Repackaging colonialism: Good governance, democracy, globalization and cognitive platitudes as assumed basic values in tropical small-scale fisheries development

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Abstract

A continuity of colonial era attributes and models characterizes the post-colonial period, although their presentation and vocabulary has been adapted by the use of inoffensive blandishments. "Good governance", "democracy" and an associated suite of terms and concepts serve to undermine the sovereignty of tropical nations, within a neoliberal framework. The historical roots of the issue and the rationale provided by modernization theory are summarized and exemplified by pre-existing fisheries credit institutions, and the myth of open access in small-scale fisheries. "Globalization" is examined as "global governmentality", or the purposeful manipulation of international institutions to maintain the global management role of Western nations.

Keywords: development, globalization, governance, neoliberalism, modernization theory

Introduction

The terms "liberal" and "liberalism" are now imbued with multiple and seemingly conflicted meanings and principles. The principal usages refer, first, to a governance relationship between a state and its subjects, and second, to the support of individual liberty and private property. To some, the distinguishing characteristics of a liberal form of governance is the free selection and pursuit of economic activities, inculcation of habits of self-regulation, and use of the market as a key indicator of appropriate levels of governance (Foucault 1997). Further, the market is regarded "…as a powerful instrument of civilization, inculcating such virtues as prudence, diligence, punctuality, self-control…" (Hindess 2001:26). By extension, this line of reasoning that securing market and property rules, while concomitantly reducing or eliminating non-market economic activities, means that the rule of the market can be used as a powerful instrument of development policy and management of natural resource extraction. This is amply demonstrated by the imperial history of Western nations. Perversely, it follows that measures taken both now by authoritarian regimes and historically by former colonial administrations, to establish and legally secure property rules and rights and to ensure that all transactions follow the rule of the market, are an integral part of liberal policy and reasoning.

Very little has changed in the transition from an era of colonial administration to one of now mature post-colonial states. Polite discourse no longer dares to mention the presumed incapacity of non-Westerners to govern themselves as a condition that could be removed only after generations of instruction by colonial administrators. It has been replaced by politically correct blandishments of neoliberalism regarding the elimination of structural factors and the transformation of cultures and values. Present-day imperial rule now operates through international financial institutions, the use of markets to regulate the behavior of only nominally sovereign governments, and aid conditionalities. Particularly forceful is the near universal promotion of "good governance".

Good governance, together with the terms "empowerment", "popular participation", "responsibility" and "democracy" associated with it, is currently among the concepts most promoted by international development agencies. However, its objective is to constrain sovereign government freedom of action by subjecting it to the power of national and international markets that are highly manipulated by Western core economic interests (Gill 1995; Cooke 2003). As Hindress (2001:35) comments succinctly:

> "[w]hile modern democracy allows citizens only a limited role in the government of the state to which they

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> belong, it is often sought to secure a degree of legitimacy for the activities of the state which other regimes are unable to match. It is this, rather than the expansion of popular control itself, that particularly appeals to the development agencies and financial institutions which promote democracy as a fundamental component of good governance."

Hindress (2001:37) appropriately concludes: "… international neo-liberalism is the most powerful, and consequently also the most dangerous, liberalism of our time."

The historical roots of problems

It has been widely argued that the antecedents of modern Western economic power and domineering attitudes are embedded as nascent forms in imperial and colonial behavior (Wallerstein 1974–1989; Giddens 1990; Kendall 2001). Stemming from this, the underlying cause of problems in tropical small-scale fisheries is the projection of Western policies and programmes based on Western models and approaches into areas for which they are inherently unsuited (Ruddle and Hickey 2008). This stems from a continuing legacy of colonialism and cultural imperialism, as demonstrated in donor and development agency behavior of a continued reliance on unproved models and approaches designed largely by Western fisheries biologists, social scientists and policy-makers. Whereas non-Western models of proven viability were formerly disparaged openly, these days disparagement is more subtle; it often takes the form of labeling them as traditional or special cases, and dismisses them with no further examination.

More commonly, however, it is claimed that pre-existing management systems either did not exist or never existed, a common deceit based either on outright fabrication by those who cleave to the Western "developmentalist" line, or just plain ignorance and/or unwillingness to conduct the primary field research required to check the existence or not of pre-existing systems in a given locality (Baird 2010; Ruddle 2007a). More common is the unquestioned parroting that pre-existing systems have been eroded beyond all hope of recovery, and so are useless for modern purposes. In the Asia-Pacific region, the colonial era had a major and lasting impact on pre-existing systems for managing nearshore fisheries. Its main impacts include undermining or displacing traditional tenure systems in conjunction with an added legal complexity, with the Western-based state law at odds with local customary law.

Lamentably, there is nothing new about such deception, since there are many examples from the colonial era that had a major and lasting impact on pre-existing systems for managing fisheries resources (Ruddle 1994a, b, c). Impacts were especially severe where large-scale and permanent European settlement occurred, and where indigenous property concepts and rights were not recognized, or if recognized initially, as in New Zealand, were gradually overwritten and forgotten. In New Zealand, for example, despite a vital and well-documented fisheries tradition and a treaty intended to protect Maori property, the rights of indigenous fisheries were gradually usurped. In the beginning, European settlers made little use of marine resources, but as the Maori population declined, their land rights diminished, and laws effectively dispossessed them of their fishing rights, Euro-New Zealanders gradually came to dominate fishing. Fiji provides an excellent example of a blatant attempt by local colonial officials to destroy a pre-existing fisheries management system in favor of expatriate entrepreneurs, in defiance of the expressed wishes of the British Crown and the unambiguous orders of the metropolitan government. Although the Crown desired that Fijians not be deprived of their customary reef rights, neither royal command nor official British government policy was ever implemented. Rather, in 1887 the Acting Governor of Fiji opened all reefs to beche-de-mer fishing by non-Fijians, in the interests of the economy. Further, via the Rivers and Streams Ordinance of 1882 it was interpreted that private fishing rights of Fijians were abolished and that they belonged to the Crown (Ruddle 2007b).

In general, Western-trained lawyers believe that customary law is invalid for upholding legal claims and inferior to the Western legal tradition. This has been a major external factor that either deliberately or by default undermined customary law and community resource rights (Ruddle 1994a, b, c, 1995 and 2007a,b). In general, national independence has changed the situation but little, partly because the devolution of authority conflicts with the basic task of nation-building (Ruddle 1994a).

Modernization theory, the neocolonialist rationale

In the second half of the twentieth century, the USA based its relationship with newly independent nations on a theory of modernization that guided its foreign assistance and trade policies, as well as those toward nationalism and counterinsurgency. At its core was the notion that the economic and political levels of Western industrialized nations were the standard to which all other nations should be raised. Non-Western "backwardness" and solutions to it were explained by social science theories.

The USA perceived that it had a duty and responsibility to instruct and uplift other nations, a sense of trusteeship integral to its concept of liberal developmentalism.

The term "development" has been used by the United States (US) government from the beginning of the twentieth century, at first to distinguish its evangelical civilizing mission from European colonial policies. Under this approach, educational and medical institutions were an extension of Christian evangelical missions, and development was presented as a "spiritual" or "conversion experience". This subterfuge is illustrated by the activities of the Rockefeller Institution for Medical Research in China during the 1920s and 1930s, which focused on implanting and nurturing transferred institutions and ways of thinking.

In the 1930s and 1940s, the approach was supported by US academic social scientists with techniques for research and analysis that lent the sociology of modernization a statistical and pseudo-scientific aura. International comparative studies became the vogue, as exemplified by the work of sociologist Talcott Parsons, who employed national accounting to measure changes in the relative economic efficiency of nations. By the mid-1940s it was essentially agreed that modernization included five *universally* valid main precepts. These were:

1. tradition is everywhere basically uniform, so problems of development would also be uniform;
2. there is a universal linear path to modernity, with the same stages of development culminating in Western levels of urban industrialism and consumerism;
3. development can be accelerated, mainly by contact with developed societies and central planning;
4. development is a process of releasing restrained energies and resources, therefore pre-existing systems and thought must be destroyed to enable progress to take its natural course; and
5. all states wish to modernize, and the USA could the lead this global movement.

Contrary to the widely held notion, the Marshall Plan did not provide the model for later modernization schemes. Rather, Point Four (1949), which was explicitly linked to the strategic and economic objectives of the US, provided the example. It licensed an unprecedented scale of intervention by the US in other countries' affairs, such that Western economists almost took over the management of sovereign governments, and comprehensive development role virtually became the solemn duty of developing countries governments. Beginning with infrastructural projects as straightforward but ad hoc foreign aid, Point Four evolved via import substitution industrialization into structuralist theories to overcome the colonial trade patterns that were identified as a cause of underdevelopment.

In addition, Point Four drove some academic social sciences in the USA, which provided the theory to support the strategy (Pletsch 1981), and so enjoyed enormous prestige within the national security establishment (Cooper and Randall 1997). Major players rode the merry-go-round from federal appointments to foundation boards to university faculty positions. Supported by the Ford Foundation and other institutions (Simpson 1998), universities set up Area Studies Centers to conduct applied research useful to government. The Ford and Rockefeller foundations also funded the Center for International Studies at MIT, the interdisciplinary illuminati of which included W.W. Rostow, an economist whose development model of a universal five stages modernization process was grounded in the history and national interest of the USA (Rostow 1960). According to Rostow's thinking, to preserve its momentum the USA must expand world trade and increase its exports. He also asserted that humanitarianism and selfishness go together, since, regarding development, the US national interest and that of the rest of humanity were inseparable (Latham 2000).

However, by the late 1960s Rostow's theory had been refuted by academics, who were themselves ditched by international assistance institutions and replaced by either tame in-house experts or think tanks to create strategies and justifications for aid. Academics replaced Rostow's ideas with dependency theory, focusing on the processes of underdevelopment rather than the dynamics of development (Packenham 1992). But that too was attacked in the 1980s and early 1990s. The recent and mostly academic approaches of post-colonial and post-modernism relocated the study of power relations from economic development toward culture and knowledge creation. Because these were seen has having little applicability to development, doctrine continued to evolve within the US Agency for International Development, the World Bank, and United Nations (UN) agencies.

The rationale and methods of development were also seriously challenged by the environmental movement, and especially by the highly influential books of Carson (*Silent Spring*, 1962), Ehrlich (*The Population Bomb*, 1968), Meadows et al. (*The Limits to Growth*, 1972), and Schumacher (*Small is Beautiful*, 1973). That seemingly irreconcilable difference was mitigated in 1987, when the Brundtland Report popularized "sustainable development", an essentially vapid term that at once is both scientifically unsatisfactory yet totally inoffensive, and therefore is perfectly suited to the requirements of international conference reporting and UN agency documentation. Notably, it provided a way for environmentalists and development specialists to collaborate, and was an approved way of channeling dissent.

Nevertheless, US government policy adhered to the idealized vision of the North Atlantic nations as the norm to which all nations aspire. During the Reagan administration, it adopted structural adjustment, with a withdrawal of the state from the economy and privatization, the lifting of import and exchange controls, the dependence on legal codes and standards to regulate trade, and the subjection of all sectors of the economy and society to market discipline.

Although, on paper at least, modernization theory undoubtedly mobilized global humanitarianism and enabled the poor to a share in "progress", it has much to answer for because it simultaneously hyped illusion and imbued it with an aura of pseudoscience. But far worse is that it virtually issued a carte blanche to avarice, self-interest and, sometimes, ghastly intervention. As a consequence, development aid has become a vast industry and an integral part of international relations.

Some deceits of modernization theory

(1) Informal credit in fisheries

One uncomplicated illustration of the stereotypical ideas promoted by the modernization theory to either dismiss or destroy pre-existing systems is provided by informal credit, which, in the small-scale fisheries of developing countries, were invariably condemned as lacking transparency and accountability, with money-lenders characteristically demanding high interest rates under onerous conditions that might include catch-sale bondage, obligatory boat rental, or tied purchase of supplies (Ruddle 2011). Although several cases have described particularly onerous conditions within convoluted credit system in South Asian small-scale fisheries (e.g. Aghazadeh 1994; Khan et al., 2005; Rahman et al. 2002), such situations are not the norm. Evidence to the contrary was demonstrated in the 1940s by Raymond Firth in his classic study, *Malay Fishermen* (Firth 1966). Further, contrary widespread evidence was provided by scholars examining client-patron relationships, and another group that includes Merlijn (1989), Platteau and Abraham (1987), Stirrat (1974), and Yap (1978), who focused on the role of middlemen in fishing communities, and who challenged the established view by emphasizing the range of social and economic functions they perform.

The latest body of evidence emerged in the 1990s, when Adams (1992), Adams and Fitchett (1992), Bouman (1990), and Bouman and Hospes (1994) showed the widespread importance of informal financial systems in poorer nations, and, contrary to stereotypical thinking, that well-functioning pre-existing credit schemes are neither uncommon nor necessarily exploitative. Subsequently, rural credit arrangements have been revealed as both heterogeneous and segmented, with the coexistence of "formal" and "informal" credit markets being widely reported for Asia (e.g. Bardhan and Udry 1999; Barslund and Tarp 2003; Duong and Izumida 2002; Yadav et al. 1992; Ruddle 2011), and other regions (Ruddle 2011).

However, that work has been largely overlooked by the predominantly economist development practitioners. Yamey (1964) attributed their failure to consider local studies to a concern with entire national economic sectors, like foreign trade or public finance, and a preference for distilled reports rather than primary studies. Although to be expected half a century ago, this explanation omits the underlying culprit, "modernization" based on Western models (Ruddle and Hickey 2008; Ruddle and Satria 2010a, b).

(2) The myth of open access

Another and much discussed deceit is the Myth of Open Access. This was grounded in and popularized by Hardin's (1968) generalized model of the tragedy of the commons, and the collective action responses to it. By definition, this is an abstract simplification of a wide range of realities, which accounts both for its appeal and the controversial nature of its postulation of the universal irreconcilability of the behavior of individual resource users with the sustainability of the resources they exploit. But much of the criticism of Hardin's model is best leveled at the dogmatic interpretation of it by users. Despite its shortcomings, the straightforward assumptions of Hardin's model have been of enormous importance in stimulating great awareness of and research on the nature of the relationship between property regimes and patterns of natural resource use. Regrettably, Hardin's thesis has been used widely to influence opinion and to justify the change of effective and efficient pre-existing common property management systems to those either controlled by the state or privately, on the false promise of better limiting access to resources (e.g. Ostrom 1990; Andelson 1991; Steins et al. 2000).

Hardin's (1968) tragedy-of-the-commons model is the principal Western theory held to account for problems in certain fisheries. But this model is grounded in the erroneous notion that the misuse of fishery resources stems from the institution of common property. Thus, fisheries must be managed to mitigate the selfish and myopic behavior of fishermen consequent upon fisheries being a classic example of a common property resource. This has been widely viewed as the predominant pattern of individuals. The proposition asserts that inherent in the exploitation of common property resources is the tendency to physical wastage of the resource, an incentive to overexploitation by users, leading inexorably to the now familiar "tragedy of the commons", and a tendency toward economic wastage via overcapitalization of the industry, and eventual impoverishment of fishing communities and immobility of labor. To counteract these inherent tendencies, so the conventional theory runs, management by authorities external to fishing communities is required. Generally, it is accepted that the replacement of common property regimes by systems of controlled access could either eliminate or ameliorate excess effort. Although there is no unanimity of opinion concerning the optimal design of such systems, they have been widely implemented, together with catch quotas, gear and/or seasonal limitations, licensing, or a combination of these and other elements. All share the common characteristic of assigning fish harvesting rights to selected individuals, who then receive all or part of the economic rent created by the reduction in effort.

As is well known, a fundamental criticism of the model is that it fails to examine a commons in terms of its specific social and cultural contexts, and so does not account for local customs and behavior that often greatly modify patterns of natural resource use. In short, it is wrong under many circumstances. Depletion of common property resources is, thus, by no means inevitable, and, as is well documented, commons-owners may collectively agree to implement sound resource management practices. The nature of human impact on such resources will vary, mainly according to such factors as the strength and appropriateness of local rules governing usage, and the opportunity costs of exploiting the commons while foregoing the use of other resources. The nature of such community behavior, especially regarding decision-making, reduces "free rider" behavior, such that it cannot be assumed that users of common property resources are always selfish, operate on the basis of perfect information about resources and the competition, and, unhampered by social sanctions, seek to maximize private short-term benefits while transferring maximum costs to the public sector. It has been conclusively demonstrated that many fishers do not behave in this fashion.

This flaw arose in many applications of the model because it was incorrectly assumed that a common property resource is always synonymous with open access resource, as has long since been demonstrated. It is not; common property is not accessible to all people (Ciriacy-Wantrup and Bishop 1975). Rather, since a common property resource is defined by terms of inclusion and exclusion, use rights are confined to restricted groups, such as cooperatives, villagers, clans, and the like. That makes it imperative to understand in each local situation both the concepts of resources, property rights and regimes and institutional arrangements, together with the interrelationships among them. Resource use is managed by locally recognized and sanctioned rights and rules that clarify resource ownership and structure, and regulate the individual and group behavior of resource users toward each other and their property. Such local institutional arrangements may differ widely (Nguyen and Ruddle 2010; Ruddle 1994b, 1996a, b, c, 2007a; Ruddle and Johannes 1990; Ruddle and Satria 2010a, b). No resource is everywhere managed by any single property regime: rather, in some places or in certain periods a given resource may be managed as common property, whereas elsewhere or at another time it is managed under a private regime (Khumsri 2008, 2010; Khumsri et al. 2008). Prevailing management regimes are essentially a product of socio-political conditions, and, thus, the categories are often blurred. The complex variety of possible situations demands specific, local investigation in every instance.

Further, those idealized property regimes of state, private, common or communal, and none (or open access) regimes might coexist in a single area, for different types of resources, thus resources can be exploited under several types of property regime, whose nature will depend on their geographical and temporal location (Khumsri et al. 2008). Alternatively, depending on the composition of the rights, a single resource or resource area might be embraced by more than one category of right. In Japan, for example, exclusive plots for aquaculture use are leased within common fisheries rights areas (Ruddle 1987). And *de facto* and *de jure* rights coincide within a single fishery. Further, property rights and regimes and associated rules change as physical, biological, technological, economic, political, social, and other conditions in a locality or country change (Khumsri 2008, 2010; Khumsri et al. 2008). Fisheries in particular are often mixed systems with characteristics that change through time. Thus, it is critical to distinguish between a resource and a property regime under which it is held (Bromley 1989; Ostrom 1986).

Fishermens' territoriality is widespread, in both Western and non-Western societies. Often it can be regarded as a transformation of an open access resource to a commons, by the *de facto* local creation internal boundaries within the larger space, thereby creating a nested set boundaries used under state and customary laws, respectively. Such a situation also arises under state law when fishermen's behavior is modified and local boundaries are created by gear, size or other restrictions. Territoriality is a fundamentally important concept, in that it facilitates restrictive rules and regulations governing access to, the use of, and distribution of the fruits of resources. Territoriality is regarded as a critical component of institutions required to ensure resource conservation.

Also stemming from the failure to examine cases in context is the ascription of resource depletion and economic impoverishment to the nature of property rights. Although there can be no doubt that open access regimes are particularly deleterious, the real problem lies in the response: generally either to the imposition of alternative management regimes by external authorities or to some form of privatization, on the erroneous assumption that private property is both resource conservative and economically beneficial, in contrast to common property. Other actual or potential alternative management regimes are ignored.

The dogmatic interpretation of Hardin's model can be faulted for contributing to the polarization between local resource users and central or local governments. This has been exacerbated by overly enthusiastic researchers exaggerating the social wisdom and ecological perceptiveness of the former while belittling the latter. This again is a result of the failure to place resource systems within their larger social and cultural contexts, particularly by resource economists, some of who seem unable to distinguish cultural from social factors! In many cases, resource depletion is better seen as a result of the policies of past colonial or of the present governments of the independent nations that replaced them.

Manipulation toward global governmentality

The term globalization is not used here "…to account for the processes, agents, policies and particular events which give rise to a world in which global flows, mobilities and networks disrupt a pre-ordained world of nation states" (Larner and Walters 2001:16). Rather, the perspective taken is that of global governmentality, which focuses on the fundamental manipulative forces that have brought the world to its present situation, and form the broad context in which fisheries – and all renewable natural resources – are ordained to be managed.

Here it is necessary to digress briefly to clarify usage in this essay of the terms "government", "governance" and "governmentality". For the term government, standard social science usage is followed to mean both a defined administrative bureaucracy that controls a nation-state, and the structure of the governing organization that enables the employment and deployment of state power, the enforcement of existing laws and legislation new ones, arbitration of conflicts, and the monopoly of legitimized violence (Barclay 1990; Bealey 1999; Flint and Taylor 2007). "Governance" is used to signify the activity of governing performed by a government. The term "global governance" pertains to the international system of relationships between independent states, and particularly trends within the international system since the end of World War II that include an increased regulation of trans-border or global issues likesuch as the environment, and a greater role for non-state entities and global civil society (Rosenau 1999).

It is important to understand that governance is scale-neutral because its range of operation extends from a single person to all humans, and it is functionally neutral. If it is accepted that a moral or natural purpose of governance is to assure, via a hierarchy of administrative elements and political processes, a generally beneficial reconciliation of various opinions and divergent interests, the term "governance" may be applied to any purposeful activity engaged in by any number of people, and include, nation-states, international organizations, corporations, non-governmental organizations, and fishing villages.

The term "governmentality" is more complex and implies purposeful manipulation of the governed by the government. The concept was developed during the late 1970s and early 1980s by Michel Foucault, and elaborated in the 1990s in the social sciences (e.g. Burchell et al. 1991 and Rose 1996, 1999). For present purposes, the focal aspects of governmentality are, first, the way governments attempt to produce a citizenry to fulfill a government's policies, and, second, the organized practices (mentalities, rationalities and techniques) used to govern subjects. In other words, governmentality is the carefully calculated means of directing and manipulating how people behave (Jeffreys and Sigley 2009).

Thus, for neoliberalism to function as designed, individuals must be induced or educated to accept full responsibility for the conduct of their own lives (Rose 1999) because it links reduced state welfare and security to a condition where citizens are free, enterprising, and autonomous individuals. In that way, intrusive state bureaucracies and religion-based moral standards dwindle as subjects increasingly govern themselves. Through the transformation of subjects with duties and obligations, into individuals, with rights and freedoms, modern individuals are not merely free to choose but obliged to be free "to understand and enact their lives in terms of choice" (Rose 1999:87).

Eco-governmentality is a sub-field of so-called political ecology that emerged in the mid-1990s with the work of Luke (1999), Darier (1999) and Rutherford (1999). It examines specific social and environmental relationships and links them with location-free national and international systems of governance. The approach is useful for studies of trans-border environmental and other change, and in particular for tracking the cross-scales impacts and implications of policy, from the individual, through the fishing village and domestic region, to the state, and then to global organizations and corporations. The approach focuses on how government and producers of expert or specialized knowledge construct the environment to design and implement management that facilitates a government's goal of controlling subjects' lives by inducing individuals and small groups first to internalize and then to disseminate the knowledge and power to eventually create a self-regulating network with goals that coincide with those of the state. The process appears to be subtle and non-coercive because it structures and rationalizes behavior and local participation in defining problems, implementation, management, and monitoring interventions.

The process is exemplified by the way in which territory is brought under State control, and how human interaction of with it regulated (e.g. Braun 2000, 2003; Scott 1998), through measurement of natural resources for the purposes of extraction that "... allowed the state to impose that logic on the very reality that was observed" (Scott 1998:14), thereby simplifying complex ecosystems and depicting them as straightforward sites for resource extraction. Management changes the ecosystem composition by selective planting, harvesting and extraction, so eventually the once natural ecosystem resembles the way it is depicted in the simplified bureaucratic systems used to measure them. Indeed Scott (1998:23) shows how in early modern Europe scientific forestry models made by state foresters formed part of a more comprehensive body of statistical knowledge assembled to manage a population and facilitate "taxation, political control, and conscription". Similarly Braun (2000:27) demonstrates how the Geological Survey of Canada measurement and representation of the mineral composition of a territory enabled the government "... to manage individuals, goods and wealth so as to improve the condition of the state's population."

Since the types of knowledge produced to make nature intelligible to the state strongly influence the evolution of state rationality, Luke (1999) argues that the ecological domain is now the key area for the production of knowledge and power, which began in the early 1970s with increased awareness of ecological limits to human development. Production, knowledge and power became "environmentalized" and known as eco-governmentality.

In contrast, the term "globalization" is a recent concoction that describes a very old process in international human relationships. As currently used, it describes an increase the worldwide scale of the interconnectedness of cultural, environmental and social phenomena. The term has been applied to commercial, ecological, economic, financial, organizational, religious, spiritual and trade activities, among a great many of the processes and structures (Ruddle 2007b). Although identified with various trends that developed largely during the last half-century, it can be argued that the substance of globalization does not connote anything particularly new, since the integration of the modern global economy started seriously with the beginning of European global rampages, 500 years ago.

However, the process really accelerated and became integrated some three decades ago with the simultaneous rapid advances in computer technology, removal of barriers to free movement of goods and capital, and huge increases in global reach in the political and economic power of multinational corporations. The speed and intensity of modern communications is unique in history. It is this awesome speed of contemporary communication combined with the portability, increasingly low cost, standardization and integration of the required hardware and software that now enables the process of globalization to penetrate into the remotest corners of the world, and to tie hitherto isolated fishing communities, for example, into the mainstream of the world fish trade (Quibria et al. 2002; Abraham 2007; Jensen 2007; Donner and Escobari 2010). Such a thing could never have occurred at the apogee of the British Empire, for example. Then, at the colonial policy level in London, it is possible to accept the concept of colonial era globalization, based on a standard policy.

> "But at the local level implementation diverged widely, and substantial differences arose in each location. At that level globalization disintegrated. Regardless of local differences in political and economic conditions, which were substantial, this must in large part be attributed to the inability of central colonial officials in London to confirm and repeatedly check that policies were being implemented as intended. Without a rapid means of communication, that could never be attained." (Ruddle 2007b:217)

The illusion of globalization

Nevertheless, despite its vintage and pedigree, the actual meaning and full implications of the term globalization, generally remain poorly understood. However, the concept solidifies when it is made clear that globalization is thoroughly rooted in colonialism. Global trade was the supreme *raison* *d'être* of the colonial era, which was based on the straightforward concept that metropolitan power plundered colonial raw materials and dumped European manufactured goods on the colonies in return. Wealth enriched the metropolitan countries, and what was returned to the colonies was in the form of investment in physical and administrative infrastructures to facilitate the continuous plunder of their natural resources.

The concept underlying such a disarmingly simple model was, and remains, that everybody everywhere eventually benefits from the increase in trade. As a result, export led trade is the dominant factor in the global economy, and expansion of exports is now seemingly regarded as the sole way of growth. That is a cruel illusion, because most of the resultant wealth accrues to the already rich, industrialized nations that already account for the bulk of world trade.

However, comparisons between globalization in the colonial era and the present are simplistic, because they mask its vast impact on societies and ecosystems. Contemporary globalization is underlain by the negative values that drive the world economy. Principal among them are the extreme faith placed in the particularly Anglo-American philosophy of the "magic of the marketplace", money as the principal if not sole criterion of value, the "cult of success", and the doctrine of *laissez-faire* capitalism that the common good is best served by uninhibited self-interest. The modern marketplace is dominated by enormous transnational corporations, with neither local nor national allegiances, and that are managed by professionals.

Around 1980, fundamentalist free-market governments in the United Kingdom and the US implemented policies based on deregulation, balanced budgets, low inflation, privatization, government directed by the market, and corporate global freedom. Deregulation of international financial markets was the cornerstone to such policy, so as to enable financial institutions to expand international operations, particularly providing their financial services in poor countries. Since modern communications allow lightning-fast investment of surplus cash anywhere a swift profit could be made, the relaxed rules regarding financial capital soon became a major destabilizing influence on the global economy, particularly because of the speculative nature of most such investment, particularly in developing countries. International speculative investment was totally unconcerned with its impact on local societies and national economies because its concern was to make money from money, and not the production of real goods and services. A vivid example of this occurred in July 1997, with the collapse of the east Asian currencies caused by nervous short-term speculative investors suddenly pulling their money out of the region. The human and social costs of this collapse devastated millions of families and small businesses. The International Monetary Fund (IMF) was widely blamed as the source of this economic disaster because of its orthodox economic policies that undermine the market and the long-term stability of economies and societies. From this devastating crisis doubts about the benefits corporate-led globalization began to spread.

A key in understanding contemporary globalization is the structural changes that have occurred in the world economy since the early 1970s, when the fixed currency-exchange rules by which world trade had been managed since 1944 became dysfunctional. This has been manipulated by Western governments, a process largely controlled by the USA. In July 1944, the Allied powers met at a UN monetary and financial conference held in Bretton Woods, in order to create a new framework for managing the post-war global economy. Because the conference was dominated by the USA, it adopted a system based on the free movement of goods, with the US dollar (USD) becoming the main instrument of international exchange and linked to gold at a fixed price of USD 35 an ounce. In this way, the Allied nations who originally met at Bretton Woods in 1944 have maintained their clout in the world economic system, to the detriment of poorer and less powerful nations. They created and have carefully maintained a playing field that is level only for them.

At the same conference the IMF, the International Bank for Reconstruction and Development (IBRD, better known as the World Bank), and the General Agreement on Tariffs and Trade (GATT)/World Trade Organization (WTO) were established to govern and coordinate the global economy, based on global competition and corporate enterprise. The main function is to provide short-term, emergency loans to countries. Such loans are determined by a quota system, and voting power in the IMF is based on member countries' level of financial contributions to the institution. As a result, the rich nations dominated decision-making. The IBRD was established to meet the reconstruction of nations devastated by WWII, initially by providing loans for physical infrastructure, agricultural development, and the development of education. It later switched its focus from reconstruction to development in the newly independent countries. Owing to a lack of agreement at Bretton Woods, GATT/WTO began in 1947 by establishing rules for the global trade in industrial goods alone. This was done with the objective of reducing national trade barriers to stop the vicious competition manifested in the trade policies that so damaged the global economy before World War II. In 1994 GATT was replaced by the WTO, which functions as a forum for negotiations and enforcement of resultant agreements. In addition to trade agreements, WTO also included a new General Agreement on Trade in Services, which had the objective of reducing variance to investment in over 160 areas that would include, in addition to trade goods, basic needs in areas such as water, health care, education, and in addition telecommunications, banking and investment, transport and the environment. In other words, the General Agreement on Trade in Services provided enormous business opportunities for the global expansion of multilateral corporations.

From the very start these organizations were perceived of as continuing Western domination (Stiglitz 2003). They are also extremely opaque organizations (Stiglitz 2003). There has been growing unease about the institutions' agenda of globalization, and in particular of the Dispute Resolution Board (DRB), which enables the WTO to approve tough trade sanctions against members who might disagree with its interpretation of global trade rules. Previously, all member states of GATT had to agree about disciplining a member. However, now the DRB appoints a panel of experts who try a case *in camera*. It decides on sanctions, which can be overcome only if every member state of the WTO opposes them; an impossibility, because the plaintiff state would not do so! Primacy is given to trade because national environmental laws, labor policies, cultural protection, food self-sufficiency, or any other policy held or formulated in the national interest is open to attack for being an unfair impediment to free trade. The national treatment clause essentially prevents a country from discriminating against products of foreign origin, regardless of the basis for such discrimination. In other words, the WTO system is biased in favor of rich Western nations, and essentially removes the power of sovereign governments to formulate policy, even if it best serves its own people. For example, according to WTO rules a nation wishing to prohibit an import that it deems harmful to public health must first prove its case scientifically, before it can ban such an import.

In the 1960s and early 1970s, non-Western nations tried strenuously to escape from the legacy of colonialism and obtain economic justice. One successful direct effort was the creation of the Organization of Petroleum Exporting Countries (OPEC), a cartel to control the supply of petroleum to force price increases and achieve greater national incomes for the benefit of their populations. Also, there was increasingly vocal opposition to transnational corporations, who were conceived of as reconstructing the world for their own exclusive benefit. However, when the less powerful nations attempted to raise the prices for their primary products, they were thwarted by the corporations.

In 1973, the New International Economic Order was endorsed by the summit of nonaligned nations, and shortly thereafter adopted by a Sixth Special Session of the UN. In 1974 the UN General Assembly approved the "Charter of Economic Rights and Duties of Nations", which endorsed the sovereignty of nations over their natural resources, the right of countries depending on a small number of primary resources to form cartels, and a statement of principles for a new international economic order as a suppression (solidarity of the oppressed) was issued. The newly independent nations set out collectively to challenge the power of Western nations. However, their efforts were an expression of politicians and intellectuals who realized that global inequalities could never be reduced in the marketplace, and that terms of trade would be the mechanism for creating an international economic system based on just relationships among nations.

Although the nonaligned movement started as a way to escape the polarization of the East-West struggle, it soon became a mechanism for enabling developing nations to come together. In the meantime in the UN, these same countries form the Group of 77, which promotes the development of the UN Conference on Trade and Development, within which Third World countries then push for fairer terms of trade. The principle underlying idea was to intervene in the marketplace to regulate the supply of primary commodities and ensure steady prices that would benefit both producer and consumer. However, the new international economic order was not supported by Western nations, whose superior position it would undermine, and Third World nations were unable to achieve a focus, owing to their lack of political power.

A boom in the primary commodity values, particularly of petroleum in 1972–1977, gave OPEC nations huge budgetary surpluses, some of which were used for infrastructural development. However, huge amounts were placed by Western investment institutions, or deposited in banks that lent them to developing country governments to fund development and pay for expensive imported petroleum products. Universally, petroleum-based fuel prices skyrocketed, contributing to rampant inflation when economic growth was low. At that time US President Nixon unilaterally both uncoupled the US dollar from gold and devalued the US dollar. This had meant developing nations had suddenly to service or repay their loans in devalued US dollars, and at higher interest rates, thereby enormously increasing the debts of non-oil-producing nations. To facilitate that, Western banks lent large amounts at very low rates of interest. Although some of the money was used as intended, much was put to frivolous uses, and much was simply stolen outright.

As it encountered financial difficulties, the IMF entered the picture to enforce harsh conditionalities when countries applied for assistance to overcome temporary balance of payments problems. Nations were forced to follow the advice of IMF economists, who argued that problems arose from excessive demand in domestic economies because of excessive imports and too few exports. The IMF insisted that structural adjustments would solve the problem. This would slow the domestic demand for imports and boost exports. Nations were forced to adopt these austerity measures, or risk being shunned by the international economic community. In 1985 the conditionalities were formalized by the Baker Plan, which called on the World Bank and IMF to impose wider adjustments on national economic policies. As is well known, the conditionalities imposed by the World Bank and IMF included privatizing state-owned enterprises, reducing the size and cost of governments through large-scale layoffs in the public sector, cutting basic social services and subsidies on essential foodstuffs, and reducing barriers to trade. These further depleted economies and had a major impact on health and welfare of the poor, and export commodities were given priority over the production of basic foodstuffs and other domestic necessities.

As a consequence, the 1980s was essentially a lost decade for most developing countries, during which growth stagnated and debt doubled. Worse, much of the credit obtained after structural adjustment conditionalities were implemented went to servicing the interest payments on pre-existing loans made from financial institutions and rich Western countries. Little remained for productive investment, such that the conditionalities of structural adjustment programmes took funds away from education and health. In effect, poor nations sent capital to rich Western institutions. Further, as a consequence of those actions, the IMF and World Bank undoubtedly achieved a level of control over sovereign states that was unheard of even during the colonial era.

The debt of developing nations has very little to do with economics, but everything to do with Western determination to continue dominating the world politically and economically (Stiglitz 2003; George 2004). No Western power would voluntarily abandon such a lucrative set-up. Structural adjustment is an integral part the Western capitalistic-hegemonic machine that makes sense only when understood as part of immoral philosophy that puts "market fundamentalism" far ahead of the needs of people. Such market fundamentalism, the keystone of Western neoliberalism, is based on an unswerving belief in the freedom of private corporations to trade, invest and move capital wherever they wish, with minimum interference. Massive private transnational corporations now drive economic globalization, and many of them wield more power than do smaller nations. The values of efficiency and competition that drive business now also dominate debates on social policy, the public interest, and the role of government. Corporations are driven and structured by monopoly and profit, and have scant regard for social, environmental, or local level and family economic consequences of their business. Less commonly appreciated is the role of transnational corporations in destroying cultural diversity, via the homogeneous commercial culture and products sales strategies they have introduced worldwide.

This is nothing but a Western template for its perception of a "good life" spread worldwide. As an inevitable and integral part of its inexorable spread, local cultures are devalued, and the social relationships that formerly characterized families and communities are weakened. Local systems of governance and local institutions, like credit systems in rural communities, are swept aside as a global monoculture now characterizes societies worldwide, even in the remotest areas (Norberg-Hodge 1999). This has gone hand-in-hand with an almost manic mantra of privatization, downsizing of government, acquisitions and mergers that eliminate competition, and the introduction of business practices to education, welfare, and health systems, all of which have been accompanied by massive job losses. In addition to selling off public assets, governments constantly seek to attract private foreign investment, itself is no guarantee of economic progress since relatively little goes into productive activities and foreign exchange is siphoned off as corporations remit their profits overseas. Commonly too, multilateral corporations produce for the local market, thereby eliminating domestic competition through their superior efficiency and business methods. Governments of poor sovereign nations cannot intervene, as they are bound by international agreements on free trade and investment. Thus, their very sovereignty is undermined further.

Deregulation of global finance combined with lightning-fast communication has led to an enormous surge in international capital flows that enormously destabilize the global economy. Speculation now far exceeds productive investment, and has caused the recent financial crises. A minority of people has experienced increases, the gap between the rich and poor has widened greatly, and impacts on the environment and overuse of natural resources have increased vastly. As a consequence of lower barriers to foreign investment, the largest change that has occurred in almost four decades has been in global finance. Foreign exchange transactions now are virtually unrelated to productive investment in real goods or services. Rather, their objective is to profit just from money movements. Such unregulated flows of international capital have taken power from the people's representatives (i.e. elected politicians), and handed it to rich investors, whose only loyalty is to themselves. As a consequence, the world economy has now changed into a worldwide casino. And in this casino sovereign governments are now hostage to unregulated speculative flows of capital. The enormous growth in the finance and investment industry has been intimately linked to the technological revolution in computing and telecommunications. Now the billions of dollars can be invested around the world within seconds using a personal computer. Making money in this way depends on volatility, not stability, and certainly not on long-term investment. It is characterized by astoundingly fast turning of quick profits and fast, herd-like exit from an investment in the mere glimmer of financial difficulties, as in the Southeast Asian financial crisis of mid-1997.

Concluding comments

Regardless of one's ideological standpoint, there is no escaping the fact that all economy depends on the natural environment and the maintenance of a healthy and productive functioning of ecological systems. The Western industrial model of production and constant growth has consumed vast quantities non-renewable natural resources since the Industrial Revolution. Ecosystems and natural resources are being eradicated at an alarming rate, and the production of waste exceeds the world's ecosystems' capacity to absorb it and regenerate themselves. Although most concern focuses on the supply of food, hydrocarbons, and industrial raw materials, more alarming is the destruction of such fundamental life-support systems as fresh water, atmospheric quality, and ecosystem functions. Human economic activity has overstressed global ecosystems such that the well being of future generations is threatened (MEA 2005). The wealthy economic and financial systems have had a major role in causing this situation. IMF conditionalities have contributed to this because their demands for helping government expenditure often have resulted in spending cuts on environmental protection, and the like (FOE 1999). Poverty is also no friend of environmental protection because people have no option but to exploit resources to sustain their own lives.

Despite decades of effort, the practical problems that affect millions of small-scale fish harvesters and their dependents are not well understood, except by the fishermen and their families, of course. Although only relatively recently acknowledged by various types of advocates, activists and fisheries professionals, nevertheless a variety of problems that are presumed to afflict small-scale fisheries, and often ill-considered solutions to them, are scattered with conviction far and wide. Such solutions commonly result in unanticipated consequences and less than successful results, revealing an unwitting naiveté of design based on the inapplicability of principles too commonly taken as universal. Underlying that are vague and unsubstantiated, and probably mostly untenable, assumptions in the various approaches to fisheries management, especially the more recent ones. More profoundly disturbing is the lack of appreciation of the deep and inherent contradictions between those approaches and the now predominant and worldwide force of neoliberalism.

A fundamental set of related issues seems mostly to have been shied away from, and therefore not hitherto examined comprehensively. As discussed in this essay, in particular the underlying and largely hidden issues of general development philosophy and global economic directions and philosophy are not examined in the context of small-scale fisheries. These are the major global issues forming the context in which small-scale fisheries are perceived by outsiders, and that shape local operational problems and solutions to them.

The underlying cause of small-scale fisheries problems in tropical countries is the hegemonistic behavior of the Western core. Hegemonism is manifestly at work when approaches to the administration and management of fisheries applied in Western countries that have either failed to achieve anticipated successes in the West, or are based on unvalidated assumptions, are advocated for use in the vastly different conditions of the tropical world, where, in contrast, there exist many examples of pre-existing systems that have long worked well. Nevertheless, either directly through development assistance or indirectly through international organizations or increasingly through commercial means, Western nations continue to promote failed Western systems while denying the usefulness of proven non-Western systems.

In short, tropical small-scale fisheries are handicapped by bias and the underlying reason for their mismanagement is the implementation of policies and programmes based on Western models and approaches, coupled with an inability and/or unwillingness to consider non-Western alternatives of empirically proven value. This is based on a continuing legacy of colonialism and associated attitudes that remain embedded in donor and development agency behavior. It is strongly manifested in a relative lack of understanding of tropical milieu and a persistence of various prejudices, and is exacerbated by the Western structure of knowledge and the division of academic disciplines, together with the temperate bias in conventional approaches to fisheries education and management. Further, although known from colonial times, pre-existing systems of fisheries management in tropical nations have not usually been used as an alternative to introduced Western scientific approaches. During the colonial era, non-Western models were disparaged openly, whereas nowadays commonly they are dismissively labeled traditional or special cases. Often predicated on misguided theories, during the 1950s and 1960s a massive and experimental packaged transfer of social, economic, financial, educational, and legal systems, together with their underlying cultural values and aspirations regarded pre-existing economies, management systems, and often social and cultural systems as obstacles to modernization. Modernization provided the justification for foreign designers of fisheries management schemes to claim that either pre-existing system were primitive, unsustainable or often non-existent. This was reinforced by a general ignorance of the tropics and prejudice on the part of scientists and educators, whose careers were enhanced by work in temperate regions.

References

Abraham R. 2007. Mobile phones and economic development: Evidence from the fishing industry in India. Information Technologies and International Development 4(1):5–17.

Adams D.W. 1992. Taking a fresh look at informal finance. p. 5–23. In: Adams D.W. and Fitchett D.A. (eds). Informal finance in low-income countries. Boulder, CO: Westview Press.

Adams D.W. and Fitchett D.A. (eds). 1992. Informal finance in low-income countries. Boulder, CO: Westview Press.

Aghazadeh E. 1994. Fisheries socio-economic analysis and policy (BGD/89/012 Technical Report). Mymensingh: The Fisheries Research Institute, Bangladesh.

Andelson R.V. (ed). 1991. Commons without tragedy. Savage, MD and London: Barnes and Noble Books and Shepheard-Walwyn Ltd.

Baird I.G. 2010. Open to all?: Reassessing capture fisheries tenure systems in Southern Laos. p. 57–75. In: Ruddle K. and Satria A. (eds). Managing coastal and inland waters: Pre-existing aquatic management systems in Southeast Asia. Dordrecht Springer Publishing.

Barclay H. 1990. People without government: An anthropology of anarchy. Seattle, USA: Left Bank Books.

Bardhan P. and Udry C. 1999. Development microeconomics. Oxford: Oxford University Press.

Barslund M. and Tarp F. 2003. Rural credit in Vietnam. Discussion Paper 06-03. Copenhagen: University of Copenhagen, Department of Economics.

Bealey F. (ed). 1999. The Blackwell dictionary of political science: A user's guide to its terms. Chichester, UK: Wiley-Blackwell.

Bouman F.J.A. 1990. Informal rural finance: An Alladin's lamp of information. Sociologia Ruralis 30:155–173.

Bouman F.J.A. and Hospes O. 1994. Financial landscapes reconstructed. p. 3–16. In: Bouman F.J.A. and Hospes O. (eds). Financial landscapes reconstructed. The fine art of mapping development. Boulder, CO: Westview Press.

Braun B. 2000. Producing vertical territory: Geology and governmentality in Late Victorian Canada. Ecumene 7(1).

Braun B. 2003. The intemperate rainforest. Minneapolis, MN: University of Michigan Press. Ecumene 7(1):7–46

Bromley D.W. 1989. Economic interests and institutions. Oxford: Blackwell.

Brundtland G.H. 1987. Report of the World Commission on Environment and Development: Our common future. United Nations World Commission on Environment and Development Oxford: Oxford University Press.

Burchell G., Gordon C. and Miller P. (eds). 1991. The Foucault Effect. London: Harvester Wheatsheaf.

Carson R. 1962. Silent Spring. New York: Houghton-Mifflin.

Ciriacy-Wantrup S.V. and Bishop R.C. 1975. "Common property" as a concept in natural resources policy. Natural Resources Journal 15(4):713–727.

Cooke B. 2003. A new continuity with colonial administration: participation in development management. Third World Quarterly 24(1):47–61.

Cooper F. and Randall P. 1997. International development and the social sciences: Essays on the history and politics of knowledge. Berkeley and Los Angeles: University of California Press.

Darier E. 1999. "Foucault and the Environment: An Introduction". p. 1–34. In Darier E. (ed). Discourses of the environment. Malden, MA: Blackwell Publishers.

Donner J. and Escobari M.X. 2010. A review of evidence on mobile use by micro and small enterprises in developing countries. Journal of International Development 22(5):641–658.

Duong Pham Bao and Izumida Y. 2002. Rural development finance in Vietnam: A microeconometric analysis of household surveys. World Development 30:319–335.

Ehrlich P. 1968. The population bomb. New York: Ballentine Books.

Firth R. 1966. Malay fishermen: Their peasant economy. London: Routledge and Kegan Paul (rev. ed.).

Flint C. and Taylor P. 2007. Political geography: World economy, nation-state, and locality (5th ed). Harlow, UK: Prentice Hall.

FOE (Friends of the Earth). 1999. The IMF: Selling the environment short. http://www.foe.org/res/pubs/pdf/imf.pdf.

Foucault M. 1997. The birth of biopolitics. p. 73–79. In: Rabinow P. (ed). Michel Foucault. Ethics, subjectivity and truth. The essential works of Foucault, 1954–1984. Vol. 1. Transl. Robert Hurlet et al. New York: New Press.

George S. 2004. Another world is possible if …. London: Verso.

Giddens A. 1990. The consequences of modernity. Cambridge: Polity.

Gill S 1995. Globalization, market civilization and disciplinary neoliberalism. Millennium 24:399–423.

Hardin G. 1968. The tragedy of the commons. Science 162:1243–1248.

Hindess B. 2001. Liberalism – what's in a name? p. 23–39. In Larner Wendy and Walters William (eds). Global governmentality. London: Routledge.

Jeffreys E. and Sigley G. 2009. Governmentality, governance and China. p. 1–23 In: Jeffreys E. (ed.). China's Governmentalities: Governing change, changing government. NY: Routledge ,

Jensen R. 2007. The digital provide: Information (technology), market performance and welfare in the South Indian fisheries sector. Quarterly Journal of Economics 122(3):879–924.

Kendall G. 2001. Global networks, international networks, actor networks. p. 59–74. In: Larner W. and Walters W. (eds). Global governmentality. London: Routledge.

Khan S.R., Fahd A. and Azka T. 2005. Compliance with international standards in the marine fisheries sector: A supply chain analysis from Pakistan. Islamabad: Sustainable Development Policy Institute.

Khumsri M. 2008. Co-management institutions for sustainable inland fisheries management: A case study of the lower Songkhram River Basin, Thailand. Dissertation, Asian Institute of Technology.

Khumsri M. 2010. Pre-existing inland fisheries management in Thailand: the case of the Lower Songkhram River Basin. p. 99–128. In: Ruddle K. and Satria A. Managing coastal and inland waters: Pre-existing aquatic management systems in Southeast Asia. Dordrecht: Springer Publishing.

Khumsri M., Ruddle K. and Shivakoti G.P. 2008. Rights and conflicts in the management of fisheries in the lower Songkhram River Basin, Northeast Thailand. Environmental Management 43:557–570.

Larner W. and Walters W. (eds). 2001. Introduction: Global governmentality. Global governmentality. London: Routledge. 1–20.

Latham M.E. 2000. Modernization as ideology: American social science and "nation building" in the Kennedy era. Chapel Hill, N.C.: University of North Carolina Press.

Luke T.W. 1999. Environmentality as green governmentality. p. 121–151. In: Darier E. (ed). Discourses of the environment. Malden, MA: Blackwell Publishers.

MEA (Millennium Ecosystem Assessment). 2005. http://www.millenniumassessment.org/en/index.aspx (Accessed 20 August 2010).

Meadows D.H., Meadows D.L., Randers J. and Behrens W.W. 1972. The limits to growth: A report for the Club of Rome's project on the predicament of mankind. New York: Universe Books.

Merlijn A.G. 1989. The role of middlemen in small-scale fisheries: A case study of Sarawak, Malaysia. Development and Change 20:683–700.

Nguyen T.D. and Ruddle K. 2010. Vietnam: The *van chai* system of social organization and fisheries community management. p. 129–160. In: Ruddle K. and Satria A. (eds). Managing coastal and inland waters: Pre-existing aquatic management systems in Southeast Asia. Dordrecht: Springer Publishing.

Norberg-Hodge H. 1999. The march of monoculture. The Ecologist 29(2):194–196.

Ostrom E. 1986. Issues of definition and theory: Some conclusions and hypotheses, p. 597–615. In: Anon. (ed). Proceedings of the Conference on Common Property Resource Management, 21–26/4/1985. Washington, D.C.: National Academy Press.

Ostrom E. 1990. Governing the commons: The evolution of institutions for collective action. Cambridge: Cambridge University Press.

Packenham R.A. 1992. The dependency movement. Cambridge, MA: Harvard University Press.

Platteau J-P. and Abraham A. 1987. An inquiry into quasi-credit contracts: The role of reciprocal credit and interlinked deals in small-scale fishing communities. Journal of Development Studies 23(3):461–490.

Pletsch, C.E. 1981. The three worlds, or the division of social scientific labor, circa 1950–1975. Comparative Studies in Society and History 23(3):565–590.

Quibria M.G., Tschang T. and Reyes-Macasaquit M. 2002. New information and communication technologies and poverty. Journal of the Asia Pacific Economy 7:285–309.

Rahman M.M., Haque M.M., Akhteruzzaman M. and Khan S. 2002. Socioeconomic features of a traditional fishing community beside the old Brahmaputra River, Mymensingh, Bangladesh. Asian Fisheries Science 15:371–386.

Rose N. 1996. Inventing ourselves. Cambridge: Cambridge University Press.

Rose N. 1999. Powers of freedom: Reframing political thought. Cambridge: Cambridge University Press.

Rosenau J.N. 1999. Toward an ontology for global governance. In: Hewson M. and Sinclair T. (eds). Approaches to global governance theory. Albany, NY: SUNY Press.

Rostow W.W. 1960. The stages of economic growth: A non-communist manifesto. Cambridge, UK: Cambridge University Press.

Ruddle K. 1987. Administration and conflict management in Japanese Coastal Fisheries. Food and Agriculture Organization Fisheries Reports 273. Rome: Food and Agriculture Organization.

Ruddle K. 1994a. External forces and change in traditional community-based fishery management systems in the Asia-Pacific region. Maritime Anthropological Studies 6(1–2):1–37.

Ruddle K. 1994b. A guide to the literature on traditional community-based fishery in the Asia-Pacific tropics. Fisheries Circular 869. Rome: Food and Agriculture Organization.

Ruddle K. 1994c. Marine tenure in the 90s. p. 6–45. In: South G.R., Goulet D., Tuquiri S. and Church M. (eds). Traditional marine tenure and sustainable management of marine resources in Asia and the Pacific: Proceedings of the international workshop 4th–8th July 1994. Suva South Pacific and Marine Studies Program, University of the South Pacific.

Ruddle K. 1995. The role of validated local knowledge in the restoration of fisheries property rights: The example of the New Zealand Maori. p. 111–120. In: Hanna S. and Munasinghe M. (eds). Property rights in a social and ecological context: Vol. 2, Case studies and design applications. Stockholm and Washington D.C.: The Beijer International Institute of Ecological Economics and The World Bank.

Ruddle K. 1996a. Boundary definition as a basic design principle of traditional fishery management system in Pacific Islands. Geographische Zeitschrift 84(2):94–102 .

Ruddle K. 1996b. Back to first 'design principles': The issue of clearly defined boundaries. Traditional Marine Resource Management and Knowledge Information Bulletin 6:4–12.

Ruddle K. 1996c. Traditional management of reef fishing. p. 315–335. In: Polunin N.V.C. and Roberts C. (eds). Reef Fisheries. London: Chapman and Hall.

Ruddle K. 2007a. Fishing rights: Misconceptions, outright prejudice. Samudra The Triannual Journal of the International Collective in Support of Fishworkers, Report No 48:4–9.

Ruddle K. 2007b. Wronging rights and righting wrongs: Some lessons on community viability from the colonial era in the Pacific. p. 215–228. In: Taylor W., Schechter M. and Wolfson L. (eds). Globalization: Effects on fisheries resources. Cambridge: Cambridge University Press.

Ruddle K. 2011. 'Informal' credit systems in fishing communities: Issues and examples from Vietnam. Human Organization 70(3):224–232.

Ruddle K. and Hickey F.R. 2008. Accounting for the mismanagement of tropical nearshore fisheries. Environment, Development and Sustainability 10(5):565–589.

Ruddle K. and Johannes R.E. 1990. Traditional marine resource management in the Pacific Basin: An anthology. Jakarta: United Nations Educational, Scientific and Cultural Organization.

Ruddle K and Satria A. 2010a. An introduction to pre-existing local management systems in Southeast Asia. p. 1–30. Ruddle K. and Satria A. (eds). Managing coastal and inland waters: Pre-existing aquatic management systems in Southeast Asia. Dordrecht: Springer Publishing Company.

Ruddle K. and Satria A. 2010b. Conclusion: Errors and insights. p. 161–173. In: Ruddle K. and Satria A. (eds). Managing coastal and inland waters: Pre-existing aquatic management systems in Southeast Asia. Dordrecht: Springer Publishing Company.

Rutherford Paul. 1999. The entry of life into history. p. 37–62. In: Darier E. (ed). Discourses of the environment. Malden, Mass: Blackwell Publishers.

Schumacher E.F. 1973. Small is beautiful: Economics as if people mattered. London: Blond and Briggs Ltd.

Scott J.C. 1998. Seeing like a state: How certain schemes to improve the human condition have failed. New Haven CT: Yale University Press.

Simpson C. (ed). 1998. Universities and empire: Money and politics in the social sciences during the Cold War. New York: The New Press.

Steins N.A., Edwards V.M. and Roling N. 2000. Re-designed principles for CPR Theory. The Common Property Resource Digest 53:1–5.

Stiglitz J.E. 2003. Globalization and its discontents. New York: Norton.

Stirrat R.L. 1974. Fish to market: Traders in rural Sri Lanka. South Asian Review 7(1):189–207.

Wallerstein I. 1974–1989. The modern world system (3 vols.). London: Academic Press.

Yadav S., Otsuka K. and David C.C. 1992. Segmentation in rural financial markets: The case of Nepal. World Development 20:423–436.

Yamey B.S. 1964. The study of peasant economic systems: Some concluding comments and questions. p. 376–386. In: Firth R. and Yamey B.S. (eds). Capital, saving and credit in peasant societies. London: George Allen and Unwin.

Yap C.L. 1978. The middlemen in fish marketing: An appraisal. Journal of Agricultural Economics and Development 8(2):180–93.