



# TOURISM AND RURAL SETTLEMENTS

## Nepal's Annapurna Region

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**Abstract:** Functional and humanist perspectives relevant to counterurbanization studies are applied to examine the processes of growth and development of rural settlements affected by tourism. Based on a survey of tourism lodges located in several settlements in the Annapurna region of Nepal, this paper analyzes tourism-induced growth in such accommodations and its implications on changing characteristics. Results suggest the emergence of a hierarchical structure of rural settlements with core and peripheral traits. A normative classification of induced patterns defined by their development stage, size, and function is proposed. Historical, social, and economic influences on the transformation of rural settlements are discussed. **Keywords:** counterurbanization, functional perspective, humanist perspective, lodges, rural settlements, normative classification. © 2007 Elsevier Ltd. All rights reserved.

**Résumé:** Tourisme et zones résidentielles rurales: la région Annapurna au Népal. On applique des perspectives fonctionnelles et humanistes pertinentes aux études de la contre-urbanisation pour examiner les processus de croissance et de développement des zones résidentielles rurales affectées par le tourisme. Basée sur une enquête des gîtes de tourisme dans plusieurs zones résidentielles dans la région Annapurna du Népal, l'article analyse la croissance provoquée par le tourisme dans ce genre de logement et les implications pour les caractéristiques changeantes. Les résultats suggèrent l'émergence d'une structure hiérarchique des zones résidentielles rurales avec des caractéristiques fondamentales et périphériques. Une classification normative des modèles intentionnels selon leur étape de développement, ampleur et fonction est proposée. On discute des influences historiques, sociales et économiques sur la transformation des zones résidentielles rurales. **Mots-clés:** contre-urbanisation, perspective fonctionnelle, perspective humaniste, gîtes, zones résidentielles rurales, classification normative. © 2007 Elsevier Ltd. All rights reserved.

### INTRODUCTION

Geographical perspectives on the patterns of development of tourism attractions and destinations have taken many different dimensions. Volumes have been written on the evolutionary models, including the widely popular lifecycle concept and its implications for destinations at each phase (Agarwal 2001; Butler 1980; Papatheodorou 2004). Traditional approaches to studying have included core and peripheral structures (Brown and Hall 2000; Christaller 1963; Zurick 1992), the

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morphology of attractions, destinations, and specialized resorts (Jansen-Verbeke 1986; Leiper 1990; Pearce 1999), and the forms, functions, and expansion of resorts (Mathieson and Wall 1982; Pearce 1978). More recently, the evolution of self-contained holiday villages and second homes is a topic of growing interest (Faché 1995; Hall and Müller 2004). However, Pearce (1999) has lamented that the spatial structure of tourism has essentially ignored processes and phenomena at localized scales. This well applies to rural regions, where at local and regional scales, the spatial arrangements of attractions have been researched very little. Moreover, studies on change in spatial characteristics of bucolic settings at both local and regional scales tend to be unsupported by extensive theoretical basis, as, Pearce (1995) asserts, has happened in the context of urban attractions. According to him, this requires drawing upon literature outside tourism: from the context of rural regions (the focus of this study), from rural studies, and particularly from research in counterurbanization.

The changing relationships between urban and rural areas have been argued to be the products of restructuring and alignment of post-industrial production and consumption activities (Dahms and McComb 1999). These changes are manifested in the growth and redistribution of housing and settlement patterns (Kuentzel and Ramaswamy 2005), and a realignment of bucolic space to accommodate the expanding service sector (Butler, Hall and Jenkins 1998). The interests in changing rural–urban relations have thus become a topic of renewed interest to many geographers, economists, sociologists, and urban and regional planners. Similarly, the spatial patterns of areal organization of settlements (Schnaiberg, Riera, Turner and Voss 2002), and the evolution, appearance, and perceptions of regions' distinctive cultural landscapes (Gude, Hansen, Rasker and Maxwell 2005) are topics of growing interest. Complementarily, a growing body of literature exists on counterurbanization and its effects on rural redistribution of population, housing, and changing patterns of human settlements (Dahms 1998). Counterurbanization has been defined at least in two ways: as a movement of people from urban to bucolic areas and as a change in settlement system (Mitchell 2004). One consequence of this phenomenon is that many areas are experiencing a transition from agrarian- to service-based industries, with dramatic effects on landscapes. While rural amenity attractions and touristic landscapes have been a topic of interests to many (Butler et al 1998), literature on tourism-induced settlement growth patterns and changing functional characteristics is scant. This paper aims to address this shortcoming. While counterurbanization studies are mainly concerned about the consequences of urban–rural movements, it is argued that the effects of international tourism in such destinations in the Third World are similar to that of counterurbanization effects in the developed West, where rural areas have seen rapid changes in their economy and settlement patterns. In the context of settlements, Mitchell has stated that the focus of counterurbanization studies shifts from “a migratory *movement* to one of a *process* of settlement system change...” (2004:18; italics in original). The emphasis on process implies that this must be exam-

ined from both functional and humanist perspectives. While the former offer explanations to how settlements evolve, expand, and take certain spatial and morphological forms (Cowie 1983), the latter enhance the understanding of complex social, political, and economic processes which influence the emergence and development of settlements (Spencer 1995). This study is about such processes, which are analyzed and explained through a combination of the functional and humanist perspectives, but in the context of tourism development. In particular, this study examines the processes of growth and distribution of accommodation lodges; the relationship between tourism infrastructure and settlement development patterns; the progression toward a hierarchical development and classification; and the historical and social factors in tourism-induced rural settlement development patterns.

## PERSPECTIVES TO RURAL SETTLEMENTS

Counterurbanization studies have progressed from their traditional functional view (forms, patterns, and shapes) to humanist interpretations of historical, political, social, and cultural factors that shape the arrangement and rearrangement of rural settlements systems. The functional perspectives have included the analysis of deconcentration of people and houses in bucolic areas, increase in number of dwellings, dispersal patterns of dwellings, areal differentiation, and hierarchical structures. The humanist perspectives have provided critical explanations as to why these patterns have emerged and in what ways people's attitudes, decisionmaking behaviors, historical precedents, and political and social factors influence settlement patterns. The following review of the functional and humanist perspectives in counterurbanization studies attempts to illustrate their application to the processes of changes brought about by international tourism.

### *Functional Perspectives*

While settlements have also been conceived as a product of adaptation to environmental conditions (Allen 1997), early research has focused on their role as central places, or as nodes of retail distribution. The classic spatial location theories of Christaller, Losch and Isard analyzed the size, spacing, and distribution of settlements as a result of their utilization of microeconomic theoretical principles (Harvey 1969 cited in Cowie 1983). Cowie (1983) argues that original central place theory has avoided the conceptual problems posed by the geographic characteristics of rural regions by incorporating these nodes into its assumptions. The classic models thus offer limited explanations to assessing the spatial characteristics of the very smallest settlements, or as what Haggett (1965 cited in Cowie 1983) has referred to as the lower limb. Similarly, Cowie (1983) argues that studies which have attempted to apply concepts compatible with classical analysis to

low-order areas have not considered the influence of political, social, and cultural forces on their size, shape, and distribution.

Critics of spatial location theories have considered counterurbanization as a valid alternative that more appropriately explains the growth and change in population and settlement patterns in the lower hierarchies (Dahms and McComb 1999; Spencer 1995). A primary consideration of counterurbanization includes the deconcentration of people from cities to rural areas (Berry 1976), taking the form of an inverse relationship between the population size and its rate of growth (Champion 1989). For many researchers, it is simply an issue of human migration from denser cities to peripheral and rural settings where the abundance of land is a primary attraction (Stockdale, Findlay and Short 2000). Still others define it as some aspects of change in the settlement system, from densely compacted urban systems to deconcentrated patterns, where the scale and the spatial unit is at a much lower hierarchy (Spencer 1995). Mitchell (2004) states that counterurbanization is viewed as a process of change giving rise to a deconcentrated settlement, and raises the question of whether it should be construed as a movement, a process, or a pattern. Explanations as to what triggers counterurbanization are numerous: structural changes in national and international economies (Bolton and Chalkey 1990), attraction factors such as environmental amenities (Shumway and Otterstrom 2001), appeal of better environment and a tranquil lifestyle (Halliday and Coombes 1995), place utility (Sant and Simmons 1993), the rising importance of service sectors rather than manufacturing (Frey 1993), and commodification of rurality (Grieve and Tonts 1996). One significant process, which has intensified after the 90s, is the rise in demand for tourism and amenity migration in rural and countryside areas (Hall and Müller 2004). This demand has fuelled a rural service industry that continues to shape and reshape rural landscapes, land uses, housing and mobility patterns, and production of a countryside that is increasingly looking urban in character and sophistication. The effects of counterurbanization include permanent movement of people away from urban cities, contributing to the increase in number of rural dwellings, their dispersal patterns, areal differentiation, and the emergence of hierarchical deconcentrated settlement systems (Spencer 1995). These effects are similar to the effects of tourist flows in rural regions where despite the temporary nature of the surge, the number of permanent dwellings continues to increase. The new dwellings are either second homes or tourism accommodations. This increase in this housing and related infrastructure has produced settlement patterns that are dominated by tourism development. However, this phenomenon has not been studied well. Not much is known about the underlying processes and outcomes of the resulting growth and distribution patterns.

### *Humanist Perspectives*

Three underlying themes that provide humanist perspectives on counterurbanization studies include change, process, and space.

Brown (1999) has argued that change as a research topic should exist in its own right. The analysis of tourism-induced rural housing and settlements thus can be viewed from the perspective of change, which is associated with processes or vice versa. Orjan (1999) has stated that a proper understanding of the recent past is essential to comprehend emerging patterns and processes. Inherent in these processes are a multitude of decisionmaking behaviors of various actors, resulting in a highly complex characterization of development process (Brown 1981), largely attributed to the interaction among social and economic activities, physical ecological units, and development plans carried out in any given region. This interface, although nonlinear and dynamic, often produces a self-organized system. Historically, this has been the case for urban growth processes (Allen 1997), and today it can be related to growth processes in rural areas too. Cowie's (1983) critique that the classic central place theories do not consider the political, social, and cultural factors in growth processes is a valid one. However, there is a growing body of literature that incorporates humanistic perspectives of development processes, for example, the changing functional roles of bucolic settlements as influenced by perceptions and decisionmaking by inhabitants (Spencer 1995). In the context of tourism, Butler and Clark (1992) also have argued for more systematic and indepth research on the relationship between the uneven social composition of rural areas, the spatially variable development of tourism, and the problematic relationship between the two.

A second underlying theme is that of process, a sequence of changes in space and time (Cheng and Masser 2004). An understanding of change through both time and space should theoretically lead to an improved understanding of change and of the processes driving it (Gregory 2002). A spatial process, however, is much more than a sequence of changes, and implies a logical sequence of events being carried out in some definite manner that lead to a recognizable result (Getis and Boots 1978). Change is defined by a series of patterns, and logical sequence implies an understanding of process. In contrast to pattern, process contains a dynamic component. In the context of rural settlements, it is imperative that both change and its processes are determined so that any undesirable alterations and processes therein can be minimized in the future. A third underlying theme is that of touristic space. The transformation of space often comprises complex, intertwined linkages of social, economic, and political space, as Torres and Momsen (2005) discuss in their study of Cancun, Mexico. Space can be differentiated in many ways: as an empty area which is merely a nonplace notion of placelessness, as an in-between tourism place where lines are blurred between travelling, dwelling, and other social behaviors, as an enclavic exclusively for the consumption of a tourism class (Place 1995), and as a hybrid development marked by irregularities (Torres and Momsen 2005). The effects of tourism on space thus greatly vary across a region, producing a variable mosaic of space and landscapes.

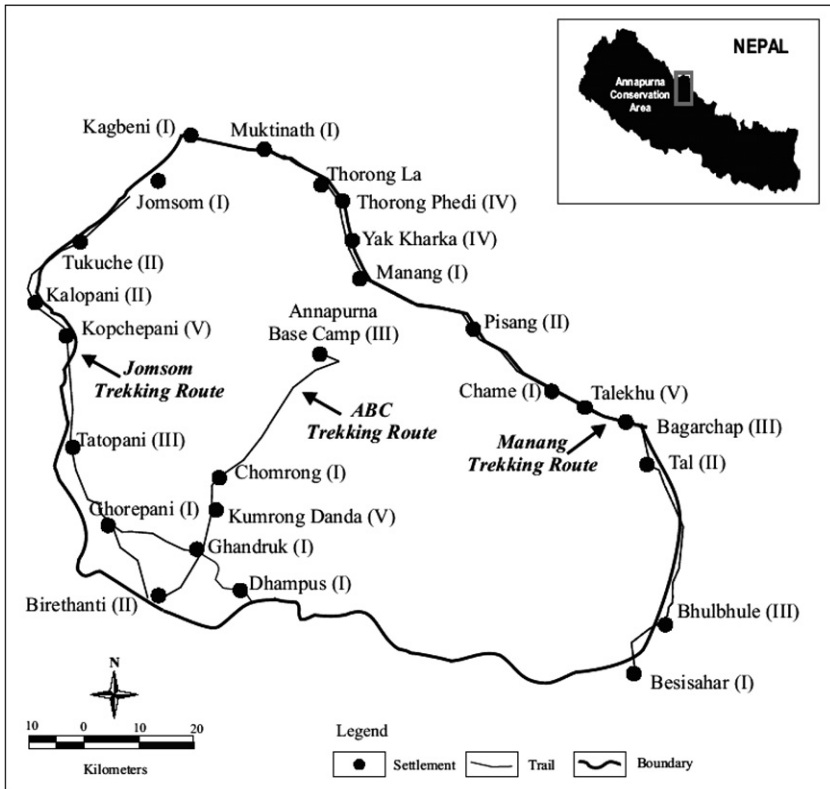
The discussion of functional and humanist perspectives is applied in this study of tourism-induced changes in the form, functions, and hierarchies of rural settlements in Nepal's Annapurna region. Analysis is

based on two key questions: whether tourism-induced rural settlement systems exhibit patterns similar to the effects (growth, distribution, hierarchy) of counterurbanization and whether these effects can be meaningfully interpreted using humanist perspectives of change and processes discussed in the context of counterurbanization.

### *Study Methods*

Results presented in this paper are based mainly on a questionnaire survey of 497 lodge owners, locally available documents on economic development trends, and published accounts of social and economic conditions in the region. Fieldwork, conducted during the four months between May and August 2002, included visiting 100% of the lodging establishments in 94 settlements. Onsite interviews with owners were conducted using a checklist of items which solicited information on the name of the property, location (including altitude), year of establishment, type of settlement, history of construction (i.e., new construction mainly for the purpose to use as a lodge or conversion of a pre-existing dwelling to one). Further, sought information included number of single, double, triple rooms, and dormitories, total number of beds, average room occupancy, number and type of toilets (attached/detached) and shower rooms (hot shower or not), and future plans for expansion. The checklist also contained information on owners' primary and secondary occupation, ethnicity, approximate number of guests per day during tourism seasons (March–May and October–November), ownership information (own/rent), and number of employees (including hired labor from outside the family). Additional data were gathered through discussion with local people and other key informants, including local officials, schoolteachers, trekking guides, and porters. Informal conversations with guests, especially repeaters, were also useful in examining some of the changes. Because socioeconomic information on each village where the lodges were located was necessary to provide adequate context for development through time, secondary information sources (mostly in Nepali) were collected from five local administrative district headquarters in Pokhara, Beni, Jomsom, Chame, and Besisahar. Historical accounts of trade and tourism and other aspects of social and economic systems in the region are based on existing literature.

A second purpose of the survey was to apply a normative classification scheme to the various types of settlements influenced by tourism. This was based on settlement records (old or new), history of lodges, number of lodges and their sizes (rooms and beds), type of economic function (degree of dependency on tourism or agriculture), degree of local involvement in tourism, and locational advantages (from a tourism standpoint) of the settlements. Based on the above and additional background information related to this history, demographics, and economics, a five-class system of settlements was developed. After analyzing the data, all were assigned to a class based on the above criteria and after cross-checking existing backgrounds available. The validity of



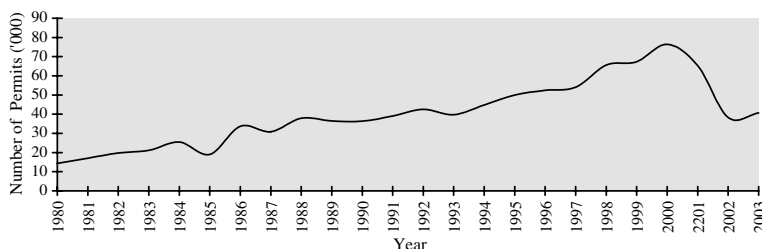
Note: Letters in parenthesis refer to the type of settlements discussed in the text (see also Table 2).

**Figure 1. Major Settlements in the Annapurna Region**

the classification system was checked in two ways: one, correlations tests to examine if older settlements had proportionately more lodges and local employment in tourism compared to newer ones, and two, the fit of the classification was verified qualitatively from discussions with local lodge owners and key informants during a follow-up visit in summer 2003. Data were coded and entered into the SPSS database (SPSS v. 12.0). Results are mainly descriptive, with the intention to provide an analysis of key processes of tourism-induced growth and distribution, and changes in settlement functions. Where appropriate, the results of Pearson's chi square ( $X^2$ ) and correlation ( $r$ ) tests are discussed. Reported significance values are at  $\alpha$  0.05, unless otherwise indicated.

#### *Tourism and Rural Settlements in Annapurna*

Located in the western region of Nepal, the Annapurna Conservation Area is the most popular international trekking destination in this country (Figure 1). Its 7,629 km<sup>2</sup> area consists of high mountain scenery, more than 300 km of trail network through high passes, deep



(Source: HMG 2003)

**Figure 2. Number of Trekking Permits issued in the Annapurna Region**

gorges, fast flowing rivers, and colorful settlements. Tourism and environmental management in the region are regulated by the Annapurna Conservation Area Project, which is an undertaking of the King Mahendra Trust for Nature Conservation (recently renamed the National Trust for Nature Conservation), a nongovernmental organization. Various ethnic groups including the Gurung, Magar, Thakali, Manangi, Brahmin, Chetri, and Newar inhabit the region. In the past, declining trade and deteriorating agricultural productivity in the central hills of Nepal had caused an exodus of people to the lowlands, as new frontiers were opened for resettlement. With the rise in tourism in the early 80s, many families returned to their original homes to invest in related businesses (Heide 1988). Figure 2 gives the annual number of trekking permits issued since 1980. It shows that the numbers have increased from 14,332 in 1980 to 35,800 in 1990, and, by 2000 to more than 65,000; but the numbers have declined since then due to political turmoil in the country (Bhattarai, Conway and Shrestha 2005). Trekking tourism, concentrated along three main routes including Jomsom, Manang, and Annapurna Base Camp (ABC), has become a major economic activity in the region. It provides employment to over 50,000 local guides, porters, and entrepreneurs.

*Growth and Distribution of Lodges.* The first lodge in the region was opened in 1969, but by 1980 there were 45 already, which increased to 203 in 1990 and 497 in 2002. Until 1990, only 29 settlements had lodges and by 1990 this was 69; by 2002 there were 94 with at least one lodge. Growth in the number of properties corresponds to increases in number of trekkers. A comparison of increase in the three regions shows that until 1980 development was concentrated mainly in Jomsom. Significant growth in their numbers continued there during 1980–90; however, ABC and Manang also saw dramatic increases; the former surpassed Jomsom in lodge construction during this period (Table 1). This pattern continued well into 1995, after which Manang saw a dramatic surge in construction, closely followed by Jomsom. Overall, Jomsom has more older (>20 years) lodges (8.1%), compared to ABC (4.9%) and Manang (4.6%): 44% of the units in Manang are less than five years old, compared to Jomsom (36.8%) and ABC (31.4%). However, differences across the three routes are statistically not significant ( $X^2 = 62.562$ ,  $p < .109$ ).

**Table 1. Growth in Tourist Lodges and Accommodation Capacity**

Region	1980	1990	1995	2000	Total <sup>a</sup>
ABC					
Lodge	9	56	44	36	145
Bed	191	971	708	504	2,374
Bed/Lodge	21.2	17.3	16.1	14.0	16.4
Jomsom					
Lodge	24	51	42	70	187
Bed	710	1,002	681	988	3,381
Bed/Lodge	29.6	19.6	16.2	14.1	18.1
Manang					
Lodge	9	42	34	72	157
Bed	208	888	793	1,149	3,038
Bed/Lodge	23.1	21.1	23.2	15.9	19.3

<sup>a</sup> Not including eight surveyed lodges for which information on bed capacity was missing.

Similar growth can be observed in total number of beds added during different periods. Interesting, however, is the ratio of bed and lodge, which appear to decline after 1990 except in Manang, where it increased until 1995 then declined. There are more bigger lodges (>21 beds/lodge) in both Jomsom (30.2%) and Manang (31.4%) than in ABC (22.6%). Conversely, ABC has many smaller lodges (<10 beds; 25.3%) than both Jomsom (19.3%) and Manang (13.8%), but the differences are statistically not significant ( $X^2 = 122.647$ ,  $p < .080$ ). In terms of the average number of rooms per lodge, Manang tops the list with 8.3, followed by Jomsom (8.2) and ABC (7.1). It should be noted that Manang's data is greatly distorted by one lodge at Thorung Phedi that has 109 beds. Over 22% of the properties in Manang and Jomsom have more than 11 rooms compared to ABC (only 14.5%), but the differences are statistically not significant. Strong positive relationships exist between the numbers of rooms and beds ( $r = .969$ ,  $p < .001$ ); between number of rooms and average daily tourists ( $r = .722$ ,  $p < .001$ ), and between number of beds and tourists ( $r = .782$ ,  $p < .001$ ).

Another interesting development is the trend towards luxury lodges; for example, newer lodges are bigger and have several attached bathrooms too. Four settlements (Ghandruk, Kagbeni, Jomsom, and Tatropani) have the highest number of lodges with attached bathrooms. On average, units with bathrooms have a higher bed capacity (30.5 beds/establishment) than those without (16.5). The average number of tourists per day in lodges in the former category is 18.5 compared to 7.9 in the latter, and room occupancy is 58.9% and 40.2%, respectively. A unique aspect of "local luxury" in mountain lodges is the enticement of "free hot showers" or "24 hour hot showers". There are significant differences in the number of average daily tourists in lodges with hot shower (9.5) and those without it (3.8). Many smaller lodges do not have showers and are attractive options only for the lower end of the budget tourists. The average number of beds per lodge with hot shower

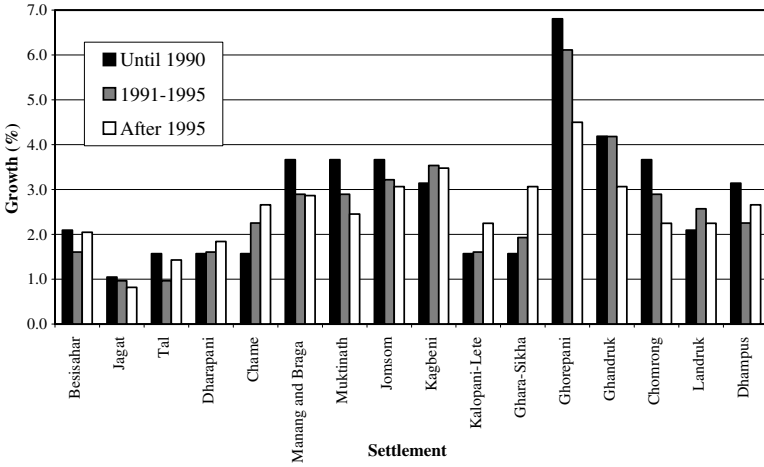


Figure 3. Growth in Lodges in Selected Settlements

is 18.6 compared to 9.1 in those without it. Also, room occupancy is higher in the former (42.6%) than in the latter types (39.5%).

Figure 3 compares the growth in lodges in selected settlements. Their main concentrations (in Ghorepani, Ghandruk, Dhampus, Manang Muktinath, Jomsom, and Kagbeni) constitute 21.1% of all units in the region. Three ABC settlements (Ghorepani, Ghandruk, and Chomrong) together make up 10.5% of all in the region, but their proportional share has declined since 1990. Overall, growth in bigger settlements has slowed down, with the implication that the accommodation capacity there has reached its peak. As a consequence, Dharapani, Chame, Kalopani-Lete, and Ghara-Sikha have seen more growth in recent years.

*Toward a Normative Classification.* Overall, rural settlements in the Annapurna region can be grouped into five types. Type I usually have numerous lodges (minimum of 10), high capacity (>200 beds in total), a few grocery stores, access to electricity, one or two video outlets, and a dominant tourism-driven economy. They are also the main centers where most government offices, including those related to tourism (telephone, foreign exchange, and information services), are located. Type II are bigger (in total number of housing units) but generally have less than 10 lodges, less than 120 beds, and a rudimentary infrastructure compared to the former type. Lodging and tourism services are not the most important activities in this group. The next types are strategically located, bigger in size, and mostly at higher altitudes; they are fully dependent on tourism. Type IV have experienced a transition from a seasonal to permanent habitation and are now completely dependent on tourism. Similar to Type III, the last type are strategically located but smaller settlements dependent entirely on tourism. The distribution of number of lodges by settlement types is shown on Table 2. There are 12, 30, 28, 7, and 17, respectively, in the five type settle-

**Table 2. Classification of Settlement Types in the Annapurna Region**

Type	Lodge (f)	Region	Settlement (year when the first lodge opened)
I	Established settlement with more than two decades of tourism history		
	54	ABC	Ghandruk (69), Chomrong (73), Dhampus (74), Landruk (74)
	76	Jomsom	Ghorepani (72), Marpha (84), Jomsom (74), Kagbeni (74), Muktinath (74)
	34	Manang	Besisahar (85), Chame (78), Manang (77)
II	Traditionally farming village experiencing significant growth in lodging activities in recent years		
	22	ABC	Chimrong (?), Syauli Bazar (84), Kimche (84), Birethanti (74)
	83	Jomsom	Sudame (?), Ramghain (?), Ulleri (82), Tikheduga (79), Hile (84), Sikha (84), Ghara (84), Dana (74), Pahirothapla (?), Kaiku (?), Ghasa (74), Lete (74), Kalopani (69), Kobang (79), Larjung (79), Tukuche (74), Khingar (84)
	44	Manang	Jharkot (79), Khudi (87), Bahundanda (87), Tal (73), Pisang (92), Braga (89), Dharapani (83), Timangbesi (?), Ngawal (?)
III	Strategic/traditional village that developed as a result of later tourism		
	53	ABC	Tadapani (?), Bamboo (87), Dovan (87), Chitre (82), Himalaya (84), Deurali (84), Annapurna Base Camp (84), New Bridge (87), Pothana (82), Tolkha (84), Jhinudanda (89), Machapuchhre Base Camp (89)
	20	Jomsom	Eklobhatti (?), Tatopani (73), Nangethanti (?), Banthanti (80),
	56	Manang	Ngandi (77), Jagat (88), Chyamje (74), Latamarang (79), Koto (84), Donaque (84), Syange (88), Munji (97), Bhratang (84), Bhulbhule (83), Bagarchap (87), Ongde (88)
IV	Seasonal village now permanent because of tourism		
	11	ABC	Bhichuk Deurali (86), Bherikharha (79), Simuwa (88)
	15	Manang	Gunsang (79), Yakkharka (88), Chauritettar (78), Thorong Phedi (85)
V	Primarily tourism village (newer)		
	6	ABC	Sitkyu (?), Kumrong Danda/Khola (94)
	13	Jomsom	Phalante (96), Kokethanti (95), Kopchepani (89), Rupse (94), Syang (91)
	10	Manang	Lilibhir (93), Ghermi (?), Shreechaur (?), Yonphu (?), Karte (?), Thanchowkbesi (93), Dhukur-Pokhari (?), Kaniga (97), Sera (96), Talekhu (90)

? = Year of lodge establishment unknown.

ments. The growth trends of lodges in the five types indicate that both the first and second experienced the highest growth in lodges prior to and during the 1980–90 period. This slowed down for Type I after 1990, but for the other the slowdown during the 1990–95 period was compensated by a substantial increase after 1995. Similarly, the number of lodges in Type III follows a pattern similar to that in the second: a significant increase during 1980–90, followed by a slowdown during

1990–95, and increasing again after 1995. In contrast to the first three types both IV and V had fewer lodges until 1990, but increased significantly thereafter. The validity of the five-class system can be tested at least in two ways. First, bigger lodges tend to be in older settlements (as with Types I and II). Second, correlations between settlement type, beds, tourists, and room are all negative. Although correlation coefficient values are not significant, the negative relationship indicates that the third, fourth, and fifth types have lower numbers of beds. They have fewer tourists and rooms also, thus validating the classification based on lodge size. Those receiving higher numbers daily have also employed more people ( $r = .597$ ,  $p < .001$ ), and tend to be older. These results validate the classification based on degree of local involvement and history of lodge establishment.

Based on size, the total number of lodges, type of economic base, number of housing units and population, and degree of local involvement in tourism, rural settlements in Annapurna can be further grouped into four categories: core and peripheral; first, second and third order; tourism either as a primary or secondary activity; and older and newer. The first two types can be defined as core while the other three are peripheral. Roughly 63% of all lodges are within the core and the remaining within peripheral settlements. Type I and II are first order (rank) settlements given their size of resident and visiting populations. Types III and IV are of the second and Type V of the third order hierarchy. Type I, III, IV and V are heavily dependent on tourism, and the remaining one on agriculture with tourism as a secondary activity. A Type II reflects a transient economy, that is, from farming to a mixed economy, while a Type IV suggests its conversion from a seasonal to a permanent settlement. Similarly, the first two types are older than the other three. Tourism linkages between Type I, II, III and IV are primary, while between the first two the linkage is secondary. Type I settlements like Ghorepani, Jomsom, Muktinath, Ghandruk, Chomrong, and Landruk have reached their peak in lodge construction; as a result, there is more construction in the next three types. Trends in lodge development in Type II indicate that although these settlements experienced tourism development as early as the first, it is only in recent years that more new lodges were added. Similarly, a period of boom in lodge construction in Type III occurred in the early 80s, primarily because of their locational advantages: terminal point (Annapurna Base Camp), end of a long ascent (Ongde), spaced out at a considerable distance (typically four to six hours of trekking, as with Tadapani), or as alternative but less attractive options for overnight stays (such as Eklobhatti). These locations soon became alternative stops for overnight stays and drew a large number of arrivals who might otherwise have stayed in more established settlements. Further spill effects resulted in the emergence of new settlements, typically in areas which had locational advantages similar to Type III. For example, Yakkharka (*kharka* refers to a pastureland) was a summer herding village until the late 80s, but is now inhabited even during fall and early winter. A final development is the emergence of newer settlements (Type V), which exist solely because of the growing demand for food and overnight

accommodation. Typically, there may not be more than three or four permanent building structures, and they are similar to Type III in locational advantages. These are more common at high altitudes where trekkers need an extra day or two to recuperate from the constant up-hill climb.

*Implications on Settlement Functions.* The progression of settlements from Type I to Type V is typical of changes at the regional level. Significant changes have also occurred at the level of individual settlements, where the growth in lodges has occurred mainly in two different ways. First, there has been rapid expansion, both spatially and in overall increase in built-up areas. Second, some traditional houses have changed their utility, as when their owners have converted their houses to accommodate tourists. This phenomenon is similar to what has happened in Namche Bazaar in the Everest region (Nepal 2005). Thus, tourism-related residence conversion is making dramatic changes in the character of rural settlements like Ghandruk, Ghorepani, Jomsom, and Kagbeni, where there are clear tendencies for people to abandon their houses in the center and to construct more spacious buildings on the periphery. In Chomrong, a new settlement composed mainly of lodges has emerged above the old village. While built-up areas are now occupying rice terraces, a side effect of expanding tourism is that many lodge owners are no longer able to cultivate their farm land, and those who wish to continue cannot find people willing to work due to declining interest in agriculture. Working in trekking is less laborious than farming, is more prestigious, and has bigger rewards. Lodge owners have been encouraged to plant trees on fallow land, and it is unfortunate that farm produce like fresh vegetables, milk, and eggs are imported from outside in large quantities, resulting in significant economic leakages. The lack of attention to agriculture and other alternative forms of economic activities illustrates that increased tourism activity and associated development of lodges and infrastructure have been responsible for a gradual shift in local perceptions about the economy and importance attached to different types of economic activities.

The region's traditional economic base, which is dependent upon resource-intensive activities like agriculture and forestry, has been gradually replaced by service-oriented enterprises. Growth in transport and communication, hotel and catering, travel agencies, rescue clinics, banking including foreign exchange, information centers, and art and cultural exhibitions in Ghandruk, Jomsom and Manang, have made these settlements increasingly urban in character. The emergence of specialized bakeries, laundry services, video halls, and Internet cafés has added to the quality and diversity of tourism services. Similarly, a large number of shops with an impressive range of imported consumer goods, including mountaineering equipment and clothing, food, and local and Tibetan curios now serve the burgeoning tourism population. In 2001, a new five-star hotel was opened in the outskirts of Jomsom serving upscale tourists to the region. Many lodge owners wish to expand or improve their current level of services and facilities. These include adding extra beds and attached bathrooms,

**Table 3. Lodge Owners' Future Infrastructure Plans<sup>a</sup>**

Plan	ABC ( <i>n</i> = 146)	Jomsom ( <i>n</i> = 192)	Manang (N = 159)
Additional beds	23.8	17.3	29.0
Additional attached bathrooms	7.9	12.7	3.7
Solar water heater installation	6.3	16.4	18.7
Building repairs	11.1	10.9	13.1
Roof-top or terrace dining	17.5	15.5	14.9
Backboiler installation	1.6	8.2	5.6
Electricity	11.1	4.5	0.9
Oven/Electric water heater	3.2	9.1	0.9
Better toilets/shower	4.8	4.5	12.1
Others	12.7	0.9	1.1

<sup>a</sup> Figures indicate % of responses.

adding rooftop or terrace dining, better toilets and shower, and various energy-related installations (Table 3). Expansion of at least 160 beds was planned in the near future. While big lodges wished to be bigger and more sophisticated (with flush toilets and Western type loo), smaller lodges wanted to add showers and attached bathrooms, two basic but important amenities in the region. Thus, expanding infrastructure has not only altered the exterior building design and architecture, but the interiors of many new lodges look completely modern.

*Endogenous Processes.* The changing forms, functions, and hierarchical development of tourism-induced rural settlements can be explained through the examination of historical, socioeconomic, and cultural developments within the Annapurna region. The historic migration of the highland ethnic groups from Tibet during the 13th and 14th centuries, followed by periods of migration of Tibetan refugees in the 50s who used the routes on their journey to Pokhara, where a refugee camp had been established by the Nepali government, have had influences on the spatial distribution of settlements (Hagen 1994). Remnants of other refugee camps are scattered throughout the region; these were established to handle increasing numbers of refugee crossing over to Nepal from Tibet; some camps like Tatopani eventually became popular tourism locations.

Hospitality traditions in the region date back to several decades before the arrival of trekking tourism, and trans-Himalayan trading was instrumental in establishing this tradition. Trading lasted for more than two centuries, ending around the early 70s, when modern transportation and trade treaties made it less profitable (Fürer-Haimendorf 1989). The Thakali were skilled traders and innkeepers who controlled a significant part of the historic salt trade along the Kali Gandaki corridor (Heide 1988). A network of *bhatti* (traditional inns), located strategically along major trading routes and at transshipment points such as Tukuiche and Manang, served food and accommodation needs of tourists (Nepal, Kohler and Banzhaf 2002). Many early Europeans who journeyed across the region found shelter at these establishments,

which were later adapted to meet the demands of a burgeoning trekking and mountaineering markets. The rise in tourism caused a reverse migration from the lowlands to the highlands, where people found lucrative business and employment opportunities in trekking industry. Soon Ghandruk, Jomsom, and Manang attained the privileged status of tourism hubs, benefiting from the influx of government and non-governmental involvement in providing services and employment opportunities. Examples of the latter type include the Annapurna Conservation Area Project headquarters and its several field offices throughout the region and various district-level administrative services in Besisahar, Chame, and Jomsom. The post-90s saw the emergence of small tourist settlements; the main centers like Jomsom, Ghandruk, Ghorepani, Dhampus, and Manang eventually yielded to new centers at the expanding periphery.

The kinship and clan system prevalent among ethnic groups like Gurung, Thakali, and Manangi (Heidi 1988; Macfarlane 1976) helped members strengthen social and economic ties within their clan. Lodge ownership in the region is limited mainly to a few influential Gurung, Thakali, and Manangi families, who have been the forerunners of the trade and trekking, and today are owners of multiple lodges. With savings from their employment in the Indian and British Gorkha armies (Macfarlane 1976), many Gurung families invested in lodges. Similarly, many Thakali families conducted businesses in cities and were already very rich by local standards. These ethnic groups controlled a large share of tourism businesses in the region (for example, Gurungs in southern Annapurna, Thakalis along the Kali Gandaki corridor, and Manangi in the upper Marsyangdi Valley). Not only decisions on location of a lodge, accommodation capacity, and range and quality of services offered are dictated by influential groups of lodge owners, but significant proportions of tourism-generated wealth and property remain confined to a few families. For example, most guides will choose to arrange accommodations for their guests in lodges that belong to their close relatives. Similarly, more prestigious jobs such as guiding remain confined within the inner circle of each clan, whereas lower status jobs (such as working as a porter) are open to people from other ethnic groups. The net effect of this system is that the distribution of wealth and property has remained restricted to a few influential groups, thus widening the gap in social and economic status between different ethnic groups.

The advent of service-based enterprise has brought a new set of values and beliefs associated with perceived notions of social and economic status; and superior abilities in entrepreneurship are emerging too. This capacity of the local people is exemplified by some tea and coffee sellers in Thorung La, a high pass (5416 m) that all trekkers must cross above Thorung Phedi to complete the Annapurna circuit trek. The climb from Thorung Phedi (*phedi* refers to the base of a hill) to Thorung La (*la* refers to a mountain pass) is a four-hour walk on knee-deep snow (even during summer), with an elevation gain of 985 meters. Most trekkers start the climb before dawn and some as early as 2 in the morning. The treacherous and difficult climb to the

pass is rewarded not only by spectacular views of several high mountains but also by early morning coffee or tea, thanks to the ingenuity of local entrepreneurs who arrive at the pass well ahead of the trekkers to set up a make-shift shop and earn a profit three to four times greater than at Thorung Phedi. Over time, such make-shift shops transform into more permanent structures, the numbers of which may increase quickly to give an appearance of a tourism settlement.

Many local inhabitants have experienced first-hand that investing in a new lodge or converting their traditional homes to lodges makes a good business decision. Due to the remote location and locally controlled tourism, outside investors are few; the new hotel in Jomsom, which is owned by an influential Nepali from Kathmandu connected to the royal family, is an exception. However, during the 90s, many local lodge owners started to seek financial assistance from foreigners, typically affluent Western tourists and mountaineering guides; at least 10 lodge owners reported having foreign partners. In addition, the physical changes of rural settlements can be largely attributed to local owners' decisions about the location, size, structure, and design of lodges. In the absence of government-imposed building regulations, the decisions are influenced by an owner's social and economic status, contemporary trends in trekking, and the demand for specific types of hospitality services. For example, conversion of group sleeping rooms into double rooms, provision of hot showers, modern bathroom fixtures, roof-top and terrace dining, landscaped front yard, and installation of big glass windows that provide panoramic views of the mountains are largely driven by tourist demands. There have been changes in lodge architecture and use of construction materials too. The Manisha Hotel in Ghandruk represents a stark contrast in architectural style and building materials against mostly mud and brick houses characteristic of a Gurung house. Overall, room and bed capacity of a lodge is more regulated in ABC than Jomsom and Manang, mainly due to the Annapurna Project's success in enforcing limits.

## CONCLUSION

Since the early 90s, increasing attention has been paid to understanding local contexts of changes in the characteristics of rural settlements. Tourism has emerged as a major driving force in their growth and expansion. Counterurbanization concepts have incorporated tourism and amenities in their analysis of human population and housing growth and distribution patterns. These concepts have been used also to examine the processes of change in rural settlement systems. This paper argues that the effects of international tourism on a remote Third World destination are similar to the effects of counterurbanization in the developed Western countries. Changes in the growth, distribution, hierarchies, and appearance of settlements in the Annapurna region are no different than in other areas affected by increased urban-rural migration.

This study of the local impact of an international phenomenon determines the type and level of changes in rural settlements' distribution and hierarchies, and provides explanations as to why particular patterns and trends have emerged. This is done in two ways. First, a functional perspective to tourism-induced development patterns is provided. Second, a humanist perspective on how these changes have been influenced by several endogenous factors is discussed. Traditionally, rural areas have been perceived to be slow to change, but with increasing mobility and the influx of tourists, settlements like those in the Annapurna region are expanding in size and appearing more modern than in the past. Traditional settlements that were primarily subsistence-oriented are now gradually adapting to a cash-based, market economy. Some specific changes in the Annapurna region include: overall, more built-up areas; settlements physically expanding both vertically and horizontally; many smaller settlements dominated by lodges; linear patterns of expansion following the main trekking routes; settlements emerging as service-oriented more than as agriculture or trade centers; emergence of a hierarchical structure; bigger, multistoried houses with very large accommodation capacities; and architectural (interior and exterior) changes in housing design, and modern facilities (such as showers, living rooms, and attached bathrooms). The increases in dwellings, infrastructure development, dispersal pattern, and the development of settlement hierarchies observed in Annapurna are similar to the effects of counterurbanization. It is unlikely that in the absence of international tourist flow to the region, these settlements would have progressed to the stage where they are today. The patterns have been influenced by historic and current economic, social, and political structures. For example, expansion of lodges during the early periods was influenced more by local landowners and rich entrepreneurs and their social and political networks, a finding that is consistent with counterurbanization studies which indicate how select groups of local landowners are able to influence the social and political structures that determine how urbanization progresses in rural areas (Spencer 1995). The post-90s growth patterns in Annapurna lodges represent a gradual progression toward a free enterprise system introduced after the democratic changes in the country in 1990 which restricted the political power of the rural elite and increased involvement of rural communities in the decisionmaking processes.

The study proposes a normative classification of tourism-induced rural settlements based on their history, growth in number and size of lodges, period of lodge establishment, type of economic dependence, and location. Furthermore, an asymmetry of core-periphery configuration of tourism-induced settlements has emerged. At a regional level, types I and II exhibit characteristics of core; types III, IV and V can be characterized as peripheral settlements. The progression from a lower order to a higher order, and from the periphery to core, is not necessarily linear, as historical precedents, economic imperatives, cultural traditions, and geographic locations have affected the growth and distribution of rural settlements. In the Annapurna region,

historical influences on tourism and hospitality traditions, past and emerging social norms and networks, new forms of entrepreneurial drive, and economic importance placed on different means of production and consumption all help explain how and why particular patterns and trends have emerged. Past studies have indicated that smaller settlements eventually yield to larger ones, as the latter extend their influence much farther away from their centers. Rural settlements in the Annapurna region seem to indicate a reversal of this pattern, as several larger centers have yielded to smaller ones, contributing to a well-defined hierarchical structure. New settlements have emerged where there were none before; some have ceased to expand due to physical barriers and changing economic circumstances, while others continue to expand and mature as important service centers and tourism spaces. Understanding these processes of change is an important issue for rural development and tourism planners. However, planning and regulating the development of human settlements, and housing structure and designs in the Annapurna region are beyond the control of the local government. Decisions on accommodation capacity, architecture, and utility primarily rest with individuals, and tourist preferences play an important role in such decisions. Given the complexity of social and economic relations within and between various ethnic communities and how these relationships play out in the establishment of tourism services and facilities, there is very little local governments can do to influence the outcomes. Therefore, how lodge owners' attitudes and decisionmaking behaviors, and their social networks both within and outside the region, continue to influence the emergence of a spatial template of growth and development of tourism-induced rural settlements would be an interesting issue for further research. Will the legacy of the past continue to shape future developments in lodge distribution and the emergence of hierarchies? What new social, economic, and political realities will direct and redirect growth patterns in lodge development and urbanization of rural areas? What criteria, besides location, are essential for rural settlements within destinations to trigger the development of infrastructure? What criteria can be used to measure a "tourism threshold" for rural centers? Finding answers to these questions is essential for a broader understanding of the implications of tourism development for rural settlements.

With the rise in Mao insurgency in the region, and the recent bombing of Annapurna Conservation Area Project headquarters in Ghandruk, it is uncertain whether tourism will increase; recent numbers certainly do not look promising. However, with the recent successfully negotiated agreement between the mainstream political parties and the Mao insurgency leaders, it is likely that dramatic changes will take place in local politics and power structures in the Annapurna region and throughout Nepal. How these changes will influence the development of tourism in Nepal's rural areas and what impacts these will have on settlement growth and development patterns are unclear at this time, and could be an interesting research agenda in the future. **A**

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