

where are the **poor ?**

*Experiences with the
Development and Use
of Poverty Maps*



**Norbert Henninger
Mathilde Snel**

Where are the Poor?

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Foreword

The quest to eliminate poverty is one of the great human endeavors of our time. Never before has humankind had the economic resources and technological tools to end human deprivation. We do now.

One essential tool is *information*. In all countries and at all times, information is power. Information forms the basis of knowledge, which can be used to direct finite human and financial resources to projects with the greatest impact on improving the lot of poor people. Information is key to enable people to lift themselves out of poverty—a condition characterized not only by lack of income and material goods, but also by lack of *opportunity*. Foremost among these are the opportunity to learn and the opportunity to participate in decision-making.

In *Where are the Poor? Experiences with the Development and Use of Poverty Maps*, Norbert Henninger and Mathilde Snel examine a powerful new information analysis and communication tool that has come into prominence in recent years. They show how poverty maps can be used by international, national, and local decision-makers to direct investments in human development. They demonstrate the importance of the *spatial* dimensions of poverty. All too often, pockets of deprivation remain unrecognized alongside greater prosperity. Poverty mapping pinpoints places where development lags. It can highlight the location and condition of infrastructure and natural resource assets that are critical to poverty reduction. Armed with this knowledge, policymakers can deploy highly targeted antipoverty expenditures and interventions to reach the neediest people by the most effective and affordable means.

Drawing on case studies from 14 countries in Africa, Asia, and Latin America, the authors review how poverty maps were used and some of the factors constraining their use in a wide variety of geographic and institutional settings. Examples reveal how development decisions, investments in infrastructure, and targeting of assistance were shaped by poverty mapping in the countries studied. The report also points to the largely untapped potential for applications incorporating the risks and opportunities associated with environmental

factors impacting poverty as well as applications to assist the planning and operations of private businesses and other non-traditional users. Especially intriguing is the role of poverty mapping in shedding light on antipoverty policy options, sparking fresh public debate, and strengthening civil society's call for increased transparency and accountability of government decision-making.

From such experiences come lessons that can guide future poverty mapping initiatives in other countries. Emerging as pivotal themes in the study's findings are the need for collaborative approaches and senior-level support as well as the importance of active dissemination of results. Recommendations aimed at national and international actors sketch a plan for sustaining poverty mapping in the countries studied and expanding its frontiers to all developed and developing countries. Particularly in the latter, poverty mapping must be viewed as an essential, long-term capacity development and institutional strengthening exercise. In all cases, early, continuing stakeholder involvement combined with data access for all those who want it are cornerstones of a successful poverty mapping effort.

This report is the product of a strong collaboration between the World Resources Institute (WRI), UNEP/GRID-Arendal, and dozens of country experts supplying information and insights for the cases studied. The Netherlands Ministry of Foreign Affairs, the Swedish International Development Cooperation Agency, and the FAO-CGIAR-UNEP Poverty Mapping Project funded by the Norwegian Ministry of Foreign Affairs provided critical support for this study. We are pleased to express our appreciation to all for their exceptional encouragement and generosity.

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Executive Summary

Finding ways to reduce poverty and inequity is a daunting challenge for local, national, and international decision-makers. One important aspect of this challenge is the spatial heterogeneity of poverty: poor people tend to be clustered in specific places. Aggregated, national-level poverty data mask this subnational variation. For example, the figure below presents maps of poverty data from Ecuador at increasing levels of resolution, from national to regional, provincial, and municipal. These maps show that even the lowest-poverty region of the country (with a poverty rate of 30-45%) contains provinces with considerably greater incidence of poverty (45-60%) as well as municipalities with extremely high poverty rates (60-75%).

Poverty maps for Ecuador at various levels of spatial resolution



investments in infrastructure and services could have the greatest impact. Once largely the domain of economists and social scientists, poverty maps are now being used by policymakers and many non-governmental entities, including civil society groups, academic institutions, and private businesses. However, the new and diverse applications of poverty mapping emerging over the past five years have not been well documented.

The World Resources Institute (WRI) in collaboration with UNEP/GRID-Arendal has conducted a study examining the uses and impacts of poverty maps. Our interest in this topic grows out of extensive experience in mapping biophysical indicators, including those related to coral reefs, water resources, frontier forests, and drylands. We have found indicator maps to be a powerful tool for stimulating and advancing policy dialogue. In particular, poverty mapping provides a means for integrating biophysical information with socioeconomic indicators to provide a more systematic and analytical picture of human wellbeing and equity. Environmental factors represent one dimension of the complex physical, biological, and socioeconomic systems that influence

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