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Well-Being in Forest-Dependent Communities, Part I: A New Approach

ABSTRACT

This chapter presents a new approach to the conceptualization and assessment of well-being in forest-dependent communities. Studies of well-being in natural-resource-dependent communities (NRDCs), including agrarian communities, boomtowns (communities undergoing rapid growth), and forest-dependent communities, are examined to highlight common themes and approaches. Social indicators, which more directly address well-being, are discussed, and a five-point summary of common weaknesses is presented. The county, a commonly used unit of analysis for well-being assessment of NRDCs, is rejected in favor of a more socially relevant unit. A discussion of a new approach to well-being in forest communities begins with definitions of the terms community and forest dependence; the latter is broadened from traditional commodity-based definitions to include aesthetic and tourism-related dependence. The work of Amartya Sen, whose conceptualization of well-being focuses on the real opportunities people have and their achievements in light of their opportunities, forms the foundation of this new approach. Sen's conceptualization is further broadened by shifting analysis away from exclusive attention on the individual to include the community, which acknowledges the importance of a sense of place. Methodologically, the new approach to well-being involves collecting diverse slices of data, including secondary measures and an assessment of community capacity. Community capacity consists of three components: physical capital, human capital, and social capital. Assessment involves evaluating how community residents draw these components together to meet local needs and create opportunities. The advantage of this approach is that well-being assessment includes not only indicators suggestive of low well-being but also a measure of how communities respond and create opportunities to improve local wellbeing.

INTRODUCTION

Forest ecosystems in North America have recently become the focus of comprehensive and broad-scale ecosystem studies. Many of these studies have adopted an "ecosystem management" approach (see, for example, Bormann et al. 1993; Ministry of Environment 1994; and Forest Ecosystem Management Assessment Team [FEMAT] 1993, among others). Ecosystem management has been defined in diverse ways, but there is general agreement that humans and human communities are a part of ecosystems and an important area of study (Grumbine 1994; Manley et al. 1994; World Commission on Environment and Development 1987). Despite this agreement, however, no ecosystem study to date has adequately addressed the well-being of humans and human communities.

This chapter presents a new conceptual and methodological approach to assessing community well-being in communities that are dependent on natural resources, with a particular emphasis on forest-dependent communities. The focus on forest-dependent communities stems from the recent emphasis on forest ecosystem studies and from the fact that the well-being of these communities has long been narrowly discussed in the context of extractive forest management activities. Other studies involving natural-resource-dependent communities and studies using social indicators are reviewed to highlight the diversity and complexity of approaches to understanding human well-being.

This chapter is divided into two sections. The first section begins with a review of studies evaluating well-being and the lives of individuals living in natural-resource-dependent communities. These studies narrowly define dependence in terms of commodity production, and they spend considerable energy analyzing the connection between resources and human well-being, an important though often overstated linkage. Common themes among these studies are highlighted. The first section concludes with a discussion of social indicators, which address the more basic issues of what well-being is and how it should be assessed; the limitations of social indicators; and the use of counties as the unit of analysis for understanding well-being.

The second major section of this chapter presents a new approach to the study of well-being in forest-dependent communities. Because of the confusion surrounding the terms community and forest dependence, these concepts are defined. The work of Amartya Sen, whose conceptualization of well-being focuses on the real opportunities people have and their achievements in light of their opportunities, forms the foundation of the new approach offered here. Sen's conceptualization of well-being is broadened in one important way: well-being analysis is shifted away from looking exclusively at the individual to looking at the individual and his or her community. The chapter concludes with a discussion of how these concepts and this approach can be used to develop a new methodological approach to a community well-being assessment in ecosystem management studies.

STUDIES OF WELL-BEING IN NATURAL-RESOURCE-DEPENDENT COMMUNITIES AND THE USE OF SOCIAL INDICATORS

Resource Dependency and Well-Being

The inclusion of humans and the study of human well-being in ecosystem studies is in its infancy. It is therefore useful to briefly examine empirical studies of resource dependency and human well-being in a variety of natural-resource-dependent communities (NRDCs). The objective of this section is to offer a glimpse of the diverse ways in which researchers have grappled with the linkage of resource dependency and human and community well-being. Studies of well-being in three kinds of NRDCs are reviewed: agrarian communities; boomtowns, or communities that have undergone extremely rapid growth associated with the extraction of nonrenewable resources; and forest-dependent communities.

An often implicit and underlying aspect of studies of communities that are dependent on forests and other resources is the attempt to understand the relationship between resource use (or dependence) and individual and community wellbeing. Yet the more basic questions of what constitutes wellbeing and how it might best be evaluated remain unanswered. Other research, such as the work on social indicators, has

addressed that question more directly, though still not without difficulties.

Agrarian Communities

The Jeffersonian ideal of the small, agrarian rural community forms the model against which agriculture and other resource-dependent communities are evaluated (Bealer et al. 1965; Drielsma 1984). The community in this model is stable, is small in scale, and offers the opportunity for healthy family life, independence, and entrepreneurial activity (Drielsma 1984).

The classic study of well-being in agrarian communities was conducted by Walter Goldschmidt (1947), who evaluated the structure of agriculture and its relationship to community well-being in California. The variables he examined include wages of owner-operators, industrial workers, and basic laborers; employment turnover; security in labor; social isolation of workers; labor participation in important community decisions; and the strength and diversity of community institutions and infrastructure. Goldschmidt found that an increase in the concentration of the farm sector led to a decline in rural economic and social well-being. He noted that in contrast to a community surrounded by large farms, a community surrounded by small farms had a higher percentage of self-employed and white-collar workers; a lower percentage of farm wage laborers; more business and retail trade; more schools, parks, civic and social organizations, newspapers, and churches; and a better-developed infrastructure and a more local decision-making structure. The dimensions of well-being most affected were living conditions and income.

Subsequent studies have shown that the inverse relationship between large-scale industrialized agriculture and wellbeing still holds true for California and nearby states in which large-scale industrial agriculture is dominant (MacCannell 1988; Swanson 1988). In raising the issue of the impact of land tenure on the well-being of agrarian communities, Goldschmidt's study raised the possibility that concentration of control of other resources, particularly in the hands of essentially absentee owners, might have similar adverse effects in other kinds of resource-dependent communities.

Boomtowns

Studies of rapid resource-related growth in small communities, commonly known as boomtown studies, generally discuss well-being in terms of population change. The focus of many of these studies is the impact of development activities. The independent variable, rapid community growth measured by population change, is associated with extractive energy projects such as oil or gas or mining development. Dependent variables have included measures of income and various aspects of employment, but the most commonly used variables by far are measures of crime (Albrecht 1982; Finsterbusch 1982; Freudenburg and Jones 1991; Gold 1982; Krannich et al. 1989; Seydlitz 1993; Wilkenson et al. 1982).

Some researchers have drawn broad conclusions suggesting that rapid development leads to the loss of integrative functions and is accompanied by a loss of local control, caused primarily by the rapid influx of outsiders overwhelming existing social services and networks (Jobes 1984a, 1984b; Gold 1985; Kennedy and Mehra 1985; Krannich et al. 1989). Gold (1985) believes disruption is caused by contrasts in lifeways and involves the replacement of close friendships and kin networks (gemeinschaft characteristics) with a less integrated social organization.

Freudenburg and Jones (1991), in an exhaustive review of boomtown studies, found that crime increased (by a factor of three, on average). This is in contrast to earlier studies, which, as Freudenburg and Jones point out, overstate the benefits of development activities. Yet, while lending support to the social disruption thesis (Finsterbusch 1982), the authors take issue with those who use grand theories and draw broad conclusions. They adopt what they term a middle-range perspective and suggest that the increase in crime associated with rapid development is due to reduced density of acquaintances.

Unlike many other boomtown researchers, Freudenburg and Jones rely on three primary data sources in their review and reanalysis of boomtown development: county-level data, survey data from communities, and case studies using crime statistics. Finally, unlike Goldschmidt's findings and the findings of researchers in forest-dependent communities, a discussion of which follows, decision making controlled by extralocal organizations was not examined or did not surface as a significant issue for researchers in these studies.

Forest-Dependent Communities

Well-being in forest-dependent communities has long been discussed in the context of community stability, a term that, for many, includes the more general notion of forest community well-being. The commonly held misconception of community stability calls for a steady flow of timber products, primarily logs, to ensure stable employment in the timber industry, which, in turn, leads to community well-being. (Community stability was once conceived in much broader terms [see Dana 1918 and Kaufman and Kaufman 1946]. Beginning in the late 1920s, however, the term became inextricably linked to timber industry employment in U.S. Forest Service discussions of sustained-yield forest management [Fortmann et al. 1989].)

One of the earliest studies of well-being in a forest community was carried out by Harold and Lois Kaufman (1946) in the Libby-Troy area of Montana. In addressing well-being, the Kaufmans used the then-popular term stability. But because their use of stability encompasses much more than employment stability, well-being is substituted for it in this discussion of their work.

The Kaufmans believe that creation of a prosperous economy is essential to well-being, but in addition to a concern about "what people do for a living" is a concern about "how well they live." They state, "A characteristic of the good life is that experiences in the community and of the forest are

not only regarded as means but as ends in themselves—they are appreciated and enjoyed for their intrinsic worth. Also, the good life has a depth and variety of experience" (23). They point out that attainment of "the highest standard of living" can be realized only by maintaining a balance between population and natural resources. They link this concern to the limits of "timber supply, production costs and markets" (15). Like more conventional analysts, they agree that maintenance of community well-being involves the development of a stable timber industry, a diversified economy, and the practice of sustained-yield forestry. But in addition to the contribution of land use and industry to well-being, they describe five other "approaches" toward maintaining community well-being: organizing the greater community, strengthening the rural home, making religion a part of life and the church more community centered, promoting public participation in the determination of forest policy, and creating a forest-centered tradition. In these suggestions there is evidence of both the Jeffersonian tradition and a sense that the promotion of wellbeing involves process as well as products.

Kaufman and Kaufman question the wisdom of the Sustained-Yield Forest Management Act passed at the time of the study. They argue that it favors timber operators with large holdings, thereby concentrating economic power in the hands of a few while being "silent concerning controls that might be needed to safeguard the public interests" (71). In one of the first calls for public involvement, the Kaufmans suggest that the Forest Service involve the public in the formulation of forest policy to ensure that the concentration of economic power does not result in the abrogation of public interests and concerns. They maintain that such involvement should be "extensive" (85). The Kaufmans' study is rare in its attention to these issues.

The studies by James Fred Kelly (1974) and David Williamson (1976) demonstrate the value that loggers place on "rugged individualism" and their contempt for and resistance to the U.S. Forest Service, the agency that controls the terms of access to forest resources. Kelly's study emphasizes the importance of strong community ties and a spirit of cooperative community self-reliance for well-being, while Williamson focuses on the social organization of gyppo logging around kin networks. Carroll (1984) explores the sense of community held by loggers as an occupational group and also finds the tradition of spirited individualism firmly entrenched. (His approach is, in part, a response to a perception of the decline of community in modern society and, in part, an attempt to avoid the conundrum of locality-based definitions of community.) This individualism is empowering and plays an important role in well-being, but at the same time it binds workers to a disappearing occupation (Carroll and Lee 1990). Carroll (1984) reports that loggers and their families have powerful ties to their physical locales, although these ties do not correspond to the geographic bounds of their communities. As is the case in the earlier studies, local residents' contempt for the Forest Service is also a theme.

Marchak's (1990) study of forest-dependent towns in British Columbia emphasizes the adverse effects of uncertainty about future employment (reflected in high rates of population turnover) stemming from control of the resource base by outside firms that make decisions "without reference to the needs of workers in these communities" (99). She suggests that high turnover rates do not reflect the personal choices of workers but rather the structure of the industry. Marchak was the first researcher to note that women are particularly demoralized by the conditions in single-industry forest towns.

Kusel and Fortmann (1991) and Kusel (1991) studied forest counties and communities in California, focusing on general well-being and the capacity of forest communities to maintain and enhance local well-being. Capacity is described as "what enables communities to pull through hard times" (Kusel and Fortmann 1991, 84). Methodologically, their work comprises three separate studies: a statistical analysis of forest counties that examined indicators of well-being and explored measures of forest use, a rapid rural appraisal of seven forest communities to assess community capacity, and a longterm ethnographic study of three forest communities, examining well-being and capacity. Kusel and Fortmann also examined the relationship of ownership and control of forest resources to well-being. They found that a higher concentration of private forest landholding is associated with lower median income, and that high percentages of public timberland are associated with higher poverty rates (at the county level). They found also pockets of high poverty in lowpoverty forest counties.

Kusel and Fortmann determined that communities are deeply affected by forces outside of their control, including outside employers, natural-resource decision makers, and outside money. In contrast to studies characterizing the "inevitable" culture clash between newcomers and long-standing residents (see, for example, Price and Clay 1980 and Schnaiberg 1986), Kusel and Fortmann note that recent inmigrants and women play crucial roles in mobilizing community action and increasing local capacity.

In the ethnographic study, Kusel found that extensive job loss in rural forest communities was devastating in the short and long term. Economic and social turmoil led to short-term difficulties for families and communities and to a long-term reduction in community capacity. Mill restructuring has the effect of reducing well-being through layoffs. Kusel also found that local, family-run mills contribute more to community well-being than mills owned by large, nonlocal owners.

Forest communities throughout the Pacific Northwest were included in the social assessment conducted by the Forest Ecosystem Management Assessment Team (FEMAT). (This was one of three teams created by President Clinton to "identify management alternatives that attain the greatest economic and social contribution from the forests of the region and meet all requirements of applicable laws and regulations" [FEMAT 1993, ii].) The FEMAT study is one of the first large-scale, American ecosystem studies that attempts to explicitly include

and assess human communities. The objectives of the social assessment include describing the nature and distribution of social values (which were not linked to any locality), identifying the consequences of forest management alternatives for communities and individuals, and describing how alternatives affect social values and constituencies (FEMAT 1993, VII-45).

FEMAT scientists held two separate workshops with panels of community experts to assess the capacity of communities in the region. The concept of community capacity was defined in the workshops as an independent variable that in part determines community response to and the consequences of land-management alternatives. Higher-capacity communities were considered more adaptable and therefore less affected by changes in forest management.

Although a variety of secondary data were offered and used by experts, FEMAT researchers relied primarily upon experts' knowledge of communities. The concept of capacity, modified in this chapter, plays a key role in the new approach to well-being described herein and is discussed at length later.

Social Indicators and Well-Being

Two primary areas utilizing social indicators include (1) social impact assessment (SIA), which predicts and assesses the consequences of technical projects (e.g., hydroelectric projects, waste-dump siting, etc.) and specific policy actions on wellbeing (Interorganizational Committee 1994), and (2) broader research focused on more general well-being or life conditions (e.g., Allardt 1993; Campbell 1981). Included in this second area is an examination of the philosophical and conceptual underpinnings of well-being (see, for example, Nussbaum and Sen 1993). These two broad areas of research offer important insights to scientists studying the relationship of resource dependence to community well-being, and much of this discussion relies upon them. This section closes with a brief discussion of the county as a unit of analysis used for well-being assessment.

Terms such as standard of living, quality of life, welfare, happiness, life satisfaction, and others have been used in studies to characterize a good and healthy life or the critical components of one. But they may have different meanings to people and consequently have led to confusion about what well-being is and how it might best be measured. The numerous approaches to the study of well-being, such as measurement of utility, income, personal satisfaction, and happiness, to mention just a few, have yielded incommensurable and, at times, contradictory results that have only further muddied the waters of well-being assessment. Burdge (1994) states, "The field of impact assessment does not have a series of agreed upon concepts or list of variables around which to accumulate research knowledge" (3). Discussing the link between environmental planning and social assessment, he states that there is a "need to reach some tentative agreement on concepts, procedures and content."

In addition to conceptual concerns, social indicator researchers have wrestled with the problem of whether to study well-being by using subjective self-report measures or measures of external conditions (also called sociodemographic measures), considered by many to be more objective (Allardt 1993; Erikson 1993). Implicit in the debate over appropriate measures are the questions, Who should do the evaluating? and, What variables should be evaluated? Sociodemographic measures, including crime, income, employment, and poverty, are frequently the measures of choice because they are the most detailed measures available for a limited area, are easily gathered (or have already been gathered, in the case of U.S. Census Bureau data), and have more direct policy relevance for governments than other measures (De Neufville 1975). (See Burdge 1994 and Interorganizational Committee 1994 for recent discussions of categories and indices.) Yet, despite widespread use and limited researcher reflection, both sociodemographic measures and subjective self-report measures have significant limitations. Sen (1985b), in particular, and others have provided powerful critiques. A five-point summary of the limitations of social indicators is presented here, followed by a brief discussion of the problems associated with the unit of analysis used in many NRDC studies of well-being.

First, social indicators, consisting of aggregate individual data, ignore the variability of structural conditions at the level of the county or region, and of such institutional arrangements as the concentration of capital, land ownership, and power that influence well-being in a community (Kennedy and Mehra 1985; Kim 1973). Communities with greater disparities in wealth often have lower community well-being than communities with more equal distribution of wealth, even though average measures such as income may be the same. Goldschmidt's (1947) evaluation of the structure of agriculture and its relationship to community well-being is a good example of why this consideration of institutional arrangements is important.

Second, Sen (1985b) points out that sociodemographic measures of opulence, such as real income, confuse well-being with being wealthy in terms of material possessions. Measures of real income provide an indication of what an individual can buy, or his or her "commodity command," but they provide no indication of how an individual may improve his or her life with purchased commodities. Sen (1987) states that commodities provide only a means to an end and that the issue is more a "matter of the life one leads rather than of the resources and means one has to lead a life" (16). In their research, Kaufman and Kaufman (1946) expressed a similar concern with how well individuals live.

Third, and related to the previous point, is the issue of what constitutes well-being for whom. For example, socio-demographic measures of opulence do not take into account the distribution of resources within a family (Sen 1985b). For example, a male head of household may purchase luxury items for himself while other family members are inad-

equately clothed and fed. Similarly, women's concerns may differ from those of men. Nussbaum and Sen (1993) question whether the quality of female life has similar constituents to the quality of male life. Feminist research was launched out of a concern that women's perspectives and their life circumstances were not recognized. Oakley (1975) points out that women have been reduced "to a side issue from the start." The concerns of adolescents may also differ from those of adults. Freudenburg (1984) discovered that adolescents in rapidly growing communities were more likely to be dissatisfied with their locality and less satisfied with their overall quality of life than adolescents in similar towns that were not growing rapidly, whereas the same relationship did not hold for adults.

A fourth problem has to do with subjective measures and the distinction between ill-being and well-being. Subjective well-being is commonly measured with scales indicating satisfaction with the self as a person, personal freedom, personal happiness, and sense of personal control (Campbell 1981; Chamberlain 1985). Yet Headey and colleagues (1985) point out that well-being may be a different dimension than illbeing. They found that more objective measures of health and material standard of living, while contributing little to measures of well-being, significantly contributed to measures of ill-being. Bradburn and Caplovitz (1965) and Wilson (1967) found the same to be true for measures of happiness: there are positive and negative dimensions that are independent of one another. In addition to requiring measurement of positive and negative dimensions, this suggests that people may adjust their perceptions of well-being (or happiness) to the conditions they face.

Sen (1985b), studying the same issue from an economic and philosophical perspective, states that subjective measures of well-being, such as pleasure and desire fulfillment, are incomplete for two reasons: (1) they are fully based on the mental states of an individual, and (2) they lack a personal metric of value ("the mental activity of valuing one kind of life rather than another"). Sen terms these reasons "physical condition neglect" and "valuational neglect," respectively. An example illustrates the incompleteness. One who is poor, without the comfort of a home, out of work, and ill-fed but happy has obviously adjusted her expectations and taken solace in small pleasures. But fulfillment of limited desires, no matter how happy this person might be, is not suggestive of a high level of well-being. Moreover, this psychological state cannot be compared to that of another individual whose desires are greater. Sen (1984) states, "Quiet acceptance of deprivation and bad fate affects the scale of dissatisfaction generated, and the utilitarian calculus gives sanctity to that distortion. This is especially so in interpersonal comparisons" (309).

Fifth, researchers who have examined the relationship between objective and subjective measures have shown that sociodemographic indicators have little relationship to subjective measures of well-being (Barlett and Brown 1985; Campbell 1981; Gans 1962; Mastekaasa and Moum 1984;

Oppong et al. 1988; Suttles 1969). Gans (1962) reported in his study of West Enders in Boston that there existed a high satisfaction among residents of the area, yet it was declared a slum because of measures (by upper-middle-class professionals) of low physical condition and low income and was completely cleared for redevelopment. The difference between the West Enders' satisfaction with the area and the measures of the "professionals" provides a warning that not only may measures differ, but they may do so because some measures reflect the values (and power) of those who are doing the measuring more than the values of those whose well-being is being evaluated. Moum (1988) found that only 10% of the variance in quality-of-life scales is explained by sociodemographic variables.

Given gender, class, and ethnic differences and the importance of local salience, it is not surprising that numerous measures of well-being have been developed but no standard metric has emerged (Burdge 1994; Johnson 1988; Oppong et al. 1988). The arguments just expressed suggest that the "holy grail" of complete well-being assessment may indeed be unobtainable. They also demonstrate that considerable humility is necessary in any assessment and interpretation of human well-being.

The Social Unit of Analysis

In the debates over self-report measures versus sociodemographic measures and over appropriate metrics of wellbeing, little attention is paid to the unit of analysis or level of data aggregation used for assessment. This may lead to additional confusion about whose well-being one is discussing and the factors that influence it. Data availability (and research funding) too often determine the unit of analysis. The county has been the most common unit of analysis in studies of community stability in forest-dependent communities (Machlis and Force 1988), and its exclusive use is inadequate for several reasons (for a contrasting view, see Lobao 1990).

Perry (1986) has criticized the use of counties because they are not a unit with real social meaning. People do not generally identify with their counties, and, indeed, numerous NRDCs are alienated from their parent county. Relationships and life take place in communities, not counties.

Equally important for NRDC assessment is that only a small percentage of communities in a county may be resource dependent. County-level measures, whether they are median income, poverty, or unemployment, may have little relationship to resource activities. For example, the 1990 median income of Plumas County, a northern California county with a number of forest-dependent communities, is slightly more than \$24,000. The four largest communities in the county, which are more dependent on extractive timber activities than the rest of the county, have median incomes that are well below the county median—one almost \$9,000 lower and another \$5,000 lower. The southern Sierra Nevada mountain communities in Tulare and Fresno Counties offer additional examples.

Most of these communities have little in common with the much larger, agriculturally dominated Central Valley communities located in the same counties. Distilling forest dependence in these communities by using county data would be difficult, if not impossible. This is not to say that the linkage between resource dependency and well-being at a county level is unimportant, but that such dependence in communities that are part of a county aggregate in which the relationship appears relatively small and insignificant will not be identified.

If one desires to understand community well-being, then, the unit of analysis must focus on and isolate community. County data alone often encompass too broad and diverse an area to be used for accurate examination of well-being in many NRDCs. Finally, a determination of the causal factors influencing community well-being more often than not requires a specificity and detail unobtainable with county-level data.

A NEW APPROACH TO FOREST COMMUNITY WELL-BEING

This section begins with a definition of *community* and a redefinition and expansion of the term *forest dependence*. The concept of community has engendered considerable debate, a debate that will not be resolved here but that nonetheless must be addressed. In sharp contrast, the concept of forest dependence has been uncritically accepted as employment generated from tree harvesting. The use of the concept here is considerably broadened from the more narrow use. A discussion of Amartya Sen's novel "capabilities and functioning" approach to well-being follows. His approach is expanded by adding an emphasis on the community, to arrive at the "capacity" approach. This section and the chapter conclude with a discussion of how the concept of capacity can be used in an assessment of community well-being.

Conceptual Clarity

The Concept of Community

Community in this paper is defined in terms of a locality-based shared identity. This definition is primarily based on Gusfield's (1975) discussion of community, which includes the intersection of two components: a relational component and a territorial component. The relational component involves "the quality or character of human relationships," which includes a sense of belonging. Selznick (1992) states that this includes shared beliefs, interests, and commitments among individuals that unite diverse groups and activities. The relational component of community is a vital part of individual well-being and is discussed further later.

Gusfield's territorial component involves what people have in common and share at their specific locale. This includes diverse institutional components: governments and law, school districts, churches, and families, among other things (Selznick 1992). Gusfield's conception of community roughly encompasses the three areas for which Hillery (1955), in a survey of the literature, found definitional agreement: social interaction, area, and common ties. (See Lee et al. 1990 for a discussion of these concepts for forest communities.) Although Gusfield does not limit his discussion to place-based communities, the focus here is primarily on geographically place-based, forest-dependent communities.

Despite this focus on locale, it is terribly important to recognize that forest communities are part of the larger society, with extensive vertical linkages, to use Warren's (1978) terminology. (Warren's [1978] observation that horizontal linkages [ties between organizations within a community] have been overwhelmed by vertical linkages [ties to organizations and institutions outside the community] is relevant here. Warren argued that the rising influence of an increasingly urban society frequently results in a decline of a community's distinctiveness, self-sufficiency, and individual interactions.) These linkages, or the lack of them, may profoundly affect a community and the opportunities it has available. A small rural community that is the home of a mill owned by a multinational corporation may have additional mill-related employment and other opportunities. This same community will also be quite sensitive to the actions of a single company (or individual in the company), which may have no local ties beyond the mill. In a somewhat similar vein, social relationships extend beyond the formal administrative and informal boundaries of a community (Selznick 1992; Strathern 1984). Individuals may hold multiple "community" identities as a result of associations at their place of work and through other organizations and institutions that are outside of their community of residence. Small NRDCs include overlapping sets of social groups, and these groups are important to local community well-being and how local communities are influenced by forest policy. The focus on place-based communities suggested here provides a clear starting point, and a critical one, for assessing well-being. Many rural NRDCs in the West, by the nature of their location and proximity to public lands, often have clear geographic boundaries.

Broadening the Concept of Forest Dependence and Recognizing the Importance of the Sense of Place

Forest-dependent communities are those immediately adjacent to forestland or those with a high economic dependence on forest-based industries, including tourism as well as timber. This broader definition is necessary to show that well-being in forest communities must focus on more than a biological resource and timber products.

First, forest dependence suggests that a community's primary relationship is to a biological forest, and, as the term has commonly been used, to wood products. (Machlis and Force [1988] point out that forest or timber dependency is generally determined by forest commodity production or economic measures

[e.g., measures of sales by forest industries, percentage of total income from the forestry sector, and forest industry employment].) It is true that forest-dependent communities rely on the biological forest resource. However, these communities, particularly ones in which a number of residents work in the wood products industry, also depend on the economic and social structure that permits (and demands) particular uses of the forest resource. This structure mediates the terms of a community's access to the economic and social benefits of this resource. The strongest relation is to the economic and social system, not the biological one, despite its obvious importance. Thus, in a community in which many workers are employed in the wood-products industry, the ability of local residents to gain economically from the forest, as well as to create new jobs, is a function not only of the biological condition and production of the forest but also of (1) the extent to which controllers of the forest permit and promote commercial activities, (2) the extent to which those who create industry jobs make them available in or near the community, as well as the extent to which those who control wood-products jobs maintain them, and (3) the terms upon which these jobs become available. The same may be said of other forestdependent jobs.

Second, the commodity production perspective ignores those forest-dependent communities that do not produce a single board foot of timber. Communities can be economically dependent upon the forest without any forest-commodity production whatsoever. Many communities whose raison d'être is forest tourism or retirement living are dependent on the forest, and they are increasing in number and size, particularly in the western United States.

Third, forest dependence occurs with no economic relationship to the forest resource and is based on an aesthetic, symbolic, and locality-based importance (Hester 1985; Hiss 1990; Tuan 1993; Walter 1988). The forest is a landscape and, for forest communities, part of a human sense of place. As a landscape, Relph (1976) suggests, it represents "an expression of communally held beliefs and values and of interpersonal involvements" (34). Meinig (1979) observes that "a well-cultivated sense of place is an important dimension of human well-being. Carried further, one may discover an implicit ideology that the individuality of places is a fundamental characteristic of subtle and immense importance to life on earth, that all human events take place, all problems are anchored in place, and ultimately can only be understood in such terms" (46).

Wendel (1987) found that a majority of the residents of a forest community in California chose the response "the trees/ the forest" to a question asking what was the most important place in the community. The trees and the forest were important for many reasons: they represented a link with the residents' past tradition of logging, a connection to their present and future economic base of tourism and to aesthetic values, to mention just a few. Hester (1985) calls places that reinforce and help define the community living tradition "sacred"

places. Kaufman and Kaufman (1946), using the term stability rather than well-being, state, "A meaningful tradition is always an important part of the life of a stable community. A tradition is needed . . . which magnifies the significance of the forest and portrays the relationship of forest and people" (30). Berry (1987), in a somewhat similar vein, believes community to be inseparable from its place, with community and place mutually supportive. They represent the human and natural economies, each offering the other the possibility of a lasting and livable life.

As a landscape, sacred place, or resource, the forest supports local residents and contributes to the definition they have of themselves and their understanding of who they are. The lifeways of community members and the landscape are intertwined. Thus, when discussing dependence, one must recognize that the forest provides not only the means of production, diversely defined, but sustenance to the local living tradition, economically, socially, and spiritually.

Capabilities and Functionings

Sen (1984, 1985a, 1985b, 1987, 1993) offers what he calls the capabilities and functionings approach as an alternative way of evaluating well-being. An individual's capabilities consist of the freedom one has or the opportunities from which one can choose. An individual's functionings consist of one's achievements, or what she or he "succeeds in doing with the commodities and characteristics at his or her command" (Sen 1985b, 10). Functionings vary from the more basic, which include escaping mortality and malnourishment, to the more complex, such as achieving self-respect (Sen 1993). Sen argues that these elements are part of an individual's being and must be part of a well-being assessment.

Sen's approach to well-being counters the problem of the limitation of sociodemographic measures, such as measures of opulence, by evaluating not just the goods at one's disposal or one's wealth, but how they contribute to what a person can do. For example, an individual who owns a bicycle, other things being equal, would be considered better off than one who does not. But if the same individual lives in a war-torn country where the roads are predominantly unridable and bicycle riders are targeted by snipers, bicycle ownership contributes little to that person's transportation functioning and may negatively affect well-being. Similarly, a job that provides an adequate income may be essential to one's (and one's family's) well-being, but if an individual cannot advance in his or her job, or if creative opportunities are desired but unavailable, diminished well-being through reduced achievement results. A job that provides adequate pay contributes to one's well-being, but the pay alone constitutes only a portion of one's achievement. These examples highlight what Sen (1984) refers to as the "capability to function" (317).

The capabilities and functionings approach addresses the subjective-indicator problem by dividing the evaluation into two parts: "(i) specification of the functioning achievements,

and (ii) the valuation of the functioning achievements" (1985b, 30). Specification requires identifying achievements for which a valuation is made. To return to the example of a poor, unemployed, ill-fed, homeless person, the specification of her functionings would clearly indicate a low level of well-being, while the personal valuation of her well-being is rendered somewhat unimportant.

What is unique about Sen's capabilities and functionings approach is that it requires an analysis of the opportunities or freedom individuals have (capabilities) and their achievements or successes (functionings) in light of their opportunities. For someone to have a high level of well-being, she or he not only must feel well but also must have opportunities available and be able to take advantage of them. Sen, however, restricts the analysis of well-being to the individual and avoids the sticky problem of a contextually based valuation of various capabilities and functionings, which is important for a more complete evaluation of well-being.

The Importance of Community

To allow for a complete discussion of individual opportunity, as well as to better understand the valuation of functioning achievements and well-being, requires a focus on the individual and on community. Motivations for human action spring from internalized values. Benn (1982) maintains that these flow from "traditions of behavior" that do not reflect "individually conceived goals, but reflect those of our culture and communities" (49-50). Selznick (1987) offers the perspective of the "implicated self," which holds that humans are dependent on others for personality development and "psychological sustenance" (447). He states, "A morality of the implicated self builds on the understanding that our deepest and most important obligations flow from identity and relatedness, rather than consent" (451). Bellah et al. (1985) and MacIntyre (1984) maintain that human identity is found in community, as a collective living tradition.

Acceptance of the perspectives of "traditions of behavior" and the "implicated self" requires a well-being assessment to examine how communities define success (or functionings), which in turn affects how individuals view success. Native American communities may define success differently than Anglo communities. Ethnically similar communities may have definitions of success that differ from one another for any number of reasons as well. Hence, beyond the most basic of functionings, proper assessment must recognize these differences. A community and its traditions must inform the evaluation of well-being. To neglect the community is to neglect context and important—indeed vital—aspects of individuals.

It is important to point out that a community of shared values does not equal a community of conformity (Lasch 1988). Lasch states that social solidarity is not "an identity of interests; it rests on public conversation. It rests on social and political arrangements that serve to encourage debate instead of foreclosing it" (178). Communal relationships, with the

associated responsibilities they bring, and freedom to choose are both coveted values. Selznick (1992) points out that there must be "freedom in associations as well as freedom of association" (363). He adds that a concern for personal autonomy "assume[s] that the worth of community is measured by the contribution it makes to the flourishing of unique and responsible persons. As an attribute of selfhood and of self-affirmation, autonomy requires commitment as well as choice" (363).

The perspective of the implicated self also recognizes that taking part in the life of a community contributes to individual well-being. Humans are constituted by social relationships found in community, and there is a reciprocal and interdependent relationship between an individual and others in her or his community. Implicit in this perspective is that a collective good exists; well-being may be improved by residents working on community projects that, narrowly conceived, are of no benefit to them personally. Individual well-being is increased as a result of an increase in feelings of being a part of a community and by making the community a better place to live. This is part of the relatedness component of community discussed earlier and involves a category of individual behaviors termed commitments. More broadly, this behavior may be termed civic responsiveness. Sen would disagree with the extension of well-being analysis to include commitment behaviors. Because of the importance of his work for the approach developed here, a brief review of this disagreement and a response to it are presented in appendix 12.1. Sen (1990) nonetheless recognizes the importance of community to wellbeing, stating, "Some functionings are very elementary. . . . Others may be more complex but still widely valued such as achieving self-respect, or taking part in the life of the community" (emphasis added).

Well-Being Assessment

Adopting Amartya Sen's approach to well-being requires the assessment of individual opportunities (capacities) and achievements or successes (functionings) in light of available opportunities. Individual opportunities are shaped by conditions that individuals face personally and within the context of a community. For example, as a general rule, one who is in poverty will have fewer opportunities than one who is not. But support services and networks available for those in poverty in one community will likely lead to higher capacities compared to the capacities of those in poverty in another community without such services and networks (all other things being equal).

For large-scale ecosystem studies, it simply is not possible to evaluate opportunities and successes for each individual. Nonetheless, diverse secondary data combined with primary data about communities (including support services) can be used to develop a rudimentary understanding of conditions and opportunities. Useful secondary measures and their related functioning include but are not limited to the following: measures of poverty that indicate those who have not

secured an income adequate to escape it (escaping poverty being a very basic functioning); poverty intensity (i.e., the further one is below a poverty threshold the higher the intensity), suggestive of a lower level of functioning and greater need; and higher education levels, suggestive of higher functioning and possible opportunities. Equally important, the presence of individuals with high levels of education may lead to increased community capacity, for reasons discussed next. Other important measures that address conditions that also may address the functioning of residents include measures of crime, drug dependency, and children in families receiving public assistance. (Machlis et al. 1995 prepared a list of indices and measures for the Eastside Ecosystem Study, though no direction was provided for indicator selection or use.)

Community Capacity

The expansion of well-being analysis calls for a focus on community to assess activities (or civic involvement) that, in turn, affect opportunities for residents in a community. Capacity is more than the existence of or individual willingness to participate in voluntary organizations. It involves assessing individual commitment actions at the level of the community that, when combined with physical and human resources, determine community capacity.

Community capacity is the collective ability of residents in a community to respond (the communal response) to external and internal stresses; to create and take advantage of opportunities; and to meet the needs of residents, diversely defined. It also refers to the ability of a community to adapt to and respond to a variety of different circumstances. Community capacity depends on three broad areas: (1) physical capital, which includes physical elements and resources in a community (e.g., sewer systems, open space, business parks, housing stock, schools, etc.), along with financial capital; (2) human capital, which includes the skills, education, experiences, and general abilities of residents; and (3) social capital, which includes the ability and willingness of residents to work together for community goals. While physical and human capital are commonsense foundations of capacity, social capital appears to be one of the most important determinants.

Selznick (1992) discusses communities as places where people grow and flourish. He notes that a "flourishing community has high levels of participation: people are appropriately present, and expected to be present, on many different occasions and in many different roles and aspects" (364). The empirical research of Putnam (1993a) in Italy, Flora and Flora (1991) in the Midwest, and others has shown the importance of social capital and has demonstrated that it is a primary determinant of economic development and community capacity. Putnam (1993b), examining the modern-day rise of regional governments in Italy from the eleventh century, states, "The historical roots of the civic community are astonishingly deep.... Communities did not become civic because

they were rich. The historical record strongly suggests precisely the opposite: they have become rich because they were civic. The social capital embodied in norms and networks of civic engagement seems to be a precondition for economic development, as well as for effective government." An example is offered to show the relationship between social capital and financial capital and to further explicate the role and importance of social capital. A community may have a number of residents who are quite wealthy, but if they are not involved in the community and desire little to do with it, their financial capital does nothing for the community beyond their self-interested concerns. Conversely, a community with little financial capital and high social capital may conduct numerous fund-raisers as well as reach outside the community to raise money to address local needs, thereby improving local well-being.

Measurement of community capacity can be complex. Diverse slices of data examined over time are needed for accurate assessment (see Kusel 1991, Kusel and Fortmann 1991, and Putnam 1993a). To gain a rapid understanding of community capacity of forest-dependent communities, researchers can conduct workshops with experts who are knowledgeable about diverse community issues. These experts assess the components of capacity listed previously and, more specifically, identify those most determinate of overall community capacity. Use of expert informants in workshops requires a shift in methods, a shift made considerably more difficult by the necessary addition of qualitative data collection. The selection of experts to participate in workshops is critical, as it determines the accuracy and quality of the information obtained. Experts must understand community issues, institutions, and resources and cannot be community boosters or overly partisan about issues.

The assessment of community capacity facilitates an understanding of opportunities for productive and rewarding involvement in a community and the potential for increased opportunity for individuals. Although such assessment does not allow a specification of how any single individual's wellbeing is affected, high community capacity itself is suggestive of higher levels of well-being for residents. High capacity suggests, too, that expansion of opportunities to meet community needs (and local well-being) is not only possible but likely. With continued shifting of responsibilities from state and federal entities to localities, and increased responsibility placed on locals for self-development and self-improvement including those communities that have long relied on federal and state subsidies for infrastructure development and maintenance—examining the capacity of communities is an important area of well-being research.

SUMMARY: FOREST COMMUNITY WELL-BEING

In this review of the studies of well-being it should be clear that there is room for considerable improvement in the assessment of well-being in communities dependent on forests and other natural resources. Future studies of well-being cannot rely only on subjective reports of well-being, because of their incompleteness; exclusive reliance on measures of opulence such as income are equally limiting, because such measures do not address the issues of distribution of resources. Additionally, if researchers are to discuss resource dependency and well-being, they must be clear about the term dependency: what it means and the variety of ways in which resources can be valued. The forest as a "place" embodies a diverse array of values. If a local forest, long used as a locale for the production of wood products, is reserved exclusively for recreational use or is overcut, local well-being will decline through the diminution of socially important forest values (not to mention jobs).

Researchers also must be clear about the unit of analysis. Community well-being cannot be assessed through county-level analysis. Counties are too heterogeneous, and too often jobs associated with resources make up a small proportion of a county economy. Communities are a logical unit of study but pose methodological problems: clear identification of boundaries is often difficult, and data availability within these boundaries may be limited. Well-being analysis must often strike a balance between socially meaningful units of analysis and units for which data are available.

Communities must be thought of not only as units of analysis but also as parts of well-being assessments. Inclusion of the category of behavior termed commitments broadens the conception of well-being in two significant ways. First, it acknowledges that capabilities and functionings are defined in part by the community. A community is composed of and sustained by individuals, and individuals are shaped by their community. Viewed in this light, a community—defined here as a locality-based collection of individuals—can foster or inhibit individual thinking about capabilities and individual ability to function, and the ways in which it does so must be considered. Hence, local conditions are viewed as an influence on individual conceptualizations of well-being. A second implication of a broadened conception of well-being is that relationships within a community involve a component of responsibility to communal relationships. This involves practices of commitment that make up patterns of individual allegiance and responsibility directed toward community. These practices may profoundly affect well-being.

In broad-scale ecosystem studies, it is simply not possible to assess the resources each individual has and determine how they contribute to that individual's functioning. An assessment of community capacity allows researchers to assess in some measure the opportunities available to residents today

as well as the potential for creating additional opportunities and improving well-being. A basic assumption is that the higher the capacity of a community, the more likely it is that opportunities exist or will be created to expand individual capabilities and functioning. The very act of building community capacity is not only opportunity enhancing but also leads to improved social well-being.

The emphasis on individuals, local community, and capacity does not mean that social and political arrangements beyond community boundaries should be ignored. They are an important—and in many cases a critical—component of capacity and local well-being. This is particularly true of forest communities in which local and nearby land is owned by and local jobs are controlled by outsiders. Actions originating outside of a community may contribute to or severely restrict the capabilities and functionings of local residents. For example, local capabilities may be reduced by forest management decisions that do not involve local residents and that do not take into account local needs. Good capacity assessment will identify these arrangements. Improving the ability of a community to respond to and influence decisions affecting them that are made outside community boundaries is another way of improving the well-being of community residents.

What is unique about this approach to the study of community well-being is that it involves an analysis of factors that reduce local well-being and an analysis of how individuals and their communities respond to these factors. Examination of capacity encompasses as well an examination of how individuals and communities create opportunities or, to use Sen's terminology, capabilities, that expand the possible functionings or achievements of community members and improve well-being. In addition to identifying general levels of individual and community well-being, one of the significant benefits of this approach is its identification of areas with low capacities and a reduced ability to self-develop and improve local well-being. It is these areas that require the most attention and will provide the most difficult challenges for ecosystem managers who have among their management goals the desire to improve the well-being of humans and human communities.

REFERENCES

- Albrecht, S. L. 1982. Commentary on "Local social disruption and Western energy development: A critical review." Pacific Sociological Review 25 (3): 297–306.
- Allardt, E. 1993. Having, loving, being: An alternative to the Swedish model of welfare research. In The quality of life, edited by M. C. Nussbaum and A. Sen, 88–94. Oxford: Clarendon Press.
- Barlett, P. F., and P. J. Brown. 1985. Agricultural development and the quality of life: An anthropological view. Agriculture and Human Values 2 (2): 28–35.
- Bealer, R. C., F. K. Willits, and W. P. Kuvlesky. 1965. The meaning of rurality in American society: Some implications of alternative definitions. Rural Sociology 30 (3): 257–66.

- Bellah, R., R. Madsen, W. M. Sullivan, A. Swidler, and S. M. Tipton. 1985. Habits of the heart. New York: Harper and Row.
- Benn, S. I. 1982. Individuality, autonomy, and community. In Community as a social ideal, edited by E. Kamenka, 43–62. London: Edward Arnold.
- Berry, W. 1987. Does community have a value? In Home economics. San Francisco: North Point Press.
- Bormann, B. T., M. H. Brookes, E. D. Ford, A. R. Kiester, C. D. Oliver, and J. F. Weigland. 1993. A broad, strategic framework for sustainable-ecosystem management. Prepared by the Eastside Forest Health Panel for presentation to the Chief of the U.S. Forest Service. Corvallis, OR: Forestry Sciences Lab.
- Bradburn, N. M., and D. Caplovitz. 1965. Reprints on happiness. Chicago: Aldine.
- Burdge, R. J. 1994. A conceptual approach to social impact assessment: Collection of writings. Middleton, WI: Social Ecology Press.
- Campbell, A. 1981. The sense of well-being in America: Recent patterns and trends. New York: McGraw-Hill.
- Carroll, M. S. 1984. Community and the northwestern logger. Ph.D. diss., University of Washington.
- Carroll, M. S., and R. G. Lee. 1990. Occupational community and identity among Pacific Northwestern loggers: Implications for adapting to economic changes. In Community and forestry: Continuities in the sociology of natural resources, edited by R. G. Lee, D. R. Field, and W. R. Burch Jr., 107–24. Boulder, CO: Westview Press.
- Chamberlain, K. 1985. Value dimensions, cultural differences, and the prediction of perceived quality of life. Social Indicators Research 17 (4): 345–401.
- Dana, S. T. 1918. Forestry and community development. Bulletin 638. Washington, DC: U.S. Department of Agriculture.
- De Neufville, J. I. 1975. Social indicators and public policy. New York: Elsevier Scientific Publishing.
- Drielsma, J. H. 1984. The influence of forest-based industries on rural communities. Ph.D. diss., Yale University.
- Erikson, R. 1993. Descriptions of inequality: The Swedish approach to welfare research. In The quality of life, edited by M. C. Nussbaum and A. Sen, 67–83. Oxford: Clarendon Press.
- Etzioni, A. 1988. The moral dimension: Toward a new economics. New York: The Free Press.
- Finsterbusch, K. 1982. Commentary on "Local social disruption and Western energy development: A critical review." Pacific Sociological Review 25 (3): 307–21.
- Flora, J. L., and C. Flora. 1991. Local economic development projects: Key factors. In Rural community economic development, edited by N. Walzer, 141–56. New York: Praeger.
- Forest Ecosystem Management Assessment Team (FEMAT). 1993. Forest ecosystem management: An ecological, economic, and social assessment. Report of the Forest Ecosystem Management Assessment Team (July). Washington, DC: U.S. Forest Service.
- Fortmann, L. P., J. Kusel, and S. K. Fairfax. 1989. Community stability: The foresters' figleaf. In Community stability in forest-based communities, edited by D. LeMaster and J. Beuter, 44–50. Beaverton, OR: Timber Press.
- Freudenburg, W. R. 1984. Boomtown's youth: The differential impacts of rapid community growth on adolescents and adults. American Sociological Review 49:697–705.
- Freudenburg, W. R., and R. E. Jones. 1991. Criminal behavior and rapid community growth: Examining the evidence. Rural Sociology 56 (4): 619–45.

- Gans, H. J. 1962. The urban villagers. New York: The Free Press of Glencoe.
- Gold, R. L. 1982. Commentary on "Local social disruption and Western energy development: A critical review." Pacific Sociological Review 25 (3): 349–56.
- ——. 1985. Ranching, mining, and human impact of natural resource development. New Brunswick, NJ: Transaction, Inc.
- Goldschmidt, W. 1947. As you sow. Glencoe, IL: The Free Press.
- Grumbine, E. 1994. What is ecosystem management? Conservation Biology 8:23–38.
- Gusfield, J. R. 1975. Community. New York: Harper and Row.
- Hazard, G. C. 1988. Communitarian ethics and legal justification. University of Colorado Law Review 59 (4): 721–39.
- Headey, B., E. Holmstrom, and A. Wearing. 1985. Models of well-being and ill-being. Social Indicators Research 17:211–34.
- Hester, R. 1985. Subconscious places of the heart. Places 2 (3): 10–22.Hillery, G. A., Jr. 1955. Definitions of community: Areas of agreement.Rural Sociology 20 (2): 194–204.
- Hiss, T. 1990. The experience of place. New York: Alfred A. Knopf.
- Interorganizational Committee on Guidelines and Principles. 1994. Guidelines and principles for social impact assessment. NOAA Technical Memorandum NMFS-F/SPO-16. Washington, DC: U.S. Department of Commerce.
- Jobes, P. C. 1984a. Social structure and myth: Impacts of energy development in ranchland. Paper presented at the annual meetings of the American Sociological Association, San Antonio, Texas, August.
- . 1984b. Disintegration of a ranching community: A longitudinal case study of the impact of coal development on gemeinschaft. Unpublished manuscript. University of Michigan, Ann Arbor.
- Johnson, D. J. 1988. Toward a comprehensive "quality-of-life" index. Social Indicators Research 20 (5): 477–96.
- Kaufman, H. F., and L. C. Kaufman. 1946. Toward the stabilization and enrichment of a forest community. The Montana Study, University of Montana. Missoula, MT: U.S. Forest Service, Region 1.
- Kelly, J. F. 1974. The Skoglund loggers. Ph.D. diss., University of California, Riverside.
- Kennedy, L. W., and N. Mehra. 1985. Effects of social change on wellbeing. Social Indicators Research 17 (2): 101–13.
- Kim, K. 1973. Toward a sociological theory of development: A structural perspective. Rural Sociology 38 (4): 462–76.
- Krannich, R. S., E. H. Berry, and T. Greider. 1989. Fear of crime in rapidly changing rural communities: A longitudinal analysis. Rural Sociology 54 (2): 195–212.
- Kusel, J. 1991. Ethnographic analysis of three forest communities in California. Vol. II of Well-being in forest-dependent communities. Sacramento: California Department of Forestry, Forest and Rangeland Assessment Program.
- Kusel, J., and L. Fortmann. 1991. Well-being in forest-dependent communities. Vol. I. Sacramento: California Department of Forestry, Forest and Rangeland Assessment Program.
- Lasch, C. 1988. The communitarian critique of liberalism. In Community in America: The challenge of habits of the heart, edited by C. H. Reynolds and R. V. Norman, 173–84. Berkeley and Los Angeles: University of California Press.
- Lee, R. G., D. R. Field, and W. R. Burch Jr. 1990. Introduction: Forestry, community, and sociology of natural resources. In Community and forestry: Continuities in the sociology of natural resources, edited by

- R. G. Lee, D. R. Field, and W. R. Burch Jr., 3–14. Boulder, CO: Westview Press.
- Lobao, L. M. 1990. Locality and inequality: Farm and industry structure and socioeconomic conditions. Albany: State University of New York Press.
- MacCannell, D. 1988. Industrial agriculture and rural community degradation. In Agriculture and community change in the U.S., edited by L. E. Swanson, 15–75. Boulder, CO: Westview Press.
- Machlis, G., and J. E. Force. 1988. Community stability and timber dependent communities. Rural Sociology 53 (2): 220–34.
- Machlis, G. E., J. E. Force, and S. E. Dalton. 1995. Monitoring social indicators for ecosystem management. Unpublished paper. Eastside Ecosystem Management Project, Walla Walla, WA.
- MacIntyre, A. 1984. After virtue: A study in moral theory. Vienna, IN: University of Notre Dame Press.
- Manley, P. N., G. E. Brogan, C. Cook, M. E. Flores, D. G. Fullmer, W.
 Husari, T. M. Jimerson, L. M. Lux, M. E. McCain, J. A. Rose, G.
 Smitte, J. C. Schuyler, and M. J. Skinner. 1995. Sustaining ecosystems:
 A conceptual framework. Version 1.0 (April). R5-Em-Tp-001. San
 Francisco: U.S. Forest Service Pacific Southwest Region and
 Station.
- Marchak, P. 1990. Forest industry towns in British Columbia. In Community and forestry: Continuities in the sociology of natural resources, edited by R. G. Lee, D. R. Field, and W. R. Burch Jr., 95–106. Boulder, CO: Westview Press.
- Mastekaasa, A., and T. Moum. 1984. The perceived quality of life in Norway: Regional variations and contextual effects. Social Indicators Research 14 (4): 385–419.
- Meinig, D. W. 1979. Symbolic landscapes: Some idealizations of American communities (and the beholding eye: Ten versions of the same scene). In The interpretation of ordinary landscapes, edited by D. W. Meinig, 31–48. New York: Oxford University Press.
- Ministry of Environment, Lands, and Parks (Province of British Columbia) and Environment Canada. 1994. State of the environment report for British Columbia. British Columbia: Minister of Environment, Lands, and Parks; Ottawa: Minister of State.
- Moum, T. 1988. Yea-saying and mood-of-the-day effects in self-reported quality of life. Social Indicators Research 20 (2): 108–25.
- Nussbaum, M. C., and A. Sen. 1993. Introduction to The quality of life, edited by M. C. Nussbaum and A. Sen, 1–6. Oxford: Clarendon Press.
- Oakley, A. 1975. The sociology of housework. London: Robertson.
- Oppong, J. R., R. G. Ironsides, and L. W. Kennedy. 1988. Quality of life in a centre-periphery framework. Social Indicators Research 20 (6): 605–20.
- Perry, C. 1986. A proposal to recycle mechanical and organic solidarity community sociology. Rural Sociology 51 (3): 263–77.
- Price, M. L., and D. C. Clay. 1980. Structural disturbances in rural communities: Some repercussions of the migration turnaround in Michigan. Rural Sociology 45 (4): 591–607.
- Putnam, R. D. 1993a. Making democracy work: Civic traditions in modern Italy. Princeton, NJ: Princeton University Press.
- ——_ 1993b. The prosperous community: Social capital and public life. The American Prospect 13 (spring): 35–42.
- Relph, E. 1976. Place and placelessness. London: Pion.
- Schnaiberg, A. 1986. Reflections on resistance to rural industrialization: Newcomers' culture of environmentalism. In Differential social impacts of rural resource development, edited by P. D. Elkind-Savatsky, 229–58. Boulder, CO: Westview Press.

- Selznick, P. 1987. The idea of a communitarian morality. California Law Review 75:445–63.
- ——. 1992. The moral commonwealth: Social theory and the promise of community. Berkeley and Los Angeles: University of California Press.
- Sen, A. 1984. Resources, values, and development. Cambridge: Harvard University Press.
- ——. 1985a. Well-being, agency, and freedom (the Dewey lectures). Journal of Philosophy 82 (4): 169–221.
- ——. 1985b. Commodities and capabilities. Professor Dr. P. Hennip—man Lectures in Economics, vol. 7. New York: North-Holland.
- ——. 1987. The standard of living. Edited by G. Hawthorn. Cambridge: Cambridge University Press.
- ——. 1990. Individual freedom as a social commitment. New York Review of Books, 14 June.
- ——. 1993. Capability and well-being. In The quality of life, edited by M. C. Nussbaum and A. Sen, 30–53. Oxford: Clarendon Press.
- Seydlitz, R., S. Laska, D. Spain, E. W. Triche, and K. L. Bishop. 1993. Development and social problems: The impact of the offshore oil industry on suicide and homicide rates. Rural Sociology 58 (1): 93–110.
- Society of American Foresters. 1989. Report of the Society of American Foresters national task force on community stability. Bethesda, MD: Society of American Foresters.
- Strathern, M. 1984. The social meaning of localism. In Locality and rurality: Economy and society in rural regions, edited by T. Bradley and P. Lowe, 191–97. Norwich, England: Geo Books.
- Suttles, G. D. 1969. The social order of the slum. Chicago: University of Chicago Press.

- Swanson, L. 1988. Agriculture and community change in the U.S. Boulder, CO: Westview Press.
- Tuan, Y. 1993. Passing strange and wonderful: Aesthetics, nature, and culture. Covelo, CA: Island Press.
- Walter, E. V. 1988. Placeways: A theory of the human environment. Chapel Hill: University of North Carolina Press.
- Warren, R. L. 1978. The community in America. 3rd ed. Chicago: Rand McNally.
- Weeks, E. C. 1990. Mill closures in the Pacific Northwest: The consequences of economic decline in rural industrial communities. In Community and forestry: Continuities in the sociology of natural resources, edited by R. G. Lee, D. R. Field, and W. R. Burch Jr., 125–40. Boulder, CO: Westview Press.
- Wendel, S. 1987. McCloud, California: Maintaining cherished landscapes and lifestyles. Professional report (Master of Landscape Architecture), Department of Landscape Architecture, University of California, Berkeley.
- Wilkenson, K. P., J. G. Thompson, R. R. Reynolds Jr., and L. M. Ostresh. 1982. Local social disruption and western energy development: A critical review. Pacific Sociological Review 25 (3): 297–306.
- Williamson, D. 1976. Give 'er snoose: A study of kin and work among gyppo loggers of the Pacific Northwest. Ph.D. diss., American University.
- Wilson, W. 1967. Correlates of avowed happiness. Psychological Bulletin 67 (4): 294–306.
- World Commission on Environment and Development. 1987. Our common future. New York: Oxford University Press.

APPENDIX 12.1

Why Civic Responsiveness (or Commitment Behaviors) Are Important: A Counterargument to Sen

Sen (1987) ignores "commitments" in the calculus of personal well-being. He does so by making a distinction between actions based on "sympathy," which are included in calculations of well-being, and actions based on "commitment," which are not. Sen includes "commitments" in a category called "agency achievement" (1987) or "agency freedom" (1985). According to Sen (1985), "agency achievement" is a more inclusive category than personal well-being, and includes "what a person is free to do and achieve in pursuit of whatever goals or values he or she regards as important." He points out (1987) that by expanding the focus of attention and including "commitments," we move from "personal well-being" to "agency achievement."

Help provided to an individual that has the effect of making the helper "feel—and indeed be—better off" is "sympathy." This increases one's personal well-being. The behavior category of "commitments," on the other hand, involves personal action (it too may be help provided to another), which Sen states, "in the net, [is not] beneficial to the agent himself." Sen adds, "This would put action outside the range of promoting one's own well-being."

Sen's rejection of an action because it is "in the net" not "beneficial to the agent himself" involves an evaluation of action (and its consequences) after the fact, or a prediction of its outcomes. Sen states (1987) he is concerned with effects. He, however, does not discuss at what point this calculation should take place nor what measures should be made to determine whether a behavior is beneficial or not. Given the nature of his decision rule, Sen ignores the motivation for in-

dividual action. Both categories of behavior, "commitments" and "sympathies," may involve action for which the motivation stems from the desire to help another person. Actions to improve one's community that do not have the "effect" of contributing to one's well-being therefore are not included in Sen's well-being calculations. In this manner, Sen ignores historical, social and societal forces that not only influence action (and motivations for action) but also influence value decisions implicit in the evaluation of well-being.

Etzioni (1988) states that the category of action called "commitments" is moral behavior. This is because such action is based on intentions, not consequences or effects. Intentions may also be considered the "intrinsic character" of action, and are taken here to be the primary criteria by which to evaluate it, because the consequences of action may not be predictable. This valuational approach is central to a deontological social philosophy (Etzioni 1988; Hazard 1988).

REFERENCES

Etzioni, A. 1988. The moral dimension: Toward a new economics. New York: The Free Press.

Hazard, G. C. 1988. Communitarian ethics and legal justification. University of Colorado Law Review 59(4): 721–39

Sen, A. 1985. Well-being, agency, and freedom (the Dewey lectures). Journal of Philosophy 82 (4): 169–221.

——. 1987. The standard of living. Edited by G. Hawthorn. Cambridge: Cambridge University Press.