



United States  
Department of  
Agriculture

Forest Service

Pacific Northwest  
Research Station

General Technical Report  
PNW-GTR-755  
June 2008



# Incorporating Understanding of Informal Economic Activity in Natural Resource and Economic Development Policy

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This work was performed under PNW JVA 03-JV-11261955-256 and PNW PO AG-046W-P-07-0095.

## **Abstract**

**McLain, Rebecca J.; Alexander, Susan J.; Jones, Eric T. 2008.** Incorporating understanding of informal economic activity in natural resource and economic development policy. Gen. Tech. Rep. PNW-GTR-755. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 53 p.

This report synthesizes the literature on the role of informal economic activity in the United States postindustrial economy. Informal economic activity is expanding in the United States and is likely to continue in the foreseeable future. The formal and informal economic sectors are inextricably intertwined, with individuals and households combining elements of both sectors to construct their livelihoods. Although the informal economy is often thought of as the domain of economically marginal individuals and households, virtually everyone participates in the informal economy to some extent. However, the literature highlights how factors such as social status and household position in the formal economy affect whether participation in informal economic activity is exploitative or empowering. The nontimber forest products sector serves as a case study of why it is important to consider informal economic activity when developing natural resource and economic development policy. We recommend steps policymakers can take to identify and encourage positive aspects of the informal economic activity. We also highlight several areas of research to improve understandings of the role of informal economic activity in postindustrial societies.

Keywords: Informal economy, livelihood strategies, nontimber forest products, natural resource policy, rural development policy.

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## Introduction

The past three decades have been a period of global economic restructuring, with service economies gradually replacing the manufacturing economies that dominated North America and Western Europe in the post-World War II era. At the same time, manufacturing sectors have restructured. Large firms now rely on subcontracting and other flexible labor arrangements to accomplish tasks once carried out by full-time, permanent, in-house employees. Offshoring of processing, marketing, and other tasks to other parts of the globe with cheaper labor has become common. Rural regions of the United States are no exception to these trends. Since the 1980s, extensive downsizing, outsourcing, and restructuring in the agriculture, ranching, forestry, mining, and other natural resource sectors have diminished the availability of formal sector employment opportunities in many of the Nation's rural towns and communities despite overall gains in regional employment opportunities. In urban and rural areas alike, economic restructuring has been accompanied by an expansion in informal economic activity (Edgcomb and Thetford 2004, Leonard 1998, Losby et al. 2002, Sassen 1994, Schneider 2002, Smith 1990, Thomas 2001, Zlolinski 1994).

Informal economic activity is typically defined as economic activity that takes place outside of nation-state regulatory and reporting systems (Reimer 2006, Thomas 2001).<sup>1</sup> Informal economic activity includes a broad set of activities, both legal and illegal, ranging from unpaid household work to under-the-table construction work to the sale of prohibited drugs. Informal economic activities have long been part of the total national economy, and a large literature documents their presence and importance in rural sectors of the United States (c.f., Adams 1994, Brown et al. 1998, Cohen and Stephens 2005, Dick 1996, Dickinson 1995, Edgcomb and Thetford 2004, Halperin 1996, Jensen et al. 1995, Lee 2002, Levitan and Feldman 1991, Losby et al. 2002, McInnis-Dittrich 1995, Nelson 1999a, Ratner 2000, Slack 2007, Tickamyer and Wood 1998). In the natural resources sector, property rights and their enforcement on both public and private land are also an important focus of nation-state regulatory systems. However, which resources fall outside of nation-state control, and thus within the realm of informal economic activity, differs over time and from place to place.

The growth of the informal economic sector during the 1990s and early 2000s in postindustrial societies prompted an increase in scientific studies examining how

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<sup>1</sup>In the U.S. context, the nation-state includes federal and state governance structures, including semiautonomous political and administrative subdivisions of the states, such as counties, townships, and parishes.

formal and informal sectors of national economies are related and identifying the benefits, as well as the costs, of informal economic activity. This report reviews and synthesizes the literature from two decades of scientific research aimed at developing better understanding of the social and economic roles of informal economic activities and the links between formal and informal economic activities in rural America's postindustrial economies. We use the nontimber forest products (NTFP) sector as a case example for illustrating the implications of this research for rural economic development and natural resource policy and management. The NTFP sector is a particularly suitable subject for two reasons. First, much economic activity within the NTFP sector has historically taken place outside of or on the edges of the formal economy, even when economic activity in most other natural resource sectors of rural economies (e.g., wood products, mining, commercial fishing, livestock production) had moved largely into the formal economy. Although NTFP industries are expanding worldwide, without an understanding of the dynamics of informal economies, it is difficult to assess the contributions of NTFP activities to local and regional economies. Second, in the past two decades, several trends have occurred simultaneously that affect both the formal and informal sectors associated with NTFPs. One trend consists of pressures to extend regulation across broader economic sectors, another is restructuring that has shifted forest sector activities among regions, and a third is an increase in expectations that NTFP might provide opportunities to replace jobs lost because of declines in the volume of federal timber harvested. Efforts to bring the NTFP sector more completely into the formal economy include the development of rules governing NTFP resource access, labor, health and safety, and food safety as well as efforts to enforce and expand tax systems affecting NTFP activities. Because NTFP policy in many parts of the United States is still in flux, policymakers have a unique opportunity to craft regulatory and economic development policies that take into account the lessons learned from the now substantial body of scientific literature on the importance of informal economic activity in postindustrial economies.

In "Overview of Literature," we draw upon literature in the fields of anthropology, sociology, development economics, and law to answer the following questions.

- How is the informal economy defined?
- What are the origins of the informal economy concept?
- What factors affect how people participate in the informal economy?
- What are the benefits of the informal economy?
- What are the costs of economic activity that takes place in the informal sector?

- How are the informal and formal economies related to each other?
- What policy approaches have governments taken or could they take to support or discourage informal economic activity?

In “Informal Economy in Rural America,” we examine and synthesize the findings of the scientific literature on NTFPs in the United States relative to the questions posed above. This literature reveals that much economic activity associated with NTFP harvesting, processing, and exchange in the United States has characteristics similar to those of informal economic activity. To the extent that the literature permits, we discuss and describe benefits and costs associated with participation in NTFP activity in the United States, the diverse ways in which people participate in NTFP economic activities, and the emergence of strong pressure in many parts of the United States over the past two decades to formalize such activities. We supplement our findings from the literature with knowledge drawn from our collective experience as active participants in NTFP studies and policy discussions from 1993 onward.

The literature reviews indicate that informal economic activity is a critical component of the United States’ economy. They suggest that much activity (though not all) that takes place in the informal sector contributes positively to the well-being of individuals, households, and society as a whole. However, they also highlight how factors such as social status, degree to which households are integrated into the formal economy, and other variables influence whether participation in informal economic activity is exploitative or empowering. Owing to the still relative scarcity and limited geographic scope of scientific studies on the informal economy, natural resource or economic development policymakers are limited in their ability to develop policies based on understandings of the total economy. In “Policy and Research,” we recommend steps policymakers can take to identify and encourage positive aspects of the informal economy activity. We also identify several areas of research with high potential for improving scientific understanding of the role of informal economic activity in postindustrial societies.

## **Overview of the Literature on the Informal Economy**

### **Defining the Informal Economy**

“Informal economy” is one of many terms used to describe diverse economic activities that are omitted from or only partially accounted for in macroeconomic analyses. Other terms used include informal sector, secondary sector, alternative economy, black market economy, cash economy, clandestine economy, domestic economy, hidden economy, household economy, invisible economy, irregular

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**Scholars differ greatly in their views about what types of activities are informal economic activities and therefore about what to measure or observe when studying how the informal economy works.**

economy, moral economy, nonofficial economy, parallel economy, second economy, shadow economy, and underground economy (Leonard 1998, Losby et al. 2002, Overton 2000, Wiegand 1992). Some terms, such as domestic economy and black market economy, cover a narrow range of economic activities, whereas others, such as informal economy and alternative economy, are much broader in scope. In this report, we use the terms informal economy and its close relative, the informal sector. Both terms are relatively value-neutral, inclusive of a broad range of economic activities, and widely used by social scientists, economic development specialists, and policymakers.<sup>2</sup>

Scholars differ greatly in their views about what types of activities are informal economic activities and therefore about what to measure or observe when studying how the informal economy works. Additionally, the nature of the data used to analyze informal economic activity differs greatly (i.e., random sample surveys, qualitative research, comparative historical analyses, among others), and different methods of gathering and analyzing data carries with it important sensitivities (and insensitivities) to informal economic activity. We provide a chart showing the different kinds of research approaches used for the informal economy studies included in this literature review (see appendix). These differences matter because what researchers do and do not measure or observe shapes scientific understandings of individual, household, corporate, and national economic behaviors. The definitions scholars use also affect the extent to which it is possible to compare the results of studies of informal economic behavior conducted at different times and in different places.

Much of the disagreement over how to define the informal economy centers on whether to include nonmarket transactions, and if so, what types of nonmarket transactions (e.g., unpaid work, self-provisioning, subsistence activities) to include (Brown et al. 1998; Levitan and Feldman 1991: 151–152; Reimer 2006). Other major points of contention are whether to include criminal activities, such as protection rackets, blackmail, and commerce in illegal drugs and prostitution (McInnis-Dittrich 1995), and corruption, such as bribery, favors, and payoffs (Lomnitz 1988).<sup>3</sup>

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<sup>2</sup>Hart, an economic anthropologist, is often attributed with developing and popularizing the term, “the informal sector.” Hart first used the term in the early 1970s to describe economic activities not captured in national employment or business statistics (Losby et al. 2000). Hart’s (1985) work in urban Ghana indicated that the so-called unemployed often had jobs, but many of those jobs did not appear in national employment or business data gathering efforts. He concluded that important economic behavior occurs that standard economic models are unable to describe (Hart 1985).

<sup>3</sup>Note that definitions of criminal activity are culturally specific, and activities considered illegal or criminal in some cultures may not be considered so in other cultures.



Thomas (2001) provided a useful conceptual model of informal economic activity, which posits that national economies are composed of a continuum of economic sectors including some based primarily on informal economic activity. He defines informal economic activity as “the production of goods and services whose value is not included fully, if at all, in the National Income Accounts of a country (Thomas 2001: 1). In his framework, informal economic activities differ according to whether they are market or nonmarket transactions and whether the goods or services or the production and distribution of them are legal or not. He identifies four sectors of informal economic activity—household, informal, underground, and criminal (table 1). The household sector does not involve market transactions; the three others do. Household economic activity is entirely legal, whereas the other three types of activity differ in terms of their legality. Even legal informal economic activity, such as domestic work, can have exploitative aspects, in that participants often contribute to the social good by participating, but may not benefit adequately in terms of formal social security or other state-provided distributions. Activities in the informal sector produce “legal goods and services, but in an unregulated way” (Thomas 2001: 2). For example, a self-employed individual might do business quite openly without registering as a business with the state, or a small business might operate openly but without complying fully with health and safety regulations. The underground sector consists of businesses that produce legal goods and services, but which seek to remain hidden in order to deliberately avoid complying with laws and regulations (Thomas 2001: 2). An example of underground activity is a business that operates clandestinely in order to avoid paying taxes. Criminal activities produce outputs and services that society views as illegal, and whose production and distribution are, therefore, also illegal. Definitions of criminal or illegal activities, however, differ tremendously over time and across societies.

**Table 1—The structure of informal economic activity**

<b>Sector</b>	<b>Market transactions</b>	<b>Output</b>	<b>Production/distribution</b>
Household	No	Legal	Legal
Informal	Yes	Legal	Quasi-legal
Underground	Yes	Legal	Illegal
Criminal	Yes	Illegal	Illegal

Source: Thomas 2001: 2.

Whether narrow or broad in scope, all definitions of the informal economy refer to economic activities that are “unrecorded or imperfectly reflected in official national accounting systems” (Losby et al. 2002: 2), and “neither government regulated nor fully taxed” (Levitan and Feldman 1991: 151). As Leonard (1998) noted, it

is the “confines of state regulation that determine informalization” rather than the moral or social values or the economic importance attributed to the activities. However, the absence of nation-state regulation governing a particular set of economic activities does not mean that those activities take place in the absence of regulation. Under virtually all circumstances, uncodified societal norms both constrain and facilitate specific types of economic behavior. Rules governing economic behavior are also often set and enforced by trade associations, guilds, marketing boards, community-based governance structures, or other social entities.

Reimer (2000) defined informal economic activities as involving “the production, distribution, and consumption of goods and services that have economic value, but [that] are neither protected by a formal code of law nor recorded for use by government-backed regulatory agencies.” For our case study of the NTFP literature, we use Reimer’s definition, which includes all four of Thomas’s sectors; because it encompasses activities that are regulated by the nation-state but that do not necessarily enter into the national economic accounting systems. Reimer’s definition is appropriate for understanding economic behavior in a sector such as the NTFP sector where subsistence activities, nonmarket transactions (e.g., gifting, unpaid work), quasi-legal activities (e.g., off-the-books work, partial or noncompliance with labor and harvesting regulations), and, in some places and circumstances, criminal activity (e.g., theft, fraud) and corruption, are common. Limiting the study of economic behavior in the NTFP sector to a narrow slice of these activities would produce a highly skewed picture of how NTFP economies actually function. It would also obscure the range of considerations that individuals, households, and firms take into account when making choices about whether and how to participate in the NTFP sector.

### Origins of the Informal Economy Concept

The concepts of informal economy and formal economy are inextricably linked. Leonard (1998) situated the origin of these two constructs in late 19<sup>th</sup> and early 20<sup>th</sup> century Western Europe and North America, a period when nation-states in those regions established far-reaching economic reporting and regulatory frameworks aimed at encouraging industrial expansion. The administrative structures that emerged during this period enabled the governments of industrializing nations to control a much broader range of social domains than had previously been possible. These new forms of bureaucracy together with the emergence of more efficient markets facilitated the flow of resources to manufacturing industries and the maintenance of social order in rapidly transforming economies of the late 19<sup>th</sup> century.

Prior to the 1800s, the household was the key unit of production. Most members of the household participated in economic activities aimed at keeping the household operating, and few people willingly committed all their labor to work outside the household. As Leonard explained (1998: 3), households opportunistically developed diverse portfolios of income-generating and subsistence production activities to reduce risk:

Embarking on a range of economic strategies outside contractual wage-employment promoted self-reliance and independence and provided households with a greater level of security than could be gained through reliance on one specific economic practice.

Leonard pointed out that during the early phases of industrialization in European and American economies, manufacturing concerns typically relied on a network of decentralized craftworkers and subcontractors operating within household production systems to produce goods, a system known as the outworker system. As industrialization intensified during the late 19<sup>th</sup> century, factory and office-based employment gradually replaced the outworker system. In the factory system, manufacturers controlled and directed the labor process, from centralized hiring to surveillance to quality control. However, worker exploitation, the insecurity of many industrial jobs, and the prevalence of dangerous and inhumane working conditions in many sectors of the industrializing economies led to widespread worker protests and the emergence of worker unions during the late 19<sup>th</sup> and early 20<sup>th</sup> centuries.

In response to these protests, nation-states developed regulations governing labor conditions and workplace environments, as well as systems to support workers and their families during economic downturns. To fund the new welfare and regulatory programs, nation-states expanded their tax systems; they also expanded systems for monitoring and enforcing the growing body of tax laws and labor and work-place health and safety regulations. A key feature of state welfare and regulatory systems established in the late 19<sup>th</sup> and early 20<sup>th</sup> centuries is that they made use of economic accounting systems that equated work with waged employment. Leonard (1998: 26) observed that as state controls extended over a widening sphere of economic activities, “Individuals came to be recognized and defined as employed or unemployed and work became increasingly equated with formal paid employment.”

Over time, the set of economic activities included in national economic accounting systems or taxed and regulated by the state became known as the “formal” economic sector. All other economic activities—unpaid work in and

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outside the household, subsistence production, reciprocal exchanges of goods and services, cash-based “under-the-table” employment, and employment linked to criminal activities, among others—became categorized as the “informal” economic sector. By the mid-20<sup>th</sup> century, a large proportion of economic activities in the United States took place within the formal sector (Dickenson 1995, Leonard 1998). Government policies developed during the 1930s, resulted in programs such as home economics extension that sought to move women out of petty commodity production and resulted in the gradual devaluation of household economic production (Adams 1994).

However, rather than dying out or shifting permanently to the margins of society as anticipated, informal economic activity has expanded during the past two decades in postindustrial economies (Losby et al. 2002). Recent studies document that people of many social classes, income categories, ethnicities, and occupations in the United States engage in informal economic activities as part of their daily lives (Brown et al. 1998, Levitan and Feldman 1991, McInnis-Dittrich 1995, Sassen 1994, Snyder 2003, Zlolinski 1994). Although low-income individuals and households rely more on the informal economy for their survival needs than their wealthier counterparts, middle and high-income individuals and households also participate extensively in informal economic activities (Slack 2005).

Growth in the informal sector during the past two decades is both producer and consumer-driven. It is producer-driven in that some firms that formerly operated wholly in the formal sector seek to remain competitive through outsourcing key manufacturing, marketing, and maintenance tasks to business operating wholly or partially in the informal sector (Zlolniski 1994). At the same time, it is driven by consumer demand at the high and low ends of the market (Sassen 1994). At the high end of the market, expanded demand among high-income urban-based consumers for custom work has created niches for very small enterprises with highly skilled (and often very well-paid) workforces (Sassen 1994, Snyder 2003). Many of these firms operate at least partially in the informal sector (Sassen 1994). At the low end of the market, the growth in urban-based low-income populations has sparked demand for cheap consumer goods and services that only businesses that do not comply with labor and workplace safety regulations can afford to produce (Sassen 1994).

### Factors Affecting Participation in the Informal Economy

A common theme in the informal economy literature is that a number of factors affect the ways in which people participate in informal economic activities. Specifically, the resources and skills they bring with them are major factors in whether

such activities are effectively dead-end jobs or are socially and economically empowering. Important factors that shape how individuals and households engage in and benefit from informal economic activity are individual labor status, the extent and nature of their links to formal sector employment, the extent to which the work fosters connections with the world beyond the household, and the ability participants have to choose whether or not they work in the informal economy. For the sake of clarity, we discuss each factor separately, but in the real world, the four factors are not entirely independent of each other. In particular, a person's ability to choose whether or not to participate in the informal economy is often constrained or enhanced by the other three factors.

**Labor status—**

People participate in the informal sector in three major ways (Losby et al. 2002): as self-directed workers, by working for someone else (i.e., in an employer-employee relationship), or as nominally self-directed workers under working conditions such that they are effectively employees. Narotzky's (2000) study of informal economic activities associated with shoe manufacturing in southeastern Spain illustrates the distinctions between these categories and why they matter. In the category of people working for someone else are employees who work in small shoe-making workshops, most of which hire workers without adhering to the country's labor regulations or health and safety regulations. Among the self-employed are the owners of the small shoe-making workshops, often women, and jobbers, usually men, who connect home workers and workshop owners with the larger factories. The home-based workers in Narotzky's study, often women, fall within the category of people who nominally work for themselves, but under conditions that functionally make them employees of a specific workshop or jobber (i.e., they have limited choice in where they can sell their products and little to no control over the prices that their work commands). Because the jobbers and small workshop owners in southeastern Spain's shoe production system are more mobile and can tap into wider markets, they exercise more control over the conditions of their own work than the home workers do.

Overton (2000) described a similar continuum of economic vulnerability among self-employed fishermen in Newfoundland, many of whom operate partially within the informal sector. A critical factor in the vulnerability of many self-employed fishermen in Newfoundland is that many fishing households do not own fishing boats and gear, which are critical means of production within the commercial fishing industry. For all practical purposes, nominally self-employed fishermen who own no boats or gear have an employee-type relationship with fishermen who are also self-employed but who do own boats and gear. Even among those fishermen

who own their own boats and gear, the degree of indebtedness among boat owners is sufficiently high that, in effect, many self-employed fishing boat operators work for credit merchants rather than for themselves. In Newfoundland fishing communities, the self-employed informal worker continuum ranges from those who own their boats and gear outright (least vulnerable) to those who own boats and gear but are heavily indebted (more vulnerable) to those who do not own a boat or gear and work for a share of the catch (most vulnerable).

Similar patterns of vulnerability exist within the nonmonetary informal economy. Levitan and Feldman (1991) documented the occurrence of interhousehold exchange involving land and capital, as well as labor, among households in rural upstate New York. They observed that the creation and maintenance of these exchange networks involved costs in terms of time and energy, and noted that individuals and households with more assets did better in informal exchanges than those with fewer assets. Studies in Vermont (Nelson 1999a, 1999b) and Newfoundland (Felt and Sinclair 1992, Overton 2000), and Nebraska (Edgcomb and Thetford 2004) documented a similar pattern in other parts of the United States and Canada.

#### **Links to the formal sector—**

How individuals participate in the informal economy is often closely tied to how they or another member of their household are linked into the formal economic sector. Nelson's (1999a, 1999b) study of informal economic activity in rural Vermont showed that households where at least one member had a "good" job (defined as a stable, permanent, full-time job with health and retirement benefits) participated in informal economic activities very differently from households where members had only "bad" jobs. In households where at least one member had a "good" job, the members who participated in the informal sector often engaged in entrepreneurial businesses. In households, where members had "bad" jobs in the formal sector, members participated in the informal economy as waged workers or sold their services on a very small scale. Typically members of "bad" job households lacked the capital to set up larger-scale businesses of their own. Members of "good" job households also engaged differently than members of "bad" job households in reciprocal exchange networks. Members of "good" job households tended not to charge or expect payment or return favors when they performed services for neighbors, family, or friends, whereas members of "bad" job households generally expected some form of recompense. Nelson (1999a, 1999b) found that de-coupling household economies from "good" formal sector employment decreased the household members' ability to engage in the informal economy as self-employed entrepreneurs and shifted them into informal economic activities resembling "bad" jobs in the formal sector.

**Social embeddedness—**

Granovetter's (1985) notion of social embeddedness posits that all economic action is shaped by social relationships and ties. Portes and Haller (2005: 13) argued that informal economic activity is much more socially embedded than formal sector activities. Narotzky's (2000) study of shoe-manufacturing networks in Spain and Halperin's (1996) study of informal marketplaces in the Appalachians illustrate the extent to which informal economic activity is socially embedded. In both cases, the existence of a network of strong kinship ties enables households and firms to engage in informal economic activities: in one case the production and marketing of shoes and in the other the refurbishing and marketing of used goods. At the same time, by engaging in informal economic activities, participants strengthen kinship and other social ties. The link between social ties and informal economic activity is thus a two-way, mutually reinforcing connection, a characteristic Nelson (1999a) referred to as sociability.

Although most informal economic activities have an element of sociability, the degree to which informal work expands an individual's social connections outside the immediate household differs considerably. For example, Nelson's (1999b: 534) research in rural Vermont found that men typically engaged in informal activities that strengthened and widened their social networks. In creating ties with others outside the framework of family and friends—plowing the driveway of a neighbor or bartering with another craftsman—men expand their personal networks and, thus, accrue valuable social capital that can assist them in their search for formal and informal employment (Nelson 1999b: 534). In contrast to their male counterparts, rural Vermont women tended to do home-centered work that didn't bring them into contact with others beyond the household, and thus women did not accrue as much social capital as men through their participation in informal economic activities.

**Choice—**

Individuals have differing abilities to choose how and how much they participate in the informal sector. Some people choose to work in the informal sector because doing so offers them more control over their everyday lives or a creative outlet for their talents not available in the formal sector (Halperin 1996, Snyder 2003). However, others work in the informal sector because they have no possibility of getting work in the formal sector or because their choices of work in the formal sector are worse than what they can find in the informal sector (Felt and Sinclair 1992, McInnes-Dittrich 1995, Zlotniski 1994). Edgcomb and Thetford (2004) found that how Nebraska community members participated in the informal economy differed depending on the resources and opportunities available to them. People with well-paid permanent jobs in the formal sector typically participated in the

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informal economy by choice. They viewed their participation as a way to minimize future risks, supplement existing income, or exercise their creative talents but not as an economic necessity. In contrast, people with no employment or low-paying jobs in the formal sector stated that they had no option but to work in the informal economy. They often worked for lower wages in the informal economy than their counterparts with good jobs.

### Benefits of the Informal Economy

The informal economy provides a number of critical economic and social benefits in postindustrial societies. Many of these benefits accrue simultaneously, and all play a role in buttressing the workings of the formal economy. Five benefits frequently highlighted in the informal economy literature are cost-cutting, training, economic buffering, identity expression, and social network development.

#### **Cost-cutting—**

By operating in the informal sector, firms can reduce or eliminate a number of the costs associated with formal sector operations, such as income taxes, payroll taxes, worker's compensation, unemployment insurance, and business license fees, allowing them to provide goods and services at lower cost than their formal sector counterparts (Aponte 1997, Felt and Sinclair 1992, Losby et al. 2002, Nienhaus and Brauksiepe 1997). The competitive advantage for firms operating in the informal sector, however, often—though not always—comes at the cost of poorer working conditions for employees (Castells and Portes 1989, Marcelli et al. 1999, Narotzky 2000).

#### **Training—**

The informal economy often serves as a place where workers and entrepreneurs can acquire the skills, connections, or capital needed to engage effectively in regulated economic activities (Edgcomb and Thetford 2004, Losby et al. 2002, Snyder 2003, Stepick 1989). Stepick (1989) described how Cuban entrepreneurs arriving in Miami during the 1950s and 1960s established as a livelihood strategy construction firms that operated primarily outside the regulated construction industry. Over the course of several decades, many of the Cuban firms eventually formalized their construction operations, bringing them into compliance with a variety of tax, licensing, labor, and health and safety regulations. At an individual scale, Edgcomb and Thetford (2004) found that some of the Nebraska residents they interviewed engaged in unregulated economic activities to test whether their production and marketing systems were good enough to make it worth their while to formalize their operations.



**Economic buffering—**

The informal economy functions as an economic safety net, albeit sometimes a precarious one, for people of diverse income and ethnic backgrounds who are unable to or prefer not to participate in the formal sector. For some people, the informal economy is their only option for earning income. For example, McInnis-Dittrich (1995: 400) found that for low-income Appalachian women, “the informal economy was not their first choice of labor markets, it was their only choice.” Similarly, immigrants with limited English skills or formal education may find that the unregulated economic sector is the only place where they can obtain work (Fernandez-Kelly and Garcia 1989, Stepick 1989, Zlolinski 1994).

Some people work in the informal economy because such work is easier to fit into their other life activities than formal sector employment (Halperin 1996; Nelson 1999a, 1999b). For example, a woman may choose to knit sweaters while taking care of her children, and then sell the sweaters at a local crafts market. Although the sums brought in through such interstitial activities are sometimes (but not always) small, the people who earn them often consider them as important contributions to their overall household economies (McInnis-Dittrich 1995, Nelson 1999a).

Some workers with jobs in the formal sector also engage in informal economic activity to reduce the risks associated with formal employment (Edgcomb and Thetford 2004). For example, someone with a good-paying job in the formal sector might run an auto-detailing business in her spare time as a fallback option in the event that her formal sector job is eliminated or downgraded.

**Cultural and individual identity expression—**

Informal sector employment sometimes permits people to engage in meaningful employment, construct personal identities, or maintain particular ways of life that they cannot replicate in the formal sector (Brown et al. 1998, Felt and Sinclair 1992, Snyder 2003). In a study of informal economic activity participation among residents of New York City’s East Village, Snyder (2003) found that some people participated in informal economic activities primarily as a way to construct or maintain an identity linked to a particular career choice. For example, one woman she interviewed received under-the-table payment for tarot-card readings as an initial step in developing a full-time business as a psychic. Another interviewee does under-the-table work as a voice coach as part of a long-term objective of opening up a voice therapy business.<sup>4</sup> Snyder found that informal workers of this type, whom

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<sup>4</sup>The voice coach and tarot card reader examples illustrate the multifaceted benefits of informal economic activity in that both serve simultaneously as a means for gaining skills and as a means for expressing individual identities.

she categorized as entrepreneurs, typically did not hold full-time formal sector jobs, although another member of their household, usually a spouse, often did. Another category of individuals, whom she categorized as avocationalists, had lucrative jobs in the formal sector but engaged in informal work outside their regular work hours to pursue personal passions, such as teaching martial arts, drawing, or music. Likewise Brown et al. (1998) linked the unexpectedly high rates of informal economy participation among higher income residents in the Mississippi Delta to their desire to maintain a lifestyle based partially on subsistence activities such as hunting, fishing, firewood cutting, and gathering.

#### **Social networking—**

Another important benefit of informal economic activities is that through participating in them, people develop and maintain social networks (Nelson 1999a, 1999b; Dick 1996; Halperin 1996; Levitan and Feldman 1991). Social networks developed through informal economic activity often have an economic function: they create an economic safety net that participants can draw upon during hard times and serve as social glue that often carries over to formal business settings (Centeno and Portes 2006, Lomnitz 1988). Levitan and Feldman (1991: 154) argued that the social networks created through informal economic activities permit the “symbiotic enhancement of mutual potential” and stress that their benefits cannot be calculated solely by measuring economic returns to those who engage in them. Instead, both cost minimization (economic logic) and the desire to create and maintain social ties and identities (social logic) often simultaneously motivate people’s participation in informal economic activities (Levitan and Feldman 1991). Reciprocity is an important element of these social networks (Losby et al. 2002).

#### **Costs of Informal Economic Activity in Postindustrial Contexts**

Informal economic activity has many social and economic benefits. However, in countries such as the United States, where the functioning of the social welfare system depends on widespread participation in the formal economy, the persistence and expansion of the informal economic sector has costs as well (Aponte 1997). Costs are incurred, often simultaneously, at both the macro level (i.e., structural or societal) and the micro level (i.e., individual, family, household). At the macro level, the more that businesses, individuals, and households operate in the informal economy, the greater the potential loss in revenues for the state, in the form of taxes and business fees that would have been received if the businesses and individuals operated in the formal economy (Leonard 1998). The loss of these revenues can hinder the state’s ability to enforce regulations and provide basic services to its

citizens. At the micro level, much informal sector employment exhibits characteristics of downgraded labor, e.g., low wages, no medical benefits, no paid leave, no retirement benefits, irregular hours, and long hours (Castells and Portes 1989, Losby et al. 2002). Informal sector workers who become disabled on the job or too sick or too old to work may require state assistance, placing pressure on the state social welfare system to which neither the workers nor the businesses that profited from their labor contributed. Businesses operating in the informal sector are also less likely to comply with health, safety, and environmental regulations (Irrarrazaval 1997, Kahn and Pfaff 2000, Leonard 1998), resulting in working conditions that may constitute a danger to employees, as well as posing broader public health and safety hazards. When employees or others suffer damage as a result of dangerous conditions in unregulated workplaces, the burden of mitigation or reparations often falls, once again, on state welfare programs to which neither the businesses nor the employees contributed. On the other hand, policy incentives that enable and encourage individuals to participate in desirable informal economic activities (e.g., babysitting, caring for sick, elderly, and disabled individuals) can decrease the need for state services, offsetting revenue losses.

## Connections and Exchanges Between the Informal and Formal Economy

Scholars of informal economic activity agree on one point: informal and formal economic activities are inextricably intertwined rather than distinct and mutually exclusive spheres of interaction (Edgcomb and Thetford 2004; Halperin 1996; Henry and Stills 2006; Losby et al. 2002; McInnis-Dittrich 1995; Nelson 1999a, 1999b; Sassen 1994; Smith 1990; Tuominen 1994; Zlolinski 1994). For example, Zlolinski (1994: 2332) found that firms in Silicon Valley's janitorial industry are a "part of a continuum in which the degree of informality increases as one moves from large to small-scale companies" (Zlolinski 1994: 2332). Prior to the 1980s, large companies in the Silicon Valley relied either on in-house janitorial employees, many of them union members with relatively good pay and fringe benefits, or subcontracted to janitorial firms who paid their employees somewhat lower wages that also included fringe benefits. As labor costs increased, both public and private sector institutions began contracting out their janitorial work, typically to nonunion subcontractors. By the end of the 1980s, three categories of janitorial jobs had emerged: in-house janitors with relatively high wages and fringe benefits working as employees of large high-tech firms, less well-paid janitors without fringe benefits working as employees of small to medium-sized janitorial firms, and very low-paid workers with no benefits working under the table for self-employed persons.

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Among individuals and households, interweaving informal and formal economic activities is a common economic strategy (Edgcomb and Thetford 2004; Halperin 1996; Losby et al. 2002; McInnis-Dittrich 1995; Nelson 1999a, 1999b; Zlolinski 1994). In the only study to date that measures national rates of participation in the informal economy, Herzog et al. (1989) found that 15 percent of the respondents performed paid work for others outside the formal sector, whereas 81 percent engaged in unpaid work for others. Nearly all respondents participated in household maintenance, improvement, and cleaning—all forms of informal economic activity—within their own household (Herzog et al. 1989). Subsequent localized surveys and qualitative research on livelihood strategies indicate that people combine informal and formal economic activities to construct individual, household, and business livelihood strategies in a variety of ways (Edgcomb and Thetford 2004; Nelson 1999a, 1999b; Slack 2005; Snyder 2003). Some people participate in formal economic activities during the week and in informal economic activities on weekends. Others shift back and forth between formal and informal economic activities during the same workday. Still others spend most of the year working primarily in the formal sector but work seasonally in the informal sector. The key point is that in the postindustrial U.S. context, just as the formal economy cannot operate without the informal economy, neither can the informal economy operate without the formal economy.<sup>5</sup>

### Policy Approaches to the Informal Economy

The boundaries between the formal and the informal economies are fluid within and across societies. Many factors affect those boundaries, including normative expectations within the subculture or region. Leonard (1998) described how labor relations in Western societies changed as they industrialized, moving from out-worker systems to factory systems. As this transformation occurred, networks of welfare and regulatory policies were enacted to protect workers, and tax structures evolved to support social welfare and regulatory programs. However, many informal activities such as subsistence gathering and gifting remain largely or entirely unregulated.

In analyzing the benefits and costs of policies aimed at shifting activities presently taking place in the informal sector into the formal sector, it is useful to distinguish between two fundamentally different types of activities. Many informal economic activities are not, and likely never will be, subject to nation-state regulation or reporting requirements. Examples of such activities include child care that

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<sup>5</sup>Sociologically, there remain the questions of for whom and for what specific patterns of interaction between the formal and informal economy are beneficial.

takes place within households and between neighbors, gardening for household consumption, and cutting firewood for one's elderly neighbors. However, the ability of individuals to participate in these sorts of beneficial informal activities can be undermined by policies that tie social support systems to employment in the formal sector (Edgecomb and Thetford 2004). For example, in the United States, affordable health insurance is linked so tightly to formal sector (and usually full-time) employment that many people who might otherwise be available to do their own child care or care for elderly, disabled, or seriously ill family members, are forced to obtain full-time employment.

A second, and from a policy perspective, much different set of informal economic activities are those that are nominally subject to nation-state regulation or reporting, but for which enforcement is weak or nonexistent. Examples of such activities include bartering (which is taxable in the United States), doing under-the-table construction work, or running a business without obtaining required licenses. Nation-states generally take three approaches to dealing with informal economic activity that takes place in economic domains nominally subject to regulation (Sassen 1994): ignoring its existence, making an effort to control it, or legalizing it. The merits and challenges of each of these approaches are described below.

#### **Ignoring the informal economy—**

Most countries with weak state enforcement systems, including many Latin American and southern European countries, tacitly permit businesses to operate informally (Castells and Portes 1989, Leonard 1998, Lomnitz 1988). The informal economic sector serves as an important source of employment for workers who would otherwise have no employment options (Centeno and Portes 2006). Their employment in the informal sector buffers states against the social unrest that would result if such workers had no way to make a living. At the same time, the informal economic sector enables businesses to produce lower cost goods and services, making it possible for workers to survive on the low wages they receive through informal sector employment (Sassen 1994). Larger firms operating in the formal sector can also reduce their costs by outsourcing some tasks to informal businesses (Zloliniski 1994). The disadvantage of ignoring informal economic activity is that by permitting business to operate informally, states provide incentives for the persistence of social inequities and unsafe working conditions (Aponte 1997, Leonard 1998). Moreover, the often arbitrary and selective enforcement of regulations that accompanies the state's turning a blind eye to informal economic activities undermines the state's credibility and diminishes society's overall trust in state governance structures (Lomnitz 1988).

**Attempting to control the informal economy—**

States with relatively strong enforcement capacity often seek to control elements of informal economic activity by developing much stricter and more broadly reaching regulations or more effective monitoring and enforcement systems, a process referred to as criminalization (Epstein 1994). However, criminalization efforts are often counterproductive (Epstein 1994, Sassen 1994). For example, if taxes and regulatory compliance are too onerous, attempts to enforce them merely drive businesses further underground or out of business. Epstein (1994) argued that driving firms out of business is against the state's long-term interests, as the state loses the revenues as a result of decline in economic activity while experiencing additional pressure from unemployed workers for state financial assistance. In his view, "The social question therefore is not whether these regulations impose significant costs, but whether the costs that they impose are justified by the benefits that they create (Epstein 1994: 2165)." He noted that one of the potential costs of seeking to exert control over the informal economy is the moral corrosion that emerges if the state's ability to enforce the rules is highly uneven. Additionally, more regulation and stricter enforcement increases administrative costs, which may negate any additional revenue generated. Moreover, as the tax burden increases and costs to businesses of complying with regulations rise, the informal economy inevitably must expand to keep up. Portes and Haller (2005) referred to this phenomenon as the paradox of state control.

**Legalizing the informal economy—**

In the past two decades, many countries have reduced or eliminated labor, health, safety, and other regulations, and cut back on the taxes needed to support regulatory systems. This approach, known as deregulation, addresses some of the issues raised by Epstein (1994). However, if too broadly applied, deregulation can severely erode workers' economic security and place stress on the state's social welfare system (Leonard 1998, Sassen 1994). Aside from placing vulnerable populations at risk in the short term, the presence of economic insecurity among a large percentage of a country's population can lead to widespread social unrest in the long term. Additionally, reliance on the informal economy's reciprocity systems to promote general economic security may leave members of the population who cannot reciprocate (i.e., the very poor, the very old, the sick) at risk of having no security at all (Leonard 1998, Overton 2000). Centeno and Portes (2006) concluded that the degree to which deregulation can be applied in modern industrial economies is limited. They noted that many economic transactions can take place without a regulator as long as they are embedded in a pre-existing web of social networks or larger social structures. However, whereas such networks often function well

at local levels, at the national level, formal contractual systems with some form of regulation are needed to limit the likelihood that businesses will renege on their agreements. In the absence of such regulation, Centeno and Portes (2006) argued that lack of stability and high transactions costs will inhibit economic investment and perpetuate social inequities.

**A fourth option: upgrading the informal economy—**

Sassen (1994) contended that often none of the three options are satisfactory and argued that policymakers need to recognize that the informal economy is a necessary component of industrial and postindustrial economies. She interpreted the growth of informal economic activity in sectors where most businesses used to operate primarily in the formal economy as an indication that prevailing tax, employment, and labor policies, most of which emerged in the early part of the 20<sup>th</sup> century, are inappropriate for today's economic environments. She referred to these policy disjunctures as regulatory fractures, noting that they occur when "economic processes diverge from the model for which extant regulations were designed" (Sassen 1994: 2291). Sassen defined the core policy problem of informalization of previously formalized economic activities as how to simultaneously provide workers with reasonable wages and working conditions, ensure that businesses and individuals pay their share of taxes needed to support state services (from which they benefit directly or indirectly), and minimize operating costs to entrepreneurs. She proposed a fourth policy approach: upgrading the informal economy by gradually phasing in regulations and offering long-term technical and financial assistance to help businesses operating in the informal sector to integrate into the formal sector. Sassen's policy recommendations are situated in the context of bringing previously formal, but now informal economic activities back to appropriate modes of formality.

Numerous studies support Sassen's analysis of the benefits of policy approaches aimed at upgrading portions of the informal sector (Irrazaval 1997, Leonard 1998, Warren 1994). However, these studies highlight the need for policies that reflect clear understanding of how the portions of the informal economy targeted for upgrading are structured. To paraphrase Leonard (1998), when seeking to upgrade informal economic activities, policymakers need to ask the question: "What policies will best support the development of empowering forms of informal economic growth while minimizing the development of disempowering forms of informal economic activity?"

Three areas that policymakers need to pay particular attention to when seeking to upgrade portions of the informal economy include (a) how economic power is distributed within the informal sector under consideration, (b) what the major

economic constraints to formalization are, and (c) what social costs are associated with formalization.

**Understanding the distribution of economic power within the informal sector—**

Warren's (1994) study of the differential development of the informal sectors in three regions of Italy illustrates how existing distributions of economic power affect the outcomes of policies intended to upgrade informal sector activity. In southern Italy where economic power is concentrated in the hands of a few Mafia-controlled corporations, government support of informal sector activities merely served to reinforce the existing inequities in income distribution. In contrast, in northern Italy, where strong local alliances exist between local governments, businesses, and worker cooperatives, government support of informal sectors led to economic growth in which the benefits were more evenly distributed. Overton (2000) reached a similar conclusion after studying informal economic activity within Newfoundland fishing communities. He argued that current policies that target economic development assistance toward fishermen who own gear free and clear exacerbate the already inequitable distribution of resources and undermines poverty alleviation goals. In a similar vein, Aponte (1997) distinguished between demand-led growth in the informal sector, which is characterized by the presence of entrepreneurs who choose to participate, and supply-led growth in the informal sector where workers are forced to participate for lack of better options. He sees the former as a positive for society and the latter as a negative.

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**Very small enterprises and self-employed contractors dominate the informal sector.**

**Understanding the economic constraints to formalization—**

Very small enterprises (defined as businesses that employ fewer than 10 employees) and self-employed contractors dominate the informal sector (Castells and Portes 1989, Losby et al. 2002). Crafting policies to upgrade portions of the informal economy therefore requires an understanding of the economic constraints under which these kinds of businesses operate. For example, in a study of barriers to formalization among microenterprises in Chile, Irarrazaval (1997) found that although most microenterprises were formalized in the sense that they obtained state-issued business licenses, few of them could afford to comply with workplace health and safety regulations. Irarrazaval also identified the extra time and monetary costs associated with formalization, such as learning what the requirements are, completing and filing forms, and keeping records, as key barriers to formalization for many microenterprises. In a similar study of the constraints to formalization among microenterprise entrepreneurs operating in the informal sector in rural Nebraska, Edgcomb and Thetford (2004) found that lack of time to acquire the skills and knowledge needed to operate within the formal sector



was a barrier to formalization for most respondents. Other barriers they identified included insufficient capital, limited nearby markets for the goods and services offered, the extra time and effort needed to comply with regulations, and the logistical difficulties of scaling up production operations. Based on their extensive review of the informal economy literature, Losby et al. (2002) recommended that policymakers develop tax and regulatory policies that enable very small enterprises to compete in the formal sector with larger, more intensively capitalized firms. However, they acknowledge that creating labor policies sensitive to the needs of very small firms while providing adequate protections for workers will be challenging, particularly in sectors of the informal economy dominated by the presence of nominally self-employed, but de facto contract workers.

#### **Understanding the social costs of formalization—**

The reluctance to formalize is sometimes linked to the social costs that go with operating in the formal sector. For example, many of the informal sector entrepreneurs Edgcomb and Thetford (2004) interviewed in Nebraska expressed reluctance to formalize their businesses because doing so would fundamentally change the nature of their involvement in the activity. For many interviewees, one advantage of operating in the informal sector is that doing so leaves open the possibility of moving in or out of the activity as needs and desires change. Running a business in the formal sector, however, often requires expanding the business in order to recoup the costs associated with formalization, and making it correspondingly more difficult to shut down operations temporarily or seasonally. As long as an informal economic activity remains just “one more patch in a complex of economic endeavors” (Edgcomb and Thetford 2004: 34), the participant exercises greater flexibility of choice in whether to continue engaging in it or not.

### **The Informal Economy in Rural America: Nontimber Forest Products Case Study**

The NTFP sector illustrates the importance of understanding the role of informal economic activities in rural economies. Nontimber forest products include a multitude of botanical forest products other than industrial timber and wood fiber resources, such as edible and medicinal plants and fungi, evergreen boughs, ferns, moss, saps, resins, seeds, and cones. In the United States, foresters often include wood products such as firewood, posts, poles, specialty woods, and Christmas trees in the category of NTFPs. An expansion in demand for these products in the past 20 years has been accompanied by calls for increased regulation of NTFP harvesting and commerce.

Nontimber forest products are harvested, processed, and traded in all forested regions of the United States, and the individuals who participate in NTFP activities come from many income levels, social classes, and ethnic and racial backgrounds (Jones and Lynch 2002). Historically, much NTFP activity in the United States has taken place outside the regulatory structures of the nation-state, with widespread pressure for formalization only since the mid-1980s for most NTFPs. The economic contribution of NTFPs is difficult to determine given the lack of state and federal systems for tracking the value or quantities of products harvested or traded. However, more than 1,300 species are commercially harvested across the United States (Jones and Lynch 2007), and many more species have subsistence, spiritual, and other nonmonetary values.

The extent of commercial trade in NTFPs is poorly documented, but is likely substantial. In the Pacific Northwest alone, economists estimated that in 1989 the floral greens industry contributed \$128 million to the regional economy (Schlosser et al. 1991), and in 1992, the wild mushroom industry contributed \$41 million (Schlosser and Blatner 1995). Five years later, exports of wild matsutake mushrooms from the Pacific Northwest to Japan were valued at \$9.5 million (Alexander et al. 2002). In the Eastern United States, sales of American ginseng from July 1997 through June 1998 were valued at \$138 million; in the same year, sales of saw palmetto (*Serenoa repens* (Bartram) Small), a medicinal plant found in Florida, were estimated at \$27 million (Alexander 2004).

Nontimber forest product harvesting and processing activities, such as wood cutting and the preparation of jams and jellies from wild fruits and berries, are frequently among the activities identified in studies of informal economic behavior in rural areas (Bailey 1999; Brown et al. 1998; Cohen and Stephens 2005; Felt and Sinclair 1992; Levitan and Feldman 1991; Nelson 1999a, 1999b; Slack 2007; Tickamyer and Wood 1998). Studies of NTFP harvesting, use, and trade in the United States (see, e.g., Emery 2002, Jahnige 2002, Schroeder 2002, Spero and Fleming 2002) also highlight the importance of NTFPs in subsistence and gifting activities, economic practices that often (though not always) fall within the informal sector.<sup>6</sup>

However, much economic activity associated with NTFPs involves monetary transactions or barter (Alexander et al. 2002), practices which are potentially subject to taxes, business licensing requirements, labor regulations, workplace health and safety regulations, and a large number of other formal regulations or reporting requirements. Even NTFPs acquired for subsistence use or gifting are sometimes

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<sup>6</sup>For example, noncommercial hunting and fishing are highly regulated throughout the United States, and Alaska has an elaborate set of rules governing subsistence hunting, fishing, and gathering.

subject to formal laws and regulations governing their harvest and transportation (Antypas et al. 2002, Schroeder 2002). However, neither the informal economy nor the NTFP literature shed much light on how NTFP activities are distributed across the informal and formal economic sectors. Nonetheless, as illustrated in the discussion below, the literature on NTFPs suggests that much NTFP activity, including activities involving monetary exchange, has many of the characteristics of informal economic activity. Owing to the relative scarcity of research on NTFP economic activity, in this section we do not address a number of important issues identified in “Overview of Literature,” including differences in how individuals participate in informal economic activity based on gender, ethnicity, and class, benefits and costs of informal economic activity associated with NTFPs, and the impact of policies on how those benefits and costs are distributed.

## **Benefits Associated With Nontimber Forest Product Activities in the United States**

The NTFP literature identifies a number of benefits associated with participation in NTFP activities. These include economic buffering, identity expression, social networking, enabling people to leverage economic value and social meaning, and connecting humans with nature. Three of these benefits—economic buffering, identity expression, and social networking—correspond with benefits identified in the informal economy literature. The informal economic activity benefits of cost-cutting and training do not appear as major themes in the NTFP literature. However, two benefits not identified in the informal economy literature—connecting humans with nature and enabling people to leverage economic value and social meaning—are frequently mentioned in the NTFP literature. In many cases, work associated with NTFPs provides several benefits simultaneously.

### **Economic buffering—**

The literature is rich in examples of how participation in NTFP activities provides rural and urban people alike with an economic safety net. In some cases, people turn to NTFPs during times of hardship or because they have few other economic options. For example, during the 1930s, many people in the Northwest gathered wild plants for subsistence use and sale to survive the depression (Fisher 2002, Richards and Alexander 2006, Robbins 1988). Nontimber forest product gathering continued to take place during the post-World War II era (Wiley 1966) and remains important today in many communities in the United States. People harvest and process NTFPs for supplemental income, as a full-time (and sometimes well-paid) occupation, or both. In some cases, individuals participate in NTFP activities out of economic need; in other cases they do so not out of need, but to obtain a little bit of

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**Benefits associated with participation in NTFP activities include economic buffering, identity expression, social networking, enabling people to leverage economic value and social meaning, and connecting humans with nature.**

extra income, holiday money, or to supplement the household larder and medicinal cabinet or to obtain materials for crafts.

In the Pacific Northwest economy, rural residents harvest wild huckleberries, wild mushrooms, and other forest products for income, subsistence, and recreation (Carroll et al. 2003, McLain 2000, Richards and Alexander 2006). Urban-based Asian and Latino immigrants harvest beargrass (*Xerophyllum Michx.*), wild mushrooms (numerous species), sword fern (*Polystichum munitum* (Kaulf.) C. Presl), and salal (*Gaultheria shallon* Pursh) (Hansis 1996, Richards and Creasy 1996, Spreyer 2004). Rural residents of contemporary northern Michigan harvest, process, and buy a variety of products, such as evergreen boughs, medicinal plants, and wild edibles to fill cyclical gaps in formal sector employment, shifting in and out of NTFP work as employment opportunities in other sectors expand and contract (Emery 2002). Urban dwellers of Korean and Japanese descent harvest ferns in California's forests (Anderson et al. 2000) and Hispano healers in rural Colorado gather many medicinal plants from local national forests (Spero and Fleming 2002). Mohawk Indians in New York (Shebitz and Kimmerer 2005) and African-Americans in South Carolina gather sweetgrass (*Hierochloe* R. Br.) for basketry (Dufault et al. 1993, Hart et al. 2004, Rosengarten 1994). Rural residents harvest a variety of medicinal plants, craft materials, and wild edibles in the Ozarks and Appalachians (Bailey 1999, Chamberlain 2000, Greene et al. 2000). Subsistence harvesting of medicinal plants, wild edibles, materials for crafts, and firewood remains important in many Native American economies in Alaska (Pilz et al. 2006, Schroeder 2002). These are just a few examples of the ubiquitous economic activity associated with NTFPs in the postindustrial United States.

Gathering is particularly important as a supplemental source of income and subsistence goods for older people, single women with children, and people with disabilities (Bailey 1999, Love et al. 1998, Richards and Alexander 2006). However, participation in economic activities associated with NTFPs is not restricted to low-income individuals and households. Exploratory research conducted as part of a national study of NTFP harvesters in 2002–2003, indicates that the individuals and families who rely on NTFPs for part or all of their livelihoods come from many income levels (Jones and Lynch 2002). Many family farmers in the Northeast, Southeast, and Midwest augment their farming income through NTFP activities such as maple syrup tapping, firewood cutting, making jam from wild berries, harvesting nuts, and harvesting pine straw (Gold et al. 2004, Teel and Buck 2002, Workman et al. 2003, Zinkhan and Mercer 1997). Nontimber forest products can be especially important for secondary household income earners who need an income source that can be tapped at a moment's notice.

Hinrichs' (1998) work points to the importance of NTFP activities in the efforts of households to develop diverse portfolios of economic activities that enable them to minimize the risks of relying too heavily upon a single income source. Hinrichs describes the logic underlying the economic portfolio approach:

Diversifying work activities and potential income streams often represents an effort to minimize risks. The goal is not so much to create a bigger pie, but rather to fill out the pie with wedges of different flavored pies; improving the odds that one wedge on the plate will sate a particular hunger. Low levels of supplemental income from a given activity may not matter in a given year, but in another year, even such low levels may be critical...the timing of the income, earmarking of this income for particular purposes such as taxes, home or farm improvements, leisure or even luxuries, and the seasonal use of household labor and land resources reflect a concern with livelihood, broadly understood, rather than absolute income (Hinrichs 1998: 527).

Emery (2002) observed that much NTFP activity requires little capital investment, making it relatively easy for participants to move in and out of such work as their needs shift. She argued that the flexibility inherent in subsistence activity and small-scale commercial exchange related to NTFPs enhances the economic importance of these activities in rural economies where the often limited formal sector employment opportunities are subject to strong contractions and expansions. She concluded that policies that maintain the low entry and exit costs associated with NTFP work located outside the formal marketplace would increase the overall resiliency of individuals and households in rural areas.

#### **Expression of cultural and individual identity—**

The intertwining of NTFP work and identity appears repeatedly as a theme in the NTFP literature for the United States (Carroll et al. 2003, 2005; Hinrichs 1998; Jones and Lynch, in press; Love et al. 1998; McLain 2000; Rosengarten 1994). Native Americans have long viewed participation in NTFP activities as an important mechanism for maintaining their cultural traditions. Many tribes have negotiated or taken legal action to ensure that tribal members retain or re-acquire access to NTFPs of cultural, as well as economic, significance (Carroll et al. 2003, Danielsen and Gilbert 2002, Fisher 2002, Lee 2002, London 2002, Richards and Creasy 1996, Schroeder 2002). Hinrichs (1998) found that some maple syrup producers in Quebec and Vermont participate in maple sugaring to develop and strengthen their identities and social status as rural producers. The importance of this goal is reflected in the high percentage of maple syrup producers who stay in business even

when “a strict cost accounting, at least in some years, might suggest shutting down” (Hinrichs 1998: 528). Some ginseng harvesters in West Virginia willingly participate in the harvest even when harvests are economically marginal because the enjoyment they get from spending time in the woods offsets their limited economic gains (Bailey 1999). Many commercial harvesters participate in NTFP activities because doing so enables them to retain a certain amount of independence and control over the structure of their everyday lives (Bailey 1999, Carroll et al. 2005, Hansis 1996, Jones 2002, Love et al. 1998, McLain 2000).

#### **Social network creation and maintenance—**

Nontimber forest products economic activities often serve as a means for participants to develop and maintain social networks. For example, Lee (2002) described the importance of the “cooler” ring system in maintaining social ties between rural and urban Native Alaskans. In the cooler ring system, urban-based Native Alaskans periodically transport coolers full of foods acquired in urban stores to kin and friends living in rural settlements. In exchange for the urban foods, the rural Native Alaskans gift the urban visitors with fish, game, and wild plants. The urban-based visitors often take time during their visits to harvest wild plants or other products to bring back to the city. Rural women in these networks use their contacts with urban-based relatives to help their family members find jobs in town or access health care systems. Such networks are equally important in the continental United States. Emery (1998) found that bartering and gifting accounted for almost two-thirds of the uses mentioned by harvesters for the products they gathered. Gifting is commonly practiced by many huckleberry harvesters in eastern Washington, with gifts of berries often reserved for special people or occasions (Carroll et al. 2003).

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**Some individuals participate in NTFP gathering activities to acquire for themselves or give to others products that would otherwise be beyond their economic means, that are not readily available on the market, or are imbued with particular social meanings.**

#### **Leveraging economic value and social meaning—**

Some individuals participate in NTFP gathering (and sometimes processing) activities to acquire for themselves or give to others products that would otherwise be beyond their economic means, that are not readily available on the market, or are imbued with particular social meanings. Leveraging differs from economic buffering to the extent that participants view the products as luxuries or something “extra” rather than as necessities. For example, at its annual gathering in 1998, the North American Mycological Association, the Nation’s largest amateur mycological society, sponsored an elaborate gourmet meal prepared by a world-reknowned chef, to which members contributed the wild fungi used in each course. The value of the prepared meal far exceeded the value of the wild mushrooms used in its preparation. When gifts to others are involved, leveraging can have both an economic and a social dimension. Gifts harvested by the givers themselves often carry social

significance that transcends their economic value, reflecting and heightening the high-end niche market dimension of informal economic activity observed by Sassen (1994) in urban settings.

### **Connecting humans with nature—**

One important benefit of NTFP gathering is not typically associated with other kinds of activities described in the informal economy literature: it provides an avenue for participants to develop and maintain intimate connections with and knowledge about nature (Jones and Lynch 2002). This kind of interaction permits individuals to acquire experiential understandings of the connections between and among forest species, as well as knowledge of how biophysical conditions affect plant and fungal reproductive and growing behaviors. Indeed, many harvesters cite this feeling of connectedness to the larger biophysical world as a motivation for participating in NTFP activities even when it is not economically rational for them to do so (Bailey 1999, Jones and Lynch 2002).<sup>7</sup>

## **Factors Affecting Participation in Nontimber Forest Product Economic Activities**

As discussed in “Overview of Literature,” two key factors that influence whether informal economic activity is beneficial or harmful to the people engaging in it are the participants’ labor status and their access to the factors and/or means of production needed to engage in informal economic work.<sup>8</sup> A comparative analysis of the floral greens and wild mushroom industries in the Pacific Northwest illustrates how labor status, access to the factors and means of production, and the quality of economic opportunities are intertwined in the NTFP sector.

Ballard (2004), Brown et al. (2004), Lynch and McLain (2003), and Spreyer (2004) described how in the 1990s, a de facto wage labor system gradually replaced the largely independent self-employed harvester workforce on the Olympic Peninsula in western Washington. From the 1920s through the 1980s, most floral

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<sup>7</sup>Emery et al. 2006 documented this same phenomenon among NTFP harvesters in Scotland.

<sup>8</sup>The three classic factors of economic production include land, labor, and capital; some economists now include entrepreneurship and/or human capital as additional factors of production. Means of production include such things as tools, equipment, infrastructure, and machines. We use the term production here in the broad sense of human work or actions that add value (economic, cultural, and/or spiritual) to NTFPs, rather than the narrow sense of planting and harvesting crops. This broad definition takes into account the multiple ways in which people obtain NTFPs: Some NTFPs are harvested in a more or less “wild” state, others exist in the “wild” but are tended by humans to improve their productivity or provide products of a desired quality, and still others are deliberately planted and cared for.

greens harvesters were nonindigenous people working primarily as self-employed harvesters who exercised choice in where they could sell their products (Spreyer 2004). Between 1950 and 1980, strong competition among the region's dozens of brush sheds (wholesale buyers of floral greens) coupled with a steady and strong European demand for the Pacific Northwest's floral greens kept prices to the pickers relatively high (Spreyer 2004). In the late 1980s, Canadian and Latin American suppliers emerged as strong competitors in the global floral greens market driving down producer prices (Spreyer 2004). By the mid-1990s, a handful of companies based in western Washington and linked to each other through kinship ties had cornered most of the Pacific Northwest's export market (Spreyer 2004). By the end of the 1990s, Latino harvesters made up a large portion of the Pacific Northwest floral greens workforce (Lynch and McLain 2003, Spreyer 2004). Although most Latino harvesters are nominally self-employed, their labor status is contested in Washington state's courts (Lynch and McLain 2003). According to Washington state labor regulations (RCW 51.08.195), floral greens harvesters who call themselves independent contractors are truly self-employed only if they have a choice in where they can sell their product; if they are obligated to sell their product to the brush shed operator who holds the lease on the land they pick, the law considers them shed employees (Draffan 2006). Interview and participant observation data indicate that many nominally self-employed Latino harvesters have little choice in where they can sell their product (Ballard 2004, Lynch and McLain 2003, Spreyer 2004). In effect, they operate as de facto employees of the brush sheds under working conditions that strongly resemble those of downgraded labor in the textile industry and manufacturing sectors.<sup>9</sup>

The downgraded labor status of Latino floral greens harvesters in the Pacific Northwest contrasts starkly with the labor status of the predominantly Southeast Asian and Euro-American wild mushroom workforce in the same region. McLain's (2000) and Jones' (2002) studies of the wild mushroom industry in Washington and Oregon indicated that most Euro-American pickers participate in the harvest either as truly self-employed individuals or small (often kin-based) groups.<sup>10</sup> Richards

<sup>9</sup>The work of Emery et al. (2002) with galax (*Galax aphylla* (Poir.) Brummitt) gatherers in North Carolina suggested that a similar demographic shift from a largely Euro-American to a largely Latino harvester population is taking place in the Southeastern United States. However, the galax permitting system creates conditions analogous to the Pacific Northwest mushroom harvest labor structure. At the time that this study was conducted, the majority of galax harvesters were truly self-employed.

<sup>10</sup>Several mushroom buyers reportedly sought to bring in Asian crews working as de facto employees in the late 1980s and early 1990s, but these efforts failed when crew members realized they could make more money by working as independent pickers.



and Creasy's (1996) study of wild matsutake (*Tricholoma magnivelare*) harvesters in southern Oregon and northern California describes Southeast Asian matsutake harvesters as working primarily as members of extended family groups. They do not state whether these groups or the individuals in them operate as self-employed individuals or family businesses. No systematically collected data exist on this topic. However, based on many hours of participant observation at mushroom buying stations in the Pacific Northwest during the late 1990s and early 2000s, we believe that it is likely that most Southeast Asian pickers operate as self-employed individuals or family businesses rather than as de facto employees of mushroom buying companies.

A comparison between the floral greens and wild mushroom sectors indicates that control over the factors and means of production strongly influences whether harvesters participate as self-employed entrepreneurs or as de facto employees (Brown et al. 2004, Lynch and McLain 2003, Spreyer 2004). To make a living, floral greens harvesters need access to harvesting sites and to transportation. Many private landowners, the Washington State Department of Natural Resources, and some U.S. Department of Agriculture (U.S. Forest Service) offices grant access to floral greens harvesting sites through short- or long-term leases covering very large areas. These leases are generally too expensive for individual pickers to obtain, so buying shed operators or their representatives purchase the majority of them. Shed operators allow pickers to harvest floral greens on their leased lands with the understanding that the pickers will sell the harvest only to them. Over time, the most productive floral greens leases, which are disproportionately located on private and state lands, have become concentrated in the hands of a small number of shed operators (Spreyer 2004). Floral greens pickers now have limited options for obtaining legal access to harvesting sites and exercise little choice in where they can sell their product.

In contrast, many private landowners, as well as the Washington State Department of Natural Resources, the Oregon Department of Forestry, and the U.S. Forest Service grant access to wild mushroom sites through the use of nonexclusive, relatively inexpensive harvesting permits. Most of these permits are priced sufficiently low that even individuals with very low incomes can afford to acquire them.<sup>11</sup> Unlike the brush shed operators, wild mushroom buyers rarely have much

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**A comparison between the floral greens and wild mushroom sectors indicates that control over the factors and means of production strongly influences whether harvesters participate as self-employed entrepreneurs or as de facto employees.**

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<sup>11</sup> For example, in Oregon permits for harvesting morels (*Morchella* spp.), chanterelles (*Cantharellus* spp.), and boletes (*Boletus* spp.) are \$2 per day or \$100 per season. Whether or not wild mushroom permit prices are appropriate for economic conditions differs by area and circumstances. For example, the \$300 annual permit required to harvest matsutake mushrooms on national forests in central Oregon can be reasonable in a good season but unreasonable when the crop is poor or when market prices are low.

control over who has access to mushroom harvesting sites. As a result, they cannot use control over access to force pickers to sell to them.

Floral greens and wild mushroom harvesters also must have access to a motorized vehicle and the means to pay for the gas and maintenance needed to keep it in good working condition. In the floral greens sector, many pickers are recently arrived immigrants from Mexico or Central America who typically lack the means to purchase or maintain a vehicle. These pickers rely upon a transportation system modeled after the “raitero” system in the agricultural sector to travel to and from harvesting sites (Lynch and McLain 2003). In the raitero system, a vehicle owner (the raitero)—often a Latino immigrant who has been in the country for several years—subleases land with floral greens on it from one of the major brush sheds. The raitero transports harvesters who cannot afford a vehicle to the land he has leased. Harvesters who work under a raitero pay him for their transportation and typically are also obligated to sell their product to the shed that holds the raitero’s lease. The raitero system is beneficial in that it provides a way for harvesters to earn money without having to invest upfront in a vehicle, gas, or repairs. However, the system is also rife with opportunities for abuse, particularly for undocumented immigrants who live in fear of being reported to the immigration service.

The situation is quite different in the wild mushroom sector.<sup>12</sup> Most Euro-American mushroom pickers either have their own vehicle or travel with other pickers who exercise choice in where they sell their mushrooms. Southeast Asians are more likely to share transportation but generally they do so as part of an extended family unit. Unlike the Latino harvesters who work within the raitero system, Southeast Asian pickers who share transportation are not obligated to sell their mushrooms to a company selected by the vehicle owner. In the larger mushroom camps, it is not uncommon for pickers traveling in the same vehicle to sell their mushrooms to buying stations operated by different buying companies.

### Combining Informal and Formal Economic Activities in the Nontimber Forest Product Sector

In the informal economic system, literature reveals that people often combine informal and formal economic activities. Similarly, commercial NTFP harvesting is often part of a mix of formal and informal sector activities. An example from

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<sup>12</sup> Since the mid-1990s, Latinos have also become much more active in the commercial wild mushroom harvest. However, they make up a substantially smaller portion of the mushroom picker population than of the floral greens picker population.

the Pacific Northwest illustrates this theme. One family on the Olympic Peninsula has two adults and two children. The father is a retired logger with a pension. Now that he is retired, he harvests mushrooms commercially for 3 months out of the year. To augment the family's food supply, he hunts deer and elk and fishes for salmon. All of these activities take place partly within the formal economic system, in that commercial mushroom gathering and subsistence hunting and fishing are regulated by the state. The mother has always been a housewife doing the unpaid but necessary work of preparing food, raising children, sewing clothes, and more. To bring extra cash into the home, she operates a fruit and vegetable stand supplied with produce from the family's 5-acre parcel. After the father got into picking mushrooms commercially, the mother began to buy mushrooms from harvesters to sell to a wholesaler in Seattle. The children assist the parents in the harvesting and buying of mushrooms and with supplying and running the roadside stand. Additionally, one of them cuts firewood to sell to passing tourists and to take into larger towns on the peninsula. This family's scenario of multiple sources of income obtained through participating in both formal and informal economic spheres is typical of families involved in commercial mushrooms.

Emery's (1998) discussion of several NTFP commodity chains illustrates the ways in which employment status and involvement in the formal and informal sectors changes as one moves along a chain from work in the forest to processing, shipping, and distribution. The gatherers and buyers in the five commodity chains she examined all worked as self-employed entrepreneurs, either as individuals or in very small groups. However, buyers typically hired hourly employees to process and ship materials. The exception was for grave blankets made from evergreen boughs, which buyers paid home-based self-employed workers by the piece to assemble. She observes that, "The structure of the relationships between buyers and other actors moves along a continuum from the informal to the formal economy as a chain progresses" (Emery 1998: 123). One implication of this phenomenon is that NTFP policymakers will need to pay particular attention to the structure and roles of informal economic activity in the livelihoods of harvesters and initial processors to minimize the occurrence of inadvertently negative economic impacts at the forest end of the NTFP commodity chains.

## Pressures to Formalize the Nontimber Forest Product Sector<sup>13</sup>

For most of the 20<sup>th</sup> century, most state and federal agencies chose not to regulate or not to enforce regulations governing subsistence uses of NTFPs and activities taking place in the first stages of NTFP commodity chains, such as gathering, buying and sorting of raw materials, and preliminary processing. The practice of turning a blind eye to these activities extended to resource tenure systems, with the result that harvesters across much of the United States enjoyed de facto open access to many NTFPs on public land until the 1980s (McLain and Jones 2005). Some states sought to regulate private property rights to NTFPs in relatively high demand, such as ginseng, evergreen boughs, and floral greens (Carlson 1986, Emery and Pierce 2005, Spreyer 2004), often by relying on state laws governing trespass and possession and transportation of NTFPs. In western Washington, the state's limited capacity to enforce these rules created de facto open access conditions on much private industrial timberland (Spreyer 2004); it is unknown how prevalent such conditions were in other areas of the United States.

Starting in the mid-1980s, rising consumer demand for NTFPs coupled with growing interest in conserving biodiversity led to pressure to bring increasingly larger portions of the NTFP sector under nation-state control, both through the development of new regulations and stricter enforcement of existing regulations (c.f., Alexander and Fight 2003, Antypas et al. 2002, Chamberlain et al. 2002, McLain and Jones 2005, McLain et al. 1998).<sup>14</sup> Recent efforts to formalize the NTFP sector are most extensively documented for the Pacific Northwest. Federal and state agencies that have expanded regulations (and enforcement efforts) governing access to NTFPs in the Pacific Northwest since the early 1990s include the U.S. Forest Service; the U.S. Department of the Interior, Bureau of Land Management, and National Park Service; the Washington Department of Natural Resources, and

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<sup>13</sup>This section focuses on pressures to expand the nation-state regulatory system to include a much larger portion of the NTFP sector than has historically been included. We define the nation-state in the U.S. context as including federal and state governance structures, including semiautonomous political and administrative subdivisions of the states, such as counties, townships, and parishes. Much of the discussion draws from the authors' field research and participant observation of policy from 1994 onward. Much of this work was done in the Pacific Northwest, but it also includes a year-long (2002-2003) ethnographic study of NTFP management that included interviews with harvesters, private landowners, and public land managers in the Southwest, central Rockies, Ozarks, the Southeast (including Appalachia), the mid-Atlantic States, the Northeast, and the Great Lakes region, as well as the West coast states.

<sup>14</sup>The literature on NTFPs in the United States is insufficiently developed to permit a comparison of how state policies differ in their approach to informal economic activity or how local contexts mediate the distribution of costs and benefits of formalization (i.e., studies along the lines of Warren's (1994) study of regional differences in Italy).

the Oregon Department of Forestry. Additionally, Washington and Oregon have expanded state laws and regulations governing enforcement of property rights over NTFPs located on privately held lands, and have also expanded reporting and record-keeping requirements for NTFP dealers.<sup>15</sup> The state of Montana followed suit in 2005. Washington stepped up enforcement of state labor laws in the floral greens sector in the early 2000s (Lynch and McLain 2003). Although much less extensively documented in the scientific literature, efforts to extend nation-state control over NTFPs, particularly with respect to regulating access to resources, are also taking place in other parts of the United States (c.f., Anderson et al. 2000, Bilger 2002, Chamberlain et al. 2002, Emery and Pierce 2005).

In the Pacific Northwest, some proponents of formalization have called for entirely new laws or regulations aimed specifically at NTFP activities or at a particular NTFP industry; others have advocated for stricter enforcement of laws and regulations that already apply to NTFPs but that have been only weakly enforced. A variety of rationales underlie the calls for expanding nation-state control over the NTFP sector. Some proponents of formalization define the policy problem as one of ecological sustainability, arguing that more restrictive harvesting policies and stricter enforcement are needed to protect forest ecosystems and NTFP species from overharvesting. Others see the policy issue as one of maintaining social order and advocate in favor of greater formalization primarily as a means to reduce unauthorized harvesting of raw materials and to decrease conflicts on the ground. Still others frame the problem as a question of economic and social injustice, and point to the need for stricter enforcement of existing labor and workplace safety laws to ensure that the benefits of economic activity associated with NTFPs are fairly distributed. Many proponents of increased regulation cast the problem as a “free rider” issue, accusing NTFP businesses of not paying their fair share of the taxes and licensing fees, which fund the Nation’s social support systems. For medicinal and food products, some proponents of regulation cite the potential health dangers associated with some of the products and call for expanding or more strictly enforcing food and drug safety rules. Some stakeholders define the issue as one of unfair business practices and assert that stricter enforcement of existing regulations will

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<sup>15</sup> Some of the pressures for expanding regulations and/or increasing enforcement of existing nation-state regulations governing access over NTFPs on private and public lands are efforts of the owners and/or managers to retain some value for NTFPs. However, interviews with private and state land managers in western Washington in 1994 and 2002 (Lynch and McLain 2003) suggest that the desire on the part of private landowners to reduce risks of vandalism, illegal dumping of waste, and legal liability for injuries incurred by people traveling or working on their property may be equally (and sometimes more) important factors.

create a more level playing field between those who comply with the law and those who do not. Most of these problem definitions are not mutually exclusive, and proponents of formalization often put forth several problem definitions simultaneously, together with suggested policy solutions. Common to all of these positions is the underlying belief that bringing the NTFP sector more fully under the control of the nation-state is the best way to address the perceived problems. However, in the absence of methods and systems for measuring the social, economic, and ecological costs and benefits of changing the existing configuration of informal and formal economic activity within the NTFP sector, it is impossible to know whether this widely held belief is justified.

## Policy and Research Implications

The most critical weakness of government policy with respect to the informal economy is one of perception of the informal economy rather than one just of policy design (Devey et al. 2006).

The informal economy cannot be regulated away, nor, as the literature synthesized in this report indicates, is it necessarily desirable to do so. Resolving or avoiding many of the regulatory fractures evident in postindustrial rural economies requires the development of much better understandings of the full range of economic structures and processes that shape the distribution of economic costs and benefits. In this section we mention the kinds of information needed for NTFP policies in particular, followed by that needed for natural resource and economic development policy more generally.

### Nontimber Forest Product Policy and Research

Resource and economic development policymakers and managers can take the following steps to incorporate understandings of the informal economy when developing or advocating for policies that directly or indirectly affect NTFP use, trade, and management. These steps will need to be taken in a variety of policy venues (e.g., labor, tax, natural resources, health care, among others) to achieve the intended effects.

#### **Sift out the potential impacts of regulation—**

Emery and Pierce (2005) argued that policies of public and private landholders in much of the Eastern United States undermine subsistence activities, often inadvertently, and at sometimes significant social, economic, and nutritional cost to rural individuals and households. In contrast, the formalization of subsistence gathering under the Alaskan National Interest Land Conservation Act of 1980 protected

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**The informal economy cannot be regulated away, nor, as the literature synthesized in this report indicates, is it necessarily desirable to do so.**

subsistence rights but with the unintended consequence of virtually eliminating the possibility of even small-scale commercial NTFP harvesting (whether in the informal or formal sector) on the Tongass and Chugach National Forests. In western Washington's floral greens sector, formalization of resource access on state lands during the early 1990s led to requirements that harvesters pay hefty permit or lease fees for access to floral greens on state-owned lands. These fee requirements inadvertently made it economically infeasible for most intermittent and part-time gatherers to continue harvesting floral greens (Lynch and McLain 2003). Although the state may have gained some additional income from imposing such fees, it is unclear whether that additional income offsets the social and economic costs to the low-income retirees and single mothers (many of whom rely on state subsidies to survive) who could no longer afford to participate in the harvest. Policies that do not recognize the heterogeneity in the informal economy risk inadvertently resulting in poverty-reinforcing exclusions. To obtain the information needed to analyze the potential impacts of new regulations or stricter enforcement of existing regulations for NTFPs, one can ask the following questions.

- What is the nature and extent of informal economic activity associated with the harvesting, processing, and exchange (market and nonmarket) of the product(s) targeted for policy reforms?
- How do individuals, households, and firms engaging in NTFP activities combine informal and formal economic activities to construct and maintain the economies of households and businesses?
- How are labor relations structured at different points along the relevant commodity chain(s)?
- How do property rights and shifting cultural understandings of what constitutes public and private goods affect how people engage in informal economic activities associated with NTFPs and the ways in which costs and benefits associated with NTFP activities are distributed?
- What are the key inputs and resources needed at different points along the relevant commodity chain, and how are these distributed among the participants in the commodity chain?
- How do NTFP activities contribute to the formation and maintenance of cultural capital in rural communities, and how do policies aimed at supporting the growth of niche NTFP markets influence existing patterns of NTFP access and trade?
- How do the answers to the questions above differ along the dimensions of gender, ethnicity, social class, age, disability status, citizenship status, and income level?

Although we frame these questions in the context of the NTFP sector, they are equally valuable in understanding informal economic activity in other economic sectors.

**Recognize the importance of place and the need for place-specific policies—**

In Italy, state support for informal economic activity has resulted in very different social and economic outcomes for the country's northern and southern regions (Warren 1994). Warren attributes the different outcomes for the same nation-state policies to the differences in cultural and economic contexts in which these policies were applied. The take-home lesson for policymakers in the United States is that regional power relations, institutional organization, and social relations likely will influence the outcomes of policies aiming to support or discourage informal economic activity. This in turn highlights the importance of developing place-based policies, rather than one-size fits all policies.

**Provide carrots not just sticks—**

In most economic sectors, the flip side of nation-state regulation (sticks) is nation-state support (carrots). For example, the federal government supports the agricultural, timber, and grazing sectors through direct subsidies (e.g., road building, below-market value grazing fees on public lands, and payments to encourage farmers to refrain from growing certain crops) and indirect subsidies (e.g., research and extension). Few such programs exist for NTFPs.<sup>16</sup> Largely absent in the calls for NTFP policy reform are the economic support mechanisms that in other industries offset negative consequences that are sometimes associated with regulation. Additionally, most economic and technical assistance programs for NTFPs require that beneficiaries operate in the formal economy, making them inaccessible to many microenterprises. Most NTFP businesses are microenterprises (Alexander et al. 2002), and thus have difficulty qualifying for economic assistance for conducting marketing research, obtaining inexpensive credit, and the like. One promising approach for expanding the capacity of federal and state economic development programs to assist microenterprises is to structure programs so that businesses can enter the formal sector in increments (Sassen 1994), rather than requiring them to do so instantaneously. A caveat associated with using the incremental upgrading approach in the NTFP sector is that many NTFP activities have historically taken place only in the informal sector and initial resistance to even incremental upgrading is likely to be strong. Irarrazaval's work on the use of upgrading approach for

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<sup>16</sup>Some exceptions include maple syrup and Christmas tree production.



microenterprises in Chile, businesses that had not previously functioned in the formal sector, suggests that some businesses will participate in such programs.

Although not all NTFP businesses will consider it in their best interest to enter the formal sector, such policies will benefit those who would like to but who lack the financial and/or technical capacity to do so. To tailor incremental upgrading to the NTFP sector (or sectors), research that answers the following questions is needed.

- What economic assistance programs exist for NTFP businesses?
- What are the barriers to the participation of NTFP businesses in such programs?
- Which programs have been successful at reaching NTFP businesses, and what factors contributed to this success?
- What approaches have policymakers in other sectors taken to upgrade participation in the formal sector incrementally?
- What are the characteristics of successful incremental upgrading programs?
- What hinders the success of such programs?

Because the answers to these questions are likely to differ by geographic region, studies designed to answer these questions should include cross-regional comparisons. The information obtained from research designed to answer these questions would provide valuable insights for crafting workable “carrots” for NTFP businesses.

## **Natural Resource and Rural Economic Development Policy and Research**

The recommendations outlined above are applicable to natural resource and rural economic development policy more generally. Crafting policies that acknowledge the importance of activities taking place in the informal sector also requires a shift in the topics and methods used in studies of rural economies. Specifically, more information is needed about how, where, why, and when rural people engage in informal economic activities, as well as what the consequences are for social justice, social and economic well-being, and ecological sustainability. Areas of research that we believe merit priority consideration are discussed below.

### **Prioritize research on the relationship between labor status, access to resources, and ecological conditions—**

The ways in which people participate in informal economic activities are closely related to the economic and social resources they have at their disposal. As a rule,

individuals, households, and firms with more resources have more options and can leverage their resources to participate more effectively in informal economic activities than those with fewer resources. A need exists for studies that examine more closely the relationship between labor and resource access in rural areas, as well as for research on economic development policies that have been effective in minimizing the emergence of de facto wage labor conditions. The informal economy literature sheds little light on whether or how participating in the informal economy affects ecological conditions. Recent research in the floral greens sector suggests the possibility that in some circumstances policies encouraging de facto wage labor systems may have negative ecological, as well as social and economic, consequences (Ballard 2004, Spreyer 2004). Additional studies that examine the links between labor status, access to resources, and ecological conditions are needed to determine whether this relationship holds true in other circumstances.

**Build in support for community capacity building—**

The operation, support, and role of the informal economy is closely connected to community and network-related issues. Policy responses that address human capital development from an individual standpoint are inadequate, and need to be accompanied by support for community capacity and development. An example of such an approach is the Social Research and Demonstration Corporation's (SRDC) Community-Based Work project in Nova Scotia (Gyarmati et al. 2007), which links the formal and informal economies through a focus on the local communities that support them. By recognizing that networks and communities are key factors in how the informal and formal economies intersect, the policy options developed and implemented through the project have resulted in higher rates of full-time employment, increased earnings, and a reduction in the demand for unemployment compensation for chronically underemployed populations. A key feature of the project is its emphasis on developing social capital among subpopulations with historically weak links to informal and formal networks that provide access to resources needed to obtain and keep full-time employment in the formal sector. An unanticipated side benefit of the program has been an increase in formal volunteerism by project participants.

**Develop and refine economic indicators for monitoring participation in informal economic activity—**

Scientists have only recently begun to include indicators for measuring and tracking informal economic sector conditions in national forest planning processes. One planning venue where social scientists have argued strongly for the need to create such indicators is the Roundtable for Sustainable Forestry, a long-term national

planning group that emerged out of the 1994 Montreal Process, an international forum for the establishment of criteria and indicators for sustainable temperate and boreal forest management (USDA FS 2004). Informal economic activity is addressed (albeit in a limited way) under Criterion 6, the maintenance and enhancement of long-term multiple socioeconomic benefits to meet the needs of societies. A number of Montreal Process indicators (e.g., those indicators related to production and consumption, investment in the forest sector, employment and community needs) could be structured to explicitly include informal sector conditions, but only one indicator (Indicator 47, area and percentage of forest land used for subsistence purposes) does so. Scientists who participated in developing several of the key socioeconomic indicators note that the lack of national-level data on informal economic activity seriously limits the ability to accurately monitor key socioeconomic indicators of sustainable forest management (Alexander 2004, Emery et al. 2004). The social networks, organization of work, structures of regulation, and institutional structures are also important foci for indicator development. They are usually inferred from individual-level information, but this approach has been largely inadequate to the task. Developing such indicators and integrating them into data collection is therefore of high priority, and will require collaboration between researchers and policymakers.

**Integrate household level analyses into macroeconomic analyses—**

Federal and state economic accounting systems measure only a portion of the economic activity that individuals and households engage in because they fail to capture the informal economic activities. Research methods that can capture these values need to be tested and implemented. Data from such studies would help explain how individuals and households in rural communities successfully piece together viable livelihoods in good times and bad. These data would also be useful in the development of rural economic assistance programs to strengthen desirable informal economic activity. Rural sociologists have had some success at capturing rates and extent of participation in informal economic activity at substate levels by combining qualitative and survey research methods (Jensen et al. 1995, Nelson 1999a, Slack 2007, Tickamyer and Wood 1998). These efforts, however, are not integrated into ongoing statewide economic data-gathering processes. They provide information about informal economic activity only at one point in time and over relatively small areas. Reimer's (2006) work on the informal economy in Canada is one possible model for moving beyond the substate level. He analyzed household time budget data gathered through Canada's General Social Survey, which is conducted every 6 years, to estimate participation levels in informal economic activities on a national scale. However, as Reimer noted (2006: 43), time budget

information in itself is insufficient as it cannot be used to “identify the variety of exchanges, commitments and attitudes that go to make up the informal economy.” He emphasized, as do most researchers who study informal economic activity, the importance of combining survey work with ethnographic, indepth interviews to develop accurate understandings of such activity.

## Conclusion

Far from being a relic of the past, informal economic activity is both a critical and expanding component of the U.S. economy. Much activity (though not all) that takes place in the informal sector contributes positively to the well-being of individuals, households, and society as a whole. By understanding the heterogeneity and the economic and social benefits of informal economic activity, as well as how individuals and households construct viable livelihoods through a mix of informal and formal economic activities, policymakers can craft natural resource and economic development policies that take these factors into account. The strong trend toward informalization of previously formalized sectors, coupled with widespread disinvestment in government regulatory and social welfare programs, provides additional impetus for funding research that examines the dynamics of informal economic activity in postindustrial rural America.

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**Far from being a relic of the past, informal economic activity is both a critical and expanding component of the U.S. economy.**

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## Appendix—Overview of Informal Economy Literature Reviewed

<b>Study</b>	<b>Nature of data</b>	<b>Location</b>	<b>Time period</b>
Adams 1994	Social history—case study including face-to-face interviews, direct observation, archival analysis	Union County, IL	1900–1990
Aponte 1997	Literature review	United States	1985–1995
Brown et al. 1998	Random sample survey, face-to-face interviews with 334 individuals	Two communities in Mississippi	1994–1995
Castells and Portes 1989	Comparative analysis of national economic census data	Latin America and the United States	1950–1980s
Centeno and Portes 2006	Literature review	International (including developing and postindustrial economies)	Late 20 <sup>th</sup> century, early 21 <sup>st</sup> century
Cohen and Stephens 2005	Ethnography based on participant and direct observation, unstructured interviews, and semistructured interviews (20 individuals)	Fayette County, PA	Late 1990s to early 21 <sup>st</sup> century
Dickinson 1995	Social history—regional case study based on analysis of archival data, including government statistics	Mid-Atlantic region, USA	1830–1993
Edgcomb and Thetford 2004	Qualitative research, purposive sample, face-to-face open-ended interviews with 42 individuals	Western Nebraska	Early 2000s
Epstein 1994	Law review essay; illustrative case examples	International, developing and postindustrial societies	Late 20 <sup>th</sup> century
Felt and Sinclair 1992	Household survey, 554 individuals in 250 households; cluster sampling, face-to-face interviews	10 communities in northern Newfoundland	Late 1980s
Fernandez-Kelly and Garcia 1989	Comparative case study of immigrant communities; methods not described	Los Angeles, California, and Miami, Florida	1980s
Halperin 1996	Ethnography; methods not described	Communities along the Ohio-Kentucky border	1980s
Henry and Sills 2006	Literature review and random sample survey, telephone interviews of 751 respondents	Michigan (statewide)	2005
Irrarrazaval 1997	Census of businesses in one community, plus indepth face-to-face interviews with 10 business operators	Municipality of La Granja (Santiago, Chile)	Early 1990s
Jensen et al. 1995	State-sponsored survey, random stratified sample of 505 women from low-income households	All nonmetropolitan counties in Pennsylvania	1990–1991
Leonard 1998	Historical analysis; cross-national literature review	Western Europe and the United States	Late 20 <sup>th</sup> century

<b>Study</b>	<b>Nature of data</b>	<b>Location</b>	<b>Time period</b>
Levitan and Feldman 1991	Qualitative case study; face-to-face interviews with 23 randomly selected rural households	Schuyler County, New York	1980s
Lomnitz 1988	Literature review and reconstructive ethnography	Focus on Georgia Republic in the Soviet Union	Mid-20 <sup>th</sup> century
Losby et al. 2002	Literature review	International with U.S. focus	Late 20 <sup>th</sup> century
Marcelli et al. 1999	Random sample household survey of 558 individuals	Los Angeles (Mexican-born individuals only)	1994
McInnis-Dittrich 1995	Qualitative case study, open-ended and multiple face-to-face interviews with 23 low-income women; supplemented with participant observation within the community	One county in Kentucky	Late 20 <sup>th</sup> century
Narotzky 2000	Ethnographic case study, methods not described	Vega Baja del Segura (Spain)	1979–1980; 1995
Nelson 1999a and 1999b	Qualitative research including face-to-face interviews with 117 individuals representing 81 households; random sample telephone survey of 158 households	Unspecified rural county in Vermont	Late 20 <sup>th</sup> century
Overton 2000	Social history, methods not described	Newfoundland	20 <sup>th</sup> century
Portes and Haller 2005	Literature review	International, developing and postindustrial economies	Late 20 <sup>th</sup> century
Ratner 2000	Literature review	U.S. focus	Late 20 <sup>th</sup> century
Reimer 2000, 2006	Statistical analysis of time budget data from Canada's General Social Surveys; 9,817 respondents for 1992 and 10,749 for 1998	Canada (nationwide)	1992, 1998
Sassen 1994, Sassen-Koob 1989	Ethnography and secondary data analysis; face-to-face interviews with 30 homeworkers and 30 shopowners	New York City (four of five burroughs); secondary data for the states of New York and New Jersey	Late 20 <sup>th</sup> century
Schneider 2002	Statistical analysis of economic data from 110 countries	International	Late 20 <sup>th</sup> century
Slack 2005, 2007	Random sample telephone survey of 476 households; indepth face-to-face interviews with 26 low-income households	Nonmetropolitan counties in Pennsylvania	2003–2004
Snyder 2003	Qualitative research including face-to-face interviews with 50 self-employed individuals	East Village (New York City)	1999–2001
Smith 1990	Literature review, with focus on 14 case examples	International, including developing and postindustrial societies	Late 20 <sup>th</sup> century



<b>Study</b>	<b>Nature of data</b>	<b>Location</b>	<b>Time period</b>
Stepick 1989	Qualitative community case study, including long-term participant observation and longitudinal study of Cuban and Haitian refugees	Haitian and Cuban refugee communities in Miami, Florida	Mid to late 20 <sup>th</sup> century
Thomas 2001	State-of-the-knowledge essay	International	Late 20 <sup>th</sup> century
Tickamyer and Wood 1998	Random sample telephone surveys of individuals in each of 3 years, sample size was 649 in 1994, 675 in 1995, and 663 in 1996	Kentucky (statewide)	1994, 1995, and 1996
Tuominen 1994	Analysis of national census data	United States	Mid to late 20 <sup>th</sup> century
Warren 1994	Regional case study, methods not described	Italy	Late 20 <sup>th</sup> century
Weigand 1992	Literature review and analysis of economic and tax statistics	United States	Mid to late 20 <sup>th</sup> century
Zlolinski 1994	Ethnography, including intensive observation of 22 low-income Mexican immigrant families	San Jose, California	1991–1993



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