

WHERE IS
THE WEALTH
OF NATIONS?

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Measuring Capital for the 21st Century



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FOREWORD

This volume asks a key question: Where is the Wealth of Nations? Answering this question yields important insights into the prospects for sustainable development in countries around the world. The estimates of total wealth—including produced, natural, and human and institutional capital—suggest that human capital and the value of institutions (as measured by rule of law) constitute the largest share of wealth in virtually all countries.

It is striking that natural capital constitutes a quarter of total wealth in low-income countries, greater than the share of produced capital. This suggests that better management of ecosystems and natural resources will be key to sustaining development while these countries build their infrastructure and human and institutional capital. Particularly noteworthy is the share of cropland and pastureland in the natural wealth of poor countries—at nearly 70 percent, this argues for a strong focus on efforts to sustain soil quality.

This new approach to capital also provides a comprehensive measure of changes in wealth, a key indicator of sustainability. There are important examples of resource-dependent countries, such as Botswana, that have used their natural resources to underpin impressive rates of growth. In addition, the research finds that the value of natural capital per person actually tends to rise with income when we look across countries—this contradicts the received wisdom that development necessarily entails the depletion of the environment.

However, the figures suggest that, per capita, most low-income countries have experienced declines in both total and natural capital. This is bad news not only from an environmental point of view, but also from a broader development perspective.

Growth is essential if developing countries are to meet the Millennium Development Goals by 2015. Growth, however, will be illusory if it is based on mining soils and depleting fisheries and forests. This report provides the indicators needed to manage the total portfolio of assets upon which development depends. Armed with this information, decision makers can direct the development process toward sustainable outcomes.

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This book is dedicated to the memory of David Pearce—professor, mentor, friend, and intellectual father of the work presented here.

ACRONYMS AND ABBREVIATIONS

CES	constant elasticity of substitution
EA	environment accounts
eaNDP	environmentally adjusted net domestic product
ENRAP	Environment and Natural Resource Accounting Project
EPE	environmental protection expenditure
EU	European Union
Eurostat	European Commission's official statistical agency
FAO	Food and Agriculture Organization of the United Nations
GDP	gross domestic product
geNDP	greened economy net domestic product
GNI	gross national income
GNIPC	gross national income per capita
IO	input-output
IUCN	The World Conservation Union
MFA	material flow accounts
NAMEA	national accounting matrix including environmental accounts
NDP	net domestic product
NPV	net present value
PIM	perpetual inventory model
PPP	Purchasing Power Parities
PVC	Present Value of Change
OECD	Organisation for Economic Co-operation and Development
OLS	Ordinary Least Squares
SAM	social accounting matrix
SEEA	system of integrated environmental and economic accounting
SNA	system of national accounts
SNI	sustainable national income

SOEs	state-owned enterprises
SRRI	Social Rate of Return on Investment
TMR	total material requirements
UNEP-WCMC	United Nations Environment Programme World Conservation Monitoring Centre
WDI	World Development Indicators
WDPA	World Database of Protected Areas

Note: All dollar amounts are U.S. dollars unless otherwise indicated.

LOOKING FOR THE WEALTH OF NATIONS—A LOGICAL MAP

