

Poverty and Environmental Degradation: A Critical Analysis of the Nexus

Abstract

Many observers conceptualize the link between rural poverty and the environment as a “downward spiral,” with population growth and economic marginalisation leading to environmental degradation. However, recent micro-scale empirical research challenges this model, showing striking heterogeneity in environmental management by the rural poor, including evidence of their success in adapting to environmental change and the efficacy of policies in influencing outcomes. Using both conceptual and empirical material, this article aims to assess the relationship between poverty and the environment. We will specifically examine criticisms of the “poverty causes environmental degradation” approach, arguing that recent scholarly work on the complex web of factors involved in the poverty-environment nexus provides a more useful toolkit for assessing the relationship between poverty and the environment in local places. We will conclude by analyzing how policies can more effectively address the interrelationship between poverty and environmental degradation, highlighting promising areas of impact.

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Key words

Poverty, environmental degradation, poverty-environmental degradation nexus, power, market failure and institutional failure

Introduction

Poverty and environmental degradation represent two of the largest global challenges of contemporary times. It has been more than thirty years since world leaders congregated in Stockholm to deliberate on the poverty-environment nexus and declared the need for “preservation and improvement of the human environment, for the benefit of all the people and for their prosperity”¹. While some countries can boast remarkable achievements in poverty alleviation, global poverty remains a persistent challenge in this millennium with more than a third of the world’s population living in a “*condition of absolute deprivation*”². Where achievements have been made in improving the quality of life and livelihoods of people, these have rarely been without adverse environmental impacts. In fact, if we look deeper into strategies, the relationship between poverty and the environment has been poorly

34 integrated into PRSPs³ (Poverty Reduction Strategies Papers) and often has not been
35 operationalized. The experience of the UNDP and UNEP partnership show that there is still a
36 general lack of understanding of how environment and poverty are linked and/or how to
37 include environmental sustainability in national, sectoral and district development process,
38 including within environment ministries.

39 Many observers conceptualize the link between rural poverty and the environment as
40 a “downward spiral,” with population growth and economic marginalisation leading to
41 environmental degradation (Scherr 2000). However, recent micro-scale empirical research
42 challenges this model, showing striking heterogeneity in environmental management by the
43 rural poor, including evidence of their success in adapting to environmental change and the
44 efficacy of policies in influencing outcomes (Scherr 2000). Using both conceptual and
45 empirical material, this article aims to assess the relationship between poverty and the
46 environment. I will specifically examine criticisms of the “poverty causes environmental
47 degradation” approach, arguing that recent scholarly work on the complex web of factors
48 involved in the poverty-environment nexus provides a more useful toolkit for assessing the
49 relationship between poverty and the environment in local places. I will conclude by
50 analyzing how policies can more effectively address the interrelationship between poverty
51 and environmental degradation, highlighting promising areas of impact.

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The use of “I” and “we” in the abstract.

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53 **The Global Imperative to Address Poverty and Environmental Degradation**

54 Finding ways to effectively address environmental degradation and poverty is a global
55 imperative (UNDP 2000). The United Nations Millennium Development Goals recognize
56 that environmental sustainability is part of economic and social well-being across the globe.
57 The Millennium ecosystem Assessment (2005) found that 60% of ecosystem services are
58 used unsustainably and concluded that “any progress achieved in addressing the goals of
59 poverty and hunger eradication, improved health, and environmental protection is unlikely to
60 be sustained if most of the ecosystem services on which humanity relies continue to be
61 degraded.” A large body of research demonstrates that environmental conditions and access
62 to environmental assets are closely linked to the livelihoods, health and security of people
63 living in poverty—particularly women and children. Greatly expanded public and private
64 investment in the productivity of these environmental assets can generate strong returns for
65 poverty reduction and contribute to pro-poor growth. Yet, despite their critical importance,
66 environmental assets continue to be degraded at an alarming rate. Therefore, integrating

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researches, since its very necessary; for the sake of
readers.

67 poverty-environment concerns into the mainstream of development policy, planning and
68 investment is an urgent priority (IIED/IUCN/UNDP/UNEP/WRI 2005)⁴.

69 There are important links between natural resource management and poverty.
70 Numerous studies have shown that environmental damage can have particular significance
71 for the poor. Recent participatory poverty assessments, conducted in 14 developing countries
72 of Asia, Africa and Latin America, reveal a common perception by the poor that
73 environmental quality is an important determinant of their health, earning capacity, security,
74 energy supplies and housing quality (Brocklesby and Hinshelwood 2001). Rural studies
75 frequently suggest that poor people's economic dependence on natural resources makes them
76 particularly vulnerable to environmental degradation (Amber 1999; Cavendish 2000). Other
77 studies have assessed the health damage suffered by poor households that are directly
78 exposed to pollution of the air, water and land (Bosch et al 2001; Mink1993). In addition,
79 conflicts over the environment may have regressive impacts because the poor are least
80 capable of coping with these disasters (Myers and Kent, 1995).

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81

82 Differing Approaches to the Poverty-Environment Nexus

83 There is much controversy surrounding the relationship between poverty and the
84 environment, demonstrated by two differing general approaches and schools of thought. The
85 first postulates that poverty is a major cause of environmental degradation, particularly in
86 developing countries (Duraiappah 1998: 2170). This predominate approach argues that in
87 order for policy makers to address environmental issues, they must first address the poverty
88 problem and is evidenced in the Bruntland Report (World Commission on Environment and
89 Development 1987), World development Report (World Bank 1992) and also discussed more
90 carefully in Perrings (1989) and Baland and Platteau (1996).

91 A second broad school of thought argues, through a variety of differing theories and
92 postulations that a direct link between poverty and environmental degradation is too
93 simplistic and the nexus between the two is governed by a complex web of factors
94 (Duraiappah 1998). For example, a body of economic literature disputes the conventional
95 theory by asserting that a more complex set of variables comes into play and that simple
96 generalizations of this multidimensional problem are often erroneous and miss many
97 important points (Leach and Mearns 1995). Such analyses point out demographic, cultural,
98 and institutional factors as important variables in the connection between poverty and
99 environmental degradation (Duraiappah, 1998:2169). An intricate web of these factors in
100 addition to feedback loops between environmental degradation and poverty make the process

101 of identifying causality links, if any, between these two phenomena a non-trivial
102 exercise(Duraiappah 1998: 2169).

103 In addition, critiques of theorizations of a “downward spiral” are furthered by
104 research that suggests many poor people are able to adopt protective mechanisms through
105 collective action that reduces the impacts of demographic, economic and environmental
106 change (Forsyth et al 1998). Such research indicates that many current conceptions of
107 environmental degradation are based on misinformed linkages of human activity on
108 landscape change, in effect bypassing many of the most pressing environmental problems
109 that currently affect poor people (Forsyth et al 1998).To achieve the goal of poverty reduction
110 and environmental protection there is a pressing need to first, evaluate and analyze the
111 poverty-environmental degradation nexus and second, to prescribe policy options to mitigate
112 or eradicate these two problems.

113

114 **Three Theorizations of the Relationship between Poverty and Environmental** 115 **Degradation**

116 Among the theorists who are critical of an overly simplistic generalization that find
117 poverty to propel environmental degradation, Duraiappah (1998) offers three other possible
118 relationships between poverty and the environment. Through analyzing Duraiappah’s
119 postulations about these possible relationships between the environment and poverty, I will
120 argue that the relationship between poverty and environmental degradation is highly complex
121 and varied, alluding any straightforward generalizations about cause and effect. In particular,
122 I will contend that attention to local dynamics and human’s interaction with particular
123 resources, such as land and water, support the claim that multiple factors, including
124 institutional and market failures, further mediate the poverty-environment nexus.

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125 Instead of poverty being the primary culprit leading to increased environmental
126 problems, one counter approach suggests that a combination of greed, power and wealth
127 causes environmental degradation in many developing countries (Boyce 1994). For example,
128 Duraiappah (1998) describes this approach as one that views the exploitative practices of the
129 rich as the primary factor forcing segments of the population into poverty, and in turn
130 exacerbating environmental degradation. Duraiappah (1998: 2171) summarizes this linkage:

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131 One could argue that power, wealth and greed can cause or exacerbate poverty which
132 in turn then causes environmental degradation. Then the solution is to address the force
133 causing the poverty and in this case, it would be the power/greed/wealth factor.
134

135 This view both substantiates and complicates the theory that poverty fuels environmental
136 degradation, as it finds the root causes of environmental degradation to be greed, power and
137 wealth, even as these dynamics themselves fuel the forms of poverty that jeopardize
138 sustainability.

139 Duraiappah postulates a second possible relationship, which highlights the links
140 between markets and institutional failures with environmental degradation respectively
141 (1998). Specifically, institutional and/or market failures are hypothesized as the primary
142 instigators of environmental degradation (Duraiappah 1998). Here, understanding a clear
143 distinction between market and institutional failure is very necessary when policy
144 implications and prescriptions are addressed, as specific types of failures require unique
145 prescriptions (Duraiappah 1998). In many instances, a general category called institutional
146 failure is used to illustrate both mechanisms. For example, policy responses to incorrect price
147 signals (market failure) will be quite different from policy initiatives needed to establish and
148 enforce well defined property rights (institutional failure). The distinction is not always clear
149 but it must be made if policy analysis and prescriptions are primary objectives (Duraiappah
150 1998).

151 The third and final possible relationship that questions the conventional view is
152 the notion that environmental degradation is a major factor causing poverty (Duraiappah
153 1998). According to this approach, if environmental degradation is caused by only exogenous
154 poverty (or poverty caused by factors other than the degradation of the environment) then the
155 “poverty-induced environmental degradation” argument can be accepted and it would be
156 optimal from the policy maker’s perspective to pursue environmental protection through
157 poverty mitigation policies (Duraiappah 1998: 2171). However, if poverty is endogenous, or
158 itself caused by environmental degradation, then a feedback loop is possible, where more
159 environmental degradation leads to further endogenous poverty. In the end, this theorization
160 supports the “downward spiral” view, demonstrating how environmental degradation
161 reinforces each other.

162 Although the majority of the literature reviewed by Duraiappah (1998) show marginal
163 groups adopting environmental degradation activities, very few freely chose these activities
164 and many had no choice but to adopt unsustainable activities (Duraiappah 1998). Economic
165 conditions and increased vulnerabilities with regard to markets and institutions as well as the
166 environment, often caused by the activities of the powerful and wealthy, left marginal groups
167 with few options other than to adopt resource mining activities (Duraiappah 1998). Thus, the
168 possible link from poverty to resource degradation is not so well established as the link from

169 resource degradation to poverty. From the above discussion, the poor cannot be blamed as the
170 main culprit behind environmental degradation. Rather, the poor in many cases are more aware
171 about local land, forest, and water resources, as their lives and livelihoods are often more
172 entangled and dependent on these resources. In fact, in some cases the poor are mobilizing to
173 protest the high costs of environmental degradation that they are experiencing (Broad et al
174 1994).

175 As Duraiappah illustrates, distinguishing the root causes and effect of the poverty-
176 environment relationship is critical for creating effective policy. For example, policies
177 focused on the mitigation of endogenous poverty will have limited impact if the primary
178 forces driving environmental degradation are still present (Duraiappah 1998). In other
179 instances, if environmental degradation is caused by only power, wealth and greed then the
180 policy prescription may be complicated by rent-seeking activities on the part of the wealthy
181 and powerful (Duraiappah 1998). Thus, vested interests have the potential of preventing the
182 adoption of these solutions (Duraiappah 1998: 2171). A lack of discernment of the root
183 causes and connections between environmental degradation and poverty may be one reason
184 why many policies addressing the poverty-environmental degradation issue have failed or
185 had limited success (Duraiappah 1998: 2172).

186

187 **Place-specific Dynamics, Resources and Institutional Failures**

188 From the examples of several case studies on land and water, Duraiappah(1998) and
189 others (Forsyth1998; Scherr 1996b; Scherr2000) show the ways that multiple factors,
190 including local dynamics and institutional failures, impact the relationship between poverty
191 and environmental degradation in place and case-specific ways. For example, Duraiappah
192 (1998) uses the example of an institutional failure, specifically a lack of land-tenure, as
193 forcing impoverished populations to resort to unsustainable land activities. In addition, he
194 points out that it is often higher income groups with commercial interests that have the
195 potential to most dramatically degrade the environment, disrupting the assumption that
196 poverty normally or usually fuels environmental problems. Similarly, an absence and misuse
197 of property rights furthers the ineffective governance of water resources, leading to
198 degradation. For example, Duraiappah summarizes:

199 With the establishment of individual property rights and the breakdown of traditional
200 institutional structures, the rights to water have quite often meant benefits to high-income
201 groups who either had the resources to acquire the water property rights or take
202 advantage of the access to government subsidized water supplies (1998: 2175).

203

204 Here, the institutional structures regulating property place the poor in a situation where there
205 only recourse is to degrade, rather than sustain, the limited resources they have access to.
206 While poverty may ultimately propel environmental degradation, specific local institutional
207 arrangements remain the root cause, a distinction that remains critical if policy is to
208 effectively address the poverty-environment relationship.

209 Local institutions thus provide the social fabric within which poverty-environment
210 interactions are often determined (Scherr 2000). Effective resource management, whether for
211 private, communal or public resources, often requires collective regulation (e.g. use or
212 management restrictions on privately-held resources to influence environmental externalities)
213 or collective investment (e.g. establishment of community drainage systems or trees for
214 public use) (Scherr 2000). Good local organisational and management skills often underpin
215 successful resource management activities (White and Runge 1994; Scherr 2000). Cultural,
216 demographic, market and leadership factors and characteristics of the resource base and local
217 government affect the emergence and success of local organisation for natural resource
218 management (NRM) (Scherr 1999b). A key indicator of equity in NRM organisations is
219 whether the poor, including women, take part and have an effective voice (Scherr 2000).

220 Local institutions also provide community physical and social infrastructure that
221 complements and supports the development of non-farm activities, the commercialisation of
222 agriculture and urban-rural links (Vosti and Reardon 1997; Scherr 2000). Support services to
223 the poor for agricultural production and resource management(e.g. technical assistance and
224 marketing information) influence their capacity to respond positively to NRM challenges
225 (Scherr 2000:489).Local endowments, conditions for adoption of conservation technology
226 and local institutions thus appear key to generating increased livelihood security for poor
227 people while also improving environmental conditions (Scherr 2000).

228 The most effective action for reducing poverty and environmental degradation will
229 thus depend on the dynamics of local change and the relative importance of key factors
230 (resource-conserving technology, local institutions and property rights) influencing poverty-
231 environment interactions (Scherr 2000:484).

232

233 **Poverty and Environmental Stewardship**

234 However, Duraiappah (1998), Scherr (2000) and other scholars (Forsyth et al (1998);
235 Reardon and Vosti (1995); Cavendish (1999)) indicate that economically disadvantaged
236 populations often are in a unique position to conserve resources, and often act to do so when
237 institutional and market failures are absent. Research demonstrates the ways the poor are

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238 uniquely positioned to be stewards of the environment, and often act to preserve the
239 environmental resources for which they depend on for sustenance and their livelihoods,
240 sometimes even reviving degraded resources. For example, studies have found a wide range
241 of environmental outcomes under management by the poor and of welfare outcomes
242 following environmental degradation. Researchers reveal that poor farmers adopt resource-
243 conserving practices nearly always because these also contribute to increased productivity or
244 output stability and are economically viable in the farmers' context of risk and resource
245 constraints (Scherr 2000). Such dual-purpose technologies are essential to achieve poverty
246 reduction and environmental policy objectives (Scherr 2000:486). Reardon and Vosti's
247 (1995) concept of 'conservation investment poverty' highlights poor people's limited
248 capacity to mobilise critical cash, labour, machinery or other resources, even for highly
249 profitable and effective investments. This is partly because of weak institutional development
250 and poor functioning of factor markets in many poor rural areas (Scherr 2000).

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251 A result of this new evidence of variability in poverty–environment interactions has
252 been an emerging focus on “sustainable rural livelihoods” (Scherr 2000: 481). Examinations
253 of livelihood strategies have revealed that although the rural poor may have limited resources,
254 they still have considerable capacity to adapt to environmental degradation, either by
255 mitigating its effects on their livelihoods or by rehabilitating degraded resources (Scherr
256 2000: 482). A wide variety of coping mechanisms may be used to deal with environmental
257 stress (Scherr 2000: 482). Some of these responses imply further impoverishment (e.g.
258 reducing consumption, depleting household, or moving), others may offset the welfare effects
259 of resource degradation without improving the natural resource base (e.g. increasing off-farm
260 employment, exploiting common property resources) (Scherr 2000). Some strategies both
261 improve natural resources and reduce household poverty by protecting and preserving the
262 asset base, diversifying and improving on-farm production systems, or taking out credit to
263 invest in future production or resource protection (Scherr 1999b).

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266 **Relationships between Urban Poverty and Environmental Degradation**

267 To address the twin problems of poverty reduction and environmental protection at
268 the global level, a sole focus on the poverty-environmental degradation linkage in rural areas
269 remains insufficient. Examples from urban areas further demonstrate that a host of complex
270 factors mediate the relationship between poverty and environmental degradation, not least
271 how these two processes are understood differently in urban contexts. In particular, some of

272 the most important current challenges to orthodox conceptions of environmental degradation
273 come from urban areas (Forsyth et al 1998). There are thus important differences between
274 poverty–environment linkages in urban and in rural areas: Firstly, in the rural context
275 livelihoods depend more directly on natural resources than in the urban context where cash-
276 based income streams and assets are more significant; Secondly, poor people tend to
277 contribute less to the forces causing environmental degradation in urban areas; Thirdly, urban
278 environmental degradation is primarily associated with health impacts(Forsyth et al 1998:
279 26).

280 As a result, the causes, consequences and distributional costs of urban deprivation are
281 commonly more adequately addressed via political and economic policies rather than through
282 direct intervention into environmental processes (Forsyth et al 1998). As with rural areas,
283 environmental problems in urban areas are perceived and experienced differently by various
284 social groupings, and are also subject to a number of potential misconceptions and errors in
285 measurement and management (Forsyth et al 1998). Rural trends in environment or social
286 wellbeing are not always good guides for urban areas (Forsyth et al., 1998). Urban
287 environmental problems in developing countries are also commonly associated with the
288 world’s largest cities – such as Sao Paulo, Cairo and Mexico City (Forsyth et al 1998: 26). Yet
289 the majority of urban inhabitants in developing countries are actually found in smaller
290 settlements, particularly those considered to be small and intermediate, of less than 20,000 or
291 between 20,000–250,000 people (Forsyth et al 1998: 26).

292
293 Poor people in urban areas have shown a willingness to organize in order to ensure access to
294 water and sanitation, particularly in the case of shanty-towns (Forsyth et al 1998). But in
295 comparison with rural areas, local institutions in cities have a number of additional problems
296 that make adaptation difficult (Forsyth et al 1998). Most importantly, urban environmental
297 problems are almost universally defined in terms of impacts on health rather than impacts on
298 land productivity, forest and soil resources (Forsyth et al 1998). In addition, many
299 environmental risks (Health related problems) are relatively new or beyond the experience of
300 poor people, and therefore are more difficult to respond to (Forsyth et al 1998). As a result of
301 these factors, local institutional responses to environmental health problems and risks in
302 urban and industrial areas may depend more on the provision of institutional support by the
303 state, international agencies and investors rather than local communities (Forsyth et al
304 1998:28). However, these too are subject to problems of access (Forsyth et al 1998).
305 Evidence has suggested that there are poverty thresholds effects where, for example, the

306 poorest 20 percent may be unable to participate in such schemes (Forsyth et al 1998).
307 However, “such institutional provision for the urban poor may take second priority for
308 national and local governments with the emergence of prosperity and local elites as the
309 ‘green’ environmental agenda (concerning conservation aspects of environment) take
310 precedence over ‘brown’ agendas (concerning housing, pollution, sanitation etc.)” (Forsyth et
311 al 1998: 28).

312 Many studies that adopt the viewpoint of the Brundtland Commission, that poverty
313 eradication has to come before environmental protection, may encourage the adoption of
314 policies that do not acknowledge the different meaning of environment to poor people, and
315 macroeconomic responses that may increase both poverty and environmental degradation in
316 rural and urban settings (Forsyth et al 1998). Instead, it is important to acknowledge the local
317 rather than universal experience of poverty and environmental degradation and to provide
318 enabling circumstances for poor people to create their own institutional responses to
319 economic, demographic and environmental changes (Forsyth et al 1998). The particular
320 approach of ‘environmental entitlements’ offers a way to address these concerns (Forsyth et
321 al 1998). This approach stresses the interactions of different institutional responses to
322 environmental degradation at a variety of scales and by a variety of actors (Forsyth et al
323 1998). Immediate research priorities include better understandings of techniques to
324 strengthen local institutional responses to change; ways to integrate these into increasingly
325 international markets; and methods to make international environmental policy objectives
326 more representatives of local, poor people’s concerns (Forsyth et al 1998).

327
328 The World Resources Report 2005 identifies a number of actions needed to improve
329 integration of environment into Poverty Reduction Strategies (PRS) processes, such as:
330 recognizing the importance of income from the environment and natural resources,
331 addressing tenure and access to resources, tackling issues of decentralization and
332 management at local levels and developing environmental indicators and monitoring that are
333 relevant to poverty. In 2005, UNDP and UNEP began the process of integrating their
334 respective poverty and environment programmes to form the UNDP/UNEP Poverty –
335 Environment Initiative (PEI)⁵, which currently operates in eleven countries in Africa, Asia
336 and Central America. The UNEP is promoting the message that *investment in environmental*
337 *management that benefits the poor will deliver strong results in terms of sustained poverty*
338 *reduction, growth and achieving the Millennium Development Goals (MDGs)*. Many national
339 and international non-profit organizations like CPALI⁶ (Conservation Through Poverty

340 Alleviation programme- a US based non profit organization) are developing working models
341 for integrated , small scale, enter prise systems that link rural livelihoods to natural resource
342 conservation. The World Bank’s current focus is on the achieving of the Millennium
343 Development Goals (MDGs), calls for the elimination of poverty and the implementation of
344 sustainable development. The World Bank (World Bank 2003; 2008), is currently
345 encouraging environmental mainstreaming in Poverty Reduction Strategies.

346

347 **Conclusion**

348 Different case studies, for example of water and land, examined by Durraiph (1998) and
349 other scholars show that power, greed, market failure and institutional failure are the major
350 factors behind environmental degradation , not poor people themselves, while degradation
351 negatively impacts poor groups. Studies also show that poor people often have a high level
352 of awareness about the environment, and are in a position to protect the environment, as a
353 sustainable environment will support their livelihoods. Hence, we can say that the “poverty
354 creates environmental degradation” argument is vastly insufficient for understanding the
355 nature of these processes. Many policies will not be effective if they overlook the root causes
356 and only see one direct link between poverty and environmental degradation, ignoring other
357 contributing factors and feedback loops. In addition, Forsyth’s case study demonstrates that
358 the rural poverty-environment link and urban poverty-environment link is highly different,
359 both practically and conceptually, affecting poor groups differently. In rural areas, the poor
360 directly depend on natural resources (as part of their livelihood) and experience the problem
361 of environmental degradation in terms of economy and livelihood, while the urban poor
362 depend on cash-based income for their livelihoods, experiencing environmental problems
363 largely in terms of health problems.

364 This article has explored the dominant approaches to understanding the
365 ‘poverty-environmental degradation’ nexus. Each of these approaches has reviewed the
366 problem from different lenses and accordingly generated policy options. The environmental
367 needs of, and pressures on, the poor will certainly intensify in coming decades. Hence, it is
368 important to establish more effective micro-macro links of environment and poverty policies.
369 As the examples and more detailed case studies above show, “Although the relationship
370 between poverty and environment is highly variable, the ‘downward spiral’ is both avoidable
371 and reversible in many circumstances (Scherr 2000). Meeting the challenge of reconciling
372 poverty reduction and environmental protection will require careful investigation and
373 rethinking of the institutional arrangements on which such efforts so fundamentally depend.

374 Poor people have an unrecognised potential for adaptation and innovation. Public policies can
375 positively influence the micro-scale factors that determine how poor adapt to environmental
376 pressures. However, more pro-active policies are required to achieve environmental and anti-
377 poverty objectives simultaneously, enhancing the access to and productivity of poor people's
378 natural resource assets and engaging them as partners in public resource management (Scherr
379 2000). In essence, it can conclude that, poverty reduction and environmental protection are
380 complementary goals and should be treated jointly together as a central idea with a 'win-win'
381 policy and with comprehensive programmatic approach.

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Notes

¹ Report of the United Nations Conference on the Human Environment, Stockholm, 5-16 June 1972 (United Nations publication, Sales No. E.73.II.A.14 and corrigendum), chap. I.

² United Nations: Report of the World Summit on Sustainable Development Johannesburg, South Africa, 26 August- 4 September 2002

³ PRSPs – Poverty Reduction strategy Papers are prepared by the member's countries through a participation process involving domestic stakeholders as well as external development partners, including the World bank and International monetary fund.

⁴ This publication is a joint product of staff from UNDP, UNEP, IIED, IUCN and WRI, prepared on behalf of the Poverty-Environment Partnership.2005: IIED/IUCN/UNDP/UNEP/WRI (2005): Sustaining the Environment to Fight Poverty and Achieve the MDGs: The Economic case and priorities for action – A message to the 2005 world Summit. Printed by Bedwick & Jones Printing, Inc. September 2005, UNDP, New York.

⁵ PEI- The UNDP-UNEP Poverty –Environment Initiative is a joint programme to provide financial and technical support to countries to build capacity for mainstreaming poverty-environment linkages into national development planning processes, such as PRSP's and MDG achievement strategies.

⁶ CPALI'S goal is to build broad based partnerships among conservation and development organizations businesses, governments and local communities that work to introduce new ways that rural farmers can profit from sustainable use of natural resources.

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