ADDRESSING INEQUALITIES

The Heart of the Post-2015 Development Agenda and the Future We Want for All

Global Thematic Consultation

RESOURCE INEQUALITY: MOVING INEQUALITIES FROM THE PERIPHERY TO THE CENTRE OF THE POST-2015 AGENDA

Leisa Perch, Clare Watson and Bridget Barry (IPC-IG)

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Abstract:
There is an unintended and false separation between in the social, economic and environmental drivers of under-development in the Millennium Development Goal (MDG) framework. In practice, however, the root causes of these drivers are often interconnected. Real-word examples highlight the existing scale and scope of what we define as 'resource inequality' –the unequal access of socially and economically marginalized groups to natural resources and basic services, which are fundamental to human development.

A significant proportion of the world's population experience some form of resource inequality: more than one third of the global population lack basic access to energy; the urban poor suffer disproportionately from the health and productivity impacts of poor sanitation; millions in Asia and Africa lack access to safe drinking water and reliable access to electricity; and rural women generally lack basic economic rights to the lands they cultivate. The time required to collect water and fuel limit productivity, especially for women, and the lack of electricity access limits political and social participation–essentials for inclusive and sustainable development.

While acknowledged in various policy statements and commitments, the intersections between practical and strategic development needs receive ad hoc attention in global development discussions. The visible political divide over the link between women's reproductive rights and sustainable development at the Rio+20 Conference underscores the underlying ambiguity that persists surrounding the nexus between the social and environmental dimensions of inequality. Tackling 'resource equality' can bridge this gap.

In the lead up to and during the implementation of the post-2015 Agenda, a 'resource inequality' lens can inform a more comprehensive and coherent approach to development and help the advance beyond crisis-related and economically-driven approaches to natural resource management.

Biographies:

Leisa Perch is Policy Specialist/Team Leader, Rural and Sustainable Development, with the UNDP/Government of Brazil's International Policy Centre for Inclusive Growth. Prior to this assignment, she served as Programme Manager for Poverty Reduction, Gender and HIV/AIDS in the UNDP Sub-regional office for Barbados and the Organization of Eastern Caribbean States (OECS). She has over 15 years of diverse experience, with expertise spanning several areas: post-disaster livelihoods, sustainable development, information for decision-making, poverty reduction, gender, HIV/AIDS, social development, human development and MDG reporting. She has published several papers on the nexus between social and environmental policy as well as on aspects of global environmental governance.

Clare Watson
Clare Watson is a former intern with the Rural and Sustainable Development Team. She holds a Master's Degree in International Affairs from The New School University. Her research interests include agriculture, food sovereignty, and the market-state dichotomy in development.

Bridget Barry
Bridget Barry is a research intern with the Rural and Sustainable Development Team. She has a Master's Degree in Urbanisation and Development from the London School of Economics and Political Science. Her research interests include land, Central America, campesino and indigenous movements, urban-rural dynamics and resource access. She has previously worked in Guatemala, Belize and Costa Rica.

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Introduction

In the current Millennium Development Goals (MDG) framework, an unintended and false separation exists between the social, economic and environmental drivers of under-development. While development challenges such as MDG 1 (poverty and hunger), MDG 3 (gender equality) and MDG 7 (environmental sustainability) may appear to be distinct, their root causes are often interconnected. Furthermore, data suggests a number of resource gaps between groups within society that make some inequalities more global in nature: more than one third of the world's population lacks access to energy, unsafe sanitation undermines the health and productivity of 790 million urban residents, and millions of women have no tenure to the lands they cultivate. [1]

Many countries in the Global South have land concentration Gini-coefficients of over 0.8—a mark that indicates highly distorted land distribution and access, precluding productive participation in the rural economy and forestalling rural development. [2] The development of formal land markets has established a capital-influenced hierarchy that limits and excludes the participation of low-income populations, women, indigenous peoples or the otherwise marginalized.[3] Though the agricultural sector remains a substantial contributor to the economy throughout the Global South—representing between 20-60 percent of GDP and employing up to 65 percent of the workforce—it is significantly under-resourced in terms of finance and technology. [4]

Overall, these policy failures create broad patterns referred to in this paper as 'resource inequality', defined as *the unequal access of socially and economically marginalized groups to natural resources and basic services which are critical for human development, due to race, location, class and/or gender*. These patterns matter for the accelerated implementation of the MDG, and should define an ambitious and transformative post-2015 development policy environment.

Structural features shape these disparities in an economic, socio-cultural and environmental sense, often as institutional failures or as institutionalized forms of exclusion and disempowerment. For example, broad notions of social justice and the cascade effects of multiple and intersecting inequalities that shaped the Millennium Declaration were more muted in defining the MDG agenda itself.[5]

Operating within a conceptual framework where equity is compatible with growth and sustainability, this paper focuses largely on natural resources and key basic services that have a profound influence on development within countries. As fundamental asymmetries explain inequalities in the global economy,[6] similar asymmetries shape participation in the national economy as well as who benefits (and who does not) from growth and development. Structural inequality theory suggests that such dynamics are influenced by a confluence of unequal

relations in roles, functions, decisions, rights and opportunities.[7] A centre-periphery analysis adds another dimension, one that is more than just geographic in nature. Through this lens, the 'centre' pole or driver of the national economy is discrete; often a small set of sectors and actor that are urban-focused, intensely resource-consumptive and part of an increasing concentration of productive output, capital and services. In contrast, the 'periphery' is a dispersed body representing a significant proportion of the population, often rural, and encompassing those who are generally excluded from the growth process and are dependent on primary production.

Section 1 identifies existing patterns and drivers of resource inequality globally and attempts to define its structural nature for countries and specific populations. Section 2 assesses the escalating competition for and deprivation of critical natural resources (land and water), how these condition the underdevelopment of specific social groups, and how these have undermined the success of MDGs. Section 3 initiates a two-part focus on a fundamental challenge to a future inequalities agenda, i.e. the structural separation of social and environmental policy. First through the lens of the national level biofuel sector, and then at the global level through the Rio+20 lens (Section 4); our analysis will show how such policy failures can reproduce structural resource inequalities. The report concludes with priority considerations, based on important lessons emerging from greater social equity and resource equality that can deliver on the inherent promises within the development agenda.

Current patterns of resource inequality

In an increasingly complex context of policies, agreements, protocols, commitments and goals the principle of equity has endured. As part of the new post-2015 Agenda, one of the principles proposed for a new set of Sustainable Development Goals (SDGs) is for the application of SDGs to reflects and enhance the principle of equity.[8] A growing body of work highlights the centrality of equality and equity and makes a significant push for systematic efforts to break the cycle of structural inequality and marginalization.[9] One of the enduring barriers to sustained development progress and transformative change has been the structural inability of the poor and marginalized to access and control the quantity and quality of natural or service-based resources. Historically, poverty reduction efforts have often focused on securing productive resources, considering natural resources largely as productive assets. However, natural resources also provide a number of social goods by playing a supporting or an enabling role, i.e. the importance of water to reproductive activities and the enabling role of the environment for good health and human well-being.

In assessing current patterns of resource distribution and access, a number of group-based disparities are clear:

- *Access and consumption disparities between states:* The disparity in access and availability of fresh water between and within the Global North and Global South has been referred to as a 'water crisis' as 1.1 billion people are without access to clean water and 2.6 billion people live without access to adequate sanitation. [10] One third of those without water live on less than $1 a day.[11] Eliminating 'energy poverty', for example, means bringing electricity to 1.6 billion unserviced people and providing safer and healthier energy alternatives to 2.8 billion people reliant on traditional biomass for cooking (FAO, 2010),[12] a significant number of whom are women. The persistence of these resource gaps and development lags raises a number of governance questions. Despite an increasingly significant share of global growth and wealth being created in Asia and Africa, considerable segments of these populations belong to energy-poor households. Current trends in global investment raise other concerns about the distribution of finance to reverse these trends: global investment in renewable energy is concentrated in industrialized countries (65 percent), and leading developing economies (Brazil, China and India) receive nearly 30 percent of that global investment.[13]

- *Disparities within states:* The available picture emerging from several developing countries and entire regions is one of significant and crippling disparities, such as urban/rural inequalities in terms of how resources and services are distributed (Table 1). In Southern Africa, the gap in access to key resources at times exceeds 40 percent in Botswana, Madagascar, Seychelles and Zambia, and more than 60 percent in Zimbabwe and Namibia. The persistence of these disparities during periods of significant growth links inequalities to poorly designed distribution and re-distribution mechanisms and systems.

Table 1: Access to Basic Services in Southern Africa

		Population	**Economics**			**Access to basic services**		
		Average annual population growth, percentage (WDI, 2010)	World Bank classification of economies	GDP per capita, PPP US$ (HDI, 2010)	Annual GDP growth, average	Access to an improved water source, percentage of urban/rural population	Access to improved sanitation facilities, percentage of urban/rural population	Access to electricity, percentage of urban/rural population
Period		**1990-2008/2008-2015**	**2009**		**2002-2010**	**2008**	**2008**	**2005**
1	Angola	2.9/2.6	Lower middle income	5,959	12.3	60/38	86/18	26/4
2	Botswana	2.0/1.3	Upper middle income	13,462	4.3	99/90	74/39	45/9
3	D.R. Congo	3.1/2.7	Low income	327	5.6	80/28	23/23	16/2

4	Lesotho	1.4/0.8	Lower middle income	1,605	3.1	97/81	40/25	23/1
5	Madagascar	2.9/2.5	Low income	958	2.4	71/29	15/10	48/5
6	Malawi	2.5/2.7	Low income	902	5.7	95/77	51/57	29/1
7	Mauritius	1.0/0.4	Upper middle income	13,101	3.9	100/99	93/90	100/100
8	Mozambique	2.8/2.1	Low income	929	7.7	77/29	38/4	26/2
9	Namibia	2.3/1.8	Lower middle income	6,474	4.9	99/88	60/17	75/12
10	Seychelles	n.a.	Upper middle income	20,828	2.6	100/n.a.	97/n.a.	80/50
11	South Africa	1.8/0.7	Upper middle income	10,140	3.6	99/78	84/65	27/1
12	Swaziland	1.7/1.4	Low middle income	5,058	2.4	92/61	61/53	n.a.
13	Tanzania	2.8/2.9	Low income	1,426	7.0	80/45	32/21	27/1
14	Zambia	2.6/2.4	Low income	1,497	5.6	87/46	59/43	45/3
15	Zimbabwe	1.0/1.7	Low income	187	-3.1	99/72	56/37	87/8
SADC Average		2.05/1.73		5,524	4.5	89/61	58/36	46/14.2

Sources: Adapted from multiple sources[14]

As cities have grown, a distinctly urbanized structural inequality has also emerged, often within informal settlements. 'Proximity does not imply access'[15] for the 970 million urban residents without access to 'adequate' water supply [16] or other resources. Stable access to modern energy is often out of the reach of the urban poor.[17] Perceived as temporary, illegal and undesirable, the status, or lack of status of settlements can mean that distribution grids often exclude them and that residents rely on illegal access points, expensive intermediate services, or unhealthy sources such as biomass.[18] While there is some private sector participation due to the high concentration of residents in urban areas and the related economies of scale, poor communities in informal settlements are still being neglected.[19]

- *Disparities in resource rights between the state and individuals*: While investments into natural assets have surged 5000 percent, from $6 billion in 2000 to $400 billion by 2010, and returns to extractive companies increased from $3 billion to $8 billion in the past decade,[20] much of these resources are co-located where two thirds of the world's poorest live.[21] Because these 'nationalized' and public resources are ostensibly public goods, the way in which revenue is generated (by their exploitation) and then distributed can significantly influence the equitability of growth, income generation and the expansion of opportunities for all persons. Such distribution tends to be unequal, particularly in mineral-dependent economies. Mining contributes 70 percent to GDP in Angola, 11 percent in Namibia and 21 percent in Guinea, while Gini-coefficients remain high in Angola (0.58), Namibia (0.74) and in Guinea (0.43).[22] Arab States, regions where mineral resources are highly concentrated, often benefit less or lag socially and economically behind other parts of the country.[23]

- *Unequal social and political power over resources*: The poor and marginalized, and in particular women and indigenous peoples, contend with power asymmetries over resources that define economic opportunities and the benefits they can enjoy from them. This is often visible in the lack of coherence between gender policy and land policy and also in the ability of groups such as indigenous peoples to control the land over which they have ancestral as well as social and political rights. These land ownership rights do not always extend to increasingly valuable sub-soil assets and forest resources that are being sought by the private sector. As a result, these rights-holders have limited or no involvement in negotiations between the state and the private sector regarding the use of such resources and the profit-sharing arrangements that ensue.[24] Higher land values increasingly shaped by climate mitigation efforts displace other demands for community forests or foraging grounds and place some groups at a socio-economic and political advantage. In Addis Abba, an estimated 10,000 women supply one third of the fuel wood consumed from the surrounding land.[25]

  Reducing Emissions from Deforestation and Forest Degradation (REDD) and REDD+ are emerging areas where the rights of the poor to maximize forest resources for their own needs are likely to conflict with the political interests of the state at an international level in meeting a collective commitment to low-carbon development. It can be argued that the unsustainable patterns of production and consumption place an unfair burden on the poor and marginalized to conserve and develop at the same time, potentially creating new forms of inequality.

  A number of armed confrontations between indigenous groups, wealthy landowners and other actors in the Amazonian region emphasize the scale of emerging tensions and conflicts over resource use, particularly sub-soil mineral assets. In addition to creating significant insecurity in the region, the limited access to justice and legal recourse, particularly by indigenous groups, further entrench a balance of power skewed towards powerful interests.

- *Higher dependence by the poor on fragile resources*: The poor tend to rely on freely available natural resources facilitated by proximity, limited direct competition and minimal opportunity costs. The water deficit that prohibits productive agriculture is most pronounced in Sub-Saharan Africa where irrigated land as a percent of arable land was 2.2, compared with 21.6 in the Middle East and North Africa and 35.7 in Asia and the Pacific.[26] Increasing water scarcity due to climate variability and change will likely make it much more difficult for African farmers to compete in global markets. Declining productivity has been identified as a cause of accelerated land clearing and deforestation. Additionally, incomes are likely to be more variable and profit-to-loss

margins higher as farmers spend larger proportions of their income to increase production output and to meet their own food needs. Equally, the poor and marginalized often also have fewer options or alternatives to improve the quality of the resources they can afford or to which they have access. Low and variable incomes limit their capacity to seek alternatives and reinforce their reliance on systems that are inherently more vulnerable to degradation and degrade at a much faster rate.

- *Unequal access to services and resources:* The capacity of the poor and marginalized to cope with devastating shocks, such as an economic or food crisis (impacts largely on poor rural communities) and climate variability, is often constrained by unequal access to protective services. The disparities in resource access across regions, urban-rural divides and gender lines influence how different areas and populations are capable of coping with and responding to natural disasters. Outcomes of these unfortunate events are often determined by how well risk reduction plans make the connection between resource access and environmental risk. The 2010 earthquake in Haiti still defines the development and growth of the country in 2012, while a larger seismic event in Chile in the same year had short-term effects. In Haiti, infrastructure resources were fragile and weak, key services were poorly managed and distributed, governance frameworks were lacking and social resilience was significantly impaired. Moreover, efforts to recover are plagued by continued weaknesses in these four areas and the enduring limitations faced by Haitians in efforts to cope with new weather-related risks and social challenges (e.g. hurricanes and cholera). Where resources and services were located, capacity and the quality of assistance shaped individual and collective capacity to cope and adapt to changing circumstances.

- *Unequal access to finance to maximize economic participation*: Agricultural output in Africa would increase measurably (20 percent of total outputs) if women and men had equal access to inputs.[27] Furthermore, women in Sub-Saharan Africa receive only 10 percent of agricultural loans, receiving less than 1 percent of the credit globally available for the agricultural sector.[28] For those developing countries for which data are available, only between 10 and 20 percent of all land holders are women.[29] Unless access to land and the capacity to use it as an economic asset for credit are addressed simultaneously, rural women's historically unequal access to economic opportunities is likely to remain significantly unchanged.

Increasingly, the lack of a comprehensive response to these various forms of inequalities is creating smaller concentric circles of inequalities within states that cross spatial, gender and class lines. Moreover, the potential for the increasingly worsening state of environmental quality, through the unsustainable use of natural resources, to create new social and economic

inequalities and new forms of poverty, needs greater attention and should also inform an expanded understanding of inequalities.

The limitations of the MDG framework and its application

Despite the evidence of entrenched resource inequalities, the issue remains under-prioritized in the development agenda as a distinct component of the inequality dialogue. An analysis of the report of the United Nations System Task Team on the Post-2015 Development Agenda, the Rio+20 outcome document and the 2012 Global Report on Millennium Development Goals found that there is little emphasis on resource inequality as a driver of underdevelopment.

The MDG framework has been important to mainstreaming the development agenda and increasing allocation and better governance of aid resources at the global and national level. In the last decade, African and Asian countries have made significant progress on many of the foundational elements for sustained human development, including education and health. A review by Hailu and Tsukada (2011) shows African countries leading the way on MDG acceleration, accounting for 8 of the 10 countries with the most accelerated MDG rates in recent years.[30] Their results, where data was available, showed that Burkina Faso, Angola and the Central African Republic were amongst the biggest movers, with 91.3 percent (Burkina Faso) and 90 percent (Angola and the Central African Republic) progress respectively across MDGs indicators.

However, the global MDG framework's compartmentalized nature has resulted in resource inequality being implied rather than addressed directly in relation to particular MDGs, [31] such as MDG 7 (environmental sustainability), MDG 1 (poverty and hunger) or MDG 3 (gender equality).[32] While providing a focused set of limited, concrete goals and targets for human development, the framework fails to effectively consider centre-periphery patterns of resource distribution. While the 'simplicity' of the model is regarded as strength,[33] it underestimates the relationship between the root causes of seemingly distinct development challenges and the connectedness of possible solutions. It also undervalues access to justice and legal recourse as necessary complements to good policy. Equality of access to land and secure tenure, for example, underpins three separate development goals: MDG 1 (poverty and hunger), MDG 3 (gender equality), and MDG 7 (environmental sustainability). In combination, with limited and contested access and property rights to water and energy, a clear correlation occurs with high levels of hunger, according to the 2012 Global Hunger Index (IFPRI, 2012).[34] Moreover, the current MDG framework does not address the possibility that worsening environmental quality can create new forms of poverty and or inequality.

Neither robust economic growth nor Official Development Assistance (ODA), have fully mitigated the disparities we mentioned in Section I. The assertion by UNWOMEN that the

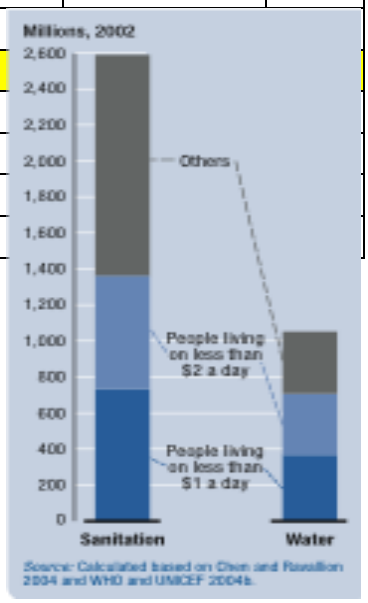
status and condition of rural women remains very low due to their lack of access to productive resources, services, markets, and agency in the making of rural development and agricultural policies,[35] suggests that the MDGs' positive impacts on development finance and coordination also have limits. Structural weaknesses in the accounting and funding frameworks themselves have undermined efforts to connect the goals. This failure is evident, for example, in the low amount of ODA allocated to multi-sectoral actions in Africa where structural inequalities and conflict over minerals, in particular, continue to undermine growth.[36]

Table 2. ODA to Africa by sector (2005-2009) as a percent of bilateral commitments

Sector	2005	2006	2007	2008	2009
Social	27.4	28.7	43.7	42.6	44.8
Economic	7.7	4.4	10.0	16.1	11.6
Production	3.9	5.1	6.4		
Multi-sector	5.3	3.2	5.1		
General program aid	5.2	8.0	9.2		
Debt	36.5	40.8	12.7		
Humanitarian	11.7	8.7	11.2		
Other	2.2	1.2	1.7		

Source: OECD, 2010 in UNDP 2011, *Assessing Progress in Africa towards the Millennium Development Goals*, New York, NY: UNDP. [37]

Figure 1. Water and Sanitation Deficit



These extended conflicts have resulted in a significant loss of life, a distinct population of disabled persons, a 30-year loss of GDP growth and stalled development.[38] The fact that humanitarian assistance continues to make up a significant portion of bilateral ODA, and thus development finance in Africa (Table 2), also implies an inherent weakness of development practice in preventing crisis. The repeated cyclical famine outbreaks in the Sahel are a case in point.

Instead, a 'crisis-mode' response serves to divert critical resources from long-term investments in development. This co-opting of resources to respond to cyclical crisis, in turn, increases the pressure on both the quantity and quality of such resources and their availability for development. Vulnerability as a result of weak economic governance, lack of critical infrastructure investments and failure to ensure substantive recovery capacity are complex drivers of resource inequality, which are also weakly reflected in the MDG framework. Such deficits at the macro-scale often define deprivations at the community and household level as well as the capacity of the poor to access and maximize natural resources effectively for their own empowerment.

Water as a social and productive resource

The poor experience the greatest deficit in access to water and sanitation.[39] Statistics demonstrate a 'two-way relationship' between poverty and deprivation in access to clean water: lack of access can cause poverty, and poverty can prevent access.

Increasing demand for water, and particularly safe drinking water, is rising, intensified by competition due to population increases, urbanization, industry, agriculture, pollution and unsustainable practices. Forecasts suggest that people with the weakest rights, such as small farmers, ethnic minorities and women, will see their entitlements to water eroded by more powerful constituencies, as observed through a number of governance challenges facing the residents of Cotacachi, Ecuador (Box 1).[40]

Box 1: Governance and resource management in Cotacachi, Ecuador

The case of Cotacachi, a northern Andean Canton of Ecuador, demonstrates how water inequality along demographic lines limits efforts to achieve various MDGs. The glacial peak of the Cotacachi volcano has supplied ground and surface water for generations, but as climate change intensifies, the Cotacachi Peak has become the first of the Andean range to completely lose its glacier due to higher temperatures (Rhoades et al*.,* 2006[41]). As a result, tensions have heightened between various users and distinct groups. Natural resources, particularly land and water, have become a source of contention between the mestizo and indigenous populations in the area, with indigenous communities lacking access to water for drinking and agriculture (Mello, 2006;[42] Rhoades et al., 2006[43]).

Appeals to the local water commission have resulted in more positive outcomes for the economically and politically influential mestizo owners of large farms. In this context, the value assigned to needs of the community, and the governance frameworks available to resolve these conflicts, become as important as the quantity of the resources themselves. The complications arising from resource scarcity in Cotacachi reflect other critiques made of the MDG framework and the limited attention given to governance issues, for example. This need to expand considerations of governance beyond the aid effectiveness targets articulated in MDG 8 (partnership for development) is reflected in several analyses including Kabeer (2011)[44] and Fukuda-Parr (2012).[45]

Conversely, directly targeted resource-equality efforts have proven to be transformative. In Morocco, from 1995-2006, four million people gained access to clean water through a decentralization programme called the *Water Supply Program for Rural Population of Morocco* (PAGER). Rural water coverage increased by 50 percent and contributed to improvements in MDG 3 (gender equality) and 7 (environmental sustainability) directly, as well as MDG 4 (child health) and 5 (maternal health), 1 (end poverty and hunger) and 2 (universal education) indirectly. Women no longer walk 10 kilometres during the dry season to find water; this

improved their reproductive health (by reducing the need to walk long hours with heavy burdens that have resulted in miscarriages) and almost doubled rural primary school attendance.[46] The programme has also created more time for women to participate politically as agents of change and water rights advocates for their community.

The improvement of water services is also dependent on equal access to other resources/services such as energy. Modern energy sources, i.e. power pumps and sanitation systems, are critical to efforts to physically bring water to un-serviced households. Energy access and services are also critical for a broad range of other economic and social activities. Energy access acts as a direct enabler to multiple MDGs: MDG 1 (ending poverty and hunger); MDG 2 (universal education) and MDG 3 (gender equality) through a reduction in time spent on consuming tasks and freeing up time for education and economic activities; and MDG 5 (maternal health) by reducing physically tasking activities and eliminating indoor air pollution).

Renewable energy could extend these co-benefits by also reducing the carbon intensity of efforts to rapidly narrow the energy resource gap (which undermines progress and development in both rural and urban areas). In Rajasthan, India, poor illiterate women around the world have seen their lives and communities transformed by training as Barefoot Solar Engineers. Their skills in installing, fixing and maintaining solar lighting units ensure that clean technology remains accessible to their communities and that income and educational opportunities are afforded to neighbours, and sisters and daughters.

Furthermore, by seeking opportunities to empower the most vulnerable groups (the rural poor, indigenous peoples and women), innovative ways can be found that contribute positively to advancing and accelerating MDG 7 (environmental sustainability) and other broader development goals, including mitigating the impact of and adapting to climate change. The *Women's Environment Preservation Committee* (WEPCO) in Nepal manages 963 tonnes of predominately kitchen waste per year that supports 40 waste-fed biogas plants. The energy produced also meets the local renewable energy demand of urban communities in Kathmandu Valley, Nepal. Since 1990, it has produced sustained incomes, won awards, mobilized resources and expanded access to information countrywide through the creation of a resource centre.[47] Recognizing the transformative force of energy access, the UN Secretary-General set 2012 as the year of *Sustainable Energy for* All.[48]

While climate change presents a number of opportunities to connect social and environmental inequalities, it also presents a significant threat to the resources the poor already have by creating greater tensions around the prioritization and allocation of scarce resources like water i.e. to meet basic needs and/or to reduce the carbon-intensity of energy expansion by focusing on hydropower alternatives.

Land as economic and political power

Like water, increasing pressures on available land resources around the world create a number of challenges. Unsustainable practices have forced people to expand the search for arable, productive land, particularly subsistence farmers in Africa and Asia, sometimes leading to deforestation.[49] Intensified competition for land is also shaped by rapid urbanization and construction, infrastructure expansion and intensified mineral/ore extraction. As at the macro level, these patterns of land use have implications for how governments fund poverty reduction (MDG 1) and who is positively impacted; how the fruits of growth are distributed (rural/urban; men/women) (MDG 1, 3 and 8); what opportunities are created to expand choice (MDG 3); what and where public investments are made (MDG 4, 5 and 6); and the pace at which exploitation takes place (MDG 7).

As land value increases with greater global demand for food, minerals, renewable energy and forest sequestration services, interstate negotiations and 'land grabs' have also become more prevalent. States are reclassifying marginal land as productive to attract more foreign investment, which is leaving disenfranchised groups with diminished access to land.[50] Armed confrontations between indigenous groups, wealthy landowners and other actors have increased, which have created a number of security challenges for many rural areas (see Box 2).

Box 2: Land possession and inequality in Guatemala

Guatemala's land distribution is the second most unequal in Latin America, with 1.86 percent of the farms owning 56.59 percent of agricultural land, and a farmland distribution Gini-coefficient of 0.84.[51] Systems predicated on racism and clientelism have maintained an elite, landowning class and perpetuated an inequitable arrangement rife with asymmetries of power. Guatemala is the only Central American country with an indigenous population as the majority,[52] but land is concentrated in the hands of large-scale farming minorities.

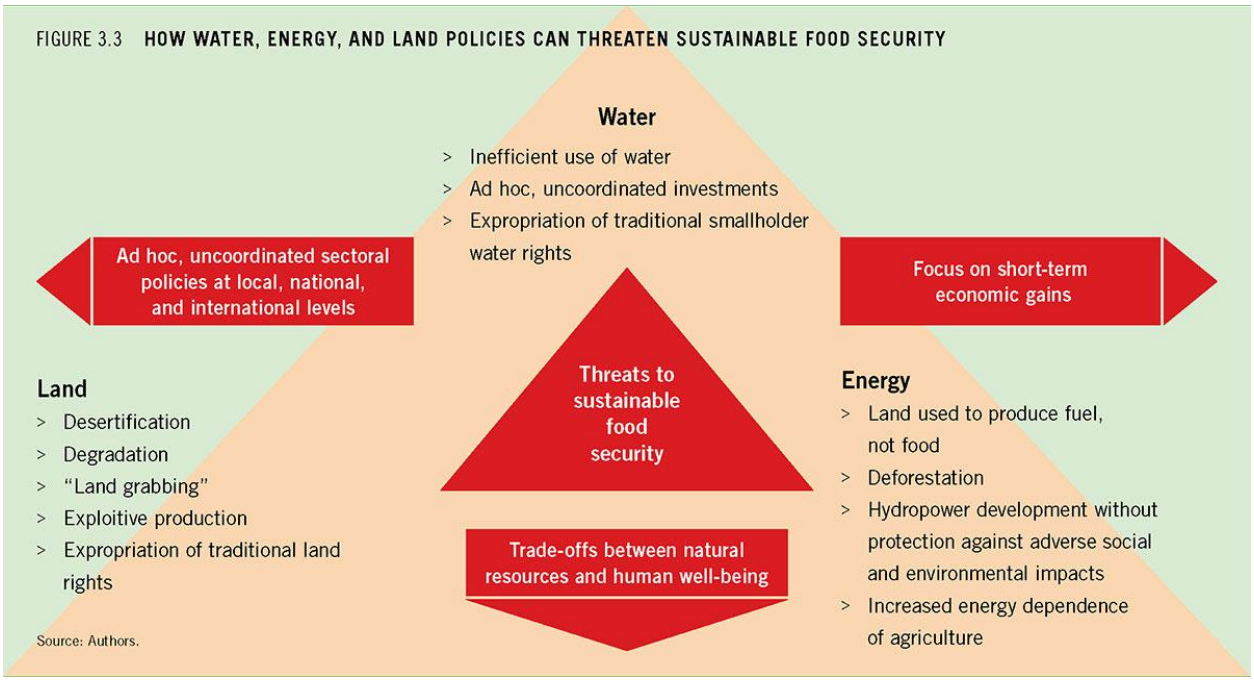
Land concentration has escalated, resulting in dispossessions, such as the violent eviction that took place in El Valle del Polochic, Guatemala in March 2011. According to first-hand accounts, military and paramilitary forces forcibly evicted 300 families from 12 communities.[53] The Q'echi' families of El Polochic had occupied the land for generations on ancestral claims, having recently been forced to acquire inconsistent claims through rental from the industrial farm Ingenio Chabil Utzaj, one of two dominant megaprojects in the area. Chabil Utzaj is owned by the Widmann family and produces monoculture sugar cane intended for biofuels. The diverse interests of the actors present in El Polochic, and their disparate levels of power are a striking example of resource inequality as ancestral claims are delegitimized by private property claims.

Source: Barry, B. (2012). *Rallying cry or 'mala palabra': The polarization of narratives on land reform and land possession in post-peace accords Guatemala*. Unpublished MSc dissertation. London School of Economics.

Women in particular face distinct obstacles to property rights and land use as a result of social, economic and political disempowerment. This affects their ability to exercise critical economic rights for economic empowerment. Although progressive legislation has been enacted in many developing countries, providing women with equal land rights under statutory law (as recently demonstrated by the new Kenyan constitution),[54] much of the law practiced in many areas is still customary.[55] National laws are often not applied or enforced inconsistently, and traditional forms of arbitration and institutional frameworks for adjudicating/administering local justice frequently disfavour women.

These structural failures in addressing resource distribution, access and needs (in the case of water, land and fuel), demonstrate the limited spillover effect of MDG efforts on the broader development agenda, particularly the environment, and raise a number of questions about the sustainability of progress to date. The increasing threat of environmental change to available resources, and the intensified competition over the best use of resources in the current era of environmental crisis are also a cause for concern, particularly where human well-being considerations are consistently under-prioritized. The continued disjuncture between inequality, environment, conflict and governance themes in the post-2015 preparation process is therefore surprising and underscores the need for more consistent resource-based analysis, particularly in the face of persistent food insecurity, hunger and under-nutrition (see Figure 2).

Figure 2. How water, energy, and land policies can threaten sustainable food security



Source: IFPRI. (2012). *Global Hunger Index: The challenge of hunger: Ensuring sustainable food security under land, water, and energy stress.* Bonn, Washington, DC and Dublin: IFPRI.

Addressing any one MDG is best achieved when accounting for the connectedness between several of them. Access to water, energy and land contribute directly and indirectly to the achievement of several objectives within the MDG framework. Greater access to water empowers women and improves the health and educational outcomes of the household. In order to ensure that the legacy of the MDGs is not undermined, the post-2015 Agenda should capitalize on these connections.[56] However, such multi-layered efforts remain more the exception than the rule, and they have often not been mainstreamed into either national or global policy as key social innovations to accomplish the MDGs or surpass them.

Persisting challenges in addressing the economy-society-environment nexus: Lessons from the biofuel sector

Low-carbon solutions are essential to meet the economic, social and environmental objectives ascribed in the global development framework, particularly for addressing climate change, and will certainly be accounted for in the post-2015 Agenda. Biofuels are an obvious entry point to deliver solutions for two reasons: (1) the adoption of biofuels requires very little adjustment from existing energy systems and (2) growing biofuel crops, a 'high value' agricultural product, presents potential economic and rural development co-benefits.

A 2011 World Bank report highlights a number of these benefits for Africa given the region's significant land and labour endowments.[57] While the report focuses heavily on the economic potential of expanding the sector, from higher farm incomes, job creation and greater energy independence, it does not elaborate on the structural challenges that could stymie the developmental impact from growth of the sector; namely, issues of rights and access to resources, particularly land.

This example points to the conceptual weaknesses in development practice that ignore the root causes of poverty and inequality and largely frame 'green' initiatives through economic and environmental lenses. This policy failure is not unique to Africa, but rather is evident in broader biofuel policy, suggesting a more fundamental inconsistency in the way the sector operates. Further, approaches tend to assume that the poor are a fairly homogenous group, limiting direct targeting to women and indigenous peoples, two groups within the poorest of the poor, who experience unique and distinct deprivations.

In countries like Brazil, which is lauded as a global example of best practice on biofuels, many of the qualitative aspects of growth, such as the quality of the work available, level of pay, or seasonality of work, have not always been y tackled as the biofuel sector has expanded. These are important distinctions, particularly for the poor, women and indigenous groups who need decent work and a living wage in order to escape poverty. The 2013 World Development Report makes the point that labour earnings are a significant factor in poverty reduction, but that a

'job' itself is not enough—what matters is also the ability to increase earnings from work.[58] Zapata et al. (2010) suggest variable economic and environmental impacts from the Brazilian biofuel model, while Perch et al. (2010) point to some social equity questions, mainly on gender, in the way in which biofuel expansion activities were targeted.[59] More recently, reforms to the land registration process in Brazil support the mandatory inclusion of men and women irrespective of civil status, and the classification system for beneficiaries for land reform prioritizes female-headed households.

Despite these inconsistencies, some clear trends can be identified from the diverse efforts to expand the sector in the last decade or more, particularly in Mozambique. Amongst these, contract farming, inclusive public policy and targeted small-scale community level initiatives are particularly noteworthy. While there are strengths and weaknesses in each approach, our findings underscore the need for greater policy coherence across social and environmental spheres of policy:

- Contract farming or 'out-grower' schemes have been identified as a positive alternative to the more traditional 'plantation' models used in biofuel production, including a greater potential for more economic/productive inclusion. These arrangements theoretically benefit local populations by investing in under-utilized resources, such as land and labour, while leaving property in the hands of its original owner.[60] It thus does not result in a large-scale resource transfer from the poor to large multinational corporations or other more powerful interests, and in turn, they promise increases in income from higher-value crops and hence greater productive output. However, some analysis suggests that results have not necessarily been pro-poor.[61] While commercial investors in biofuel projects in Mozambique have indicated a willingness to work with contract farmers, high transaction costs and the lack of structures to facilitate technical support limit the participation of smallholder farmers.

- Unlike many other countries seeking to expand biofuel production, Mozambique adopted a National Biofuel Policy in 2009. Important lessons emerge from this model, particularly about the value created by proactive and purposive policy. With an abundant labour force and an overwhelming dependence on agriculture, the government of Mozambique has targeted smallholder participation in biofuel projects as one of its principal objectives in the National Poverty Alleviation agenda.[62] Despite acknowledging the importance of incorporating women's needs and participation into the biofuel sector, and the adoption of a National Gender Policy, Mozambique's Biofuel Policy does not contain explicit measures that guarantee the inclusion of women in the sector. Furthermore, the reliance of the policy on the Land Act to determine the designation of land devoted to biofuel cultivation creates other challenges. Though

progressive in many ways, the Land Act does not address all of the necessary requirements for protecting women's access to land or ensuring their legal empowerment to demand such access.

- In Andhra Pradesh, directly targeted community-level interventions have enjoyed some success. The Integrated Tribal Development Agency (ITDA) plays an important role in narrowing the resource gap for indigenous women. The purchase of an oil-expelling machine for the women of Powergudu village in Adilabad district, allows biodiesel to be extracted from various oilseeds and used locally or sold in the market. The pongamia trees planted for biodiesel qualify for carbon credit offsetting, providing women with additional income through a World Bank agreement to purchase 147 tonnes of credits. With this revenue, the Powergudu village women started a nursery, employing a staff primarily of women. The additional oil mill in the village helped women increase their incomes and produce biodiesel to meet local energy needs.[63]

The persisting deficits in resource access and social equity have been, to some extent, enabled by this proliferation of hybrid approaches. While they offer flexibility, growing cynicism and concern about biofuels, in general, focus on the reinforcing effect on inequalities that the current structure of the sector can create. According to many accounts, the face of food security is female. At the same time, unsustainable stresses on water, land and energy challenge such security, and particularly the capacities of smallholder farmers, many of whom are women. The governance implications are significant and lend further weight to recommendations by Sachs (2012) (for a fourth pillar of the SDGs on 'good governance') and Rodrik (2012), who notes a number of governance considerations in his arguments for a broader range of goals. [64]

The lost opportunities of Rio +20

Although Rio+20 took place at a particularly important juncture in the pre-2015 development journey, and in the preparation for the post-2015 era of development practice, the meeting failed to move past the structural disjuncture between the social-environmental strands of development. Its primary role should have been to concretize and update the consensus around key element of the development agenda in the context of natural resources management and the economic-social-environmental nexus of development. However, the Rio+20 Outcome Document, despite praise by the UN System Task Team for prioritizing water and sanitation, energy and gender equality fails to mention resource inequality as an important

determining factor of unsustainability.[65] Moreover, it fails to prioritize the interlinkages between women's reproductive health and energy, water access or climate change, either as individual issues or as part of the multi-layered context in which poverty, inequality and the environment intersect.

The reinforcing nature of the lack of energy access on gender inequality, for example, is not simply a social problem but also a macroeconomic one. The new Women's Economic Opportunity Index highlights women as drivers of growth, changing the pattern and scale of growth in a number of countries, particularly in the second half of the 20th Century.[66] It has been estimated that an expanded pool of labour added as much as 2 percent of GDP growth per annum, and that narrowing the gap in Europe has contributed 25 percent to annual GDP growth in the region.[67] It also holds that the lack of progress, regression or stagnation of advancement can be a drag on growth, and that both the quality and the quantity of change in women's empowerment are important for growth and development.

At the same time, rural women's contribution to food security, environmental stewardship and agro-biodiversity, through the application of traditional knowledge, can be important to the local- and macro-economy. Undervaluing traditionally female tasks, such as seed saving, increases the risk of these services being lost, and with them, the resources necessary to respond to changing environmental conditions.[68]

Lefton (2012) argues effectively that if progress is to be made, the agenda (Rio +20) must reflect that achieving gender equality is intimately tied to achieving these other goals (poverty, environment, balanced economic growth) as well as being a goal in and of itself.[69] Twenty years later, the shift in language between Agenda 21 and the Rio +20 Outcome Document represents a change in the global consensus position. Once seen as a guarantee, there is now only a commitment to promote key individual rights and freedoms.

Though gender often defines who develops, how fast and how, the current Rio +20 consensus treats gender and sustainability as optional rather than fundamental and as peripheral rather than central. While the largely economic-focused approach will likely narrow the resource availability gap, it is unlikely to address the more fundamental issue of access and ability to use, which are shaped by more structural factors such as affordability and relevance.[70] The lost momentum on gender and sustainable development is a missed opportunity to address a number of structural limitations on development more directly.

The Rio+20 outcomes have emphasized the more easily understood links and practical considerations of development; perpetuating an 'inequality-light' approach to inclusive and sustainable development. The most significant missed opportunity being the failure to more directly link the MDGs' social agenda and the SDGs' generally environmentally-centred focus

before work on the post-2015 Development Agenda started in earnest. Moreover, the backward slide on equality, at a time when developed and developing economies are experiencing growing income disparity across society, could significantly undermine the success of a future global development agenda tilted heavily towards avoiding environmental crisis.[71] Simply put, those who already face significant obstacles and are more exposed to the vagaries of environmental change, can also least afford the additional cost of mitigation or the trade-offs resulting from the rapid transformation of economic systems to 'greener' pathways.

In October 2011, UN System Chief Executives Board for Coordination released a common statement on the Outcome of the United Nations Conference on Sustainable Development. Item 7 notes: "Rio+20 must acknowledge that economic, social and environmental objectives are not independent variables, but are mutually supportive, with progress in each area facilitating advancement in the others."[72] Rio+20 did not fully complete this mission; indeed, the lack of progress on reproductive rights in Rio 2012 stands in contrast to the global meeting held less than a month later on family planning attended by a similar number of high-level government, private sector and civil society actors, and that accorded significant importance to family planning in the development agenda. At this meeting, $4.6 billion was mobilized to extend family planning services and access to contraceptives for up to 120 million women in developing countries.[73]

Conclusion: Making a fundamental shift towards resource equality

The capacity to participate in and benefit from the growth and development process as a means of graduating out of poverty and for breaking the cycle of structural disempowerment, depends on renewed attention and investment to ensure that systems work effectively for all, and in particular, for socially marginalized groups. Koehler et al. (2012) suggest that achieving such a shift after a number of flawed and failed attempts must build on the success and failures of individualized approaches to poverty policy.[74] It must also meet the need for policies, which respond to group-based inequalities and anticipate the creation of new groups of marginalized and excluded persons as climate change and resource conflicts create an increasing number of refugees and displaced persons. Individualized policies have failed to respond to the concentrated nature of poverty, exclusion and inequality, i.e. poor individuals are often from poor households in poor communities, and dependent on economically declining or politically weak economic sectors.

These multiple layers of failures and weakness are also germane to our understanding of the limited advancements on land tenure rights; a lack of policy coherence between social and environmental policy, e.g. land use policy and gender equality; and the inconsistency between

the traditional macroeconomic models of development and the micro-based economic challenges faced by those targeted for both productive and social inclusion.

In looking towards the post-2015 Agenda and the formulation of new SDGs, the need for attention to the following is pivotal:

- The legal empowerment of the poor as a gateway to access to justice, particularly on resource allocations;
- Differentiated policies and strategies for the poor as a broad group as well as the varied and distinct groups identified herein who are also sometimes the most extremely poor;
- The differentiated capabilities of countries and people in responding to, addressing and securing progress on universally recognized development goals.

While the SDGs should not attempt to cover every issue, they should be comprehensive and serve as a building block for broader development efforts. There are four crucial resources to achieving inclusive and sustainable development and the eventual elimination of structural inequalities:

1. **Water** for health, nutrition, production and sanitation
2. **Food** for health, nutrition and education
3. **Energy** for enhancing access to productive resources and reproductive services
4. **Land** in securing economic, social and environmental rights

Moreover, development goals are needed that monitor not only financial allocations (separate budget lines for key activities) but also measure financial prioritization (the percentage of the national budget targeting a specific resource gap, such as sanitation) as well as the effectiveness of policy (the extent to which poor households have access to sanitation, and the rate of the decline of the disease burden on poor households as compared to other households).

The post-MDG Agenda has two clear challenges. The first is to define a comprehensive and sustainable development agenda that gives equal priority to the economy, society and the environment. The second is to reflect an understanding of how these three strands of development influence each other, positively and negatively, capturing lessons from the successes and weaknesses of 15 years of MDG implementation. The redeeming virtue of the current process of reflection and consultation is the priority given to the reflection, and its weakness may be its inconsistent approach to consultation and policy coherence. Bringing resources from the centre to the periphery, and extending the focus on natural resource

management beyond economics and revenue management to include its relevance to development and life as a whole, is one way of addressing both challenges in equal measure and of ensuring that the true economic, social and environmental value of resources is fully recognized.

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