, Colorado: Westview Press.

_____ (1993b) 'Anthropological and Sociological Research for Policy Development on Population Resettlement', in Cernea, M. and Guggenheim, S. (eds) *Anthropological Approaches to Resettlement: Policy, Practice and Theory* Boulder, Colorado: Westview Press.

_____ (1993c) 'African Resettlement in a Global Context' in Cook, C. (ed.) *Involuntary Resettlement in Africa,* The World Bank Technical Paper No. 227, Washington, DC.

_____ (1994a) 'Poverty Risks from Population Displacement in Water Resource Development' ICA-94. Uppsala, 6 July 1994.

_____ (1994b) 'Sociology, Anthropology, and Development: An Annotated Bibliography of World Bank Publications 1975-93', Washington, D.C.: The World Bank, Environmentally Sustainable Development Studies and Monographs Series Paper No.3.

_____ (1994c) 'Population resettlement and development', *Finance and Development,* Vol. 31 No. 1 pp.46-49.

_____ (1994d) 'Hydro-power Dams and Social Impacts: A Sociological Perspective' Paper Presented at the International Hydropower and Environment Conference, NORAD, Oslo, 12-14 September.

_____ (1995a) 'Public Policy Responses to Development-Induced Population Displacement' in Drèze, J., Samson, M. and Sing, S. (eds) *Displacement and Resettlement in the Narmada Valley.*

_____ (1995b) 'Understanding and Preventing Impoverishment from Displacement: Reflections on the State of Knowledge', Keynote address, First International Conference on Development-Induced Displacement and Impoverishment, Refugee Studies Programme, Oxford, January.

_____ (1996) 'Bridging the Research Divide: Studying Refugees and Development Oustees' in Allen, T. (ed.) *In Search of Cool Ground: Displacement and Homecoming in Northeast Africa,* London and New York: James Currey.

Cernea, M. and Guggenheim, S. (eds) (1993) *Anthropological Approaches to Resettlement: Policy Practice and Theory*, Boulder, Colorado: Westview Press.

Chambers, R. (ed.) (1970) *The Volta Resettlement Experience*, London: Pall Mall Press.

+ Chandler, W. (1984) *The Myth of TVA: Conservation and Development in the Tennessee Valley, 1933-1983*, Cambridge, Mass.: Ballinger.

Chawla, L. (1994) 'Childhood Place Attachments' in Low, S. and Altman, I. (eds) *Place Attachment*, New York: Plenum Press.

Chernela, J. (1988) 'Potential Impacts of a Proposed Amazon Hydropower Project', *Cultural Survival*, Vol. 12 No. 2 pp.20-24.

Chittagong Hill Tracts Commission (1991) '"Life is not Ours": Land and Human Rights in the Chittagong Hill Tracts, Bangladesh', the report of the Chittagong Hill Tracts Commission. IWGIA and Organising Committee, Chittagong Hill Tracts Campaign, London: Calvert's Press.

Colchester, M. (1987) 'The Tribal People of the Narmada Valley: Damned by the World Bank' in Sahabat Alam Malaysia (ed.) *Forest Resources Crisis in the Third World*, Pengang: Jutaprint.

Colchester, M. (1993) 'Changing World Bank Policies on Indigenous Peoples' *Third World Network Features*, 1093/93, Penang.

Clark, S., Colson, E., Lee, J. and Scudder. T (1994) 'Ten Thousand Tonga: A Longitudinal Anthropological Study from Southern Zambia, 1956-1991', unpublished.

Clay, J. (1988) 'Villagisation in Ethiopia' in Clay, J. Steingraber, S. and Niggli, P. (eds), *The Spoils of Famine. Ethiopian Famine policy and Peasant Agriculture*, Cambridge, Mass.: Cultural Survival.

Colson, E. (1971) *The Social Consequences of Resettlement: The Impact of the Kariba Resettlement Upon the Gwembe Tonga*, Manchester: Manchester University Press.

Crow, B. (1992) 'Rural Livelihoods: Action from Above' in Bernstein, H., Crow, B. and Johnson, H. (eds), *Rural Livelihoods: Crisis and Response*, Oxford: OUP.

Csikszentimihalyi, M. and Rochberg-Halton, E. (1981) *The Meaning of Things: Domestic Symbols and the Self*, New York: Cambridge.

Cummings, B. (1990) *Dam the Rivers, Damn the People: Development and Resistance in Amazonian Brazil*, London: Earthscan Publications.

Curle, A. (1971) *Making Peace*, London: Tavistock Publications.

Dalton, R. and Kuechler, M. (1992) *Los Nuevos Movimientos Sociales: un reto al orden político*, Generalitat Valenciana: Ediciones Alfons el Manganim.

Daniel, E. (1994) *The American Mosaic: The Impact of Space, Time and Culture on American Politics*, Boulder, Colorado: Westview Press.

Davidson, F., Zaijer, M., Peltenburg, M. and Rodell, M. (1993) *Relocation and Resettlement Manual: A Guide to Managing and Planning Relocation*, Institute for Housing and Urban Development Studies, the Netherlands.

de Pina Cabal, J. (1994) 'The Valuation of Time Among the Peasant Population of the Alto Minho, Northwestern Portugal' in Layton, R. (ed.) *Who Needs the Past? Indigenous Values and Archaeology*, London and New York: Routledge.

de Wet, C. (1993) 'A Spatial Analysis of Involuntary Community Relocation: A South African Cast Study' in Cernea, M. and Guggenheim, S. (eds) *Anthropological Approaches to Resettlement: Policy, Practice, and Theory* Boulder, Colorado: Westview Press.

Dhar, B. (1994) *'Impoverishment Risks' Analysis of Hariharjore Medium Irrigation Project Affected Persons*, a Field Report on Participatory Rural Appraisal.

Dieci, P. and Viezolli, C. (eds) (1992*) Resettlement and Rural Development in Ethiopia*, Milan: Franco Angeli.

Douglas, M. (1973) *Rules and Meaning*, Harmondsworth: Penguin.

Downing, T. and Kushner, G. (eds) (1988) 'Human Rights and Anthropology', Cultural Survival Report No. 24, Cambridge, Mass.: Cultural Survival Inc.

Downing, T. (1994) 'Social Geometrics: A Theory of Social Displacement in Resettlement' Paper Presented at the International Congress of the Americanists, Stockholm/Uppsala, Sweden.

_____ (1995) 'Mitigating Social Impoverishment when People are Involuntarily Displaced' Paper Presented at the First International Conference on Development-Induced Displacement and Impoverishment, Refugee Studies Programme, Oxford, January.

Drucker, C. (1985) 'Dam the Chico: Hydropower Development and Tribal Resistance', *The Ecologist*, Vol. 15 No. 4 pp.149-157.

_____ (1988) 'Dam the Chico: Hydropower Development and Tribal Resistance', in Bodley, J. (ed*.) Tribal Peoples and Development Issues: A Global Overview*, California:Mayfield Publishing Company.

Elazar, D. J. (1994) *The American Mosaic: The impact of space, time and culture on American politics* Boulder, Colorado: Westview.

Erhmann, H. (1975) 'Grupos de presión', *Enciclopedia Internacionalde las Ciencias Sociales*, Vol. 5, Madrid : Ed. Aguilar.

Escobar, A. (1991) 'Anthropology and the Development Encounter: The Making and Marketing of Development Anthropology,' *American Ethnologist*, Vol. 18 No. 4 pp. 658-682.

Escobar, A. and Alvarez S. (eds) (1992) *The Making of Social Movements in Latin American: Identity, Strategy and Democracy*, Boulder, Colorado: Westview Press.

Escudero, C. (1988) 'Involuntary Resettlement in Bank-Assisted Projects: An Introduction to Legal Issues', Legal Department, The World Bank, Washington.

Esteva, G. and Prakesh, M. (1992) 'Grassroots Resistance to Sustainable Development: Lessons from the Banks for the Narmada' *The Ecologist*, Vol. 22 No. 2 pp.45-51.

Fabian, S. (1992) *Space-Time of the Bororo of Brazil*, Gainesville, Florida: University of Florida Press.

Falk, R. (1983) *The End of World Order*, London: Holmes and Meier.

Fantasia, R. (1988) *Cultures of Solidarity*, Berkeley: University of California Press.

Feit, H. (1982) 'The Future of Hunters within Nation-States: Anthropology and the James Bay Cree' in Leacock, E. and Lee, R. (eds) *Politics and History in Band Societies*, Cambridge: Cambridge University Press.

Fernandes, W., Das, J. and Rao, S. (1989) 'Displacement and Rehabilitation: An Estimate of Extent and Prospects' in Fernandes, W. and Ganguly-Thukral, E. (eds) *Development, Displacement and Rehabilitation*, New Delhi: Indian Social Institute.

Fernandes, W. and Ganguly-Thukral, E. (eds) (1989) *Development, Displacement and Rehabilitation*, New Delhi: Indian Social Institute.

Fernandes, W. and Ganguly-Thukral, E. (1989) 'A Draft National Policy on Developmental Resettlement of Project Affected People' in Fernandes, W. and Ganguly-Thukral, E. (eds) *Development, Displacement and Rehabilitation*, New Delhi: Indian Social Institute.

Fernàndes, W. (1994) *Development-Induced Displacement in the Tribal Areas of Eastern India*, New Delhi: Indian Social Institute.

Fisher, W. (1994) 'Megadevelopment, Environmentalism, and Resistance: The Institutional Context of Kayapo Indigenous Politics in Central Brazil', *Human Organisation*, Vol. 53 No. 3 pp.220-232.

Fixico, D. (1990) *Termination and Relocation: Federal Indian Policy*, Albuquerque: University of New Mexico Press.

Frake, C. (1993) *Seafaring and the Medieval Construction of Time*, Stanford: Stanford University Press.

Frederiksen, H. (1982) 'Water Resources Institutions: Some Principles and Practices', The World Bank Technical Paper No.191, Washington, DC.: The World Bank.

Friedlander, K. (1940) 'On the "Longing to Die"', *International Journal of Psychoanalysis*, Vol. 16 No. 3 pp.416-468.

Ganguly-Thukral, E. and Singh, M. (1994) 'Dams and the displaced in India' in Mathur, H.M. (ed.) *Development, Displacement and Resettlement. Focus on Asian Experiences*, Delhi: Vikas Publishing House.

Gans, H. (1968) *People and Plans: Essays on Urban Problems and Solutions*, New York: Basic Books.

Garcia Canclini, N. (1993) *Transforming Modernity*, Austin: University of Texas Press.

Ghai, D. and Vivian, J. (1992) *Grassroots Environmental Action*, London: Routledge.

Ghosal, S.K. (1995) 'Issues in Resettlement and Rehabilitation of Project-Affected Families - Experiences in India', Paper Presented at First International Conference on Development-Induced Displacement and Impoverishment, Refugee Studies Programme, Oxford, January.

Gibson, D. (1993) 'The Politics of Involuntary Resettlement: World Bank Supported Projects in Asia,' unpublished Ph.D. dissertation, Department of Political Science, Duke University.

Giddens, A. (1984) *The Constitution of Society: Outline of the Theory of Structuration*, Berkeley: University of California Press.

Glass, R., Urrutia, J., Sibony, S., Smith, H., Garcia , B., and Rizzo, L. (1977) 'Earthquake Injures Related to Housing in a Guatemalan Village' in *Science*, Vol.197 pp.638-643.

Glazer, N. and Moynihan, D. (ed.) (1975) *Ethnicity, Theory and Experience*, Harvard: Harvard University Press.

Goldsmith, E. and Hildyard, N. (1984) *The Social and Environmental Effects of Large Dams*, San Francisco: A Sierra Club Book.

Gomez, T. (1993) 'Hacia un camino propio de los pueblos nahuas del Alto Balsas', Cuadernos del Alto Balsas No.2, México: Ediciones Gea.

Good, C. (1992) 'Making the Struggle One Big One: Nahuatl Resistance to the San Juan Dam Mexico', Paper Presented at the Yale seminar Programme on Agrarian Studies, Yale University: New Haven.

Gray, A. (1994) 'From Bretton Woods to Indigenous Forests'
editorial in *Indigenous Affairs*, No. 2 April-June, 1994 pp. 2-4,
Copenhagen.

_____ (1995) 'The Indigenous Movement in Asia' in Barnes R.,
Gray, A. and Kingsbury, B. (eds) *Indigenous Peoples in Asia*, Asian
Studies Center, Ann Arbor, Michigan.

_____ (forthcoming) 'Development Policy - Development Protest:
The World Bank, Indigenous Peoples and NGOs' Ms.

Guggenheim, S. (1989) 'Development and the Dynamics of
Displacement' in Fernandes, A. (ed.) *Workshop on Rehabilitation
of Persons Displaced by Development Projects*, Bangalore: Myrada.

_____ (1990) 'Development and the Dynamics of Displacement'
in *Workshop on Rehabilitation of Persons Displaced by Development
Projects*, Institute for Social and Economic Change, Myrada,
Bangalore, India.

_____ (1993) 'Peasants, Planners, and Participation: Resettlement
in Mexico', in Cernea, M. and Guggenheim, S. (eds)
*Anthropological Approaches to Resettlement: Policy, Practice and
Theory*, Boulder, Colorado: Westview Press.

_____ (1994) *Involuntary Resettlement: An Annotated Reference
Bibliography For Development Research*, Environment Working
Paper No.64, The World Bank.

Gunaratna, M. (1988) *For a Sovereign State*, Ratmalana, Sri Lanka:
Sarvodaya Book Publishing Service.

Hadejia-Nguru Wetlands Conservation Project and the National
Institute for Policy and Strategic Studies (1993) 'Proceedings of
the workshop on the management of the water resources of the
Komadugu-Yobe basin, Kuru, 1-2 April', Kuru, Nigeria:
National Institute Press.

Hall, E. (1959) *The Silent Language*, Greenwich: Fawcett.

Hallward, P. (1992) 'The Urgent Need for a Campaign against
Forced Resettlement' in *The Ecologist*, Vol. 22 No. 2 March/April
pp.43-44.

Hann, C. (ed.) (1994) *When History Accelerates*, London: Athlone

Hansen, A. and Oliver-Smith, A. (eds) (1982) *Involuntary Migration
and Resettlement*, Boulder, Colorado: Westview Press.

Hildyard, N. (1989) 'Adios Amazonia? A Report from the Altamira
Gathering', *The Ecologist*, Vol. 19 No. 2 pp.53-62.

Horowitz, M., Salem-Murdock, M. et al. (1990) 'The Senegal River
Basin Monitoring Activity Synthesis Report', Binghampton, New
York: Institute for Development Anthropology.

Horowitz, M. (1991) 'Victims Upstream and Down', *Journal of
Refugee Studies*, Vol. 4 No. 2 pp.164-181.

Horowitz M., (1993) 'Resettlement at Manantali, Mali: Short-Term
Success, Long-Term Problems' in Cernea, M. and Guggenheim,
S. (eds) *Anthropological Approaches to Resettlement: Policy, Practice
and Theory*, Boulder: Westview Press.

Hotchkiss, J. (1967) 'Children and Conduct in a Latino Community
of Chiapas, Mexico', *American Anthropologist*, Vol. 69 No.2. Also
in Romney, K. and DeVore, P. (eds) *You and Others*, Cambridge,
Mass.: Winthrop Publishers.

Huang, Y. (1984) 'On the Reform of Resettlement Policies in
China', *Chinese Journal of Water Conservation*, No.6.

Hydro-Quebec (1993) 'Grand Baleine Complex Feasibility Study',
Quebec: Hydro-Quebec.

ICIHI (Independent Commission on International Humanitarian
Issues), (1987) *Indigenous Peoples: A Global Quest for Justice*,
London: ICIHI and Zed Books.

International Dams Newsletter (1985) 'Why This Newsletter?'
Vol.1 No.1 p.1.

International Labour Organization Convention 107 (1958), on the
Protection and Integration of Indigenous and Other Tribal
Populations in Independent Countries.

Israel, A. (1987) *Institutional Development*, Baltimore, MD: Johns
Hopkins University Press.

IUCN (The World Conservation Union) (ongoing) 'Newsletter:
Wetlands Programme', Gland, Switzerland.

IWGIA (International Work Group for Indigenous Affairs),
Yearbook 1988: IWGIA 20 Years, Copenhagen.

Jellinek, L. (1991) *The Wheel of Fortune: The History of a Poor
Community in Jarkata*, ASAA. London: Allen and Unwin.

Johnson, B. (1994) *Who Pays the Price: The Sociocultural Context of
Environmental Crisis*, Covelo,Ca.: Island Press.

Joshi, V. (1991) *Rehabilitation – A Promise to Keep. A Case of Sardar
Sarovar Project*, Ahmedabad: Tax Publications.

Kardam, N. (1993) 'Development Approaches and the Role of
Policy Advocacy: The case of the World Bank' *World
Development*, Vol. 21 No.11 pp.1773-1789.

Kates, R. (1973) 'Human Impacts of the Mangua Earthquake'
Science, Vol. 182 pp.981-990.

Khera, S. and Mariella, P. (1982) 'The Fort McDowell Yavapai: A
Case of Long-Term Resistance to Relocation,' in Hansen, A. and
Oliver-Smith, A. (eds) *Involuntary Migration andResettlement*,
Boulder, Colorado: Westview Press.

Kleivan, H. (1978) 'Incompatible Patterns of Land Use: The
Controversy over Hydroelectric Schemes in the Heartland

of the Sami People', in *IWGIA Newsletter* 20-21, December pp.56-80.

Kottak, C. (1991) 'When People Don't Come First: Some sociological lessons from completed projects', in Cernea, M. (ed) *Putting People First* 2nd edn, Oxford: Oxford University Press.

Kushner, G. (1988) 'Powerless People: The Administered Community', in Downing, T. and Kushner, G. (eds) *Human Rights and Anthropology* (Cultural Survival Report 24), Cambridge, Mass.: Cultural Survival Inc.

Lassailly-Jacob, V. (1986) 'Un Exemple Éphémère de Planification du Développement: l'AVB en Côte d'Ivoire Central (1969-1980)', *Cahiers d'Études Africaines*, Vol. 103 No. 26 pp.333-348.

_____ (1990) 'Grands Barrages Africains et Transferts de Populations: La Question Foncière' in *Eau et Aménagement dans les Régions Inter-Tropicales*, Talence: CEGET-CNRS.

_____ (1994) 'Government-Sponsored Agricultural Schemes for Involuntary Migrants in Africa: Some Key Obstacles to Their Economic Viability' in Adelman, H. and Sorenson, J. (eds) *African Refugees: Development Aid and Repatriation*, Boulder, Colorado: Westview Press.

Lane, C. and Jules, P. (1990) 'Displaced Pastoralists and Transferred Wheat Technology in Tanzania,' IIED, Sustainable Agriculture Programme, Gate Keeper Services, No.SA20.

Lawrence, R. (1986) 'Showdown at Big Mountain,' in *These Times*, Vol.10 No.14.

Layton, R. (ed.) (1994) *Who Needs the Past? Indigenous Values and Archaeology,* London and New York: Routledge.

Leonel, M., Mindlin, B. and Junquera, C. (1992) 'The Joint Responsibility of the International Community in the Indigenous and Environmental Issues of the Brazilian Amazon', *IWGIA Newsletter* 3/92 July-September, pp.6-20, Copenhagen.

Levine, S. and Lurie, N. (eds) (1968) *The American Indian Today*, Baltimore: Penguin Books.

Lightfoot, P. (1979) 'Spatial Distribution and Cohesion of Resettled Communities' in Gosling, L. (ed.) *Population Resettlement in the Mekong River Basin*, Studies in Geography No.10, Chapel Hill, North Carolina: University of North Carolina.

Low, S. (1992) 'Symbolic Ties that Bind: Place Attachment in the Plaza' in Low, S. and Altman, I. (eds) *Place Attachment*, New York: Plenum Press.

Low, S. and Altman, I. (eds) (1992) *Place Attachment*, New York: Plenum Press.

Magee, P. (1989) 'Peasant Political Identity and the Tucurui Dam: A Case Study of the Island Dwellers of Para, Brazil', *The Latinamericanist*, Vol. 24 No.1 pp.6-10.

Males, A. (1994) 'Past and Present of Andean Indian Society: the Otavalos', in Layton, R. (ed.) *Who Needs the Past? Indigenous values and archaeology*, London and New York: Routledge.

Malkki, L. (1992) 'National Geographic: The Rooting of Peoples and the Territorialisation of National Identity Among Scholars and Refugees,' *Cultural Anthropology*, Vol. 7 No.1 pp.24-44.

Marcus, C. (1994) 'Environmental memories' in Low, S. and Altman, I. (eds) *Place Attachment*, New York: Plenum Press.

Marris, P. (1975) *Loss and Change*, New York: Anchor Books.

Marshall, G. (1983) 'Some Remarks on the Study of Working Class Consciousness', *Politics and Society*, Vol.12 No.3.

Mathur, H. M. (ed.) (1994) *Development, Displacement and Resettlement. Focus on Asian Experiences*, Delhi: Vikas Publishing House.

_____ (1995) 'Struggling to Regain Lost Livelihood – the Case of People Displaced by Pong Dam in India', Paper Presented at First International Conference on Development-Induced Displacement and Impoverishment, Refugee Studies Programme, Oxford, January.

Mburugu E. (1994) 'Dislocation of Settled Communities in the Development Process: The Case of Kiambere Hydroelectric Project', in Cook, C. (ed.) 'Involuntary Resettlement in Africa' The World Bank Technical Paper No.227.

McAdam, D., McCarthy, J. and Zald, M. (1988) 'Social Movements', in Smelser, N. (ed) *Handbook of Sociology*, Newbury Park, Ca.: Sage Publications.

McDowell, C. (1995) 'Development-Induced Displacement', *The Courier*, No.150, March-April pp.56-57.

_____ (1996) 'Review - Resettlement and Development: The Bankwide Review of Projects Involving Involuntary Resettlement, 1986-1993', *Journal of Refugee Studies*, Vol.9 No.1 pp.104-106.

Merton, R. K. (1957) *Social Theory and Social Structure*, New York: Free Press.

Mey, W. (1984) 'They Are Now Burning Village after Village: Genocide in the Chittagong Hill Tracts, Bangladesh', *IWGIA Document* No. 51, Copenhagen.

Moore, M. (1992) 'Competition and Pluralism in Public Bureaucracies', IDS Bulletin No. 23 No. 4 pp.65-77.

Moran, E. (1981) *Developing the Amazon*, Bloomington: Indiana University Press.

Morse, B. and Berger, T. (1992a) *Sardar Sarovar: Report of the Independent Review*, Ottawa: Resource Futures International, Inc.

Morse, B, Berger, T. Gamble, D. and Brody, H. (1992b), 'The Report of the Independent Review', (commissioned by the The World Bank and published by Resource Futures International INC).

Myers, N. (1995) *Environmental Exodus: An Emergent Crisis in the Global Arena*, Washington, DC.: Climate Institute.

Nachowitz, T. (1988) 'Repression in the Narmada Valley,' *Cultural Survival Quarterly*, Vol. 12 No. 3 pp.22-24.

National Irrigation Authority, Files and Documents on Pantabangan Dam and Resettlement, 1969-1994, The Philippines.

Negrete, G. (1993) 'El Consejo de Pueblos Nahuas del Alto Balsas (CNPAB): Los primeros años 1989-1992', Cuadernosdel Alto Balsas No.1, México,D.F.: Ediciones Gea.

NGO, (1994) 'NGO Letters on Bankwide Resettlement Review', Ms., Bank Information Center.

Odidi Okidi, C. (1992) *Policy and Legal Framework in Development-Driven Involuntary Resettlement in African Countries*, draft, Kenya: Moi University, School of Environmental Studies.

Okavango Observer 'Dream of a Dam', 30 June 1995 p.1.

Oliver-Smith, A. (1982) 'Here There Is Life: The Social and Cultural Dynamics of Resistance to Resettlement in Post-Disaster Peru', in Hansen, A. and Oliver-Smith, A. (eds) *Involuntary Migration and Resettlement*, Boulder, Colorado: Westview Press.

_____ (1986) *The Martyred City: Death and Rebirth in the Andes*, Albuquerque: The University of New Mexico Press.

_____ (1991a) 'Involuntary Resettlement, Resistance and Political Empowerment', *Journal of Refugee Studies*, Vol. 4 No. 2 pp.132-149.

_____ (1991b) 'Successes and Failures in Post-Disaster Resettlement', *Disasters* Vol.15 No.1 pp.12-23.

_____ (1995) 'Resistance to Resettlement: The Formation and Evolution of Movements', *Research in Social Movements, Conflict and Change*, Vol.17 pp.197-219.

Organization for Economic Co-Operation and Development. (OECD) Guidelines for Aid Agencies on Involuntary Displacement and Resettlement in Development Projects. Development Assistance Committee, Paris, 1991, CODE/GAD (91) 201.

Oxfam, (1994) 'Response to Resettlement and Development Review of the World Bank', Ms.

Paine, R. (1982) 'Dam a River Damn a People? Saami (Lapp) Livelihood and the Alta/Kautokeino Hydro-electric Project and the Norwegian Parliament', *IWGIA Document 45*, Copenhagen.

Pandey, B. (1995) *Development Induced Displacement: An Agenda for the Social Summit*, Institute for Socio-Economic Development: Bhubaneswar, Orissa.

Pankhurst, A. (1992) *Resettlement and Famine in Ethiopia - The Villagers' Experience*, Manchester, New York and Manchester: Manchester University Press.

Partridge, W., Brown, A. and Nugent, J. (1982) 'The Papaloapan Dam and Resettlement Project: Human Ecology and Health Impacts', in Hansen, A. and Oliver-Smith, A. (eds) *Involuntary Migration and Resettlement*, Boulder, Colorado: Westview Press.

Partridge, W. (1989) 'Population Displacement Due to Development Projects', *Journal of Refugee Studies*, Vol. 2 No. 3 pp.373-384.

_____ (1993) 'Successful Involuntary Resettlement: Lessons from Costa Rica Arenal Hydroelectric Project' in Cernea, M. and Guggenheim, S. (eds) *Anthropological Approaches to Resettlement: Policy Practice and Theory*, Boulder, Colorado: Westview Press.

Paul, J. (1988) 'International Development Agencies, Human Rights and Human Development Projects', *Denver Journal of International Law and Policy*, Vol.17 No. 1 p.67.

Pearce, D. (1993) 'The Economics of Involuntary Resettlement', consultant report to the Task Force for the Bankwide Resettlement review, Ms.

Peeler, D. and Winter, M. (1993) *Tiempo Sagrado, Espacio Sagrado: Astronomia, calendario y arquitectura en Monte Alban y Teotihuacan*, Oaxaca, Mexico: Instituto Oaxaqueño de las Culturas.

Pellow, D. (1994) 'Spaces that Teach', in Altman, I. and Low, S. *Place Attachment*, New York: Plenum Press.

Posey, D. (1989) 'The Kayapó: On Trial for Speaking Out', *Index on Censorship*, Vol. 18 Nos. 6/7 pp.16 - 20.

_____ (1989) 'From Warclubs to Words', *Journal of The North American Centre on Latin America*, Vol. 23 No. 1 pp.13-19.

Quebec Government (1991) *The James Bay and Northern Quebec Agreement and Complementary Agreement*, Quebec: Publications of Quebec.

Qureshi, M. (1989). 'Resettlement, Development, and the World Bank', *The Bank's World*, May, pp.12-13, Washington, DC.: The World Bank

Radovich, J. and Balazote, A. (1992) 'La etnicidad mapuche en un contexto de relocalización', *América Indígena*, Vol. 2 No.1, Instituto Indigenista Interamericano, México.

Ramaiah, S. (1994) *Health Implications of Involuntary Resettlement and Rehabilitation, Upper Indravati Hydroelectric Project*, Preliminary Observations.

Ramirez, A., Celestino, E., and Cabañas, I. (1992) 'Los pueblos nahuas del Alto Balsas y su entorno ecológico', Ce-Acatl 31/32, Tecuilhuitl, México, D.F.

Ravindran, L. (1994) *Impoverishment Risks' Analysis of Displaced Persons in Upper Indravati Hydroelectric Project*, Field Notes.

_____ (1994) *Socio-economic study of displaced persons under Upper Indravati Project, Orissa*, CENDERET, Xavier Institute of Management, Bhubaneswar, Orissa.

Redclift, M. (1987) *Sustainable Development: Exploring the Contradictions*, London: Methuen.

_____ (1992) 'Sustainable Development and Popular Participation: A Framework for Analysis', in Ghai, D. and Vivian, J. (eds) *Grassroots Environmental Action*, London: Routledge.

Redford, K. (1991) 'The Ecologically Noble Savage', *Cultural Survival Quarterly*, Vol.15 No.1 pp.46-48.

Resettlement and Rehabilitation Officer (1994) *Brochure on Resettlement and Rehabilitation Activities of Upper Indravati Project*, September.

Rew, A. (1994) 'Social Standards and Social Theory' in Hann, C. (ed) *When History Accelerates*, London: Athlone.

Riberio, G. (1994) *Transnational Capitalism and Hydropolitics in Argenta: The Yacyretá High Dam*, Gainesville: University Press of Florida.

Riley, R. (1994) 'Attachment to the Ordinary Landscape' in Low, S. and Altman, I. (eds), *Place Attachment*, New York: Plenum Press.

Robinson, S. (1992) 'Participation and Accountability: Understanding the Political Culture of Involuntary Resettlement in Mexico', Paper Presented at the 41st Annual Conference of the Center for Latin American Studies, Involuntary Migration and Resettlement in Latin America, University of Florida, Gainesville, April 2-4.

_____ (1994) 'Involuntary Resettlement: Just So Stories', Paper Presented at the Symposium on Operational Resettlement Theories, 48th ICA Conference, Uppsala, Sweden, July.

Roder, W. (1994) *Human Adjustment to Kainji Reservoir in Nigeria: An Assessment of the Economics and Environmental Consequences of a*

Major Man-Made Lake in Africa, Lanham: University Press of America.

Rodman, M. (1992) 'Empowering Place: Multilocality and Multivocality', *American Anthropologist*, Vol. 94 No. 3 pp.640-656.

Roy-Burman, B. (1961) *Social Processes in the Industrialisation of Rourkhela*, New Delhi: Census of India.

Rutz, H. (ed.) (1992) *The Politics of Time*, Washington, D.C.: American Anthropological Association, American Ethnological Society Monographs, No. 4.

Sachs, W. (ed.) (1993) *The Development Dictionary: a Guide to Knowledge as Power*, London: Zed Books.

Salem-Murdock, M. (1989) *Arabs and Nubians in New Halfa*, Salt Lake City: University of Utah Press.

Salisbury, R. (1986) *A Homeland for the Cree: Regional Development in James Bay, 1971-1981*, Quebec: McGill-Queens University Press.

Scherer-Warren, I. and Reis, M. J. (1986) 'As barragens do Urugua: A dinnamica de un movimento social', *Boletim de Ciencias Sociales*, No. 41, UFSC, Brasil.

Scott, R.P. (1992a) 'Etnia y Nacao en dois movimentos de resistencia a barragems: México y Brazil', ponencia presentada en la Reunión del Grupo de Trabajo sobre Identidades en América Latina, CLACSO, Brasilia, Brasil.

_____ (1992b) 'Dams, Forced Resettlement and the Transformation of the Peasant Economy in the São Francisco River Valley, Brazil', Paper Presented at the XVII International Congress of LASA, Los Angeles.

_____ (1995) 'Rethinking Resettlement Phases: Questions for Administrators and for Social Movements' Paper Presented at First International Conference on Development-Induced Displacement and Impoverishment, Refugee Studies Programme, Oxford, January.

Scudder, T. (1962) *The Ecology of the Gwembe Tonga*, Manchester: Manchester University Press.

_____ (1973) 'The Human Ecology of Big Projects: River Basin Development and Resettlement', in *Annual Review of Anthropology*, Vol. 2 pp. 45-55.

_____ (1980) 'River-Basin Development and Local Initiative in African Savanna Environments' in Harris, D. (ed.) *Savanna Environments*, London: Academic Press.

_____ (1983) 'The Relocation Component in Connection with the Sardar Sarovar (Narmada) Project', prepared for the World Bank, quoted in Morse, B., Berger, T., Gamble, D. and Brody, H. 'The Report of the Independent Review', (commissioned by the

The World Bank and published by Resource Futures International Inc).

_____ (1991a) 'A Sociological Framework for the Analysis of New Land Settlements' in Cernea, M. (ed.) *Putting People First: Sociological Variables in Rural Development,* New York: Oxford University Press.

_____ (1991b) 'The Need and Justification for Maintaining Transboundary Flood Regimes: The Africa Case', *Special Issue of Natural Resources Journal on the International Law of the Hydraulic Cycle,* Vol. 31 No. 1 pp.75-107.

_____ (1993) 'Development-induced Relocation and Refugees Studies: 37 Years of Change and Continuity among Zambia's Ovenbe Tonga' *Journal of Refugee Studies,* Vol. 6 No. 2 pp.123-152.

_____ (1994) 'Recent experiences with river basin development in the tropics and subtropics', *Natural Resources Forum,* Vol. 18 No.2 pp.101-113.

Scudder, T. and Colson, E. (1982). 'From Welfare to Development: A Conceptual Framework for Analysis of Dislocated People' in Hansen, A. and Oliver-Smith, A. (eds), *Involuntary Migration and Resettlement: The Problems and Responses of Dislocated People,* Boulder, Colorado: Westview Press.

Scudder, T. with Manley, R.E., Coley, R.W., Davis, R.K., Green, J., Howard, G.W., Lawry, S.W., Martz, D., Rogers, P.P., Taylor, A.R.D., Turner, S.D., White, G.F. and Wright, E.P. (1993) *IUCN Review of the Southern Okavango Integrated Water Development Project,* Gland, Switzerland: Samara Publishing Company.

Seabrook, J. (1993) *Victims of Development: Resistance and Alternatives,* London: Verso.

Serra, M. (1993) 'Resettlement Planning in the Brazilian Power Sector: Recent Changes in Approach', in Cernea, M. and Guggenheim, S. (eds) *Anthropological Approaches to Resettlement,* Boulder, Colorado: Westview Press.

Shihata, I. (1991a) 'The World Bank and Human Rights', pp.97-134; also 'The World Bank and the Environment - A Legal Perspective', pp.135-180, in *The World Bank in a Changing World,* the Netherlands: Martinus Nijhoff Publishers.

_____ (1991b) *The World Bank in a Changing World: Selected Essays,* Compiled by Tschofen, F. and Parra, A. Dordrecht: Martinus Nijhoff Publishers.

_____ (1993) 'Legal Aspects of Involuntary Population Resettlement' in Cernea, M. and Guggenheim, S. (eds) *Anthropological Approaches to Resettlement: Policy, Practice, and Theory,* Boulder, Colorado: Westview Press.

Sigaud, L. (1986) 'Feitos Sociais de Grandes Projectos Hidroeletricos: As Barragens de Sobradinho e Machadinho', P.P. *Antropología Social, Comunicao* No. 9, Museu Nacional, UFRJ, R.J., Brasil.

Solem, E., (1982) 'Supreme Court Rejects Appeal over Alta Case', *IWGIA Newsletter,* No. 30 pp.103-106.

Sutro, L. and Downing, T. (1988) 'A Step Toward a Grammar of Space in Zapotec Villages' in Wilk, R. and Ashmore, W. (eds) *House and Household in the MesoAmerican Past,* Albuquerque: University of New Mexico Press.

Tamondong, S. Field Work Notes on Pantabangan Research, Nueva Ecija, 1992-1994.

Treece, D. (1987) *Bound in Misery and Iron: the Impact of the Grande Carajas Programme on the Indians of Brazil,* London: Survival International.

Turnbull, C. (1987) *The Mountain People,* London: Touchstone Books.

Turner, A. (ed.) (1990) *Time,* The Hague: Ten Brink Meppel.

Turner, T. (1991) 'Major Shift in Brazilian Yanomami Policy', *Anthropology Newsletter,* Vol. 32 No. 6 p.1 and p.46.

Umali, D. Ahl, (1993) *Tracing Marcos Gold, The True Story of Yamashita Treasure,* THAPI: Manila.

United Nations General Assembly (1986) *Declaration on the Right to Development, Resolution 41/128.*

Waldram, J. (1980) 'Relocation and Political Change in a Manitoba Native Community,' *Canadian Journal of Anthropology,* Vol.1 No.2 pp.173-178.

Wali, A. (1989) *Kilowatts and Crisis: Hydroelectric Power and Social Dislocation in Eastern Panama,* Boulder, Colorado: Westview Press.

Wangxiang, C. (1993) 'Resettlement Associated with Hydro Projects in China', *International Water Power and Dam Construction,* Vol. 45 No.2 pp.19-20.

Waterbury, J. (1979) *Hydropolitics of the Nile Valley,* Syracuse, NY: Syracuse University Press.

Weber, M. (1947) *The Theory of Social and Economic Organization,* translated by Henderson, A. and Parsons, T., Glencoe, Illinois: The Free Press.

West, P. and Brechin, S. (eds) (1991) *Resident Peoples and National Parks,* Tucson: University of Arizona Press.

Wilmer, F. (1993) *The Indigenous Voice in World Politics,* Newbury Park: Sage Publications.

Wittfogel, K. (1963) *Oriental Despotism,* New Haven: Yale University Press.

The World Bank. (1980) Operational Manual Statement 2.33. *Social Issues Associated with Involuntary Resettlement in Bank-Financed Projects*, Washington, DC.

_____ (1982) 'Tribal Peoples and Economic Development', Washington: The World Bank (sometimes placed under Goodland, R.).

_____ (1990) Operational Directive 4.30: *Involuntary Resettlement*, Washington, D.C., June.

_____ (1994a) *Resettlement and Development: The Bankwide Review of Projects Involving Involuntary Resettlement 1986-1993*, The Environment Department, Washington, D.C.

_____ (1994b) 'Sectoral Environmental Assessment is Needed for Power Sectors - and the Big Dams Debate', Ms. (paper circulated for discussion by Robert Goodland).

_____ (1994c) 'Status Report: Remedial Action Planning for Involuntary Resettlement', Washington, D.C.

World Rivers Review (1988) 'Activists Put IRN on the Map', *World Rivers Review,* Vol. 3 No. 3 p.1.

Zaman, M. (1982) 'Crisis in Chittagong Hill Tracts: Ethnicity and Integration', *Economic and Political Weekly,* Vol. 17 No. 3 pp.75-80.

Zerubavel, E. (1985*) The Seven Day Circle: the History and Meaning of the Week,* London: The Free Press.

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