



Southern Voice

2015 On Post-MDG International Development Goals

Occasional Paper Series

10

The Changing Intersection of Society and Development Goals

*An Examination Aimed at
Improving Policymaking*

Shuveccha Khadka

Ajaya Dixit

**THE CHANGING INTERSECTION OF SOCIETY AND
DEVELOPMENT GOALS**

An Examination Aimed at Improving Policymaking

Southern Voice Occasional Paper 10

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Publisher

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First Published May 2014

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ISSN 2307-9827 (Online)

ISSN 2307-681X (Print)

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Preface

The *Southern Voice on Post-MDG International Development Goals* was born in the spirit of collaboration, participation and broad academic inquiry. It is a network of 48 think tanks from Africa, Latin America and South Asia which has identified a unique space to contribute to the post-2015 dialogue. By providing quality data, evidence and analyses derived from research in the countries of the global South, these think tanks seek to inform the discussion on the post-2015 framework, goals and targets, and to help to shape the debate itself.

With these goals in mind, *Southern Voice* launched a call for papers among its members to inform the global debate based on the research they have already carried out, to strengthen national or regional policy discussions. The objective of the call was to maximise the impact of the knowledge that already exists in the global South, but which may have not reached the international arena.

In response to the call, we received numerous proposals which were reviewed by *Southern Voice* members. The research papers were also peer reviewed, and the revised drafts were later validated by the reviewer.

The resulting collection of ten papers highlights some of the most pressing concerns for the countries of the global South. In doing so, they explore a variety of topics including social, governance, economic and environmental concerns. Each paper demonstrates the challenges of building an international agenda which responds to the specificities of each country, while also being internationally relevant. It is by acknowledging and analysing these challenges that the research from the global South supports the objective of a meaningful post-2015 agenda.

In connection with the ongoing debates on post-2015 international development goals, **Changing Intersection among Ecosystem, Society and Development Goals: An Examination for Improved Policy Making** by *Ms Shuveccha Khadka* (Senior Researcher) and *Mr Ajaya Dixit* (Executive Director) at Institute for Social and Environmental Transition-Nepal (ISET-N) explores the links between the MDGs and Sustainable Development Goals (SDGs). In addition, it examines the interconnection between climate vulnerability, water, sanitation and health in Nepal. The study seeks to interrogate these issues within a framework of sustainable livelihood conditions.

I would like to gratefully acknowledge the contributions of *Ms Andrea Ordóñez* (Research Coordinator of the initiative) and *Ms Mahenaw Ummul Wara* (Research Associate, Centre for Policy Dialogue (CPD) and Focal Point at the *Southern Voice* Secretariat) in managing and organising the smooth implementation of the research programme.

I would also like to thank *Mr Shakeel Ramay* (SDPI) for peer reviewing and *Dr Oliver Turner* for copy editing the paper.

I would like to take this opportunity to recognise the support of Think Tank Initiative (TTI) towards *Southern Voice*, particularly that of *Dr Peter Taylor*, Programme Leader, TTI.

I hope the engaged readership will find the paper stimulating.

Dhaka, Bangladesh
May 2014

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Contents

<i>Preface</i>	<i>iii</i>
<i>Acronyms</i>	<i>vi</i>
Context	1
Changing Socio-Political Landscape.....	2
Indicators of Achievement.....	4
Climate Change and Changing Context	6
Making Sustainable Interventions	8
Bibliography.....	11

List of Tables

Table 1: Poverty in Nepal	4
Table 2: Basic Development Indicators: Nepal and South Asia	5
Table 3: Progress on MDG Targets for Nepal.....	5
Table 4: Environmental Sustainability Goals in South Asia	6

Acronyms

GDP	Gross Development Product
HDI	Human Development Index
kWh	Kilowatt Hour
MDG	Millennium Development Goal
MoAC	Ministry of Agriculture and Cooperatives (Nepal)
NAPA	National Adaptation Plan of Action (Nepal)
NLSS	Nepal Living Standard Survey
USD	United States Dollar

The Changing Intersection of Society and Development Goals

An Examination Aimed at Improving Policymaking

Shuveccha Khadka

Ajaya Dixit

Context

When world leaders adopted the Millennium Development Goals (MDGs) at the United Nations Millennium Summit in September 2000, Nepal's insurgency had reached its peak in terms of deaths and human rights violations. The MDGs, for the first time, set time-bound and measurable goals for combating poverty, hunger, illiteracy, gender inequality, disease and environmental degradation in developing and least developed countries. The eight MDGs were: 1) eradicate extreme poverty and hunger; 2) achieve universal primary education; 3) promote gender equality and empower women; 4) reduce child mortality; 5) improve maternal health; 6) combat HIV/AIDS, malaria and other diseases; 7) ensure environmental sustainability; and 8) develop global partnerships. The leaders who met in 2000 did not, however, explicitly recognise the importance of access to carbon neutral, reliable and affordable energy, despite such accessibility being critical to the achievement of all eight goals. In fact, energy access by individuals, households, nations and the world as a whole is key to human development.

As a signatory, Nepal faces the arduous task of achieving its MDG commitments by 2015. The civil conflict that engulfed the country for a decade (1996-2006) has made this task difficult because it stifled development and deprived people of their basic human rights including access to water and sanitation, as well as health, education and energy services. Despite the political turmoil that followed the peace accord of 2006, Nepal has managed to achieve a few MDG targets considerably ahead of schedule. For example, government statistics show that 80 per cent of the population already have access to improved drinking water sources; the target was just 73 per cent. Likewise, the target ratio of girls to boys in primary school enrolment has been achieved, as has the under-5 mortality rate, which stands at 50 per 1000 live births (compared to the targeted 54). Nepal is also on schedule to reach some other targets, including reducing the proportion of people living below the national poverty line; the maternal mortality ratio and the death rate associated with TB; and increasing both the net enrolment rate in primary education and the ratio of girls to boys at secondary level (NPC & UNDP 2011). Overall, there has been some progress in reducing income poverty and enhancing human development over the last decade. The adoption of long-term goals in the form of the MDGs, which have become influential at the level of international development discourse (Manning 2010), has contributed to this progress by influencing the development approach and framework of the policy arena.

Despite this progress, there still are wide disparities in achievements in terms of geography, ethnicity and gender. For example, while overall poverty has declined, certain social groups like the *Dalits* still remain disproportionately poor. In addition, a number of factors including rapid urbanisation, climate variation, and dependency on remittances, have created new challenges that could hinder Nepal's ability to sustain its achievements and meet its remaining targets. The ongoing socio-political transition adds another dimension of complexities to this basic challenge. Increased

migration and mobility have resulted in a rise in market-centric livelihoods across the country, marking a shift away from the rural agriculture and natural resource-based socio-economic systems of the past. The asset baskets of rural households are similar to those of urban households, and their livelihoods are based on urban production and institutional systems, which intersect with existing sources of marginalisation in unique ways to produce both opportunities and vulnerabilities. Rural areas are characterised by livelihood systems based on producing primary products and support services, informal institutions and technologies, which draw upon local-level human resources for production and maintenance. Urban areas are characterised by secondary-level production and tertiary-level services sector livelihoods integrated into national and global economies, and by formal institutions which, though of varying capacities, are more efficacious than rural institutions. In this fluid context, the intersection of poverty, climate change and evolving ecosystem services creates new sources of vulnerabilities that need to be recognised in the post-2015 era.

Since low-income rural and urban regions are growing increasingly linked and multiple drivers threaten the quality of ecosystem services, recognising the changing nature of ecosystem services is easier said than done. Reflecting on past research, this paper provides an overview of change processes since 1990, when Nepal underwent a fundamental political change and introduced multi-party democracy. Using the examples of drinking water, sanitation and health services, food security and access to energy in Nepal, the paper examines the vulnerabilities and risks that Nepali people face as poverty, climate change, and ecosystem services intersect. It elaborates the need to assess services of systems (both infrastructural and eco-systems), which are pre-requisites if MDGs are to meet their objectives. Arguing the need to focus on climate change adaptation as a key issue, the paper examines its implications for the post-MDG era and envisions policies and practices that could engender meaningful partnerships among actors in international, national, sub-national and local-level governance within a development framework.

Changing Socio-Political Landscape

Agriculture has been the mainstay of Nepal's economy for centuries, but its importance has declined in recent years. While agriculture accounts for one-third of national gross domestic product (GDP) and employs 65 per cent of labour, Nepal is no longer the rural agrarian society it was prior to 1951 when the country first opened its borders to the outside world. On the contrary, the population increasingly depends on regionalised relationships created through the penetration of roads, low-cost communication, and other infrastructural development; trade ties; rapid urbanisation; and large-scale migration (Dixit & Khadka 2013; Moench *et al.* forthcoming). Income from remittances has increased dramatically. Today, more than half of all households across Nepal have at least one member working outside the country and remittances from the 2.1 million Nepali people working abroad now comprise 25 per cent of GDP, and exceed all other sources of foreign currency (World Bank 2011; Lokshin *et al.* 2010; Wagle 2012).

Agriculture is still an important contributor to household income, but with income increasingly coming from non-farm activities, households are becoming more flexible in their spending. At the household level, people are moving from subsistence to commercial farming. Vegetables are their main cash crop, but many are turning towards dairying and other livestock-based enterprises. While such diversification has increased income levels, it has also raised farmers' dependency on regional and global markets, and as a result, increased their vulnerability (Dixit & Khadka 2013). In addition, the remittance economy has resulted in several other changes: there is less labour available locally; women, children and the elderly are left behind in villages to support themselves; and the nature of demand for ecosystem services such as water has changed. In many urban and peri-urban regions, families purchase rather than produce many basic necessities such as food.

Universal food security continues to remain a challenge because Nepal is unable to produce or maintain adequate supplies of food and struggles to distribute what it does have. Nationwide, agricultural production, especially of cereals, has remained stagnant or declined and barely meets the increasing need. The shortfall is met through imports. According to the Ministry of Agriculture and Cooperatives (MoAC) for example, in 2010 Nepal imported food worth USD 621 million, and

exported agricultural products worth around USD 248 million (Sapkota 2011). Trade in agriculture thus contributes to Nepal's overall trade deficit. To make the challenge of achieving food security more daunting, irrigation, which covers only 37 per cent of farmland, is affected by increasing fluctuations in rainfall and temperature. Limited access to improved seeds, affordable technologies, market opportunities and rapid urbanisation further debilitate agricultural livelihoods and productivity. Between 2005 and 2009, Nepal's cereal production did not meet the needs of its people (MoAC 2009; WFP 2009; WFP 2011), and poor distribution systems saw hunger increase. Today, almost 50 per cent of Nepal's population is undernourished and nearly half of all children under-5 are chronically malnourished. Malnutrition is highest in the Mid-Western and Far-Western regions. The Nepal Living Standard Survey (NLSS III, 2010) revealed that 37 per cent of people in the rural hills of these regions fall below the poverty line, compared to the national average of the population in poverty (25.2 per cent. In the Mid-Western region, more than 10 per cent of children under the age of five are underweight, the highest proportion in the country.

Hunger and poverty in Nepal are among the push factors triggering migration, as is the lack of employment opportunities which is itself caused by, among other things, the shortage of affordable and reliable energy. Nepal is considered to hold significant hydropower potential, and could generate enough electricity to export to meet regional needs while earning the much needed revenue (Ebinger, 2011). Such optimistic visions, however, do not account for the fact that energy systems and access to the services they generate are vital for most human activities. Energy is fundamental in this regard, whether in the form of fuel required for cooking, manual labour inputs to subsistence agriculture, lighting, or the concentrated systems required for communications, manufacturing and transport systems. Markets, social networks, finances and organisational systems require energy as a primary input. Improving its energy capacity is a basic challenge Nepal faces today. In 2011, 67 per cent of Nepal's population had access to electricity, which constitutes 3 per cent of the total energy consumed, and per capita consumption was 82.46 kWh (kilowatt hour). In the dry season of 2012, the Nepal national grid faced a daily power outage of 16 hours. About 87 per cent of energy for cooking comes from biomass. In 2010 Nepal spent USD 700 million on the purchase of fossil fuels.

As discussed above, the migration of Nepal's youth, both domestic and international, is instigated by pushes and pulls that exist at the micro (household, community) and macro (international trade, policy and economy) levels. Some of the macro-level factors driving international migration are labour shortages in developed nations due to low fertility and ageing, and labour surpluses in less developed nations; gaps in economic well-being between developed and developing nations; the growth of social networks due to the globalisation of the media; the operations of transnational organisations; the proliferation of the global migration industry; labour market segmentation; and the universalisation of education (Hugo 2006). While work-related migration has been a key livelihood strategy for Nepalis for around 200 years, it received a boost in the early 1990s when the process for obtaining passports at district headquarters was improved (Dixit *et al.* 2011; World Bank 2011). Migration accelerated in the last decade mainly due to the decade-long civil conflict, which caused unemployment, insecurity, weak governance and minimal service delivery.

During the mid-1980s and early 1990s, Nepal's economy recorded a 5 per cent annual growth rate, but political instability, high rates of urbanisation and population growth, limited access to basic services and poor governance undermined the benefits (World Bank 2007). With a poverty rate of 42 per cent and an average per capita income of USD 240, Nepal was the poorest country in South Asia in 1995-96. In 2003-04, the poverty rate was 31 per cent, a decline of 11 per cent, or [3.7 per cent] per year; and today the rate stands at 26 per cent (MoHP 2011). The poverty rate in urban areas saw a similar decline: from 22 per cent in 1995-96 to 10 per cent in 2003-04, a change of 9.7 per cent per year. These reductions occurred despite the violent civil conflict which killed 17,000 people between 1996 and 2006. Widespread insecurity in rural areas triggered rapid national rural-urban, as well as international, migration. The increasing number of people living abroad and sending remittances home was a key factor in the reduction in poverty. Since it is likely that a remittance-based economy will prevail even in the post-2015 era, there is a need for a deeper understanding of the dynamics of migration if the goals of the post-MDG years are to be met.

While poverty alleviation was a key target of Nepal's Eighth (1992-1995), Ninth (1997-2002) and Tenth (2002-2007) national development plans, which also included increasing local employment opportunities (NPC 2007) they were not responsible for the reductions in poverty as discussed above. A World Bank study attributes one-fifth of the poverty reduction, which occurred between 1995 to 2004 to the increase in international migration and remittances (World Bank 2007). That study also acknowledged the important role of domestic migration. The decline in poverty rates varies considerably across the country. The disaggregated data in Table 1 demonstrates the considerable differences in poverty across geographical areas, employment sectors, caste and ethnic groups, and educational achievement.

Table 1: Poverty in Nepal*(in Per cent)*

Nepal Poverty Measurement	1995-96	2003-04
Total	41.8	30.8
Urban	21.6	9.6
Rural	43.3	34.6
Ecological Belt		
Mountain	57.0	32.6
Hill	40.7	34.5
Tarai	40.3	30.8
Caste/Ethnicity		
Upper caste	34.1	18.4
Dalit	57.8	45.5
Tharu (Tarai Janajati)	53.4	35.4
Employment Sectors (Self-Employed)		
Agriculture	43.1	32.9
Services	25.3	14.4
Employment sectors (wage earners)		
Agriculture	55.9	53.8
Professional	8.3	2.1
Education		
Illiterate	50.9	42.0
11+ years	11.4	1.6

Source: Nepal Population Report (2011).

At the household level, remittance income has helped to reduce poverty, allowing families to invest in children's education and healthcare (a focus of the MDGs), but mostly in the purchase of land, houses, and consumption goods. Such investments have improved the social status of individual households and enabled people to move to urban areas to access private services such as education and healthcare, but they have had negative consequences, too. Some households have moved to hazard-prone roadside settlements and families have been torn apart, with children and the elderly left behind by the increasingly mobile active population. Fewer people farm, and those who do farm grow vegetables and raise livestock rather than cultivating traditional crops. In addition, the agriculture sector as a whole is becoming increasingly feminised (Maharjan *et al.* 2013; Dixit & Khadka 2013). The increase in remittance is a policy concern, because in the long-term, it is likely to reduce incentives for the government to create productive jobs (Sijapati & Limbu 2012).

To achieve its development goals, Nepal needs to scrutinise these changing contexts and the robustness of the systems that deliver services using policies and working mechanisms that look beyond national and other macro-level data.

Indicators of Achievement

The Government of Nepal has long looked for ways to measure the tangible effects of development on the lives of the country's population and has collected data on drinking water and sanitation, irrigation, renewable energy, communication, roads and transport, healthcare, education and

financial services. Nepal's ten Five-Year Plans and three Three-Year Interim Plans since the first was launched in 1951, including the current one for 2013-14 to 2016-17, have all focussed on providing basic services to people for inclusive and sustainable economic growth, poverty alleviation, peace and reconstruction, good governance and local development. While it has improved people's well-being by increasing their access to different services, the quality of those services is often poor and varies across different segments of the population. Nepal's Human Development Index (HDI) of 0.463 puts it in the low development category. It falls below the South Asian average of 0.558 and means that the country ranks 157th among 187 nations (UNDP 2013). Clearly, the country has a long way to go in implementing development initiatives (Table 2).

Table 2: Basic Development Indicators: Nepal and South Asia

Country	HDI Value	HDI Rank	Human Development Category	Life Expectancy	Mean Years of Schooling	Gross National Income (GNI per capita USD)
Bangladesh	0.515	146	Low	69.2	4.8	1785
Bhutan	0.538	140	Medium	67.6	2.3	5246
India	0.554	136	Medium	64.6	4.4	3285
Nepal	0.463	157	Low	69.1	3.2	1137
Pakistan	0.515	146	Low	65.7	4.9	2566
Sri Lanka	0.715	92	High	75.1	9.3	5170

Source: Human Development Report (2013).

Nepal has made progress in improving access to clean drinking water, sanitation and health. It has already surpassed its MDG target for the provision of clean drinking water as this now applies to 80 per cent of the population (compared to its target of 73 per cent) and is set to fulfil its target for improved sanitation (population using toilets) as this applies to 53 per cent of the population (compared to its target of 43 per cent (NPC & UNDP 2011) (Table 3). Guided by the 20-Year Vision (1997-2017), National Water Plan (2005), Rural Water and Sanitation Policy and Strategy Paper (2004), Urban Water Supply and Sanitation Policy (2010), National Water Plan (2002-2017), National Drinking Water Quality Standards (2006) and National Urban Policy (2007) the water supply and sanitation sector has made significant progress in a short period (NPC & UNDP 2011), and has helped reduce water-related health hazards. The rates of drinking water and sanitation coverage do not, however, take into account the functionality of the services provided, i.e. whether or not they are adequate in terms of the quality supplied and the availability of that supply. One study suggests that as

Table 3: Progress on MDG Targets for Nepal

MDG Thematic Area	Indicator	Achieved by 2010	Target for 2015
Poverty and hunger	Proportion of population living on less than USD 1-per-day (PPP) (%)	19.70	17.00
	Proportion of population below national poverty line (%)	25.40	21.00
Education	Net enrolment rate in primary education (%)	93.7	100.00
	Literacy rate for 15-24 years	86.50	100.00
Gender and empowerment	Ratio of men to women at tertiary level	0.63	1.00
	Ratio of literate women to men aged 15-24 years	0.83	1.00
Health	Infant Mortality Rate (per 1000 live births)	41	34
	Maternal Mortality Rate (per 100,000 live births)	229	213
	Proportion of births attended by skilled birth attendant (%)	29.00	60.00
	Clinical malaria incidence (per 1,000 population)	5.70	3.80
	Death rate associated with TB (per 100,000 population)	244	210
Environmental sustainability	Proportion of population using an improved drinking water source (%)	80.40	73.00
	Proportion of population with access to improved sanitation (%)	43.00	53.00

Source: MDG Need Assessment for Nepal 2011.

many as 92 per cent of piped water supply systems and 25 per cent of tube wells are either dysfunctional or in need of repair (WaterAid 2011).

According to the United Nations (2013), by 2025 1.8 billion people – most of them poor – will live in places classified as water scarce. Such scarcity may stem from the lack of physical supply or other factors such as pricing and social status. Many households in peri-urban and urban regions spend a sizable proportion of their income on purchasing water and will continue to do so as urban populations swell with rural migrants.

Urbanisation transforms ecological landscapes, flows of people, resources and assets and creates new opportunities. But it also comes with new sets of vulnerabilities and risks. The implications for future poverty and vulnerability stemming from social, economic and ecological transformations remain poorly understood. Most rapidly growing cities in Nepal face core governance challenges, and are struggling to provide the most basic of services. The pressure on such governance systems is intensified by both the pace of urbanisation and the associated migration as well as by additional climate-related risks. To provide universal access to water and sanitation, Nepal needs to accelerate its coverage-expanding initiatives, and continue to improve the quality of services by sources and reducing collection time.

Table 4: Environmental Sustainability Goals in South Asia

Country	Access to Improved Drinking Water		Access to Improved Sanitation	
	Achieved	Targeted	Achieved	Targeted
Bangladesh*	98.2	100.0	63.6	100.0
Bhutan***	82.5	72.5	82.5	82.5
India**	92.0	84.5	51.0	62.5
Nepal*	80.0	73.0	43.0	53.0
Pakistan**	65.0	93.0	63.0	90.0
Sri Lanka***	84.7	84.0	93.9	84.5

Source: www.undp.org; www.globalwaterforum.org

Note: * 2011, ** 2010, *** 2007.

Achieving universal sanitation coverage is likely to be more problematic than achieving universal access to improved drinking water because sanitation also includes hygiene through changing personal habits such as washing hands and cleanliness. Everyday 16 million Nepalis practice open defecation and about 10,500 children die every year as a result of water and sanitation-related diseases. Only 41 per cent of public schools have toilets and only one in four has separate toilets for girls (WaterAid 2011). The poor quality of the drinking water provided in schools and elsewhere is among the most serious of public health problems (Dixit *et al.* 2013). Overall, 80 per cent of all illness is attributed to inadequate access to clean water, poor sanitation, and poor hygiene. Diarrhoeal diseases account for 3.4 per cent of morbidity and 5.5 per cent of skin diseases (NCVST 2009). Vector-borne diseases like malaria, Japanese encephalitis, and since 2006, dengue fever, are major public health problems. The environmental determinants for good health, including safe water, sanitation, and hygiene require continued attention. It is estimated that annual investments must reach USD 108 million to meet the national goal of providing everyone with safe drinking water and sanitation facilities by 2017 (Sector Financing Study as cited in Water Aid 2011).

Climate Change and Changing Context

While the above figures on drinking water indicate the big picture, they do not illustrate the situation at the local level, which varies, for example, depending upon the nature of source piped system, tubewells, springs and wells. It is estimated that around 17.9 per cent of the piped water supply systems function well, 38.9 per cent need minor repair, 11.8 per cent require major repair, 21 per cent need rehabilitation, 9.1 per cent need reconstruction and 1.6 per cent do not function at all (NMIP 2011). If the first two are considered acceptable levels of service the coverage would stand at

56.8 per cent, which offers a different picture. The situation changes further when disaggregated at the regional district level, and when social inclusion and gender are considered.

With the anticipated future rise in global temperatures and precipitation as well as in the frequency and unpredictability of extreme events, people in remote rural areas and urban slums will experience increasing stress as key infrastructures including shelters, roads, bridges and drinking water pipelines are rendered dysfunctional and disease outbreaks will become more frequent. Research has demonstrated that it is the poor who are most vulnerable; they are most likely to depend on poor-quality water and become exposed to unhygienic conditions. When floods or other hazards disrupt local services, at both the household and government levels, there is insufficient local capacity to cope effectively. In short, climate change is reshaping the livelihoods of vulnerable populations, particularly the poor, who are often the most directly dependent on water-based ecosystem services (DST, 2008). The challenge is to identify the vulnerable and empower them to make the most of the opportunities offered and minimise the risks.

We need to disaggregate the national data set and probe more deeply in order to understand what is really happening at the household and community levels. Such work should consider the challenges to Nepal's water and sanitation development goals which are influenced by multiple factors, including the changing global climate and its impacts. Nepal's physical and social diversity already complicates the achievement of its development goals, and climate change is likely to exacerbate these challenges. A 2009 study (ISET-N, ISET, Oxford University & Practical Action) and Nepal's National Adaptation Plan of Action (NAPA) suggest that national temperatures have risen; that the monsoon arrives later and that its spatial character has changed; that hailstorms are more frequent; that frost is less likely and that snowfall patterns have changed. The 2012 Climate Change Vulnerability Index by Maplecroft Atlas lists Nepal in the 'extreme risk' category.

Climate change and its likely impacts, existing and future vulnerabilities, and weak local governance will add to Nepal's development challenges. With its fragile geology and steep topography, the country is ranked as the 20th most disaster-prone country in the world. It faces many natural hazards including floods, landslides, fires, hailstorms, windstorms, thunderbolts, cloudbursts, droughts, glacial lake outburst floods, avalanches and epidemics, all of which are likely to become frequent and intense as climate change accelerates (MoHA 2012). According to the Overseas Development Institute (2013), Nepal is likely to face disaster-induced poverty and to see an associated decline in its MDG achievements.¹ Farmers and other locals in all three of Nepal's ecological zones – the mountains, the hills, and the Terai – report that erratic rainfall and rising temperatures have negatively impacted crop production. According to them, planting is delayed and the growing season has been shortened. These changes have in turn resulted in crops being desiccated by droughts and blighted by unusual pest infestations and disease outbreaks. Flowering seasons occur earlier and tropical illnesses are breaking out among human and livestock populations at unusually high elevations. Tree lines are also moving to higher altitudes.

While the Nepali population as a whole is vulnerable to the risks associated with climate change it is the poor, women and other marginalised groups who will be most affected. Predicting which people and places will be most vulnerable to which impacts requires developing a nuanced understanding of people's lives and how they are linked with climate change through a wide range of systems and services including roads, communication, food and water. The roles of the people and organisations (agents) who use and manage such systems and services also requires exploration. Without a better appreciation of the intersection where climate change, social and economic systems and agents and their agencies meet, Nepal will be incapable of ensuring that the policy processes responsible for implementing activities and delivering services will be sufficient to address future risks and vulnerabilities.

Stress and emerging challenges in water supply, sanitation and health sectors are compounded by the losses associated with changes in agriculture. Every year, the lives of significant numbers of people are

¹The other countries facing risks are Bangladesh, Democratic Republic of the Congo, Ethiopia, Kenya, Madagascar, Nigeria, Pakistan, South Sudan, Sudan and Uganda.

adversely affected when water supply systems are washed away by disasters and when drinking water systems are contaminated by the effects of landslides, inundation and flooding. Lives are also blighted by the depletion of water sources and the degradation of water quality. Water stress is already evident and has forced some farmers to pursue rainwater-harvesting methods. They have built plastic ponds and ferro-cement tanks and purchased high-density plastic pipes to convey water for drinking and irrigation. These and other similar initiatives need continuous support from local governing bodies if farmers and households are to be able to adapt to the changing climate.

The physical vulnerabilities that people face can be readily identified, but social vulnerabilities, which are embedded in a given social construction and psychological orientation, are less obvious and more difficult to address. The poor, women, children, older people and marginalised groups are disproportionately vulnerable (Ahmed & Mustafa 2007). Because of their limited mobility as well as existing inequities and socio-cultural constraints, it is they who have been the primary victims in most disasters. A study conducted after the 2008 Koshi flood in Nepal, for example, revealed that women (including pregnant women), children, and older people experienced heightened anxiety about food, shelter, water, sanitation and the security of their families and themselves as disaster increased their psychological vulnerability (MoHA 2009). Any given physical vulnerability carries with it an inherent social vulnerability, which is accentuated when a new stress is faced. A diarrhoeal epidemic in the mid-western Hills of Nepal in 2009 for example caused 240 deaths and affected 20,000 people. Unsurprisingly, the areas struck by the epidemic were the 13 poorest and most remote districts of Nepal, which contain some of the lowest HDIs and where local health services and personnel are spread very thinly (NCVST 2009).

Making Sustainable Interventions

Economic growth, effective policies and global commitment have driven the considerable progress made towards the MDGs in many developing countries including Nepal over the last 13 years (United Nations 2013). That said, many developing countries still face multiple challenges to achieving and sustaining the Goals in a complex arena characterised by rapid changes. Climate change vulnerabilities are entwined with multiple other drivers such as migration, rapid urbanisation and changes in landuse. Lack of access to improved drinking water, poor sanitation, lack of energy, limited mobility, inequities in access to opportunities such as education, livelihoods, and poor healthcare services are still major impediments for many in developing countries. Political unrest, which has enveloped some developing nations has come as yet another barrier to progress for sustainable development, while corruption has also stymied nations' ability to maximise gains from economic growth.

The threat of climate change adds a new layer of uncertainty, particularly with regard to building the capacity to adapt. Climate change and its impacts, vulnerabilities spread across space and time, and the absence of good-quality governance all obstruct development. Stable and responsive governments can provide a sense of security, continuity and predictability in the policy regime (NPC & UNDP 2013). If governments can provide resources and build institutional and policy capacity for the implementation of strategic interventions, meeting most of the MDG targets by 2015 and progressing along a sustainable pathway is possible. However, meeting the targets for full employment and adaptation to climate change will require accelerated implementation of strategic interventions through the joint efforts of both governments and their development partners.

In the post-2015 era, the aim of meeting social development goals will depend on expanding choices for families and households. This will help enable them to make autonomous decisions to invest in the well-being of their members by, for example, prioritising education, health, shelter and information. Receiving a stable income, such as from remittance or other sources, enables families to make investment decisions. Efforts to overcome hunger and poverty and achieve MDGs broadly therefore need to focus on two goals: the creation of new jobs which enhance household incomes and the provision of systems which guarantee people access to basic services while enabling individuals, families and households to make autonomous responses towards achieving well-being. Sustainable energy pathways should be a key focus of developing countries in the creation of new

employment as well as the need to meet lighting, cooking and other related needs. Mobility, communication and banking are also central factors for well-being, but none can function unless there are energy and other systems in place. Without energy, for example, there can be no communication or transportation, and without these systems, local finance institutions and markets cannot function. Enhancing forward and backward linkages while developing energy systems will create synergies within the economy while contributing to economic development by generating additional employment opportunities. Improved access to energy will, *inter alia*, contribute to literacy and gender equality, and help lower infant mortality. Because clean energy systems provide mitigation by avoiding emission of green house gases, the energy policies should be systematically fine-tuned to contribute to the broader goals set for the post-2015 era.

Because developing countries face considerable threats both from climate and non-climate hazards (such as earthquakes), disaster risk mitigation strategies should remain a key component of poverty reduction efforts. A focus on saving lives and protecting livelihoods as well as physical systems is crucial. Thus, disaster risk reduction and climate change adaptation must find explicit recognition and integration in post-2015 development strategies. At the same time the poorest and most marginalised people continue to be excluded from basic services, despite overall progress made in their delivery. It is important to assess nuances in order to understand the complexities of power, politics, and social dynamics in each country and how they impact the implementation of plans and policies. Examining existing vulnerabilities and ensuring inclusive growth will promote a just society that can minimise disparities in access to and use of services among different areas, classes, castes and genders. To such ends the macro-level indicators are necessary and useful, but do not illustrate or help in unpacking the aforementioned local realities.

Indicators do enable macro-level planning but effective approaches to development are more than exercises in collecting macro level data. Agencies of states such as the census bureau must use disaggregated data sets and consider the nuanced realities rather than adopting a more broad overarching perspective. Only when local actors are engaged in collection and analysis can information add value to MDG efforts. In many developing countries it is not easy or straightforward to meet such objectives because of the limited capacity of local institutions already weakened by the political constraints. Capacitating both agents and agencies is the key. Any initiatives to meet the development Goals therefore should focus on strengthening systems that provide basic services (including the institutions that manage them) so that risks of implementation can be minimised.

If the five elements proposed as a post-2015 agenda – leave no one behind; put a sustainable development idea at the core of all development; transform national and local economies for jobs and inclusive growth; build peace and effective; open and accountable institutions for all and forge a new global partnership – are to be meaningful, it is essential to recognise that diversity in socio-economic and political governance are real and plural perspectives they bring can foster sustainable development. The approach in the post-2015 era will not succeed unless coordination and partnership among agents and agencies ranging from local to global levels are engaged in questioning and re-framing the process of MDGs. Indeed global commitments are useful points of entry to reforming national processes and policies, so that, in congruence, both ensure resources are allocated and targeted to build societal resilience that helps us adjust our relations with one another, to the community and to the natural environment. They can contribute to improved governance and build human capital through gains in improved drinking water, education and health services. These gains are essential but will be insufficient without diversifying the national economy, getting more and more populations involved in the production sector and trading in high-value goods supported by building domestic productivity as the foundation of well-being (Rodrik 2013).

National and local institutions must be partners in this endeavour if the processes are to be effective and long-lasting. Development aid and its programmes generally take unilateral approach in timebound tasks while neglecting the overarching objectives and deliberative opportunities for effective local participation. Existing frameworks must be re-crafted to create space for bottom-up participation to revise goals and targets, monitor MDG implementation, assess impact, and incorporate revised activities in national programmes to enhance local ownership and ensure

sustainability. Within such a framework communities at local, sub-national, national and international levels need to continuously engage in dialogue to generate shared learning across disciplinary, political, ideological and geographical boundaries.

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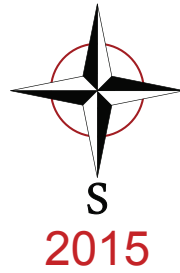
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Southern Voice on Post-MDG International Development Goals (*Southern Voice*) is a network of 48 think tanks from Africa, Latin America and South Asia, that has identified a unique space and scope for itself to contribute to the post-MDG dialogue. By providing quality data, evidence and analyses that derive from research in the countries of the South, these institutions seek to inform the discussion on the post-2015 framework, goals and targets, and to help give shape to the debate itself. In the process, *Southern Voice* aims to enhance the quality of international development policy analysis, strengthen the global outreach capacity of Southern think tanks, and facilitate professional linkages between these institutions and their respective governments. *Southern Voice* operates as an open platform where concerned institutions and individuals from both South and North interact with the network members. *Southern Voice Occasional Papers* are based on research undertaken by the members of the network as well as inputs received at various platforms of the initiative. *Centre for Policy Dialogue (CPD)*, Dhaka works as the Secretariat of the *Southern Voice*.



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