Analyzing the Political Economy of Poverty and Ecological Disruption

BY DAVID REED
David Reed, Ph.D.

David Reed is the Director of WWF’s Macroeconomics Program Office (MPO) located in Washington, D.C. Created in 1989, MPO analyzes the environmental impacts of economic policies and practices of governments and international development agencies. Using this analysis, MPO then promotes alternative approaches to ensure that environmental and equity concerns are fully integrated into economic policies and practices at national and international levels. As Director, he has managed research programs, lectured widely, and published numerous books on structural adjustment and the environment, the Global Environment Facility, macroeconomic change, poverty, and the environment. Among his recent books are, Structural Adjustment, the Environment, and Sustainable Development (Earthscan 1996), and Economic Change, Governance and Natural Resource Wealth (Earthscan 2001).

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David Reed
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This paper presents an analytical approach that is intended for use by community groups, civil society organizations, development agencies, and governmental offices that are seeking to change, in fundamental ways, the dynamics of poverty and environmental degradation in rural areas of the developing world. This approach is designed to identify the principal constraints to rural poverty reduction and improved natural resource management. It is also designed to facilitate development of strategic interventions to address those constraints at local, regional, and national levels.

The analytical approach distinguishes itself from others by virtue of the fact that it is required to meet three specific standards:

- It must analyze the complex dynamics between the rural poor and the environment in specific localities;
- It must interpret relations between the local poverty-environment dynamics and policies and institutions at meso and macro levels in each country; and
- It must analyze relations between economic policy and institutional arrangements at the three levels as they affect poverty-environment dynamics.

We have called this approach ‘analyzing the political economy of poverty and ecological disruption’. In using this term we recognize that a political economy perspective attempts to analyze the interaction of social groups, private actors, and the state in their pursuit of economic wealth and political power. Using this perspective arises from our view that in this period of staggering global wealth, poverty and environmental disruption are not ‘natural’ phenomena, somehow the result of neutral, naturally occurring events. We believe, in contrast, that ecological disruption and impoverishment of two-fifths of humanity are the product of social orders that, to one degree or another, allow privileged social groups to derive benefit from the poor and natural resource wealth.

To be more specific, poverty, in the context of...
unprecedented global wealth, is the result of competition among diverse actors at national and global levels that gives rise to exclusion of a significant portion of the human community from access to life-supporting assets, be they productive, environmental, or cultural. Environmental disruption in the context of such wealth is the result of social and economic organization that fails to pay for the costs of maintaining our planet’s ecological systems.

In this context, the objective of this publication is to present an analytical approach developed to decipher the interaction of social actors and the state as they compete for wealth and power in societies that accept, through omission or commission, social exclusion of rural populations and that disregard the environmental costs of maintaining rural populations and society in general. The analytical approach presented here is built on the premise that it is imperative to remove these counterproductive societal constraints and to open new opportunities for the rural poor and for improved natural resource management. This approach is oriented to creating new opportunities for the rural poor to improve their living standards and to manage environmental services and assets in a sustainable manner.

As the direct application of this analytical approach in China, Indonesia, El Salvador, Zambia, and South Africa demonstrates, effecting fundamental change in rural areas of the developing world is anything but a simple endeavor. By the same token, those experiences also illustrate the remarkable and often unpredictable influence that strategic interventions, built on the analytical foundations of this approach, can have on poverty alleviation and resource management in rural areas of the developing world.

This paper presents the basic elements of this analytical approach for creating “actionable knowledge” to change poverty-environment dynamics. This publication is organized into three distinct parts. Part I, In a Context of Change, offers the reader a very brief overview of key economic and social factors that have shaped the genesis of this analytical approach. This overview includes reference to the work of the “sustainable livelihoods” approach of the United Kingdom’s Department For International Development (DFID), the United Nations Development Programme’s (UNDP) Poverty-Environment Initiative, and the World Bank’s Poverty Reduction Strategy Papers. Part II, The Analytical Approach, walks the reader through the specific elements of the analytical approach that were developed through actual implementation in China, Indonesia, El Salvador, South Africa, and Zambia. Part III, Lessons, shares some of the lessons that have emerged from the application by local partners in the five countries.
I. IN A CONTEXT OF CHANGE

UNACCEPTABLY HIGH “TRANSITIONAL COSTS”

The economic and institutional reforms that have restructured national economies in virtually every developing country during the past two decades have created opportunities and imposed new constraints for the rural poor in the developing world. The new opportunities resulting from the structural changes include the dismantling of state-controlled marketing systems, the removal of bureaucratic obstacles to initiating small-scale enterprises, the opening of market outlets for new crops and products, and the opening of some political structures to public participation. In equal measure, economic and institutional changes associated with structural adjustment programs have reinforced or created new obstacles for the rural poor. These include the entrenchment of political and economic elites, new resource management regimes that preclude access for the poor, decentralization reforms that shift power to regional power brokers but not to the poor, and increased vulnerability to economic shocks that threaten the meager asset base of the rural poor, among others.

From the point of view of a global environmental organization, one of the most significant negative impacts of the economic and institutional reforms often financed by international institutions over the past two decades has been the response of the rural poor to the resulting downward pressure on their living standards as these adjustments have taken place. In scores of low-income countries, the response of the rural poor to the social dislocations has been to increase pressure on natural resources in order to maintain living standards. The responses to these “transitional costs” have included changing crop production regimes, intensifying tree harvesting for energy, intensifying direct harvest of natural products, intensifying hunting and use of bush meat, poaching in game reserves, and intensifying fishing practices, among many others.

While some of these negative environmental impacts have diminished over time, the fact remains that the structural reforms did not significantly improve natural resource management—nor did they reduce rural poverty in scores of lower-income countries as the preeminent poverty in scores of lower-income countries as the preeminent development institutions promised in justifying the structural adjustment programs. The failure of the adjustment programs to make inroads in reducing poverty in these poorer countries, particularly in rural areas, precipitated a “crisis of legitimacy” that beset the Bretton Woods institutions in the mid- and late-1990s. It became increasingly difficult for those institutions to continue promoting policy reforms that exacerbated income inequalities and failed to reduce poverty precisely in those countries where the greatest benefits had been promised.

By the mid-1990s, the diverse impacts of these sweeping economic and institutional changes on rural environments and the rural poor impelled WWF to explore new ways of improving environmental management and reducing poverty in critical ecosystems in the developing world. This publication, and the sister publications to follow, are direct products of that effort. But WWF was certainly not alone in seeking new approaches to these seemingly intractable challenges. Virtually all international development agencies and many developing country governments identified poverty reduction as their primary development objective, thereafter changing policies, practices, and intervention instruments as they sought to bring new resources to support that priority.

The responses of the development agencies are highly instructive and significantly influenced the emergence of WWF’s own response to the continued problems in rural areas. In the following section, we summarize the response of three preeminent development institutions—DFID, UNDP, and the World Bank—as they sought to address these increasingly apparent problems in rural areas of the developing world. These approaches are highlighted to show where they coincide with WWF’s objectives and where they fall short of supporting our institutional mandate.
RESPONSES FROM PREEMINENT DEVELOPMENT AGENCIES

DFID: Sustainable Livelihoods
Beginning in the late 1990s, DFID embarked on an internal reorganization of its development assistance program that placed poverty reduction at the heart of its development strategy with partner countries. Consistent with its internal restructuring and strategic priorities, the agency gave considerable attention to analyzing and actively addressing poverty dynamics at the local level. For example, DFID analyzed the experiences of over 100 civil society organizations and developing-country governments and drew heavily on the conceptual elaboration of those experiences by experts from many quarters of the international development community.

The resulting strategic approach led to the integration of DFID’s project design, policy change, sectoral development, monitoring, and evaluation under a flexible, adaptable “sustainable livelihoods” perspective. This perspective established strategic goals for development assistance, proposed specific ways by which the sustainable livelihoods approach could be integrated into projects and investments, and identified approaches through which policy changes could be shaped by this perspective.

Many aspects of DFID’s approach are compelling—most useful of which is the emphasis on interpreting the dynamics among various actors, institutions, and agencies at the local level. Compared to others examined, the approach places far more emphasis on understanding the specific conditions under which the poor live and the linkages to the surrounding environment. This emphasis seems consistent with the effort DFID made to draw on and summarize the experiences of local groups, institutes, and agencies from the developing world. As DFID’s sustainable livelihoods approach has matured over several years, it has placed increased emphasis on the questions of power, rights, and governance. It also brings into focus the experiences of local practitioners and academic researchers as they try to establish linkages to higher-level policies and institutions.

The major limitation of the approach for our purposes is that it gave little more than recognition, and little, if any, operational guidance, for analyzing the relations between local dynamics, institutions, and policies at meso and macro levels. There are several diagrammatic interpretations from local groups in developing countries that sketch power dynamics between local groups and higher powers. DFID refers frequently to the importance of analyzing how local conditions are shaped by vested interests and how overarching policies at higher levels influence local conditions. We do not find, despite the profession of commitment to the issue, guidance as to how to conduct analytical work that will unpack those complex relations from which strategic interventions can be formulated.

UNDP: Toward Win-Win Policy Options
The second approach that informed this piece is the analysis offered by the United Nations Development Programme (UNDP) and the European Commission (EC)—joined later
by the World Bank and DFID. Their work has been published under the framework of UNDP’s Poverty and Environment Initiative (PEI). The basic conceptual approach of this joint endeavor is to identify policy and institutional changes that are required to generate “win-win” situations, that is, conditions under which the rural poor can improve their livelihoods while also improving management of natural resources on which the poor depend heavily.

The PEI publications highlight six policy options or guidelines that will generate the desired “win-win” outcomes:

- Protecting the current asset base of the poor;
- Expanding the asset base of the poor;
- Comanaging resources with the poor;
- Coinvesting with the poor;
- Supporting infrastructure development for the poor; and
- Developing technologies that benefit the poor.

Under each of the six policy guidelines, PEI partners develop in considerable detail more specific guidelines that policymakers in government and development agencies should pursue to fulfill the broader strategic goals of reducing poverty and improving resource management. The major contribution of the PEI work is the emphasis placed on increasing the assets, control, and management capacity of the poor. This emphasis seems significant to us because applying those policy options necessarily implies major shifts in national development policy for virtually all developing countries. For instance, pursuing these options signifies redistributing assets, restructuring subsidies to create economic opportunities for the poor, and increasing investments in rural area management.

While we strongly support these policy recommendations, we believe that the current relations of power and control exercised by the powerful and privileged in developing countries will largely exclude implementation of the recommended policy guidelines. We also believe that the participating agencies themselves will be hard pressed to actually push the policy recommendations inside their own agencies to reshape development strategies and investment priorities because they would be considered too “political” or controversial. Hence, while sharing the policy emphasis, we believe that the PEI approach provides little guidance for translating the ideal policies into effective practice on the ground—where real changes are urgently needed. We embrace, in many ways, the policy framework suggested by the approach, but find little practical guidance for conducting analysis that will link us to those policy guidelines.

The World Bank: Poverty Reduction Strategy Papers (PRSPs)

The third analytical approach reviewed is the recent work of the World Bank. The newfound commitment of the Bank to reduce poverty emanated from the “crisis of legitimacy” that engulfed the preeminent development institutions in the mid-1990s. Paradoxically, structural adjustment programs were justified on the premise that, by diminishing the economic...
role of the state; opening the country to the international flow of goods, capital, and services; and implementing domestic economic reforms, economic growth would accelerate and thereby significantly reduce poverty. Those claims held true in certain middle-income countries but have largely failed to rekindle growth or reduce poverty in the majority of lower-income countries.

In response to the growing challenges to using public monies to support policies that accentuated inequalities and failed to help the poor, the World Bank, the International Monetary Fund (IMF), and bilateral development agencies embraced the institutional and policy changes under the aegis of the Bank’s Poverty Reduction Strategy Papers (PRSPs). This policy shift was buttressed by numerous publications, including the 2000/1 World Development Report: Attacking Poverty*, “Voices of the Poor”*, Globalization, Growth and Poverty along with numerous technical and policy papers to guide implementation of the PRSP process*.

Although the PRSPs are still in a testing and gestation stage, they do embody three major improvements over prior poverty reduction strategies. First, they encourage governments to become the principal architects of development strategies and determinants of how to use externally financed programs. This change will help address the “lack of ownership” issue, which has dogged structural reform programs over the past two decades.

Second, the PRSPs, conceived as development strategies subject to constant revision and improvement over successive years, promise to serve as programmatic umbrellas under which the many development agencies, each with its specific priorities and approaches, can effectively coordinate their combined investments and programs.

Third, the coordination of donor and government activities and investment promises to facilitate public input and increase accountability by rendering the actions of government and international agencies alike more transparent. Such accountability is to be accomplished through the increased involvement of civil society organizations in the distinct stages of PRSP preparation and implementation.
As the PRSP process has matured, it has generated considerable hope—and parallel concern. To date, important improvements associated with the PRSPs are the somewhat increased transparency of government planning and operations, enhanced coordination among donor agencies, and the direct focus on investments and institutions that are designed to reduce poverty. Opportunities for expanded civil society input and participation have also emerged in some countries.

On the flip side, widely shared concerns about the PRSP process articulated to date include the following:

- PRSPs are essentially new packages for continuing structural adjustment programs;
- Selective investment programs financed by donor agencies give priority to opening opportunities for multinational corporations and national elites but not for the poor;
- For many governments, lending operations under the PRSP framework have become little more than general budgetary support that is not accompanied by specific output requirements, identification of target groups, and operational mechanisms that can be monitored and evaluated;
- Formal “consultation” processes required by PRSPs have frequently become means for falsely claiming that civil society groups have endorsed the strategy frameworks;
- Improved management and access to natural resources by the poor are not viewed as playing an important role alleviating rural poverty.

Voices inside the World Bank, often in concert with other development agencies, have tried to elevate the saliency of the environment in the PRSPs but have not, to date, significantly increased the importance attributed to natural resource access in efforts to reduce rural poverty.
THE THREE APPROACHES: IMPORTANT CONTRIBUTIONS THAT, NONETHELESS, FALL SHORT OF OUR NEEDS

The approaches promoted by the three development agencies are highly instructive in many ways. DFID’s “sustainable livelihoods” approach offers a refined analytical approach to deciphering local poverty-environment dynamics and a policy perspective for applying the approach in project design, policy articulation, and evaluation. PEI’s “win-win policy options” approach details a cogent set of policy options for governments and development agencies. These options, if implemented, would reverse many current development priorities, increase world support for the rural poor and improve environmental management. Finally, the PRSP approach holds forth a policy framework purported to reorient the investment strategies of preeminent development institutions but that, in many ways, repackages established investment instruments of those same agencies.

However, these approaches adopted by preeminent development institutions did not provide two critical outputs that we needed to implement our work program in rural areas of the five selected countries. First, they did not offer an analytical methodology that would help local groups to construct a dynamic understanding of what processes and relations locked local communities into poverty and unsustainable resource management patterns. Second, these approaches would not allow our partners to identify the main obstacles to improving livelihoods and improving natural resource management.

In summary, with the exception of DFID’s sustainable livelihoods framework, these approaches were built on assumptions about ways to change poverty-environment dynamics that we did not necessarily share. For instance, the PRSP approach assumed that national governments, supported by external financing, could and would promote the interests of the rural poor. There simply is no historical basis to conclude that such assumptions are viable in any or all developing countries. In way of a second example, while we agreed with UNDP’s policy recommendations for promoting “win-win” outcomes, the approach did not come to terms with the political realities of power and privilege in developing countries that reproduce poverty and environmental degradation in rural areas. So, while useful from the perspective of offering generic prescriptions and seeking to improve aggregate economic indicators, we felt that the approaches could not be translated into tools designed to help the rural poor raise incomes and improve management of the rural environment.
HELPING REAL PEOPLE,
IN REAL PLACES, IN REAL TIME

Following this critical review of the approaches of other institutions, it is fair for the reader to ask, “If not the above, what does WWF seek through its efforts to influence rural poverty-environment dynamics?” The most direct answer is that we seek to help real people, in real places, in real time. We are not willing to accept predetermined macroeconomic packages, standard sector investment programs, or policy recommendations as the premise for removing the obstacles to rural poverty reduction and improved natural resource management. Certainly those interventions can be of major importance if properly constructed and applied. However, all too frequently over past decades those prescribed interventions of the major development institutions, translated through institutions dominated by elites in developing countries, have reproduced rural environmental degradation and poverty. And there is little hint that these approaches will change, in fundamental ways, the current status of the rural poor or the surrounding environment.

Therefore WWF/MPO approaches its work in rural areas on the premise that we need to apply a different analytical approach that offers a coherent, integrated understanding of poverty-environment dynamics in each locality and country. We believe that such an integrated understanding can provide the basis for identifying strategic priorities for removing obstacles to sustainable resource management and to reducing rural poverty.

In offering this analytical approach, tested and refined in five developing countries, we have no pretension of offering to the reader a uniform or replicable methodology that can be mechanically transferred to any or all settings. Such a proposition simply is not possible when one considers that this analytical approach is multidisciplinary, analyzes local poverty-environment dynamics, links local dynamics to meso and macro levels, and while also integrating economic and institutional analysis into a coherent framework. The reasons for disavowing any claim of universal transferability are multiple and include the following:

- Research teams have different experiences and capabilities and, in fact, the research culture in a given country often does not allow for the adoption of a single prescribed methodology;
- Poverty-environment dynamics at the local, meso, and macro levels vary considerably in each country and require research approaches tailored to each country; and
- The relative influence of economic policies and/or institutional arrangements in each country varies as well.

TWO REQUISITES

This disavowal notwithstanding, the reader will find below a five-step analytical approach that is further broken into multiple activities for each step. This methodological synthesis is not offered as a recipe, but as a compendium of activities that the five research teams applied selectively in their respective context. The relative utility and adaptation of each activity in the five interlocking steps are left to the practitioner to judge.

There are two factors that we must point out that contribute significantly to successfully applying this analytical approach in countries as diverse as China, Indonesia, El Salvador, South Africa, and Zambia. The first of these two factors regards the character and commitment of the organizations. We have found that the most effective organizations have the following:

- An established history of working with local groups on poverty-environment issues and a commitment to changing the prevailing factors that work against the interests of the poor and sound environmental management;
- A readiness to move from local activities to higher-level institutional and policy issues and advocacy;
An internal analytical ability or established relations with research institutes that can meet the requirements of the multidisciplinary, multi-level analysis; and

A strong track record of collaboration with local and regional government authorities and with the private sector in given localities.

While groups fulfill these standards in a variety of ways and combinations, these requisites go a long way toward ensuring intimate understanding of local problems and strong partnerships that can generate effective, long-term processes for change.

The second basic requirement that makes this analytical approach usable across many cultures and countries is the emphasis we place on identifying the specific questions that must be answered through the analytical work. In this regard, we suggest two complementary sets of questions to guide research efforts. The first set is the leading conceptual questions that must be answered by the conclusion of the analysis. The second set is the range of specific intermediate questions that allow research teams to decipher the complexity of the poverty-environment dynamics at the three scales—the local, meso, and macro levels—and, that on being answered, will allow the team to respond to the higher-level conceptual questions.

We found that the following three leading conceptual questions captured the basic purposes and interests of people trying to change conditions of poverty and ecological disruption:

1. How do local, meso, and macro level dynamics affect the livelihoods of the poor in the selected localities and affect their interaction with the surrounding environment?

2. What are important obstacles, originating at local, meso, and macro levels, to poverty reduction and to promoting environmental sustainability in the selected localities?

3. Which of these obstacles will the partner organization tackle through its interventions following the analytical stage of this program?

Accompanying these conceptual questions, we suggest articulating more specific intermediate questions such as those listed below to guide the day-to-day research activities:

1. **Local-level dynamics**: At the local level, who are the main social actors, including diverse groupings of the poor, government offices, the private sector, and other civil society organizations? What functions do these distinct actors play in shaping local development dynamics? What are the features of the local natural environment and what are the key environmental issues affecting the welfare and livelihoods of local groups and individuals? What are the principal dynamics of the local poverty-environment relations and what are the main drivers of those relations?

2. **Meso-level influences**: At the meso level, what are the principal institutions and social relations that influence local development dynamics? Who are the main actors driving those relations and how do they exert their influence? What is the relationship between these subnational institutions and actors to higher-level institutions and policymakers?

3. **Macro-level influences**: At the macro level, what are the main economic and development policies that currently influence the development options and opportunities of local actors? How are those policies transmitted to the local level? How do national institutional arrangements create conditions and opportunities by which the local poor can improve their livelihoods and manage their surrounding environment?

4. **Interpretation**: What are the main, if not determinant dynamics among actors and institutions at these three scales or levels? What is the relative influence of various policies and institutions? What are the principal mechanisms by which these policies are transmitted to lower institutional and social levels?

5. **Intervention planning**: In light of your interpretations what are the most important institutional, policy-related
ELEMENTS OF THE ANALYTICAL APPROACH

ANALYZING POVERTY-ENVIRONMENT DYNAMICS AT THE LOCAL LEVEL
- Establishing a historical context
- Establishing a quantified base line of socio-economic conditions
- Deepening analysis of environmental problems
- Analyzing the influence of a multitude of local institutions
- Conducting qualitative analysis of social and economic dynamics
- Interpreting the results of the local research

ANALYZING THE INFLUENCE OF MESO-LEVEL INSTITUTIONS
- Institutional analysis
- Identifying key actors

ESTABLISHING LINKAGES TO MACRO POLICIES AND NATIONAL INSTITUTIONS
- Macroeconomic policies
- Sectoral policy reforms
- Institutional structures and arrangements
- Institutional reforms
- Interpreting the impact of these macro-level policies and institutions

INTERPRETING THE RESULTS
- Interpretive maps
- Institutional charts
- Policy matrices
- Identification of principal obstacles to poverty reduction and sustainable resource management
- Written presentation of the analytical work

IDENTIFYING STRATEGIC INTERVENTIONS
- Identifying the potential actions to be taken
- Matching intervention options with existing capacity
- Choosing final intervention strategies
economic changes that are required to create opportunities for the rural poor in the selected localities? In order of priority, what are the required changes that can be addressed through direct interventions in association with a given project? Similarly, what are the changes that lie outside the scope and influence of a given project and what constellation of actors would be required to bring about the removal of higher level or complex obstacles?

It would be misleading to suggest that the five groups developed and followed similar analytical paths in responding to the mutually agreed questions presented above. The sequence of work, the actors involved in research activities, the analytical maps derived from analysis, and many other aspects varied considerably from group to group. Moreover, two groups pursued a “top-down” analysis whose starting point was national frameworks developed through earlier projects. Three groups employed a “bottom-up” approach that started with surveys and data gathering at the local level and moved upward to the meso and macro levels.

Despite different sequencing and applications, all groups did engage, in one way or another, in a shared set of analytical activities that we feel can be identified as a common analytical approach. The section below summarizes the constituent elements of that shared approach that consists of five basic steps: analyzing local poverty-environment dynamics; identifying the role of meso institutions; establishing links to the national level; interpreting the results; and defining strategic interventions.

THE CONSTITUENT ELEMENTS OF THE ANALYTICAL APPROACH

1. ANALYZING POVERTY-ENVIRONMENT DYNAMICS AT THE LOCAL LEVEL

Despite the fact that the geographic size of chosen localities and the number of inhabitants in each area varied significantly, the research teams found the following research techniques particularly useful at the local level:

Establishing a historical context: The teams made defining the historical evolution of local poverty-environment dynamics one of their first priorities. This historical context provided vital paths to understanding the evolution of current dynamics shaping the livelihoods and the environment in each locality. Research efforts placed institutions and major actors at the local level at the center of analysis, often explaining the rise and decline of prominent individuals or groups, the development of important local institutions, and their intersection with principal economic activities. While local dynamics were the center of focus, the historical reconstruction invariably drew causality links to policies, actors, and institutions beyond the geographic confines of the given locality by identifying regional and national pressures and decisions that influenced local behavior.

Establishing a quantified baseline of socioeconomic conditions: Without exception, research teams built data sets that quantified the socioeconomic conditions in each locality. In all five localities, prior research and surveys were available to assist in this data collection effort. As to be expected, those prior surveys did not cover all of the areas for which the researchers sought data but, nonetheless, provided a solid empirical foundation of their subsequent research. To complement previous surveys, three of the five groups implemented new household and institutional surveys using local university students. All teams obtained additional data from local government offices, agencies at regional and national levels, and other published sources.
A principal focus of this quantified research was establishing data on income derived from the various livelihood activities of the local population. And to the degree possible, the researchers gathered data dating back as far as possible on sources of income from various productive activities to trace the evolution of production regimes in each area.

**Deepening the analysis of environmental problems:**
The socioeconomic baseline provided a statistical yardstick and trend lines for understanding the status and evolution of living conditions in the chosen localities. That empirical foundation, however, needed to be complemented by in-depth analysis of the evolution of environmental problems. To this end, research teams conducted additional studies, either on their own or with analysts specializing in the problem, to further understand these critical environmental dimensions of local poverty-environment dynamics. These studies included analyses of forestry management, history of land ownership, dynamics of access to water, and other topics.

**Analyzing the influence of a multitude of local institutions:**
Interpreting the influence, direct or indirect, of the multitude of institutional relations—including organizations, laws, governance arrangements, traditions, and coercions taking many forms—was vital to deciphering poverty-environment dynamics at the local level. Several research groups conducted institutional surveys designed to map institutional arrangements in the community to higher-level agencies and bodies. Others used quantitative analysis and questionnaires to understand these relationships.

**Conducting qualitative analysis of social and economic dynamics:**
While data gathering provided a snapshot of living conditions, qualitative analysis provided personal interpretations about the way things actually worked at the local level. No amount of data could explain the way authorities exercised their influence, or why farmers, truckers, or mothers responded to economic changes in a given way. Qualitative analysis was carried out by every group and often provided the most helpful understandings about real-life dynamics among community members and between the community and outsiders.
Interpreting the results of the research: No part of local analysis was as important as the process by which the researchers interpreted the data and qualitative information gathered during the four-month research process. Yet there was no simple or uniform method that they used to guide their interpretation. In many cases, construction of models (interpretive, not quantitative models) proved highly useful in systematizing the relations among many actors and institutions. These interpretive models allowed the researchers to identify origins of obstacles that constrained the behavior of the local population and to explain how those obstacles influenced livelihoods and environmental management. Moreover, these models identified the higher-level influences—that is, the poorly defined influence of forces and actors located outside the localities—that would require further analysis in later stages of research.

Stated generally, three types of outputs were produced by the researchers based on their interpretations at the local level:

- The researchers identified the principal features of poverty-environment dynamics at the local level, placing dynamics in a historical context and using quantitative analysis to interpret current socioeconomic-environmental problems.

- They articulated what they believed to be the principal causes of poverty and environmental disruption at the local level.

- They formulated hypotheses about probable influences of higher-level policies and institutional arrangements on local poverty-environment dynamics. These hypotheses would then guide subsequent analysis linking the local to the meso and macro levels.

ANALYZING POVERTY-ENVIRONMENT DYNAMICS AT THE LOCAL LEVEL IN EL SALVADOR

PRISMA, our project partner in El Salvador, collected data in the highland communities of Chalatenango focusing primarily on assessing the development and functioning of social organizations in the chosen localities comprising La Montañona. Their focus was determined by the fact that comprehensive data collection had already been carried out through the mayor’s office and by government agencies. As a consequence of the existence of consistent data sets, PRISMA’s research on social capital formation was largely qualitative in nature and involved interviews, rural rapid appraisals, and focus groups.

Questionnaire guides were developed to ensure consistency among focus groups that included subsistence farmers, handicrafts artisans, residents (women and men), community board members, councilpersons, and other community leaders.

The most salient conclusion drawn from this research was that environmental and economic constraints imposed considerable limitations on livelihood opportunities at the time of project launch and that improved social organization would be critical to creating better conditions and opportunities in the region.
2. ANALYZING THE INFLUENCE OF MESO-LEVEL INSTITUTIONS

Analysis at the local level established the basic dynamics that shaped the day-to-day livelihoods of the rural poor and determined the use and management of environmental resources. As the researchers began to tease linkages upward to higher-level influences and actors, they began to enter the world of meso-level institutions and power relations. At times those relations were clear and lineal, traced through formal institutions and agencies. At other times the linkages were opaque and uncertain as the functions of intermediate-level institutions and agencies were poorly defined and transient.

We have called this space between the national and local levels meso-level institutions—which frequently includes provincial and district-level influences and activities. It should be pointed out that in Zambia, relatively little approximating meso-level institutions and policies existed. In South Africa, meso-level institutions, including provincial government and regional government agencies, had a presence but were not truly determinant influences. In contrast, meso-level factors were central influences in shaping poverty-environment dynamics in China, Indonesia, and El Salvador.

Institutional analysis: In cases where meso-level influences were important, one of the first efforts of the researchers was to identify the scope of influence and decisionmaking that provincial and district-level authorities exerted to shape the behavior and opportunities of local communities. To that end, the researchers organized questionnaires and conducted interviews to understand whether meso-level institutions and actors simply transmitted orders from the national level or whether they, in fact, originated specific decisions that were directed downward to community authorities. This analytical work involved two basic activities. First, the researchers analyzed the structures and decisionmaking processes specific to each ministry or government agency. This included determining what authority exercised what specific function at each level in accordance with statutes and regulations. Second, the researchers complemented this

ANALYZING THE INFLUENCE OF MESO-LEVEL INSTITUTIONS IN CHINA

The hierarchical structure of Chinese political and administrative arrangements rendered the task of interpreting the role of meso-institutions comparatively easy. The researchers, following up on information from local authorities, established contacts with provincial managers of appropriate ministries and government agencies. Interviews carried out with a range of managers provided much-needed information about the responsibilities and limits of provincial managers and how they transmit national policy to local levels.

In addition to the completion of the institutional maps that the researchers developed, perhaps the most significant outcome was the researchers’ understanding of the limits that were placed on district and county officials, as well as on managers of the forest reserve, in terms of being able to experiment with new forest management relations and altering relations with local communities. This information allowed the researchers to chart the path that needed to be followed to propose and implement new forest management regimes at the local level.
analysis of formal linkages by conducting interviews to analyze how the institutions functioned in actuality, that is, informally. This information was vital to understanding which decisionmakers had to be influenced to change established policy and institutional arrangements—and it was vital to understanding the limits of decisionmaking power in each institution.

Identifying key actors: In addition to this institutional analysis, the researchers carried out qualitative analysis to identify other influential organizations, companies, and individuals at this intermediate level that created obstacles or opened opportunities for local communities. This analysis included interviewing land- and business owners, and members of political associations, trade and business groups, and social organizations. This qualitative analysis was often summarized through political mapping that identified the influence and functions of these actors and organizations.

3. ESTABLISHING LINKAGES TO MACRO POLICIES AND NATIONAL INSTITUTIONS

With few exceptions, the impacts of macroeconomic policies and national institutions were strong and often pervasive. Liberalized economic policies, political decentralization decrees, national land tenure laws, and resource management regimes established the context in which economic and political actors, from the national level on down, were obliged to operate.

Without exception, the teams had to carry out their research in the national capitals to perform this analysis and often contracted experts in the political center of each country to support their work. The researchers covered four sets of issues as they tried to establish links from the local to the national level:

Macroeconomic policies: The degree to which research teams focused on macroeconomic policy and structural reforms varied significantly. In El Salvador, structural transformation of the economy, shifting from agriculture to services, was one of the principal determinants of local poverty-environment dynamics in that national investments were redirected from rural to urban areas. Consequently, analyzing these economic trends, as well as associated policies, was central to research work done. In China, by contrast, macroeconomic reforms, considered the largest structural reform program in the world, apparently had little direct or immediate impact on the rural communities in Deqin County. Consequently, the researchers downplayed the macroeconomic dimension of their analysis, shifting attention to sectoral reforms.

Where macro policy was scrutinized, the researchers established a 10-year time frame to retrace the development of economic policies, to highlight key structural reforms, and to identify consequences for rural areas. Such impacts were traced, for example, through price changes for agricultural goods, changes in government subsidies and investment programs, exchange rate impacts on products of local origin, and effects of trade liberalization. Taken over this 10-year period, the general effects of those macroeconomic policies on prices, production regimes, and labor markets were not difficult to establish. From those effects, potential impacts on rural producers at the local level could likewise be identified.

Sectoral policy reforms: While macroeconomic reforms established more general economic trends and contexts, sectoral policies had a far more direct bearing on local livelihoods, opportunities, and constraints. Agricultural and forest policy reforms were primary points of analysis given that these economic changes often generated immediate price changes and investment opportunities, even for the smallest farmers. Analysis of sector policies required reconstructing the previous policies prevalent in the sector and identifying specific changes associated with the new policies from which the consequences of reforms adopted
by the government would be inferred. Often impacts of sectoral reforms were still working their way through the economy or through institutions, leaving direct impacts uncertain. One of the most challenging aspects of interpreting sectoral reforms was understanding the relationship between specific investment and subsidy policies, on the one hand, and institutional changes accompanying economic shifts on the other.

**Institutional structures and arrangements:** Even more central than economic reforms, institutional arrangements and reforms at the national level demanded priority attention from the researchers. Institutional arrangements, particularly in transition and state-driven economies, established the specific terms on which the rural poor could interact with markets, interact with authorities at all levels, and ultimately interact with one another. Institutional arrangements established terms for acquiring transportation, registering enterprises, paying taxes and bribes, gaining access to forests and water, having permission to cultivate land, establishing sites for residential dwellings and so on. If one is to talk of the political economy of poverty, this is expressed most directly through institutional constraints that circumscribe all aspects of the lives of the rural poor.

**Institutional reforms:** The researchers complemented the analysis of long-standing institutional arrangements with analysis of the impact of recently declared institutional reforms. Some institutional reforms, such as land tenure reforms and changes in resource pricing, were directly linked to the neoliberal economic regime taking hold in many countries. Other reforms, such as the decentralization program in Indonesia, were efforts to correct centralized institutional policies. Other changes, including the logging ban in China, were responses to failed economic or environmental policies. Analyzing these changes posed particular challenges because formal legislation and regulations differed considerably from the way the reforms were translated into actual practice. The researchers had to contract expert technicians, for instance while analyzing land tenure issues in Zambia, to decipher the intent and implications of these reforms.

**ESTABLISHING LINKS TO NATIONAL ECONOMIC POLICY AND INSTITUTIONAL ARRANGEMENTS IN ZAMBIA**

Mano, our project partner in Zambia, focused its initial analytical efforts on identifying the institutional arrangements, recent policy reforms, and entrenched institutional behavior of major actors in three economic sectors—agriculture, wildlife, forestry—that directly affect poverty-environment dynamics at the local level in rural Zambia. We will touch on one key issue from each of these sectors:

**Agriculture:** While commercial farming can be successful in many parts of Zambia, it requires considerable technical sophistication, capital, and a long-term perspective. In contrast, improving subsistence farming over the past five decades has proven so difficult that development agencies focus only on the top 10 percent of villagers in hopes that investments can stimulate growth among the most successful of the rural poor.

**Wildlife:** Viewed as a source of rent seeking by national political figures, the wildlife sector has been besieged by institutional manipulation, mismanagement, and nepotism for decades. Recent efforts to reform the sector have led to institutional paralysis as well as the freezing of revenue-sharing arrangements at the local level that had once constituted a modest source of income for the rural poor in areas bordering national parks and reserves.

**Forestry:** Zambia’s extensive forests continue to generate income for local charcoal producers and provide revenues for the government. While deforestation problems are increasing, export of selected hardwoods from expansive Miombo woodlands to South Africa are viewed by the government as an important source of future income, as charcoal is considered to be the main domestic fuel for coming decades.

An overarching theme of Mano’s analysis was that land tenure laws, recently reshaped through land reform legislation, remained a pivotal issue around which economic development in rural areas turned. Unless local villages and chieftains were empowered to use their land and natural resources in the context of the market economy, prospects for economic improvement remained dim. Mano worked closely with the country’s preeminent land tenure expert in determining possible methods for operating within the framework of existing law to strengthen village rights over land and to use local holdings to open new economic opportunities for villagers.
Interpreting the impact of macro-level policies and institutions:
Following completion of the macro-level analyses, researchers had to integrate these new understandings into the conclusions drawn from local and meso level analyses. The basic thrust of their interpretation was to establish linkages downward from national dynamics to the local poverty-environment nexus analyzed previously. The use of interpretive models facilitated this process considerably. Moreover, the researchers used a number of other techniques to express the evolving analysis including the use of political mapping as used in Zambia, institutional mapping from local to national levels as applied in China, and building policy matrices as used in Indonesia. These systematized representations were very helpful in organizing the wealth of information gathered through the national-level research.

4. INTERPRETING THE RESULTS

Analysis at the local, meso, and macro levels provided a wealth of information about the economic, institutional, and social relations that shaped livelihoods and resource management in rural areas of the selected countries. As research teams moved through the three stages of analysis, they constantly revised their analysis of their respective localities and the relations to higher-level policies and actors. On completing the three levels, and in preparation for articulating strategic interventions, the teams needed a distinct work period to review and interpret the wealth of material that they had gathered. The following activities were frequently used in that interpretive effort.

Interpretive maps: One of the most used interpretive tools was the construction of interpretive maps that traced the impact of different influences from the national down to the local level. These maps often included an array of influences covering policies, institutions and agencies, and specific actors such as ministers or department heads. These maps became a means of sorting primary from secondary and tertiary influences that were analyzed during the research process.
ROOT CAUSE ANALYSIS
Forest degradation in three locations in the Mount Rinjani ecosystem, Indonesia

**FOREST DEGRADATION**

Uncontrolled chainsaw possession and usage

Invisible, latent non-poor interference

Root Cause 2 Demand for wood for furniture, firewood, handicrafts,

**INJUSTICE**

No conservation measures by farmers

The unseen economic incentives for conservation management and investment

**ECONOMIC BURDEN**

Security of tenure and access right to resources

Shortage of employment opportunities

Root Cause 3 Political exclusion or marginalization of poor farmers

Inappropriate, inconsistent, rigid policies

Root Cause 4 Farmers’ low capacity to mobilize resources

Root Cause 1 Weak law enforcement

Political exclusion or marginalization of poor farmers
Institutional charts: Often, when the researchers determined that one or two national agencies exerted a preponderant influence over local livelihood opportunities and natural resource management, they would chart the lines of accountability and decisionmaking at the three identified levels. They also identified specific individuals and office staff responsible for important decisions.

Policy matrices: Seldom would just one set of national policies determine livelihoods and resource management systems. Frequently a combination of three to five policy vectors converged at the local level to determine land tenure regimes, resource management systems, fiscal redistribution mechanisms, and market openings. The intersection of these policies was captured in crosscutting matrices that explained transition lines and final impacts at the local, regional, and national levels.

Identification of principal obstacles to poverty reduction and sustainable resource management: Each of these and other interpretive tools ultimately had to converge in the identification of principal obstacles that prevented the rural poor from improving livelihoods and improving management of the environment. Interpretation involved a qualitative assessment of weighing many identified influences and their relative impact on status and opportunities. We found no simple guidelines to orient the interpretation process other than to affirm that the multidisciplinary composition of the team obliged factors from various perspectives to be considered and to be included in the final articulation of constraints and causalities.

Written presentation of the analytical work: Presenting a written summary of the interpretation of the research obliged the researchers to be specific and inclusive in their analysis. Justifications became more rigorous, argumentation more specific, linkages clearer as the research team wrote the final summary of conclusions. Though this step might be taken for granted, it is included here for reference because of the distinct refinements that occurred in this final preparatory phase.

The following is a political map that illustrates in outline the main alignments of different groups in respect to: support and opposition to community empowerment through land tenure Reform in Zambia.
5. IDENTIFYING STRATEGIC INTERVENTIONS

Having completed the analytical work, our five partners faced the challenge of using the analysis to identify intervention strategies that they would pursue in the subsequent three years to promote poverty reduction and improved environmental management. This task was by no means a straightforward one because a wide range of factors had to be taken into account. Below we briefly summarize the process they followed in sorting through numerous options before identifying final work plans.

- **Identifying the potential actions to be taken**: Invariably, the inventory of possible interventions drawn up by our partners covered actions that could be taken at the local level, activities required at the national level, and many intermediate actions as well. These obstacles included national policy reforms, sectoral policy adjustments, fiscal policy reforms, and changes in subsidy and investment priorities. Obstacles also included removing constraints of land use, clarifying land tenure issues, restructuring bureaucracies, strengthening compliance with existing laws, and enforcing regulatory mechanisms, among dozens of others. At first these possible interactions were presented without predetermining which of the many options the partners would actually undertake.

- **Matching intervention options with existing capacity**: What became evident as the partners considered their options was that many required interventions simply lay beyond the power and resources that they had at hand. For example, in some cases, they could not foresee drafting and enacting land or forestry reform laws at the national level within the four years of project duration. In another, such a prospect was not entirely out of the question, although it would require an alliance-building process with other organizations at the national level. In a third, rewriting land tenure laws was excluded but not the possibility of extending current law to be used in favor of villages previously excluded from market dynamics. In short, this process of sorting through options required a rigorous categorization of intervention options and a process of identifying the requirements of pursuing each option.

- **Choosing final intervention strategies**: The foregoing exercise of matching resources with requisites of each intervention option narrowed considerably the range of final choices to be made. Each team then selected a limited set of possibilities, developed log frames around each option and presented the results to the outside advisors and potential partners at the respective local, regional, and national levels. These intervention strategies were also presented in a seminar format to the project’s National Advisory Committee to ensure that outputs were realistic and that they would generate significant improvements in the well-being of local communities and their surrounding environment.

**IDENTIFYING STRATEGIC INTERVENTIONS IN INDONESIA**

The assessment shows that interventions are required at both national and local/meso levels to enable poor communities to escape poverty as they access and manage forests in a sustainable manner. To that end, WWF-Indonesia set the following strategic intervention objectives:

- Establish a new government regulation governing community participation in forest management. That objective would be built on direct engagement and advocacy activities, each carefully planned, with the National Agrarian Reform Office and the Director General of Conservation, Protection, and Production of Forests.
- Work with government officials in three districts in Lombok to develop regulations governing community involvement in forest management in harmony with the proposed national policy. This intervention would require training, capacity building, advocacy, and community organization at local and regional levels to mobilize support for the current forest management regime.
REAFFIRMING THE BASIC FEATURES
OF THE ANALYTICAL APPROACH

The most important conclusion to be drawn from this experience is the importance of meeting the three basic requisites integral to this analytical approach, as listed below:

- Quantitative and qualitative analysis of the link between poverty and the environment must be conducted at the local level;
- Qualitative analysis must link dynamics at the local level to meso-level institutional arrangements and to macro-level policies and institutional arrangements; and
- Analysis of economic policies must be intimately integrated with analysis of multitiered institutional arrangements.

Ultimate verification of the usefulness of this analytical approach resides in the actions and interventions that have emerged from its application.

THE CENTRALITY OF INSTITUTIONAL ANALYSIS

When we initiated this project at the beginning of 2001, we assumed that economic changes associated with what has been called the neoliberal economic regime were directly influencing the status and opportunities of the rural poor in developing countries. We assumed that the transition from state-managed to market-based economies would put into play a wide range of new economic actors, particularly dynamic national companies and foreign investors. We also thought that these new actors might increase competition with small local entrepreneurs and possibly displace local producers from emerging markets.

The research did document the effects of the new market entrants but these entrants tended to be most active at national and regional levels. In reality, the rural communities studied by the research teams were often too distant and marginal to the principal growth sectors of national economies to experience direct competition from foreign market entrants. Moreover, the research affirmed that liberalization of the domestic economy opened market opportunities for some rural producers in areas previously closed to competition. A more inclusive examination of the ability of the rural poor to compete in those liberalized domestic markets will be provided in a companion piece.

What is of concern to us here is that more than direct market effects, the predominant influence felt in the rural communities was exerted by new and old institutional arrangements. In some cases, such as China, rigid institutional arrangements inherited from the past prevented the rural poor from increasing their economic and social dynamism. In cases including Indonesia and South Africa, new institutional arrangements acquired dominant significance. In Indonesia, decentralization decrees and new alignments of elites created unanticipated obstacles to poverty reduction and improved resource management. In South Africa, in contrast, dismantling of apartheid opened new opportunities and paths to economic and social interaction in some of the most isolated areas of the country.

In order to capture the new dynamics by which political power was expressed in these changing societies, institutional analysis should be emphasized in analytical work. It is strongly recommended that future studies bear in mind the significance institutional arrangements have in determining the opportunities for the rural poor and provide ample resources for analyzing the exercise of political influence through national, regional, and local institutions.
MAKING DO WITH MODEST FINANCIAL RESOURCES

The five local research teams carried out the analytical work summarized above with very limited financial resources. Budgets for the entire analytical period of six months barely exceeded $65,000 per country. It is therefore not surprising that original research was carried out only at the local level as the research partners conducted surveys and empirical analysis within the selected localities. Thereafter, virtually all subsequent analytical work was dedicated to assembling, digesting, summarizing, and interpreting research conducted by other institutes and development agencies at local, meso, and macro levels.

To be sure, additional financial resources would have significantly expanded the scope of this research. For example, local research teams would have commissioned studies in neighboring villages and districts, they would have expanded inquiries into specific institutional arrangements and dynamics and the meso level, and they would have obtained additional contributions from national policy institutes and experts to supplement their analysis of economic policies, legislation, and regulatory regimes. Moreover, research teams affirmed that if they had six more months, they could have significantly increased the scope of their analysis and involved a far wider set of stakeholders in their analytical and interpretive work.

While fully recognizing the financial constraints imposed by the project, the analytical outputs provided a remarkable set of understandings and information that enabled the groups to embark on strategic interventions fully capable of influencing the prevailing patterns of poverty and ecological disruption.

CHALLENGING THE STATUS QUO

Throughout this paper we have tried to remind the reader that the analytical approach presented above was intimately tied to the implementation of strategic interventions that seek to remove impediments preventing the rural poor from raising living standards and managing natural resources better. Strategic interventions have ranged from advocating basic changes in resource tenure regimes to increasing transparency of governmental institutions, increasing the advocacy power of the organizations of the rural poor, and rewriting legal codes. Other interventions seek to deepen collaboration with local and regional governments, build partnerships with private sector organizations, and introduce experimental resource management systems.

Some of these intervention initiatives that grew from this analytical approach have been promoted by international development agencies, while others are explicitly prohibited because they might be too "political." Some strategic initiatives challenge the status of vested interests that control important institutions and resources, while others seek to strengthen the influence of reform-minded legislators and policymakers.

In conclusion we must underscore that there is, invariably, a political dimension to both this analytical approach and to the interventions that flow from it. The approach is political in the sense that it seeks changes, however modest, in the distribution of power and opportunity in specific contexts and societies to favor the rural poor and those who manage environmental resources in rural areas. It follows that there also is an explicit and deliberate effort to diminish the influence of those groups dominating the rural poor and exploiting natural resource wealth in rural areas. The five experiences on which this analytical approach is constructed affirm that only by changing the equation of power in rural areas can the poor raise their living standards and improve their management of the surrounding environment.
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