Abstract The marginality concept calls for the integration of poverty concepts with those of social exclusion, geography, and ecology. The difficulties in reaching people at the margins of systems are explained by a set of distances, (i.e., physical distances such as being located in remote or harsh environments), social distances (being excluded, discriminated against, or not having rights or access to services or opportunities), but may also be related to technological and institutional infrastructure deficiencies. This chapter provides an overview of the concept of marginality and offers a synthesis of the findings of all the chapters in this volume. A review of policies intended to reduce marginality suggests that none of the marginality determinants need to be accepted as long term. Coherent policies and actions, however, need to match the systemic causality of marginality in order to be effective.

Keywords Marginality • Poverty • Economic policy • Exclusion • Ecology • Environment

1.1 Why Focus on Marginality?

There has been significant progress in the reduction of poverty in the developing world over the past few decades. The prevalence of income poverty defined at US$1.25/day per capita declined from 43 to 22 % from 1990 to 2008 according to information presented in Ahmed et al. (Chap. 6 this volume). This progress is the result of various factors, including economic growth reaching the poor and in many countries there has also been increased attention to social protection
policies. Most of this progress was homegrown, but both factors—growth and social protection—were somewhat assisted by development aid (Sachs 2006). A simplistic extrapolation of the declining trend in overall poverty prevalence by about one percentage point per annum over the past 20 years would automatically misguide us with the expectation that absolute poverty could end within two decades. However, it would be more realistic to assume that any further reduction of the remaining poverty will be more protracted. The diversity of people far below that income poverty line (i.e., the extremely poor) is high. Economic growth alone may contribute less to poverty reduction at societal margins, both at the bottom end of the income distribution and in geographically remote areas. Examples of the latter are revealed already by the persistence of poverty in marginal areas of China and Indonesia (see Zhu Chap. 15 and Pangaribowo Chap. 14 this volume). More than half of the world’s poor now live in large, emerging economies that happen to be members of the economically leading G20 nations. The bottom billion has shifted and no longer only lives in the poorest and often fragile states (Collier 2007).

On the other hand, the capacities to design and implement social protection policies have become more widespread over the past two decades and will assist with effective poverty reduction, even among the extremely poor (von Braun et al. 2009). Understanding the constraints and behavior of the marginalized poor is essential for effective program designs, and there has been research progress in that domain too, partly through randomized control trials of large and small development investments (Adato and Hoddinott 2010; Banerjee and Duflo 2011). Addressing extreme poverty effectively is, however, not just a matter of growth and targeted transfer policies, but also a matter of addressing structural forces such as exclusion, discrimination, and the deprivation of rights; constrained access to services and technology; governance deficiencies and corruption; and the forces of ecological change that are increasing the vulnerability and eroding the resilience of the poor, many of whom depend on natural resources at the margins in rural areas or live in high risk margins of urban areas. Some of these issues can be further illuminated by experimental research, but many are not open to that possibility due to the rigidities and scale of some of these structural forces.

A broader perspective regarding poverty reduction and development policies and programs is called for, where the nexus of poverty, environmental change, and development is addressed. This entails understanding the increasingly context-specific determinants of the serious poverty problems at societal and environmental margins. This is where the marginality concept and framework come into play. The set of actors with the potential for engaging in overcoming marginality has become more diverse and promising in strength. Besides government (central and increasingly local) and civil society actors (which in addition to charities, are often more focused on developing capacity, skills, and rights), the private sector is much more deeply involved along all elements of value chains and in service delivery (not just with corporate social responsibility approaches, but also with inclusive business and shared value approaches).
1.2 The Concept of Marginality

“Marginality” is the position of people on the edges, preventing their access to resources and opportunities, freedom of choices, and the development of personal capabilities. Being excluded, not only from growth but also from other dimensions of developmental and societal progress, is an indication of the extremely poor being at the margins of society and in many cases marginality is a root cause of poverty (von Braun et al. 2009). Depending on which aspects of marginality are being considered to explain extreme poverty, millions of people, especially in Sub-Saharan Africa (SSA) and South Asia, belong to those who are marginalized and living in or coming from marginal areas.

1.2.1 Definition of Marginality

We define marginality as “an involuntary position and condition of an individual or group at the margins of social, political, economic, ecological, and biophysical systems, that prevent them from access to resources, assets, services, restraining freedom of choice, preventing the development of capabilities, and eventually causing extreme poverty” (Gatzweiler et al. 2011, 3; also see Gatzweiler and Baumüller Chap. 2 this volume). The marginality perspective encompasses those poor who are below certain thresholds and outside mainstream socio-economic and human geographical systems, where improved access to rights, resources, and services would help enable decent standards of living. With reference to biological systems, marginality describes the state of organisms outside optimal homeostatic ranges which are necessary for living systems (Damasio 2011; also see Callo-Concha et al., Chap. 4 this volume).

As the meaning of the word indicates, marginality is a relative concept that refers to where people are and to what they have. “Where people are” not only refers to physical locations, but also to societal positions. “What they have” refers to capital assets—using a broad definition of capital—and the rules and regulations (both formal and informal) that enable access to these assets and their use. For example, ethnic minorities in rural Africa or Asia may live in geographically remote areas and be perceived as socially marginal by their respective national governments. Nevertheless, according to traditional institutions they may have user rights and access to land, water, and biological resources (e.g., forests) that enable them to function in the livelihoods of their choice. By disabling them of traditional access and rights to use these resources (e.g., by imposing rules of the nation state, prohibiting access to resources, and measuring their well-being in terms of material ownership or monetary savings), they become poor and marginalized. The marginalized poor are those who are affected by both marginalization and poverty. Causalities of the two concepts are complex (Dasgupta 2009) and the linkages between them need to be further explored, and that is a task of this book.
1.2.2 Marginality and Poverty

The concept of marginality should not be construed as an alternative to the concept of poverty; rather these two concepts overlap and are complementary. Marginality encompasses broad approaches like relative deprivation, social exclusion, or the capabilities approach. It entails an interdisciplinary and systemic perspective on the lives of the poor with the aim of revealing the underlying contributors to poverty, which have their roots in the functioning (or malfunctioning) of economic, socio-cultural, or ecological systems. This includes taking spatial dimensions such as geography and location into account. In the words of Dasgupta (2003, 2) “policies matter, as do institutions, but the local ecology matters too.” Influenced by Sen’s “capability approach” (1987a, 1993, 1999), which focuses on functions or living conditions defined as “what we can do or cannot do, can or cannot be” (1987b, 16), and the ability to achieve them (capabilities), the marginality concept goes beyond a measurement of well-being in terms of goods or commodities. This concept seeks to reveal real opportunities or barriers that exist as a result of what people have (goods, rights, knowledge, and opportunities) and where they are (understood as their geographical location or their positions within socio-political and economic systems). Both define their access to resources, services, or decision making. As in Sen’s capabilities approach, what matters for achieving desired well-being is not only the amount of what people have and can do, but also how these assets are transformed (by real opportunities) into fully functioning lives that people choose to live (Nussbaum and Sen 1993; Nussbaum 2004; Schlosberg 2007).

Where these opportunities do not exist or where they are actively constrained, barriers hinder the empowerment of people and they are constrained from developing the full potential of their lives. These barriers are constraints or capability deprivations that can originate from multiple causes rooted in economic, social, political, or ecological systems, which can also be considered enabling conditions or freedoms (see Sen 1999).

Within the concept of marginality, the nexus of poverty, environmental change, and development may be addressed. Marginality is a multidimensional and interdisciplinary concept integrating poverty, discrimination, and social exclusion; the degradation of ecosystem function; and access to services, markets, and technology. Marginality incorporates the understanding that subjective perceptions of poverty, values, and aspirations matter, and that all of these are part of calibrating the tools of poverty measurement. Apart from being inclusive and interdisciplinary, the concept of marginality offers an integrated and systemic basis for understanding the interactions between social and ecological systems. In a world with fewer natural resources for all, the linkages and changing patterns between both kinds of systems become more apparent, and the role of access to services and technologies ever more critical.

“De-marginalizing” the marginalized requires the creation of the physical infrastructure and institutional arrangements that can help to overcome the
barriers to access, exchange, and communication, and facilitate a shift away from the margins of development through building accessible assets beyond natural capital (i.e., access to services that foster human capital and technology), while including the marginalized in the process. The ability to live a life to its full potential, or to achieve the living conditions of one’s choice, can be constrained by factors stemming from social or ecological systems. If access is denied to land, forest, water or the benefits they provide (e.g., habitat, nutrient and hydrological cycling, soil fertility, carbon sequestration), then we speak of constraints or barriers to the delivery of ecosystem goods and services.

The concept of marginality facilitates an understanding of the underlying systemic contributors of poverty and exclusion that can overlap with the lack of resources and opportunities needed to achieve the desired conditions in life. Although the income poverty approach is easy to conceptualize and measure (in its simplest form the headcount ratio counts the proportion of people living under a particular poverty line), it has been criticized because it does not relate to multitudinous concepts of individual need “or to any agreed definition of what it is to be poor” (Gordon et al. 2000, 8). Relative deprivation (RD) measures build on the idea that the value of objective circumstances depends on subjective comparisons (Townsend 1979; Stark and Bloom 1985; Walker and Smith 2002; Wilkinson and Pickett 2007; Stark et al. 2011). The RD concept adds a whole new dimension to absolute poverty concepts, because it refers to the circumstances under which comparisons are made and does not define a general threshold. The RD approach is helpful, as it differs from traditional poverty concepts in that it defines the relative level of deprivation of material or social assets and conditions, whereas poverty is understood as “lacking or being denied the resources to obtain these conditions of life” (Townsend et al. 1987, 85; as cited in Sauders 1994, 235–236).

The conceptual foundations of marginality are elaborated further in Chap. 2 (this volume) by Gatzweiler and Baumüller. The authors review the distinctions between frameworks, theories, and models, and highlight that marginality is best perceived as a framework within which different sets of theories and models can be usefully applied and tested. Reducing the diversity of poverty to a few indicators entails the risk of overlooking critical features and causalities underlying poverty as analyzed from a systems perspective. Gatzweiler and Baumüller review the evolution of the marginality concept, as well as classes of poverty theories. In practical ways, they illustrate situations of the marginality of an actor (a person or group) by a specific position within the multiple dimensions (e.g., social, economic, political, nutritional, educational, geographical) of peoples’ lives in which they are more or less marginalized. They further refine the conceptual framework for investigating marginality by distinguishing “biophysical causality clusters” from “societal causality clusters” as enabling or constraining factors that lead to outcomes of well-being or poverty, and changes in positions and conditions being shaped by feedback to the factors and causality clusters.
The social exclusion approach overlaps with the concept of marginality when it is seen as a condition and process of “becoming detached from the organizations and communities of which the society is composed and from the rights and obligations that they embody” (Room 1995, 243). In Chap. 3 (this volume) Zohir emphasizes that in relation to exclusion:

In all development endeavors over the last two decades or more, either in the guise of Poverty Reduction Strategy (PRS) and Millennium Development Goals (MDGs), or to achieve greater equity and foster inclusive growth, the general concern was reaching out to those who are “left out”…[where]…“left out’s” could be children not being sent to schools by their parents, poor rural women unable to avail themselves of health services or market opportunities, people from minority or socially outcast groups having little or no access to jobs and public amenities, and the physically or mentally disabled. We refer to these people or social groups as “excluded” and to the broader subject of study as “exclusion.”

Both belonging to a group or community and being embedded within an institutional environment that secures rights and duties are necessary for escaping marginality, improving function, and achieving freedoms. Basic but crisp economic theory is invoked by Zohir to guide development practice toward understanding exclusion and initiatives to “include” the marginalized. The relationships between contracts, goods and services, and exclusion are highlighted, and types of exclusion are identified with the help of a supply and demand analysis of services: voluntary exclusion, exclusion caused by a lack of awareness, exclusion for survival, exclusion due to a lack of demand, and exclusion caused by “distance” (social exclusion, poor connectivity). Useful practical insights are gained when this theoretical analytical framework is applied by Zohir to identify the scope of different interventions for addressing the different types of exclusion, such as innovations in production, price subsidies, or transfers.

A socio-ecological perspective of marginality is pursued by Callo-Concha et al. in Chap. 4 (this volume). The authors highlight that marginality is the norm rather than an exception in ecological systems. They underline that many complex phenomena are shaped by both social and ecological systems simultaneously and inseparably, and therefore the complex issue of marginality can usefully be addressed by integrated socio-ecological systems approaches. The three conceptual and theoretical chapters mentioned above provide guidance to many of the more applied chapters of this book. They underline the complementary roles of alternative disciplinary approaches for addressing marginality and the opportunities for further conceptual and theoretical research.

Changing perceptions of development and global change call for such a new approach for addressing poverty through a marginality lens. Throughout the last two decades the global development landscape has changed dramatically. In many developing countries high economic growth rates have enabled millions to move out of income poverty. However; in South Asia and SSA we find countries with high economic growth rates, but also with a high prevalence of poverty. This is the case where in many rural settings land is becoming less available; ecosystems often turn out to be more degraded, while access to drinking water, sanitation, and energy resources remains constrained for many poor communities.
1.3 Dimensions and Prevalence of Marginality

1.3.1 Disaggregated Global Views

A book on marginality obviously can be expected to include descriptions of the magnitude and dimensions of the global marginality problem. In Part II of the book, two global views on marginality in the context of the developing world are presented first, one based on geographical information systems (GIS) and another taking a poverty statistics approach. In Chap. 5 (this volume) Graw and Husmann offer a comprehensive, multidimensional geographical mapping of marginality and identify marginality “hotspots” based on carefully selected sets of indicators at sub-national levels. Thereby the authors provide an original mapping effort of the global marginality landscape. The developing world is certainly not one uniform marginality domain. The diverse patterns, especially in Africa and Asia, are illuminating. Also interesting are the different degrees of overlap between income poverty and marginality patterns revealed in the marginality hotspot maps by the authors. The fast moving GIS based research at national and local levels offers tremendous opportunities for identifying the geographic distribution of marginality and thereby guide actions towards priority “hotspots.”

In Chap. 6 (this volume) Ahmed et al. also take a disaggregated global view and identify where the world’s poor and particularly the poorest live, and describe the extent of recent progress made in poverty reduction and the characteristics of the poor in selected countries. They found that poverty reduction was quite similar between the “subjacent” poor relatively closer to the poverty line of US$1.25/day per capita and the ultra-poor farther below—in fact the ultra-poor were slightly favored and the authors highlight that it is encouraging to see that the theory of “poverty traps” may not be holding generally true for those in ultra-poverty in recent years. Moving from global to specific country levels, marginality dimensions and patterns were analyzed for Bangladesh and Ethiopia, two countries that are further explored in the book.

The first MDG called for halving the proportion of the world’s population that suffers from extreme poverty and hunger by 2015. The hunger objective of this goal addresses extreme deprivation. Global progress towards this poverty goal has been significant, but progress on the hunger goal has been much less impressive. As Ahmed et al. point out in Chap. 6, around 1.3 billion people in the developing world subsist on less than US$1.25/day and 234 million live on less than US$0.63/day. Compared to the poor with incomes closer to the former poverty line, the very poorest are typically also marginalized: they belong to socially excluded groups, live in remote rural areas, or have less education, fewer assets, and less access to markets. Ahmed et al. also found that the proportion of the developing world’s population living on less than US$1.25/day fell from 43.1 % in 1990 (the base year for the MDGs) to 22.4 % in 2008 (see Chap. 6). This suggests that the poverty component of the first MDG has virtually been met at the global level before the prescribed timeline.
Regional progress, however, has been uneven. Whereas the numbers and proportions of the extremely poor fell in East Asia/the Pacific and in South Asia, progress in SSA has been very limited. Worldwide the absolute number of undernourished people has been growing since the mid-1990s. In 2009 an estimated 870 million people were undernourished (FAO 2012). The majority of the world’s undernourished people live in developing countries. Most of them are found in Asia, the Pacific, and SSA, and live in rural areas and often on degraded lands (Nkonya et al. 2011). Whereas in Africa most of the poor live in low-income countries, in Asia they are often found in middle-income countries. The bottom billion no longer lives in the poorest countries. Statistically speaking, the majority of the poor has shifted within the last 20 years from low to middle income countries such as India, Indonesia, Pakistan, and China, and often live in marginal regions of these countries. This has far-reaching implications for cooperative development policies, as a singular focus on poor countries will miss out on the majority of the world’s poor people.

Although there has been progress in reducing the number of poor, especially those just below the US$1.25/day per capita poverty line, the poorest and hungry have often been left behind. They do not have an effective political or societal voice, they are often decoupled from market economies (Grant and Shepherd 2008), and conventional poverty reduction and development programs are poorly designed to reach them or respond to their needs. Such a situation is extremely inefficient in macroeconomic terms and unjust from a human rights perspective. Economy-wide growth often does not reach this group, as they are not linked to (or are excluded from) the economic processes that otherwise generate and share the benefits of growth. Policies and practices that redistribute wealth from economic growth are often not in place. According to Grant and Shepherd the proximate causes for this pattern can be that the extremely poor:

• live in unfavorable areas (with poor agricultural asset bases, poor or a lack of transportation infrastructure)
• can (for various reasons) make only minimal use of their labor and lack opportunities to acquire skills
• direct most of their efforts towards achieving caloric and nutritional minimums
• are socially excluded or are of low status in society (e.g., because of the loss of the income earning household members, disease, childlessness, or being born into a disenfranchised social class)
• are excluded from public services or poverty reduction efforts.

To date research findings have shown that there is a correlation between extreme poverty and both geographical remoteness and social exclusion, and that the incidences of extreme poverty and food insecurity are concentrated in remote rural areas farthest from transportation, public service (health, education), and market infrastructure. In addition, the poorest often belong to ethnic minorities and other groups that are socially (Ahmed et al. 2009; Ahmed et al. Chap. 6 this volume). Marginality research can complement the large body of literature on poverty that is

based on indisputable facts about those who belong to the poorest and hungry today (von Braun et al. 2009):

- The poorest are becoming increasingly concentrated in SSA and South Asia. More than three-quarters of those living on less than US$0.50/day live in SSA and the proportion of the global poor in this region is increasing.
- Poverty and widespread hunger remain in regions that have experienced rapid economic growth and substantial reductions in poverty.
- Whereas the number of urban poor is increasing rapidly, the poor are still predominantly rural. Poverty reduction remains strongly connected to agricultural development in many countries.
- Poverty and hunger reduction has been slower among the poorest and excluded groups—ethnic minorities, disadvantaged people, and the disabled—causing poverty and hunger to be increasingly concentrated in these groups. In addition, poor women and children are particularly vulnerable to the long-term effects of poverty and hunger on individual health and education status.

Tracking progress (or the lack thereof) on poverty reduction, including movements below the poverty line at global, national, and sub-national levels with up-to-date and detailed measurements, remains of great importance. Although the total number of people in poverty may change little, this stability masks substantial movements in and out of poverty and population growth. Some that are living above a poverty line are vulnerable to becoming poorer, and some living below that line may rise above it. Those living far below a poverty line (i.e., the extremely poor), will likely be there for longer, perhaps for generations (see Ahmed et al. Chap. 6 this volume). Tracking poverty as such, however, needs to be integrated with the identification and tracking of many other aspects of societal, structural, ecological, and technological changes in order to identify causal mechanisms of poverty and promising options for remedial action. Such broader attempts are a promise of the marginality approach pursued in this volume.

1.3.2 Detailed Looks at Marginality: Locations and Socio-cultural Contexts

In Chap. 7 (this volume) Choudhury and Räder present a comprehensive mapping effort of the poorest and vulnerable residents of Bangladesh that was prepared for targeting interventions of the World Food Programme. The programs for social safety, disaster risk reduction, nutritional improvement, and education were prioritized and guided by this mapping effort, bringing mapping and action together in innovative ways. This offers an approach that could be adapted in other low-income countries that are under persistent budget constraints.

In Chap. 8 (this volume) Abebaw and Admassie used a host of household demographic and socioeconomic variables from rural surveys to examine the determinants of extreme poverty in rural Ethiopia, employing econometric estimation to
characterize extreme poverty. The estimation results reveal strong associations between location and ultra-poverty. The authors confirmed that ultra-poverty in Ethiopia is positively associated with distance from educational and health facilities, roads, and other socioeconomic infrastructure.

Kumar (Chap. 9 this volume) adds a dimension of insight into marginalization by offering an interesting psychological perspective of the circle of attachment trauma leading to shame and self-perpetuated marginalization. The experiences of social marginality in the lives of young girls from the Indian state of Gujarat highlights how secure interpersonal attachments help form the primary “capabilities” that have direct bearing on an individual’s sense of identity and freedom. Insecure interpersonal and emotional attachments, particularly dismissing kinds, lead to severe inhibitions in personality development and the accumulation of layers of shame and self-doubt. Kumar examines how the psyche is tormented by repeated experiences of social marginalization in the form of dismissal at the hands of family, and how shame becomes an abiding emotion—creating further doubts, disenfranchisement, and alienation that permeate the lives of the girls interviewed by the author. Breaking this cycle of marginality apparently needs a broader and deeper approach, and calls for further expansion of interdisciplinary efforts in research beyond economics and ecology.

1.4 Environmental Drivers of Marginality

Ecological and agricultural dimensions and determinants of marginality are the focus of the chapters in Part III of the book. Pingali et al. (Chap. 10 this volume) explore the linkages between poverty, agriculture, and the environment in the case of SSA. They found that natural resource endowments and land degradation are critical determinants of poverty and marginality, and identify agricultural development strategies (distinguishing farming systems, productivity, and environmental strategy components) in a framework of different opportunity costs of land and labor. Efforts to reduce the significant agricultural yield gaps with technological and policy measures in support of sustainable intensification are identified by the authors as opportunities, even in many marginal areas. They conclude that investing in targeted Research and Development (R&D), especially focused on the crops and traits that are important to the poor and the environmental limitations they face, have the potential to dramatically increase agricultural productivity and lessen marginality in SSA.

Kumar and Yashiro (Chap. 11 this volume) underline the dependence of the marginal poor upon ecosystem services. In their analyses of conditions in Asia and Africa they found that the poor are often more vulnerable than others to the loss of ecosystem functions that restrict the availability of natural goods and the performance of services. They also found that those who benefit most from environmental conservation efforts are not poor, while the poor typically suffer most from environmental degradation. Pointing at further research needs, the authors emphasize that in all of the reviewed cases of poverty-ecosystem services linkages, indicators of the intensity and directionality of linkages were either diffuse or incoherent. Information
is particularly limited on how changes in regulatory ecosystem services, many of which are critical for supporting the lives of the poor, affect human well-being.

Gerber et al. (Chap. 12 this volume) investigated the relationships between poverty and land degradation (LD) at the global level, and also in a set of developing country cases. They suggest a broader context for the assessment of LD, its causes, consequences, and costs, where the proximate causes of LD include: biophysical factors (climatic conditions, topography, etc.) and anthropogenic factors (unsustainable land management practices such as forest clearing, over grazing, etc.). Underlying causes of LD include the policies and institutional or other socioeconomic factors that determine land management practices. For example, poverty contributes to the failure to invest in sustainable land management practices. Similarly, policies that enhance investment in land management, such as payments for ecosystem services that result in reforestation efforts on steep slopes, can mitigate the proximate causes of LD in the form of soil erosion. There are feedback effects between poverty and LD that make it harder to determine the direction of the causality, and the institutional frameworks within which land users operate and make their land management decisions can supersede the impacts of poverty on LD. This was exemplified in some of the case studies examined by the authors, who propose a systematic and science-based assessment of the extent, severity, and costs of LD worldwide (Nkonya et al. 2011) as a first step towards the inclusion of LD into general measures of human well-being and of LD remediation efforts into strategies for the reduction of marginality.

1.5 Experiencing Marginality in Africa and Asia

In Part IV of this book the causes and experiences of marginality are explored in countries of Asia and Africa. Entire country, sector, and spatial dimensions, and also household behaviors are explored, and experiences with policies and intervention programs are evaluated.

Thorat (Chap. 13 this volume) addresses marginality in the context of social exclusion and poverty in India. Values, the lack of rights, and discrimination are discussed as important determinants of marginality. The experiences of change in poverty in rural India were found to have distinct patterns according to ethnic, caste, or religious group. The relative degree of “pro-poor” income growth was compared between various agricultural and nonagricultural livelihoods, rural and urban areas, and among ethnic, caste and religious groups. Rural self-employed households experienced greater income increases than wage-laborers across all ethnic, caste, and religious groups. The analyses also showed that poverty was generally reduced at a lower rate for minorities such as the “scheduled tribes,” “scheduled castes,” and Muslims. Members of these groups typically own less agricultural land, have less access to private non-farming economic activities, are more dependent on wage employment, and have historically higher levels of poverty. Thorat also identifies policy opportunities: self-employed households may benefit from opportunities for engaging
in micro-scale production and business, whereas wage laborers may benefit from increases in employment or wages. The author proposes poverty reducing agricultural growth strategies specifically tailored for rural agricultural and non-agricultural livelihoods. Off-farm income opportunities, incentives for increasing the profitability of small producers and businesses, and investments in the education and skill development of minority groups are among the policy portfolio options suggested by the author.

Consumption behavior of the poorest households in Indonesia was analyzed by Pangaribowo in Chap. 14 (this volume). The author’s approach is based on the premise that designing effective food policies and intervention programs for the poor requires accurate knowledge of their consumption patterns and behavior. For example, an important consumption behavior pattern observed was an overall decreasing share of household expenditures on food items over the last decade except for increasing expenditures on goods from the “dried and snack foods” and “meat and fish” categories. The author also found that the poor consistently spent from their meager incomes on so called “adult goods” (i.e., tobacco and alcoholic products). These consumption patterns may reflect gender biases, with male household heads deciding to spend more at the margin on these goods. Estimates of expenditure-price and cross-price elasticity point to the potential effectiveness of policy interventions for improving food security of the poor. Pangaribowo found that for the poorest households over the last decade, “dairy products” remained expenditure elastic, “staple foods” became less expenditure elastic, and that expenditure elasticity for “alcohol and tobacco products” increased. Similar to expenditure elasticity, price elasticity for categories such as “dairy products,” “meat and fish,” as well as “alcohol and tobacco products” predicted the most substantial decreases in consumption in response to price increases. Complementary and substitutive relationships among consumed goods categories imply that “staple foods” consumption among the poor will increase when prices for “meat and fish” and other nutrient rich products increase. The author concludes that in order to more effectively address extreme poverty and food security, policies should integrate information and nutrition education campaigns, and also be targeted toward women.

China’s recent experiences in addressing extreme poverty and marginality are presented and analyzed by Zhu in Chap. 15 (this volume). The evolution of effective and efficient policies, especially in rural areas, was found to be closely connected to China’s economic growth in the past three decades as well as to regional inequality. In order to alleviate and eradicate extreme poverty, the Chinese government extended the Di Bao (minimum livelihood guarantee system) program to the entire rural sector, enhanced agricultural policies, and stepped up rural socioeconomic development efforts. In developed regions of the country the Di Bao program, social insurance, and public services have effectively mitigated extreme poverty. Zhu reviewed policies that have been introduced and changes that might still be needed, especially in the rural parts of western China. The author describes the transition of Di Bao from an emergency relief and basic needs program to a mature social
protection system, aligning the poverty program for the poor and extremely poor with efforts in urban areas.

Zhu found that the successes of past anti-poverty programs have mainly benefitted the poor closest to the national poverty line, whereas the extremely poor generally remain poor because of their marginalized geographic locations and positions in society. For them the Di Bao provides a social safety-net. The author identifies requirements for improving benefits from poverty reduction programs and for linking other such programs with the Di Bao system. The requirements include improved targeting mechanisms, data availability, and management capacities, and also increased funding for intervention programs. One lesson from experiences in more developed regions in China is to target the specific difficulties of extremely poor households and individuals, for instance through increased coordination of the Di Bao social assistance program with other social insurance programs and public services.

Experiences in targeting the poorest in Bangladesh were analyzed by Ahmed (Chap. 16 this volume), who in particular looked into the impressive case of the program “Challenging the Frontiers of Poverty Reduction” (CFPR), designed and administered by the Bangladeshi nongovernmental organization BRAC (Bangladesh Rural Advancement Committee). CFPR was designed to enable the ultra-poor to enter into mainstream economic activities that would generate sustainable income sources. BRAC recognized that existing microfinance efforts had failed to address the needs of the ultra-poor, either because they lacked access to microfinance opportunities, or because they lacked the needed human capital and/or other preconditions for productive engagement. To achieve the program goal of lifting participants out of extreme poverty within 2 years and facilitate their entry into mainstream development programs, this program combines interventions specifically tailored for the ultra-poor with interventions to create an enabling environment for them. Ahmed describes the ideas behind the approach, the specific steps taken for implementing the program, and the key success criteria, which include the active participation of local villagers in identifying the poorest households, tailored training of motivated community workers, and the verification of collected data.

Policy measures and program interventions to alleviate rural poverty and marginality, along with trends in general economic indicators in Ethiopia, were reviewed by Admassie and Adebaw in Chap. 17 (this volume). The authors provide a comprehensive overview of Ethiopian policy measures and program interventions that covers food security, social safety nets, resettlement, environmental, health, and education sector policies. Despite overall increasing economic and particularly agricultural sector growth rates over the last decade, their review revealed that growth divergence and inequalities in income, health, and education remain high, and that poverty remains persistent, especially among the most vulnerable and socially excluded groups of rural Ethiopia. Thus, significant efforts to increase the equitable distribution of economic opportunities and services are still needed.
1.6 Responses to Marginality at Different Levels: State, Business, and Community

1.6.1 Key Roles of Government and Civil Society

Addressing marginality is not only a matter for central and local governments, but also a task for civil society organizations (see the review of the BRAC experience in Chap. 16 this volume), business, and local communities themselves. In Part V of this book, policies and programs, as well as actors addressing marginality are discussed.

Public policy assessments begin with Ahmad’s work (Chap. 18 this volume) on macroeconomic, fiscal, and decentralization options to address marginality. How does one reach the extremely poor and marginal groups in countries where local politicians and officials may have little incentive to provide for them? The instruments that might be involved include a range of options: transfers or assistance from higher levels of government (donors), cash support, the provision of public services (particularly health care and education), forms of employment support, and assistance for small-scale enterprises. The author outlines some of the difficulties attached to making government sourced cash transfers more effective in reaching the marginalized poor, such as the lack of political will, leakage of funds and capture at the local level by vested interests, weak public financial management systems, the lack of information about target groups, and incomplete knowledge about beneficiary needs. Ahmad offers a typology of options that is useful for improving the reach of efforts to provide for the poorest of society and concludes that simple categorical targeting mechanisms, such as through clinics or schools, can improve the effectiveness of reaching the marginalized. Good governance efforts to track and account for funds and their outcomes are among the essential ingredients for policies to successfully provide for the poorest. In the absence of genuine local interest in providing support for the marginalized and extremely poor, direct funding to beneficiaries by central governments and aid agencies appears to be the only feasible option.

Social protection programs, especially cash transfer programs, have spread across low-income and middle-income countries over the past two decades and are increasingly part of national poverty reduction and development strategies. Hulme et al. (Chap. 19 this volume) pose the question, “Just Give Money to the Poor?” and discuss insights from long-term research on social protection policies, including both conditional and unconditional cash transfer programs, which have become quite popular around the developing world over the past 20 years. The authors provide a brief history of the development of social protection and cash transfer programs, which can fill gaps where markets fail, especially with regards to the labor market and the environment—two crucial sources of livelihood for the marginalized poor. The authors give examples of the specific goals, targets, and conditions of various social protection and particularly cash transfer programs from a broad cross-section of countries, and how they have been perceived by both their
detractors and supporters. Hulme et al. argue why and how cash transfers can succeed by trusting the poorest and enabling them to escape poverty, as the poor are quite capable of identifying what is best for their own well-being. The authors identify the following five overriding features for social protection programs and cash transfers to be successful, they should be: fair, assured, practical, large enough to impact household income, and popular. They stress that these principles need interpretation at the national level, because no “model” can be automatically transferred from one country to another. The growing body of research on the limitations of these programs is noteworthy, especially when they constrain the mobility of labor, as highlighted by Levy (2008) in the case of Mexico.

### 1.6.2 Potential for Business

Marginality is not a matter exclusive to public policy and rights, but also an issue that can be addressed by business. The “bottom of the pyramid” approach (i.e., the latent power of demand by the poor as a business case) has been very much recognized by now (Prahalad 2004). Innovative business approaches offer new opportunities to reduce extreme poverty and marginality, and there are promising new initiatives for overcoming marginality through inclusive business models. The actual and potential roles of the corporate sector in combating marginality are reviewed and discussed by Baumüller et al. (Chap. 20 this volume) and Christiansen (Chap. 21 this volume).

In Chap. 20 Baumüller et al. outline the rapid evolution of related thinking in the business world and explore in detail some of the relatively new business approaches that have emerged for addressing societal problems. The potential for innovative business approaches to target the poor appears to be receiving increasing attention. The authors also examine whether and how these approaches can support not only those living close to a poverty line, but also help engage the marginalized at the lowest end of the income scale.

A promising new initiative for overcoming marginality through inclusive business approaches is the “Creating Shared Value” (CSV) approach, which is described by Christiansen in Chap. 21. CSV means that when making business decisions on future products and allocations of investments, companies simultaneously consider what long-term values can be created both for society and for shareholders. The author defines criteria for successful shared value approaches and gives a detailed example of how CSV worked in Nestle’s dairy farmer development approach at the Moga milk factory in the Punjab region of India and Pakistan. Apart from developing local dairy businesses and providing incomes, a larger section of local society has benefited from improved infrastructure, schools, sanitary and medical facilities, and nutrition education programs.

Despite the successful impacts of inclusive business approaches, rural poverty cannot be sustainably reduced by private business initiatives alone. These initiatives can achieve greater results when accompanied by public investments in agriculture
and rural development, and other forms of improved cooperation between the public and private sectors. While the potential for government support to facilitate business solutions that address extreme poverty and marginality is clear, the forms that this support should take and the actual benefits of various support measures remain poorly understood. At times governments provide support measures that reduce social welfare overall. The example of fiscal incentives is a case in point: while tax breaks are a popular tool used by governments to try to attract direct foreign investments into certain areas or sectors, studies from several countries have shown that these incentives often have had little influence on investors’ decisions, while governments lost revenues (Baumüller et al. 2011). Thus research should explore options for government measures in support of business activities for social development and assess their potential impacts in the different contexts in which they are applied. Indirect approaches for inclusive business and shared value generation that reach the extremely poor may be of particular significance, such as infrastructure investments in marginal areas, or access to improved seeds or livestock, health services, and nutritionally enhanced foods that have elements of comprehensive coverage and do not exclude the poor. Tracing the results and impacts of such investments on the extremely poor should, however, be integral to such initiatives.

It seems that the boundaries of innovative business operations can be pushed much further to include a far greater number of the marginalized and extremely poor. The corporate sector could examine these opportunities as low risk/high return ventures and continue experimenting. Development partner communities may best serve these initiatives by providing local insight and co-funding. The research community may best serve these efforts by considering innovative ideas that foster institutional arrangements that bring together unusual alliances, by accompanying efforts with solid impact studies, and through insights from comparative assessments of cases of successful efforts that were scaled up.

1.6.3 Attention to Diverse Local Contexts

As many of the above mentioned chapters of this book underline, involvement of the marginalized communities themselves is often a critical component of effectively mitigating marginalization. Gole et al. (Chap. 22 this volume) take a holistic perspective from the bottom up at the community level. Their insights are based on a series of interviews in carefully selected communities in marginal areas of Ethiopia.

In the Jida district in the Central Highlands of Ethiopia, extreme land degradation on slopes, erratic rainfall, and unsustainable logging practices on the valley plains have contributed to the marginal conditions in the area. Marginalization here is predominantly caused by anthropogenic environmental factors and human behavior. The Yayu region in contrast, is endowed with plentiful natural resources. The lack of formal credit opportunities and the resulting reliance on high-interest personal loans, shortages of family labor, and the limited size of coffee plantations all
contributed to the poverty of some community members. Marginalization here is mainly rooted in institutional factors and resource constraints, especially of land availability. In the Adami Tullu Jiddo Kombolcha district the potential for income generation depends on the possession of land with potential for irrigated agriculture or livestock production. The proximity of the district to major domestic markets has attracted investment in commercial agriculture, displacing local residents and leaving them with only marginal production areas. Here economic and socially influential forces related to investments and access to irrigation water are the main drivers of marginality. In the pastoralist community of Borana, degraded rangeland and water resources, cultural values attached to livestock, poor range management and livestock production practices, and marginal environmental conditions were identified as factors contributing to marginality. Marginality is caused by factors that vary across regions and livelihoods, but is always a complex interplay of various aspects that exclude some people from economic growth opportunities, and similar drivers of marginality are found to be root cause of poverty in all sites. The need for differentiated participatory approaches, including much attention to local leadership and governance, strengthening human capital, and access to productivity enhancing technology in agriculture, services, and infrastructure are highlighted.

1.7 Conclusions

1.7.1 Focus on Marginalized People

Of course the marginality framework developed and explored here should ultimately help reduce marginality and enhance the opportunities of marginalized people, be they women, ethnic minorities, the disabled, or some otherwise excluded group. At intermediate stages it should help frame action and assist pertinent actors (i.e., marginalized communities to gain more recognition and voice, or policy advisors, program designers and researchers to facilitate focused initiatives). This book not only provides evidence and insights of promising and innovative concepts and approaches, but also provides examples for revitalizing the poverty discourse and triggering action for change. Focusing merely on the income dimensions of poverty will not address its root causes shaped by marginality.

Marginalization appears to be very difficult to reverse once complex systems have produced such a state, but the “poverty trap” concept offers limited insights for action, compared to human-environmental interrelationships as conceptualized in socio-ecological systems (SESs). One way to overcome marginalization is to increase the resilience and adaptability of SESs, however, multiple needs must be considered simultaneously, mainly: food security, income generation, and ecosystem services. Creating incentives for economic growth works well mostly for those who already have access to assets or have been reached by employment creation and service expansion efforts, but not for those excluded from them, whether for reasons
of geography or active discrimination. For many of the extremely poor to benefit from economic growth it may be necessary to establish certain preconditions first (i.e., addressing factors that contribute to marginality), in order to make economic growth an effective means for poverty reduction.

### 1.7.2 Changing Marginal and Marginality Creating Environments

The difficulties in reaching the poor at the margins are frequently explained by physical (being located in remote or harsh environments) and social (being excluded, discriminated against, or not having access to resources and opportunities) distances, but may also be related to technological and institutional infrastructure deficiencies. In the long run, none of these deficiencies need to be taken for granted. Marginal areas, for instance, can be transformed by investments in technology and infrastructure, if this pays off in the long run. Demographic shifts in SSA for instance, are making productivity enhancing investments more attractive in some areas where demand is rising and the opportunity costs of land and labor are increasing. As Pingali et al. (Chap. 10 this volume) point out, a strategy pursuing intensification makes sense where it pays off, and releasing marginal lands from agriculture to provide other ecosystem services where returns on productivity growth investments will continue to remain low will make sense in some cases. Investing in targeted R & D to address SSA’s particular constraints—especially focusing on the crops and traits that are important to the poor and the particular environmental limitations they face—can lessen marginality and contribute to widespread reduction of poverty.

More clarity on indicators is still needed, as well-being is partially attributable to the state of the environment, which can be captured to some extent by global indicators such as genuine savings (Aglietta 2011), which adjusts the savings rate for the depletion of natural resources. However, as noted in Nkonya et al. (2011), land degradation is a form of squandering that is not addressed by any current frameworks and indicators of human well-being, nor is it addressed in measures of genuine savings. This needs to change, as productive land is not only a private good, but also contributes to the global public well-being, delivering ecosystem benefits to support a growing world population that creates increasing competition over land ownership (Deininger and Byerlee 2011).

Institutional infrastructure deficiencies are a major barrier to overcoming marginality. Institutions consist of property rights that define the flow of cost and benefit streams from resource use, they grant access to the use of resources and guarantee long-term user rights, and thereby incentives for investing in land and other forms of capital become more attractive. Institutions of marginality, in contrast, are characterized by mixed systems of informal and formal rules, which create conditions of limited access to rights and resources. So-called “limited access orders” (North et al. 2009) maintain themselves by means of extracting others...
Creating institutional environments that are more inclusive will also create new ways for markets, governments, and collective action to reduce poverty. In this volume, Zhu (Chap. 15) shows that collective action happens among advanced and marginalized villages in rural China. Although not explicitly referred to, Ahmed (Chap. 16) points to the potential of collective action among governmental, nongovernmental organizations, and the extremely poor in rural Bangladesh. Ahmad (Chap. 18) hints to the potential of decentralization and the benefits of a system in which the marginalized, the government, and actors of the fiscal apparatus work closely together to overcome marginality, and Christiansen (Chap. 21) mentions collective action opportunities between business and government. Mwangi et al. (2011) provide further examples of opportunities of collective action for overcoming marginality.

1.7.3 Need for Multi-dimensional Policies and Programs

Because of the interlinked nature of multiple variables that constitute marginality in socio-ecological systems, coherent policies (Bromley 2012) and comprehensive strategies are needed to address them. Point source “optimal” solutions in a narrow economic accounting framework and panaceas often create problems rather than solutions for disentangling marginality patterns (Higgs 1996; Scott 1998; Wilson 2002; Ostrom 2007).

While implementing comprehensive interventions to mitigate economic risks that the extremely poor have encountered, actions to eliminate social exclusion should be given greater consideration. This may not bring any significant poverty incidence changes in the short-term, but is an essential step towards eradicating poverty and promoting inclusive development, as pointed out by Thorat (Chap. 13 this volume), who calls for a shift from attention on changes in the incidence of poverty to an increasing consideration of how much the poor are benefited from multi-dimensional intervention policies.

In the absence of genuine local interest in providing for the marginalized, direct provision of funding by central governments appears to be the only feasible option, which may be reflected by the increasing popularity of central-source conditional cash transfers, such as the Oportunidades program in Mexico or the Bolsa project in Brazil. In such cases, using simple categorical mechanisms as vehicles for targeting may be more effective (Ahmad Chap. 18 this volume). Public works with limited financial incentives can be an alternative, especially if the respective community and marginalized groups are able to identify the areas where public works may be most useful (von Braun 1995). Above all, the basic building blocks for good governance, the ability to track the funds, and the outcomes of public spending remain as important as individual interventions.
One of the challenges is to strategize the appropriate division of tasks regarding appropriate measures and actions from the side of policy, civil society, and business. New ways of doing business to include the marginalized poor have been on the development agenda of governmental and nongovernmental organizations for some time now. Especially in rural areas and small farming communities, ecosystem goods and services provide an important proportion of overall income and foundation of livelihoods. Recognizing the strong dependence of the marginalized poor on natural capital underlines the importance of policies intended to preserve the environment and natural resource bases for agriculture.

1.7.4 What to Expect from the Marginality Framework

In conclusion we ask, what can be expected for whom, from the insights gained under the marginality framework developed here and the analyses done in that context? The answers to this question with the following four assertions are a call for accompanying policy actions with applied and interdisciplinary research for marginality reduction:

First, recognizing marginality and marginalized people as complex phenomena leads to equally multi-factset solutions. At first glance, this appears not to be helpful for focused development policy. However, narrowly focused policies often simply aim to treat the most prominent problem areas independent of social, ecological, and economic contexts, and may not deal with systemic problems. When marginality patterns and causes are identified and assessed in a multi-level (local, national, and global) context, appropriate actions become visible. Once the domains in which marginality may be rooted are identified they can be better addressed, such as: the lack of rights (e.g., ethnic, gender, disabilities), or the entrenched human behavior of people who have been discriminated against for a long time in a certain setting, the lack of access to services or technology, or ill designed macroeconomic policies that adversely impact certain segments of the labor market. This is an added value to income-poverty assessment, which are also most valuable as part of marginality assessment, but are further removed from cause and effect concepts.

Second, the marginality framework clarifies the actors’ and agents’ potential roles, including the marginalized themselves. Beginning with asking questions like: “who are the marginalized?”; “where do they live?” and “how and why are they marginalized?” leads to a people and community focus and the institutional setting under which they act. The marginality framework sees social and ecological systems as coupled, and facilitates the identification of the relationships between actors and public infrastructure (physical and social), and how the institutional environment creates structures which lead to processes of marginalization. By implication the framework draws attention to the marginality problem and thereby can facilitate targeting action, not in the sense of targeting a set of poor people, but targeting a set of root causes of marginality, say social exclusion, ecological risks, or deficient institutions.
Third, under the marginality framework, available **tool boxes and analytical approaches can be put to task more appropriately**, in order to assess success or failure of programs or policies. The framework does not guide toward narrowly focused and reductionist applications of tools that may be internally consistent, cost effective, and “elegant,” but that lack external and contextual relevance. Participatory data monitoring, innovative micro-modeling, collective action assessments, experimental designs, or macro–micro simulations may all play a role. The litmus test here is “did marginality get reduced?”

Fourth, the marginality framework also may be conducive to **realism in terms of temporal dimensions**, which is often lacking in development policy. Such realism may result from assessment of the persistence of marginality in a particular setting. The framework, however, besides primarily drawing attention to structural issues of gross inequality—such as exclusion—also calls attention to the temporal subscripts of causes that shape marginality, say for instance vulnerability to acute shocks or long-term exclusion. This attention to time can facilitate better identification of priority actions, as the marginalized poor have no time to lose.

One message of this book is that marginality needs to move more into the center of public policy in order to achieve inclusion and poverty reduction. Another message is that economic and ecological approaches need to come together to comprehensively identify and address marginality patterns. A third message is that on the road towards overcoming marginality, institutional and technological innovations often need to be more integrated.

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