



BUILDING INCLUSIVE GREEN ECONOMIES

Stories of Change from The Poverty-Environment Initiative in Asia Pacific



*Empowered lives.
Resilient nations.*

© 2014 UNDP-UNEP

© Joan Manuel Baleillas/FAO: Front cover photograph

© Munir Us Zaman/FAO: Back cover photograph

This publication may be reproduced in whole or in part and in any form for educational or non-profit purposes without special permission from the copyright holder provided acknowledgement of the source is made. The UNDP-UNEP Poverty-Environment Facility would appreciate receiving a copy of any publication that uses this publication as a source. No use of this publication may be made for resale or for any other commercial purpose whatsoever without prior permission in writing from UNDP and UNEP.

The views expressed in this publication are those of the authors and do not necessarily reflect the views of UNDP and UNEP. The designation of geographical entities in this report, and the presentation of the material herein, do not imply the expression of any opinion whatsoever on the part of the publisher or the participating organizations concerning the legal status of any country, territory or area, or of its authorities, or concerning the delimitation of its frontiers or boundaries.

* All dollar (\$) amounts refer to US dollars.

* All figures have been rounded off to the nearest whole number

This publication has been printed in 100% eco-fiber paper, using vegetable-based inks and other eco-friendly practices. Eco-fiber paper is a high quality, environmentally friendly fiber obtained from recycled materials.



BUILDING INCLUSIVE GREEN ECONOMIES

Highlights from the
UNDP-UNEP Poverty-Environment Initiative in Asia Pacific

Funding Partners



Acknowledgements

Authors, design, infographics and layout

Marta Baraibar & Prashanthi Subramaniam

Director of Publication

Paul Steele

Coordinator

Joyce Lee

Editor

Joyce Lee and Paul Steele

Research support

Jeongwhun Kang

Production support

Saranya Rojananuangnit

Foreword

More than anywhere in the world, Asia has experienced phenomenal economic growth in the last quarter of a century. While this has pulled people out of poverty, the gap between the rich and poor has widened.

This rapid growth has also come at a cost to our environment, such as air pollution, water contamination and scarcity, chemicals in soils and food and over-exploitation of forest and marine resources. This unsustainable approach to growth has significant and immediate impacts on people, particularly the poor and marginalized people whose livelihoods largely depend on natural resources. Climate change has already, and will continue to, intensify these problems especially for those living in small islands, low-lying coastal areas and deltas. If the issues of equity and sustainability are not properly addressed, this rapid growth will bring significant environmental and social challenges that could undermine the quality of future growth and human development.

The UNDP-UNEP Poverty Environment Initiative (PEI) offers a unique way of tackling these issues together by offering policy options to governments on how sustainable use of natural resources can help reduce poverty and maintain economic growth. With strong support from six donors globally, PEI in Asia Pacific is working with nine countries to mainstream pro-poor natural resource management into economic policies and decision making to achieve more inclusive green economies.

This publication brings together stories from the Asia Pacific region to demonstrate how this mainstreaming approach can be put into practice and the kind of results we can achieve. The post-2015 agenda promises to be a historical opportunity to adopt a more integrated approach to development, with poverty reduction and environmental sustainability at the heart of this new framework. As the vanguard of global economic and social development and home to the world's most unique ecosystems, Asia Pacific has considerable responsibilities and opportunities to shape this agenda. The work of the UNDP-UNEP Poverty-Environment Initiative can serve as an inspiration to drive for change and to catalyze support and investments to achieve a truly sustainable development.



Nicholas Rosellini
Deputy Regional Director
Regional Bureau for Asia and the Pacific
United Nations Development Programme



Kaveh Zahedi
Regional Director and Representative
for Asia and the Pacific
United Nations Environment Programme

Contents

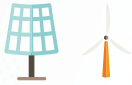
- 8 Building the future we want : Glimpses of the post-2015 global development agenda
- 9 Snapshot: Challenges in Asia and the Pacific
- 11 Bangladesh
Systems for channeling climate funds to local governments set up
- 15 Bhutan
Insurance scheme secures families from damages caused by human-wildlife conflict
- 19 Indonesia
Indonesian Government pioneers budget system to track climate change-related expenses
- 23 Lao People's Democratic Republic
Environmental and Social Impact Assessments set to promote quality investments in Lao PDR
- 27 Mongolia
Mongolia's development vision turns the spotlight on mining reforms
- 31 Myanmar
Setting the foundation to attract quality investments
- 35 Nepal
Greening Nepal's future: Environmentally Friendly Local Governance and green roads
- 39 Philippines
Revenues from natural resources help communities lead better lives
- 43 Thailand
Maize standards set the way for sustainable farming in Thailand

Building the future we want

Glimpses of the post-2015 global development agenda



Halt biodiversity loss, reverse land degradation, protect forests and terrestrial ecosystems



Access to clean, affordable and sustainable energy for all



Sustainable use of marine resources, seas and oceans



Promote sustainable agriculture, achieve food security and end hunger



Urgent action to combat climate change

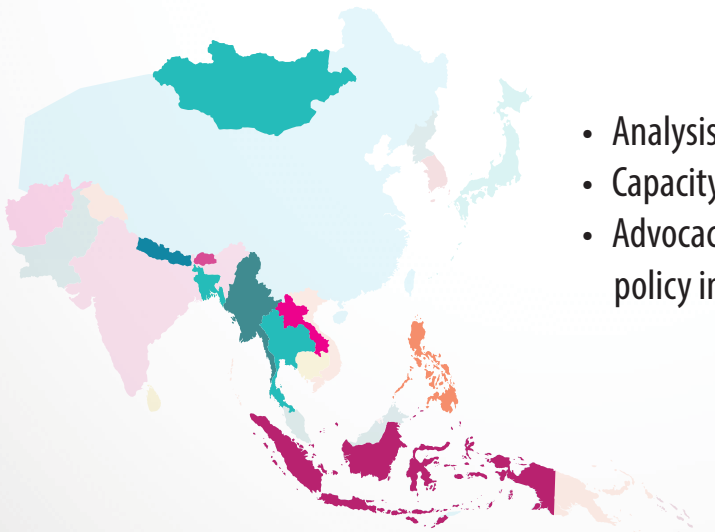


Availability and sustainable use of water and sanitation for all

Inclusive and sustainable socio-economic growth for all



UNDP-UNEP Poverty-Environment Initiative helps nine countries in Asia Pacific to achieve inclusive green economies through:



- Analysis and evidence for policy reforms
- Capacity building for institutional change
- Advocacy and communications to support policy implementation



Snapshot: Challenges in Asia and the Pacific

2/3 of the world's poor live in Asia and depend heavily on natural resources

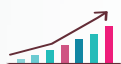
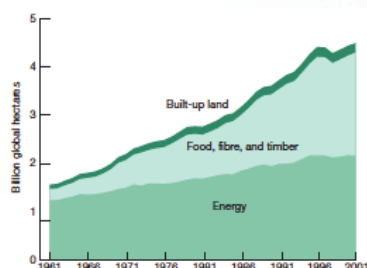
Improvements in human development over the past decades have come with high environmental degradation

 **90 %** in Lao PDR MAF/2011

 **90 %** in Nepal CIFOR/2012

% of the population dependent on natural resources

Asia Pacific's ecological footprint 1961 - 2001 WWF/ADB/GFN



As the demand for wood and other forest products increases, so does the demand for ecosystem services, such as the availability of water and flood prevention by forested watersheds WWF/ADB

7.5 % predicted decline in total fish in the Pacific region under a medium emissions scenario ADB/WWF/GFN

40 % declines in fish stocks. In the Gulf of Thailand and Malaysia, there has been a 40% decline in 5 years.



By 2100, the predicted economic loss due to climate change in the Pacific region would range between 2.9% to 12.7% of the annual GDP ADB/WWF/GFN

ADB/WWF/GFN

40 % of the coral reefs and mangroves have disappeared in the Coral Triangle, in the last 40 years ADB/WWF/GFN



Firewood accounts for 72% of all harvested wood in South East Asia and 93% of all harvested wood in South Asia WWF/ADB

12 % of the total greenhouse gas emissions come from Southeast Asia. 75% of this can be attributed to land use change, including deforestation ADB/WWF/GFN

500m Between 481-579 million people depend on forests in South East Asia Forests Peoples

30 % Projected decrease in crop yields projected by IPCC in Central and South Asia ADB/WWF/GFN

Subsistence farmers, fishing communities, the rural poor and traditional societies face the most serious risks from degradation TEEB



Inclusive green economies have the potential to offer better opportunities to the poor while preserving ecosystems



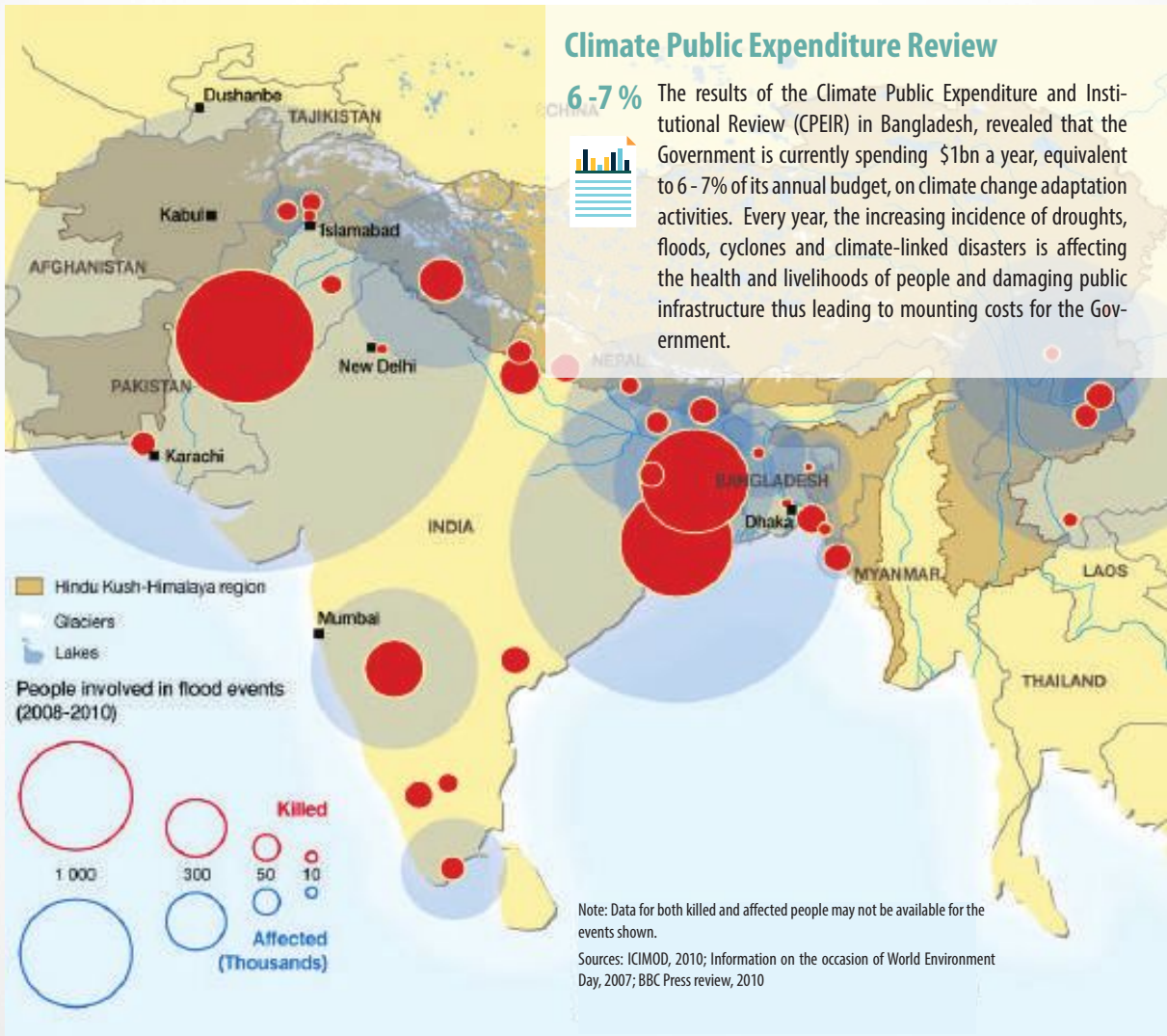
151.8 Population in millions ADB /2012

Bangladesh



31.5 % Population living below the national poverty line ADB /2010

Recent flood events in the Hindu Kush-Himalaya region ICIMOD/Riccardo Pravettoni, UNEP/GRID-Arendal/2012



Bangladesh

Systems for channeling climate funds to local governments set up



Every year, with the pertinent arrival of the tropical monsoons, an unwelcome disquiet spreads its pall over Fulchhori Union in Gaibandha district, northern Bangladesh. The seasonal rains, with the characteristic image of flooded paddy fields, are usually a moment of celebration for those in the subcontinent. However, the 165,000 strong population of this zilla faces the prospect of erratic rainfall and the flooding of the Jamuna River that flows through the district. Flash floods, cyclones and soil erosion are commonplace in Bangladesh. Recognised as one of the poorest countries in the world, almost one-third of the population lives below the poverty line and more fall under a large bracket of the population heavily dependent on natural resources for their livelihoods. The country landscape is carved by numerous river deltas and houses many rare species of flora and fauna, some of them being highly endangered species endemic to the region. Bangladesh's vulnerability to natural calamities has placed it on the fifth spot of the top ten most vulnerable countries. It is estimated that by 2030, without adequate progress in curbing this, an additional 14% of the population will be extremely vulnerable to the ravages of climate change.

With the country's precarious situation becoming a heightened concern internationally, the Government of Bangladesh has begun actively devoting greater resources, skills and building leadership specifically towards community resilience and endurance to face natural calamities.

Under the framework of the United Nations Convention on Climate Change, the Government set about drafting a National Adaptation Plan of Action that set precedence for climate change and sustainable development to become a key priority of the various development plans and in particular, the annual budgets of central and local governments.

Research and public climate expenditure reviews, carried out with the support of PEI in Bangladesh, showed that on an average, around 6% to 7% of the Government's combined annual development and non-development budgets, amounting to a sum of \$1 billion, was channelled towards climate-change related activities. It became important then to ensure that resources allocated for these projects were maintained and channelled in the most effective way possible so as to ensure the best results. In supporting the National Adaptation Plan, PEI in Bangladesh has been working on two key areas of disaster risk reduction and climate change adaptation, supporting 28 projects that aim to provide income opportunities and improve resilience of local communities to climate change vulnerabilities. The financing of these activities has forced the Government to readjust the manner in which domestic and foreign funds are being utilized.

The National Climate Fiscal Framework is a consolidated platform for assessing the various foreign and domestic funds allocated

Impacts of Climate Change

The poor are the most affected

Floods



Losses in agricultural production



Poisoning of ground water



Losses in biodiversity



Cyclones



Erratic weather patterns



Damages in infrastructure



This year floods have damaged paddy fields and all the village infrastructure. We even had to move our house from place to place.

Farmer, Chittagong



- ✓ *Assesses climate funds coming in*
- ✓ *Improves alignment of funds to national priorities*

Government of Bangladesh



International donors



National fiscal framework

- ✓ *Community Risk Assessment*
- ✓ *Mapping of hazards & resources*
- ✓ *Risks prioritized*
- ✓ *Plans of Action*

Local governments



Local fiscal framework



Research Institutions



Resilience of fishing communities



Climate resilient infrastructure



Building river embankments



Climate resilient farming



Raising bore-wells

Climate change adaptation activities



Community resilience



for the goal of climate change mitigation and adaptation in Bangladesh and how best to align them with national and local level activities. At the national level, there are multiple funding mechanisms being implemented like the Bangladesh Climate Change Resilience Fund (BCCRF) and the Bangladesh Climate Change Trust Fund (BCCTF). However, the Government at the central level has increasingly become aware of linking funding mechanisms to the work that local government institutions are carrying out and eke out better methods of channelling funds to locally based mitigation and adaptation projects. By adopting this approach, the Government can better plan and prioritize climate change investments across the country in a systematic way.

Fulchhori Union is one of eight hotspots where the Local Climate Fiscal Framework is being piloted. Every year with the rains and the flooding of the rivers, the villagers find their croplands submerged for months. The loss of food and the poisoning of groundwater has left the population struggling. Small-scale adaptation mechanisms that villagers themselves can pioneer, such as building river embankments and raising bore-wells, have far-reaching effects on health, maternal and child mortality.

These mechanisms will receive a much-needed impetus with the implementation of the Local Climate Fiscal Framework. Speaking about this, the Union Parishad Chairman of the District said, “Fulchhori Union is one of the areas vulnerable to flood and river bank erosion and climate change is influencing the vulnerability of this area significantly in the last few decades. Our agricultural production is getting hampered and many people are changing their livelihood due to continuous losses in production. Through the climate fiscal framework, we could identify our development problems related to climate change consequences and implement solutions for our development needs.”

The climate fiscal framework consists of multiple stages of action. The first is a Community Risk Assessment (CRA), a collaborative mapping of the various kinds of hazards the Union is exposed to and the resources it possesses to address this. Risks are then prioritized and corresponding risk reduction measures are proposed. These measures are then converted into clear plans of

action that local actors like NGOs and public institutions are involved in , ranging from building resilience among niche farming or fishing communities to setting up climate resilient public infrastructure and research institutions, to name a few. The Framework also seeks to identify and mobilize domestic and external investments in these local adaptation projects. These national sources of financing along with local governments’ revenues towards climate change adaptation, will serve to systematically funnel public funds towards local level projects and institutions. In setting up this framework, the focus will be on providing technical inputs in devising how the channels will run, as well as in training and enhancing the capacity of officials at the local and central level to better manage projects and to put in place accountability and transparency measures so officials can better report on the impacts that various climate change investments are having. The Local Climate Fiscal Framework will complement other social protection schemes like insurance schemes and food security agreements being planned and implemented at the grassroots level to build resilience among vulnerable communities.

The main challenge that the Government will have to prepare for, in scaling up this financing model, is to ensure that goals and plans see effective implementation. For this to materialize, strong leadership at the local and district levels needs to be encouraged and the involvement of communities must be fostered so that accountability of public officials is guaranteed. The Climate Fiscal Framework offers a strong vision and a sure foundation for the people of Bangladesh to move beyond planning for contingencies and focusing on other areas of social development like education, public health and gender equality. The snowball effect of a plan like this promises to give citizens more opportunities to dream of a better future for themselves and generations to come.



0.7 Population in millions ADB/2012

Bhutan

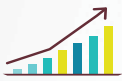


23.2 % Population living below the national poverty line ADB/2007

90 % Population dependent on agriculture and forestry FAO/2012

Bhutan is determined to remain carbon neutral

UNFCCC 15th Session of Conference of Parties (COP15) in Copenhagen (Declaration of the Kingdom of Bhutan)



Progress is measured in “Gross National Happiness” and the guiding philosophy emphasises: Sustainable economic development; Preservation and promotion of culture and tradition; Conservation of environment; Good governance.



72.5 % of the country is covered by forests. They provide the rural poor with fodder, fuel wood and building materials. The Constitution mandates that a minimum of 60% of the country remains under forest



51.4 % of the country is designated as ‘Protected Areas’ CBD/2012



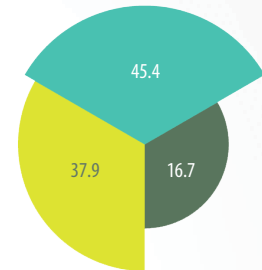
1/3 The emissions of Bhutan represent 1/3 of the sequestration capacity of its forests NEC/2010



A “green tax” on private vehicles ranging from 5% -20% of their value has been established to disincentivize private transportation.



Bhutan aims to be the first wholly organic nation of the world within a decade. Political parties are united to eradicate chemical fertilizers and pesticides.



2011

Services Agriculture Industry

Contribution of sectors to GDP, CIA/2011 estimates



40 %

Over **40 %** of national revenues come from hydropower. Bhutan's potential hydropower output is estimated at **30,000 megawatts (MW)**, only about 5% of which has been developed

ADB/2010



In our development, we focus not only on the economic aspects of jobs, food, shelter, health and education but we look beyond. And get aspects of promoting green development, preserving the environment, culture, strengthening the community. It is all based on the belief that if we find that balance, then our people can lead a happy life.

Karma Tshiteem, former Secretary of the Gross National Happiness Commission



Bhutan



Insurance scheme secures families from damages caused by human-wildlife conflict

Leki Tshering's home in Kangpara Gewog overlooks a stretch of lush paddy fields, interspersed with potato farms. Looking out from his watch tower, one of many erected in the village, he squints into the distance, his eyes and ears alert to any approaching noises. Located in Trashigang district and surrounded by the Sakteng Wildlife Sanctuary, the village is inhabited by 42 households of the Passangphu and Madhuwa communities, mostly agrarian in their living. With diverse and bountiful habitats, this region is not only home to a miscellany of commercial conifers and plants but also rare wildlife species like the snow leopard, the Himalayan black bear, barking deer and numerous different species of birds. However, with many local communities being dependent on forests for livelihoods and with human settlements and crop fields inching closer to these protected areas, the instances of human-wildlife encounters and cross-overs have been steadily rising.

The migration of wildlife into human settlement zones led not just to larger carnivores like leopards and bears feeding on local livestock but also wild pigs, deer and monkeys ravaging fields of grain, millets and maize. The costs proved too high to bear, with everything from fields to livestock to homes being destroyed. The regular destruction of crops, arable land and livestock made it very difficult for these rural populations to maintain sustained forms of living. Displacement, as a result of this, became imminent, as short-term protective measures proved to be futile

and few could afford an alternative that was effective in the long run. With over 60 % of the country recognised as "protected areas" and with almost 80% of its territory as forest cover, this scenario epitomizes what life is like in most of Bhutan. Over the years, surveys and research carried out by the Nature Conservation Division of the Royal Government of Bhutan had noted that since the 1980s there had been a steady rise in the number of conflict cases all over the country. This had led to local communities eking out their own indigenous means of keeping predators at bay, often resulting in the wipe out of populations of common predators using poisoned carcasses as bait and thus setting off ripples of imbalance in the ecosystem. Furthermore, this instilled in local communities a general dislike for provincial park policies that excluded them from planning processes and discouraged any institutional feedback measures that would help them report issues of human-wildlife conflict (HWC) .

In 2011, PEI, along with the Representation Office of Denmark and the Gross National Happiness Commission, supported the Royal Society for the Protection of Nature (RSPN) to devise a mechanism of compensation whereby vulnerable communities and those directly affected by HWC could insure themselves against crop damage and livestock loss.

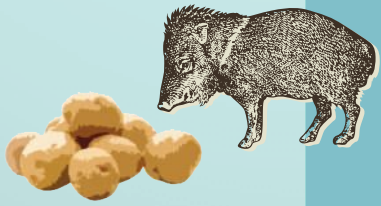
Implemented in Kangpara village, the locally managed insurance scheme sought to reach out to farmers via community- based



I sleep for six months a year in this shelter to guard the potatoes from attacks of wildpigs.

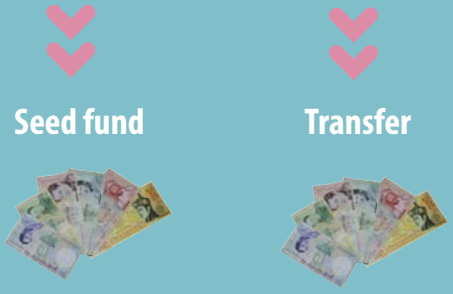
Most common animals that cause damages to crops

-  Wild pig
-  Snow leopard
-  Himalayan black bear
-  Deer
-  Monkey
-  Elephant
-  Tiger
-  Porcupine



Insurance scheme established to compensate victims of human-wildlife conflicts

Royal Society for the Protection of Nature & PEI

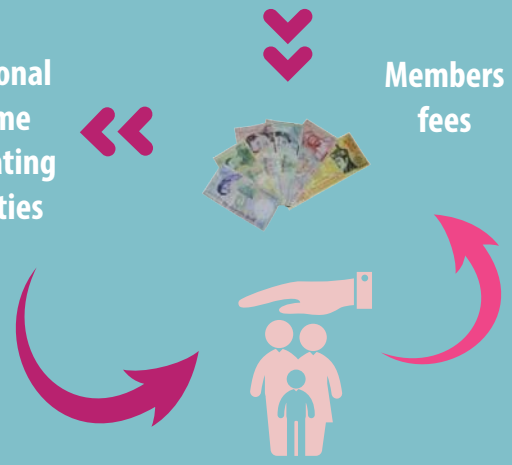


Village Committee



Additional income generating activities

Members fees



Victims of human-wildlife conflict receive monetary compensation and pay member fee

interventions. Different line ministries and divisions like the Departments of Forest and Park Services, Livestock, Agriculture, the Wildlife Conservation Division, UNDP and most importantly, local communities came together to decide how this mechanism would be institutionalized. Consultative meetings were held throughout 2011, to plan and involve aggrieved farmers and thereby better understand specific issues and identify zones for implementation.

The scheme was started with seed money worth BTN 200,000 and was sustained through nominal membership fees. A committee was set up involving the participating households and a constitutional document was decided upon which outlined a basic formula for calculating compensation for livestock and crop loss and setting compensation ceilings. Committee members were all volunteers from the community with no monetary incentives, subsequently trained to respond to the technical and financial needs of the operation. The scheme ran through 2012 into 2013 and within the first six months, 20 compensation claims had already been received and attended to, leading the way for more to follow. A review carried out in 2013, elucidated the success of the scheme in ensuring an effective and participatory way of settling compensation among villagers who had lost their basic means as a result of human wildlife conflict. As of January 2013, the committee members had raised BTN 213,641 (\$ 3,502) as part of fund savings.

Leki Tshering and other farmers like him, have stood to benefit from this initiative in more ways than one. He explains, "This community based insurance scheme has benefited us a lot as we don't have to travel all the way to the nearest Gewog Office to inform them about the crop damage. Instead the Committee can assess and decide on the compensation amount. This is faster and more reliable. . . Moreover, the compensation ceiling, membership fee and premium are all decided by the community members."

The success was further reinforced by the renewed commitment of the RSPN and the local communities in keeping the scheme

running, proposing for incentives for workers and stronger roles and responsibilities in fund raising and allocating compensation. Tshering Phuntso, a co-ordinator of the project notes that the commitment of households has also seen a significant increase over time as results became more evident. The RSPN is now seeking to upscale the project through measures like providing loans with low interest rates from the seed fund to finance income generating activities for local communities. The enthusiasm motivating this community-led insurance scheme has led to the idea of replicating similar schemes among various other regions that are at high risk of HWC.

Local government officials from Thrimshing sub-district, upon hearing the success of this scheme, met with representatives of the RSPN in early 2014 to plan and implement initiatives tailored to HWC issues in their Gewogs.

In addition to this, the Wildlife Conservation Division along with Ministry of Agriculture and Forestry have run widespread awareness and sensitization campaigns for local farmers to respond adeptly to HWC issues. Between 2011 and 2013, approximately 412 farmers have been engaged in discussions and trainings to find innovative and customized solutions to minimize crop and livestock damage. Gewog Conservation Committees have been set up in 10 Gewogs across 8 districts to toughen up the Government's response mechanisms to HWC at the local level.

Between 2007 and 2012, the Kingdom of Bhutan has seen rapid growth with the percentage of population below the poverty line, being slashed by nearly half (from 23% in 2007 to 12-13% in 2012). The sustainability of these promising trends in poverty reduction can be ensured only if environmental protection and inclusive growth, that has distinguished Bhutan's road to development so far, are continued. Indigenous and innovative solutions like these HWC mitigation measures, go a long way in reiterating the country's unique approach to development as one that is both achievable and aspirational.



245.8 Population in millions ADB /2012

Indonesia



12.5% Population living below the national poverty line ADB /2011

90 m Population estimated to be dependent on forest products Peoples forest

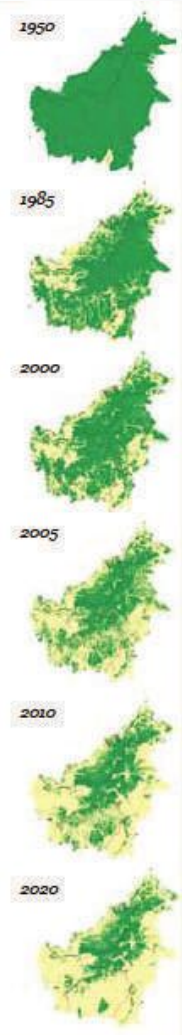


In the Heart of Borneo, an average of 850,000 hectares of forest is lost every year due to palm oil plantations, mining and timber production

Asia Pacific Fishery Commission 2010



Past and projected forest loss in Borneo WGIA 2011



Dependance on natural resources ADB/WWF/GFN



90m Between 80 and 95 million people are estimated to be dependent of forest products Peoples forest

25% of decline in forest cover, around 24 million hectares from 1991 and 2010. The quality of much of the remaining forest is also declining due to poor forestry practices, uncontrolled logging and fire ADB/WWF/GFN



250 Decline in shrimp catch from 500 kg/GT to 250-300 per year over past 2 decades ADB/WWF/GFN



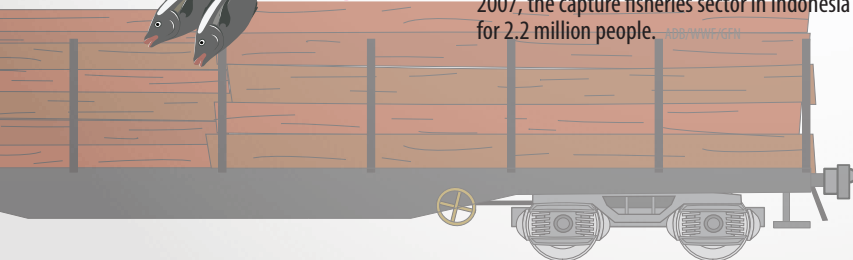
27 Species of mammals, including dolphin, whale and dugong are endangered ADB/WWF/GFN



50% Decrease in the ability of reef systems to provide food for coastal populations by 2050 is predicted, if current climate trends continue ADB



6m Across six Coral Triangle countries, at least 6 million people are directly employed in primary capture, fisheries or secondary production. In 2007, the capture fisheries sector in Indonesia provided employment for 2.2 million people. ADB/WWF/GFN



Indonesia

Indonesian Government pioneers budget system to track climate change-related expenses



The world's largest archipelago, Indonesia, is a jewel in nature's very own treasure trove. A cluster of more than 17,500 islands, the country boasts of diverse topography, ranging from mountainous tropical forests to volcanic lands to wide-stretching coastlines. Only around one-third of these islands are inhabited, with the rest home to rich biodiversity, many endangered species and verdant flora. The 245 million strong population of the country depends closely on these natural resources for livelihoods.

Of this, almost 31 million people find themselves living below the poverty line and at direct risk to the impacts of environmental degradation and climate change. While rapid industrialization and foreign investments in various sectors have steadily been on the rise, employment rates have stagnated over the years and fall well behind how fast the population is growing. This has resulted in increased stress on the environment, in addition to persistent natural disasters like earthquakes, volcanic eruptions and typhoons that the country is prone to.

People living in rural areas find themselves at greater risk and with lesser capacity to weather the fallouts of environmental degradation. With growing awareness on the need to take meticulous and coordinated steps to address this crisis, the Government has been seeking to redouble its efforts. Indonesia is currently the world's third largest country in terms of

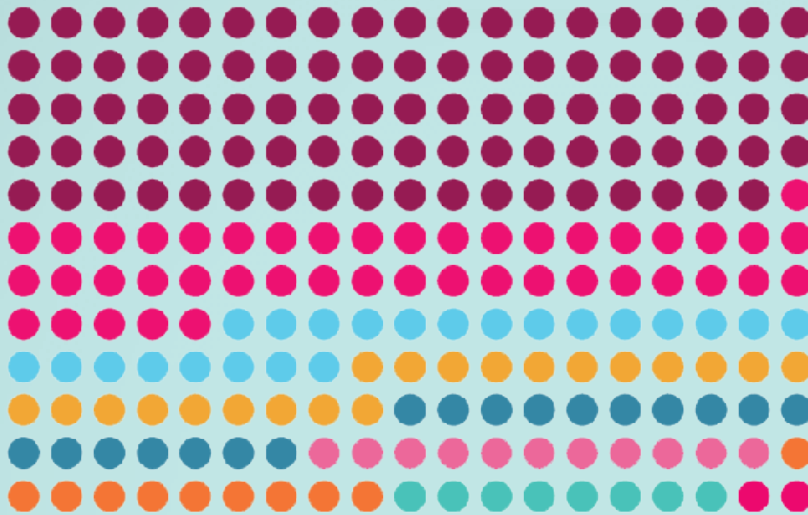
greenhouse gas emissions, fuelled by rampant deforestation. Redressing this has become a priority for government decision making, in light of both national development goals as well as international commitments to sustainable development.

At the G20 summit in 2009, former President Susilo Bambang Yudhoyono committed to reducing carbon emissions by 26% by 2020, expanding this to 41% in light of international support. These targets have formed the foundation of Indonesia's strategy for low carbon green development. In 2011, a Presidential Regulation was passed, outlining a National Action Plan for reducing greenhouse gas emissions- known nationally as the RAN-GRK and a Provincial level Action Plan, known as RAD-GRK.

The National Plan sets out specific measures, objectives and clearly demarcates responsibilities for different sectors. While the targeted sectors include forestry, agriculture, energy and transportation, industry and waste management, the National Plan envisions the coming together of almost 20 ministries and other government institutions to implement 50 key activities and 73 supporting activities that sustain emissions reduction. One such activity to tackle the ever-growing problem of deforestation is the One Billion Tree Planting Campaign. Deforestation continues to be one of the biggest contributing factors to greenhouse gas emissions in the country. Under the One Billion Indonesian Trees for the World Programme, the

Public climate finance in Indonesia in 2011

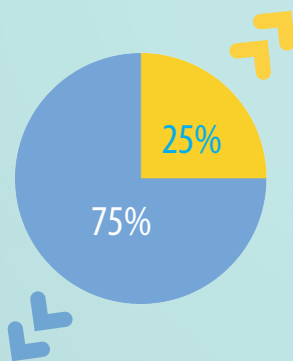
Climate Policy Initiative (The landscape of public climate finance in Indonesia in 2011)



Budget coding Climate Policy Initiative / 2011

Budget coding combined with a survey of international partners estimates that public climate finance flows in Indonesia were **\$951 million** in 2011.

Budget coding helps to link direct actions on the ground and indirect activities to national policy.



Direct Actions

Mitigation and Adaptation



Challenges remain Climate Policy Initiative / 2011

Budget coding did not solve the problem of uncertainty. Around \$1 billion was identified in additional finance that might be highly relevant but could not be verified.



Indirect Actions

Policy Development, R&D, Measuring, Reporting and Verification systems.

Figures are estimations of annual flows for 2011. All data presented relates to transfers or disbursements during 2011. Flows are expressed in IDR billions and rounded to produce whole numbers.

country hopes to plant 4 billion trees by 2020 and 9.2 billion trees by 2050. Communities have come together in planting drives and a nationally recognised Tree Planting Day was instituted in 2011. The Government of Indonesia, in addition to such initiatives at the ground level, has also renewed its focus on putting in place institutional mechanisms to track activities, expenditures and outcomes at the ministerial level to meet these targets.

PEI in Indonesia has been working to support the Ministry of Finance to put in place a financial tracking mechanism and performance-based budgeting indicators to monitor the progress that the country is making on achieving its emissions reductions target against the government budget allocated for emissions reduction activities. A key component of this mechanism is the Low Emission Budget Tagging and Scoring System (LESS), which is composed of two processes- Budget Tagging and Budget Scoring. The Tagging System flags budget codes and components that are dedicated to climate mitigation and emission reduction actions. It identifies and estimates the proportion of government expenditure allocated and spent to implement these activities. It sets out clear definitions and criteria for classifying different government-led actions as having “direct impacts” on greenhouse emission reduction and carbon stock conservation and those that have “indirect impacts” but are still useful in that they contribute to implementing core mitigation activities, such as switching to cleaner fuels and reforestation.

While the Tagging System gives a bird’s eye view of the progress on government decision making, the Scoring Systems allows for a more nuanced assessment of the kind of impact that these budgets and corresponding activities are having. The LESS system calls for a specialized methodology to be developed that will “score” mitigation actions in a priority order, compared against the costs of these activities , their benefits and other indicators. This will help decision makers to allocate budgets and resources better on mitigation actions that are having better impacts and are enduring in the long run.

Both the tagging and scoring systems will be key components of an overarching National Climate Change Mitigation Financing

Plan to set out clear models for financing and channeling resources for implementing climate change mitigation activities. So far, the value of the tagging system has already been recognised by the Government of Indonesia to the extent that it is being incorporated into the national budget decree. The Tagging System will be piloted within the Ministries of Forests and Energy in 2014 as a starting point. With the success of this tracking system for climate change mitigation, it is anticipated that PEI will support a similar process for climate change adaptation and biodiversity conservation.

As climate change mitigation and natural resource management garner greater public debate in Indonesia, the Low Emissions Budget Tagging and Scoring System is a flagship initiative that opens up new avenues for engagement between PEI and planners and policymakers in the Government. With increasing international pressure on Indonesia to sustain and strengthen its strategy for emissions reduction and climate adaptation, there is greater focus on creating institutional mechanisms like these to bolster Indonesia’s march to a greener future.



6.52 Population in millions ADB/2012

Lao PDR



27.6 %

Population living below the national poverty line ADB/2008



69.92 %

Contribution of agriculture, forestry and fishing to total poverty reduction

World Bank/2010 (Lao PDR Development Report 2010)



90 %

Estimates of population that depends on subsistence agriculture

Ministry of Agriculture and Forestry (Forest Investment Programme, 2011)

FDI in Lao PDR (US\$ million)



MPI and staff estimates and projections (World Bank Lao PDR Economic Monitor June 2013)

Natural resources sectors

World Bank /2013

- Agriculture
- Non resource industries
- Services
- Construction
- Power

Water and hydropower



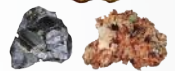
Agricultural plantations (e.g. rubber, eucalyptus, sugar)



Forests

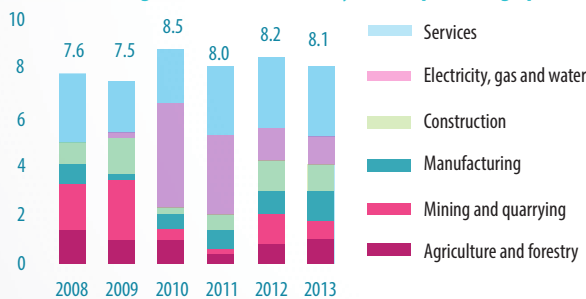


Mining



Forests, agricultural land, water and hydropower potential, and mineral resources comprise more than half the country's total wealth World Bank / 2010

Real GDP growth, contribution by sector (percentage points)



Government, LNCC data and staff estimates and projections (World Bank Lao PDR Economic Monitor January 2014)

60 % of FDI is based on natural resources PEI

55 % of rural cash income is estimated to be made by non timber Forest products IUCN / DoF / 2001

The decline in forest cover between 1940 and 2010



5m

Around 5,270,800 people are estimated to be dependent on forest products for their livelihoods

Forests Peoples



When you talk about quantity and quality, usually you don't have that together. Same applies to growth in developing countries such as Laos. Usually, when you do something very fast, it will be at the expense of the quality

Manothong Vongsay
Investment Promotion Department
Ministry of Planning and Investment
PEI /2011



Lao PDR



Environmental and Social Impact Assessment set to promote quality investments in Lao PDR

Lao PDR's evolution from a "hermit crab to a tiger cub", as Stephen Mansfield writes in his travelogue about the country, has been an enduring one. Over the past decade, Lao PDR has seen a boom in economic growth. Income per capita has doubled since 1990, lifting the country from a low-income economy to a lower-middle-income economy in 2011 with growth rates ranging from 7% to 8.5%. The key driver of this growth has been the rapid inflow of foreign direct investments (FDI) especially in natural resource and affiliated sectors like agricultural plantations, forestry, mining and mineral resources, hydropower and tourism.

The Government's transition to a liberalized market-based economy in the early 1990s opened the doors to private investors from all over the world. This strengthened Lao PDR's position as a significant economic hub in the ASEAN economic community, driving greater trade, exports and capital flow in the region. In 2013, marking a new chapter in the country's economic liberalization, the country earned full membership to the World Trade Organization.

While the focus had largely been on boosting the quantity of incoming investments, the "quality" of investments received very little attention. Prospective investors were judged solely on technical and financial aspects and their impact on environmental protection or poverty alleviation were largely overlooked. Many of these projects resulted in extended destruction of the environment, land grabs from local communities that led to

relocation, loss of livelihoods, and inequitable distribution of profits with very little compensation for local communities.

As the Government became more aware of the effects of irresponsible investments, there was a shift towards thinking about the "quality" of investments. The potential of investments to reduce poverty, the duty to protect communities and their rights, the need to preserve the environment and the need to improve technical skills of local communities came to the fore. Initial Environmental Examinations (IEEs) and Environmental and Social Impact Assessments (ESIAs) became crucial parts of the picture. These are rigorous, systematic analysis of the kind of environmental and social impacts that the project could be foreseen to have, analyse alternatives and propose measures to mitigate the impacts of the investment as well as highlight environmental and social opportunities to improve the project. National regulations on IEE or ESIA procedures usually require to conduct consultations between investors, Government officials and people affected by the investment.

A crucial part of PEI's work in the country has been to impress upon public institutions, the need for effective socio-environmental impact assessments. In 2013, PEI worked towards transforming the Environmental Impact Assessment Decree through the Department of Social and Environmental Impact Assessment of the Ministry of Natural Resource and Environment into new ministerial instructions that set out the procedural steps so that

Investing in Lao PDR: How are agricultural concession agreements approved?



Investor submits an application form (known as the 'investment proposal') to the Ministry of Planning and Investment (MPI) or to the provincial Department of Planning and Investment (DPI), depending on the size of the concession



MPI-DPI receive investment proposals on behalf of government and forwards these documents to the technical ministries and provincial authorities for comment. Once all remarks are received the MPI-DPI consolidate comments and prepare a summary report that is presented to the Investment Promotion Committee (IPC)



If the IPC approves the investment in principle, the summary of the investment is sent to the prime ministries office / governor's office for approval



If approved at this stage the investor would be invited to MPI-DPI to negotiate the terms of the investment and later, if agreeable, sign the MoU



During implementation of the MoU, that typically lasts 12 months, the investor is obligated to complete, amongst other items, a Feasibility Study, a Business Plan, an **Environment and Social Impact Assessment or Initial Environment Evaluation** and a land survey



If all documents detailed above are approved by the respective authority, the investor can start negotiating the Concession Agreement



The MPI/DPI agree on the contract templates that stipulate all the necessary conditions i.e. obligations for operating investment activities for signing



Once contract terms are agreed, and before signing terms and conditions, the drafted contract is given to the IPC for review and signing



Investor deposit project guarantee fund to account specified by government



MPI/DPI issues investment licence, this includes business registration certificate and tax registration certificate as well as other permits



Investor can start operations

Monitoring takes place

Top Investors in all business sectors from 1989 to 2012

	\$4.9 billion invested by Vietnam in 429 projects
	\$4 billion invested by Thailand in 742 projects
	\$3.9 billion invested by China in 801 projects
	\$748 million invested by Republic of Korea in 287 projects
	\$490 million invested by France in 224 projects
	\$430 million invested by Malaysia in 99 projects
	\$428 million invested by Japan in 104 projects
	\$161 million invested by India in 21 projects
	\$150 million invested by the United States in 113 projects
	\$134 million invested by Singapore in 79 projects

What needs to improve ?



- The standard process to approve concession agreements is not systematically followed
- Negotiations need to be fully transparent with public involvement in the investment approval process
- Appropriate levels of compensation should be agreed by the impacted communities to avoid conflict
- ESIA/IEEs need to be approved before investors begin operations
- Clear village boundaries and land titles are lacking throughout the country, which worsen land disputes
- Villagers are often unable to prove their legal rights to customarily occupied land, and there are incidents where the same plot of land is allocated to two different investors or for two different uses
- ESIA/IEEs tend to be project-specific and look only at short-term impacts. There is a need to undertake Strategic Environmental Assessments of the mining and hydropower sectors to identify any long-term, cumulative effects of these sectors on the environment

investors and central government authorities could carry out IEEs and subsequently, ESIA's for projects they wish to implement. As part of the process, PEI played a key role in supporting nationwide consultations, encouraging coordination among various wings of the Government and the National Assembly.

Following up on ESIA's, monitoring these investments also became an important priority that PEI advocated for. In Oudomxay province, the increase in monitoring of investments, supported by PEI, has led to exposing 20 projects that were not complying with the law. Four projects were made to stop all operations, four more received warnings and 12 were ordered to make improvements to their current operations. Investment projects that had to stop operations comprised mainly those that had not started operations and a furniture company that was not replanting trees to compensate for the impact its operations were having. Investments that received warnings were not complying with their obligations, and indulged in environmentally risky practices such as overusing pesticides that led to fatalities among livestock and domestic animals.

Complementing the institutional change taking place, PEI worked to toughen bottom-up development measures, by shining the spotlight on citizen involvement in ESIA procedures. The welfare of grassroots communities, who are most directly affected by mining works, hydropower dam constructions and plantations are often compromised in the push-pull ties between governments and private investors. Taking definite steps to redress this, PEI in 2013-14 trained over 200 central and provincial level environment officials to better understand the importance of public involvement. Trainings were provided, in collaboration with an NGO- Village Focus International, to educate officials on human rights issues, legal frameworks for involving people, conflict resolution and communication initiatives that could help open platforms for multi-way dialogues to take place with host communities, one of which is Phonesavath village.

Located in Meuang Feung District, Phonesavath is the new home to inhabitants from 16 villages who were relocated when the construction of the Nam Ngum 2 Dam began over the mighty Mekong River.

The resettlement of these communities has been a learning experience for government officials, in not only addressing the resettlement process but also in creating opportunities for regaining livelihoods that were lost. Mr. Khamson Seevongdao, the District Head for the Office of Natural Resource and Environment explains, "We prioritized the concern of public involvement in this village. For the people, their main concerns are livelihood and compensation... We are encouraging them to come and choose income generating activities that suit them, like frog farming, chicken farming or fish farming. Then we hand over the responsibility to village chiefs and youth unions to go out and promote these activities among the people." The resettlement process is a long and often arduous road, but with these measures in making the process participatory, the possibility of improving the situation and lives of people in a sustainable fashion becomes more promising.

The Environmental and Social Impact Assessment process in the country is a good example of attempts that the government is making to drive pro-poor environmental priorities at not just the institutional level but also at the community level. PEI's work in Environmental and Social Impact Assessments is a stepping stone to usher Lao PDR in a new chapter in its path to sustainability.



2.83 Population in millions ADB/2012

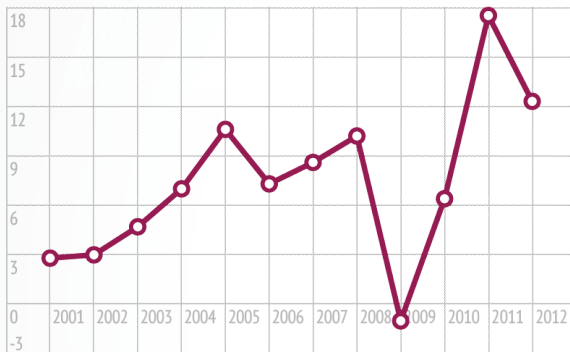
Mongolia



29.8% Population living below the national poverty line ADB/2011

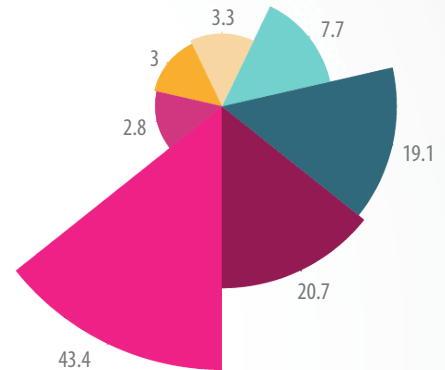
Real GDP Growth (annual, %): Real GDP growth has slowed down but it still remains in double digits

World Bank, Mongolia Economic Update/ April 2013



Exports composition (2012, % of total)

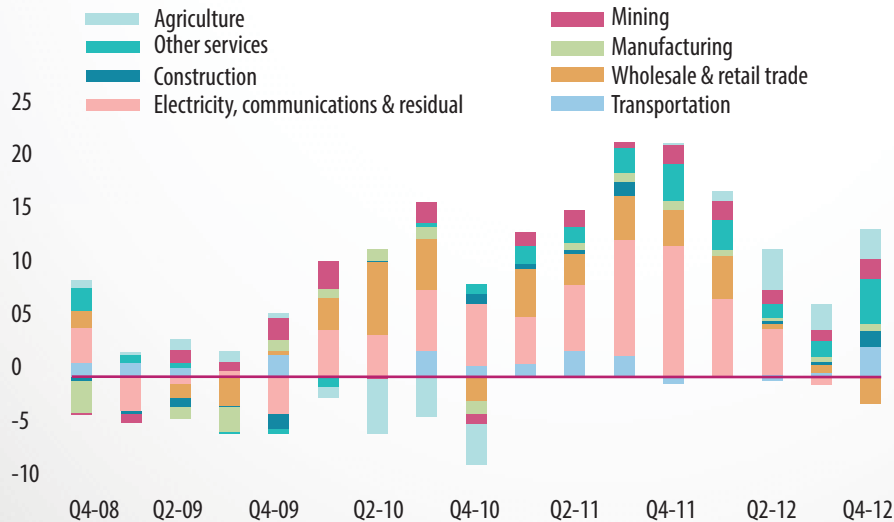
World Bank, Mongolia Economic Update/ April 2013



Coal Other Copper concentrate Crude petroleum, oils
Greasy cashmere Zinc concentrate Gold

Real GDP Growth (annual, %): Double digit growth was driven by agriculture and construction sector while mining sector grew moderately

World Bank, Mongolia Economic Update/ April 2013



89% In 2012, mineral exports accounted for 89% of total exports. The largest exported product was coal, accounting for 43.4 percent, followed by copper concentrate (19.1%), crude oil (7.7%) and gold (2.8%)

Mongolia



Mongolia's new development vision turns the spotlight on mining reforms

This landlocked country of a 2.8 million strong population has seen rapid growth over the last decade. Like its immediate neighbour China, Mongolia witnessed high economic growth of up to 15%, falling poverty rates and greater public spending dedicated to building infrastructure and promoting industrial growth. Poverty rates dropped from 38.7% in 2010 to 27.4% over the next two years. However with foreign investments receding, budget deficits and inflation, the signs of an economic crisis are beginning to unfold. With this in mind, the Government of Mongolia was forced to reassess its development priorities and pursue policy reforms that put more weight on economic growth and increased investment at any cost.

With abundance in major mineral deposits such as gold, copper and coal, mining is central to Mongolia's economy and is therefore at the heart of these reforms. The sector provides over 89% of exports and 20% of GDP; yet in the past two years, it was hit by 30% fall in revenue collection. The country has since been mired by tensions and conflicts ranging from contract disputes and coal price decline to re-negotiations over key mine sites and social and environmental conflicts with local communities.

Some of the most contentious issues are land disputes, loss of livelihoods and limited compensation. Local communities are also frustrated with the influx of migrants and the lack of benefits they reap from hosting mine sites, such as employment, good

infrastructure and revenue that is perceived to bypass local communities. Water is a scarce resource in Mongolia yet mining practices are tapping into surface water and also deep non-renewable groundwater to wash and process mining products. The thrust given to the mineral industry has also had consequences on the land, resulting in soil erosion and desertification, effluent discharge into nearby lakes and rivers, loss of biodiversity and air pollution. Major river basins like that of the Tuul River in the capital of Ulaanbataar, the Orkhon River and the Boroo River are facing major ecosystem changes due to pernicious water pollution as a result of industrial effluents finding their way to these basins.

In addition to this, Mongolia continues to record high levels of greenhouse gas emissions, with CO₂ emissions per GDP being almost 10 times higher than the global average (as of 2012). The current environmental damage has been assessed to cost 1,162 trillion Mongolian Tugrik (approx. \$600 bn), of which over half the cost is borne by mining related activities.

Institutional reforms in this sector present a key opportunity to ensure that new mining projects will contribute to sustainable development in ways that take into account the interests of local pastoral and grazing community groups, in particular. PEI in Mongolia is working with the Ministry of Economic Development to identify opportunities for integrating poverty-environment

Towards responsible mining

Government of Mongolia



Mining Companies



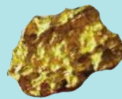
Need for adequate institutional, legal & regulatory frameworks to:

- ✓ Sustainably manage natural resources
- ✓ Maintain economic benefits

Mining



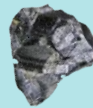
Gold



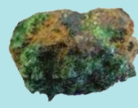
Copper



Coal



Uranium



PEI



Works with the Ministry of Economic Development to integrate poverty-environment criteria and goals into national development plans, policies and budgets



Trains planning officials in monitoring of investments



Works to improve policies and legislation on responsible mining

Negative impacts

Communities hosting mining activities



- ✓ Small employment created
- ✓ Little improvements in infrastructure
- ✓ Small revenues or compensation received

Ecosystems and biodiversity

Environmental cost estimated at

\$300 billion



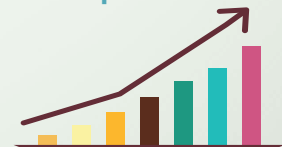
- ✓ Hazardous waste discharged into nearest lakes and rivers
- ✓ Scarce water used to process mining products
- ✓ Loss of biodiversity
- ✓ Air pollution
- ✓ Soil erosion and desertification

Economic Benefits

20% of government revenues



89% of exports



goals into policies and budgets, particularly those pertinent to foster responsible mining. By seeking to improve legislation, the interests of social inclusion and equity, gender sensitivity and climate change vulnerability are given precedence in the way public institutions work.

PEI aims to train key planning officials to understand how to manage natural resources better and implement this in a pro-poor and gender-responsive manner. National and sub-national development planning procedures are being aligned with inclusive green economy ideas by focusing on planning, monitoring and promoting sustainable investments. Measures such as community-based forestry, shift towards alternative domestic fuels to manage fuel-wood shortage and livestock insurance systems will also be promoted.

To complement this, PEI in Mongolia will work with the Government to review and strengthen mining policy reforms. Four laws are under review, including the Minerals Law that governs mining practice in Mongolia; the popularly known “Law with the Long Name” that prohibits mining in river watersheds and forests; the lifting of the Presidential moratorium on new exploration licenses; and the Extractive Industry Transparency Initiative Law on the legal requirement to comply with international transparency standards.

Technical expertise will be provided to look at how to manage mining processes and revenues in an inclusive, responsible and sustainable manner, drawing from the experiences in other countries. These practices include a variety of safeguard measures, enforcement mechanisms, inclusive and participatory approaches, gender perspectives and monitoring protocols to ensure that host communities in mine sites are not adversely affected.

Commitment to responsible and sustainable mining practices will require the cooperation and the collaboration of public institutions, private sector and local communities for the vision to

transform into sound and sustainable action. PEI’s input into the Government’s planning and budgeting processes will have important consequences for the way policymakers, businesses and communities work with each other to protect the environment and those adversely affected by mining. With this dedication to change in the mining sector, Mongolia is on the path to set an example to follow for other countries in the region.



51.4 Population in millions ADB /2012

Myanmar



25.6%

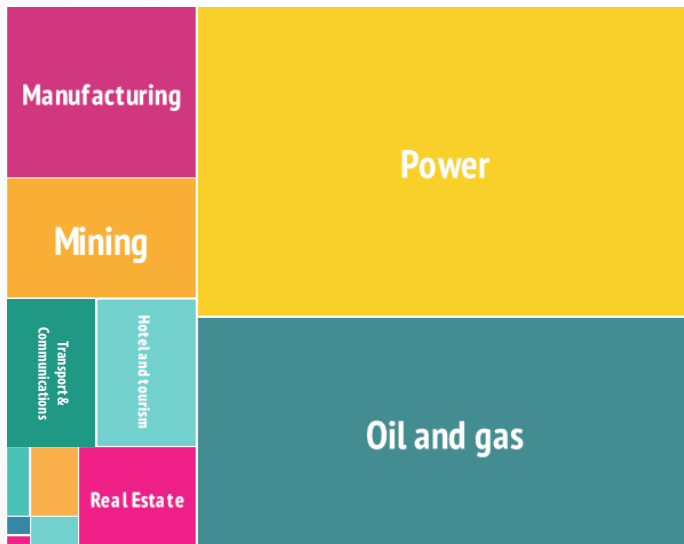
Population living below the national poverty line ADB /2010

70 %

of the population living in rural areas depend heavily on the forestry sector for employment ADB /2012

Main sectors attracting foreign investments

Source of data: Directorate of Investment and Company Administration, (data as of 31/5/2014)



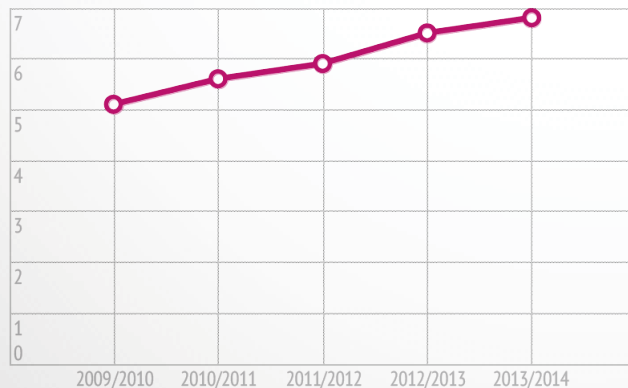
Top Investors in all business sectors until 2014

Directorate of Investment and Company Administration DICA 31/5/2014

- \$14.2** billion invested by China in 65 projects
- \$10.1** billion invested by Thailand in 73 projects
- \$6.5** billion invested by Hong Kong in 77 projects
- \$4.8** billion invested by Singapore in 117 projects
- \$3.2** billion invested by United Kingdom in 70 projects
- \$3.1** billion invested by Republic of Korea in 94 projects
- \$1.6** billion invested by Malaysia in 48 projects
- \$513** million invested by Vietnam in 7 projects
- \$474** million invested by France in 3 projects
- \$327** million invested by Japan in 46 projects

Annual Real GDP Growth (% change)

Source of data: Myanmar Economic Monitor / 2013



2.5m- 3m

Between 2.5 and 3 million people are estimated to be dependent of forest products

Peoples forest (Forest Peoples, Number across the world/2012)

19%

Decrease of the forest cover between 1990 and 2010 FAO /2010



Myanmar

Setting the foundation for attracting quality investments



The winds of change are blowing through the largest country in Southeast Asia- the Republic of Myanmar. In 2010, the country held its first elections after twenty years of military rule and ushered in a new age in democratic governance. With an estimated population of about 51.4 million, Myanmar has always assumed key importance in the region because of its ideal geographic location between the Indian subcontinent, China and the Southeast Asian countries. The country is home to diverse, pristine ecosystems, many of them endangered by human encroachment and climate change.

Historically, Myanmar was renowned for its teak forests and its fertile agricultural lands at the heart of various river basins that intersect the country. In the last century, Myanmar was one of the largest exporters of rice and teakwood in the region. In addition to this, precious stones like jade, rubies and sapphires have long been abundant here while the production and export of crude oil, natural gas, lead and zinc among other minerals, have attracted public and private investments. However, over the last forty years, with economic growth slowing down and political instability rife, Myanmar's position as a leading trade hub was set back.

With the emergence of nation-wide political and economic reforms, numerous development challenges and rampant poverty in the country have come under a renewed spotlight. 25.6% of the population continues to live below

the poverty line and key social indicators like malnutrition, maternal mortality rates and public infrastructure markers like access to electricity are among the lowest in the region.

Myanmar has been in the process of transitioning from a centrally directed economy to a market oriented economy since 1988. With the recent political reforms, a series of economic reforms are also underway to liberalize key economic sectors, regulate income tax and encourage the creation of new jobs. While economic goals revolve around the strengthening of non-natural resource sectors such as manufacturing, natural resource sectors still remain attractive to foreign investors.

In Myanmar these sectors span from extractive industries (oil and gas, minerals, precious stones) to hydropower and renewable energies and agricultural concession projects. Myanmar is currently in the process of negotiating various International Investment Treaties with other countries. The Directorate of Investment and Company Administration in the Government of Myanmar is the authority responsible for setting out international obligations that govern the entry and the working of foreign investments within the country.

As countries around the world show greater attention to investing in the country, a rising concern is how to balance the social and environmental repercussions with the economic benefits that

Investments in Natural Resources

Government of Myanmar

Foreign Investors



The Directorate of Investment and Company Administration



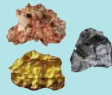
Investment treaties



Hydropower



Minerals



Forests



Marine & coastal ecosystems



Agriculture



Oil and gas



PEI



Provides a platform to create synergies between interest of Government, CSOs, host communities and private sector



Inputs in National Comprehensive Development Plan



Trains local government officials in monitoring of investments



Improves mining contract template to better benefit host communities

Negative impacts

Ecosystems and biodiversity

The poor, the most dependent on the environment

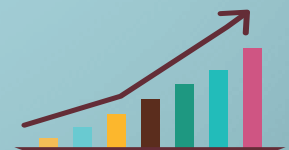


Threshold

Need for adequate institutional, legal & regulatory frameworks to:

- ✓ Sustainably manage natural resources
- ✓ Maintain economic benefits for all

Economic benefits



such long term foreign investments bring. This is of particular importance in natural resource sectors as an overwhelming majority of the country's vulnerable population is directly dependent on natural resources for its livelihood. Protecting their interests and meeting the goal of environmental sustainability, adequate institutional, legal and regulatory frameworks need to be in place. In an attempt to address this concern, there have been a number of recent laws and policies that have been passed by the Government of Myanmar. Some of these laws are exclusively devoted to promoting investments by creating further incentives for countries while others legislate on environmental conservation and responsible mining practices.

PEI in Myanmar is looking to support the government in developing stronger policies in investments in a way that the "quality" of investments and best practices in investment treaty negotiation are promoted. PEI will support the building of technical capacity of government staff and the development of a model investment treaty that can help the Government guide and negotiate future treaties. To this end, PEI will work as a platform, bringing together policymakers, private businesses, civil society organizations and communities, consulting with all in order to create the best solutions. Complementing this, PEI will provide training to local governments to better monitor existing investment projects in high priority natural resource sectors. PEI is also working with the Ministry of Mines to develop a screening tool for mining investment proposals, which will assess the final feasibility of projects as well as identify shares of revenues that can be set aside for environmental rehabilitation of mine sites and social development of local communities.

In charting out the country's vision for sustainable development over the next few decades, the National Comprehensive Development Plan is a key document that will help to articulate Myanmar's ideas and implement these ideas effectively. PEI has provided technical expertise into this elaborate plan, by advising on the management of environment and natural resources in the country.

As Myanmar steps into a new age in its development as a country, the road ahead is filled with both opportunities and challenges. In 2014, the country assumed chairmanship of the Association for Southeast Nations (ASEAN).

With the economy being one of ASEAN's main priorities and the upcoming establishment of the ASEAN Economic Community in 2015 creating a more conducive climate for free trade and investments, there is great responsibility on the Government of Myanmar to make the most of these economic opportunities and lift millions out of poverty without compromising the environment and social inclusion in the process. PEI in Myanmar is working towards making this transition smoother and sustainable for vulnerable populations in Myanmar in the years to come.



26.85 Population in millions ADB/2012



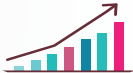
25.2 % Population living below the national poverty line ADB/2011

90 % of employment is based on natural resources sectors CIFOR/2012

Unsustainable rural roads



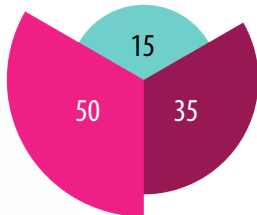
1. Use of bulldozers and excavators
1. No drainage arrangements
2. High gradient
3. No protection structures in critical places
4. No biological protection
5. No maintenance arrangements fund



Increase since 1990, often leading to land slides

10 million

rupees, the economic damage caused by landslides in 2013 in Dhading District



Services Agriculture Industry

Contribution of sectors to GDP, CIA/2011 estimates



PEI

2011

Published an economic analysis of local government investment in rural roads in Nepal. Recommendations were used to advocate for using sustainable methods.

Advocacy impact



Media, PEI and other development organizations advocacy has contributed to:



Several local governments banning the use of heavy machinery; In Dhading District, a progressive fine starting with 5000 rupees (\$58) has been established



Contracts with any road developer forces them to employ local people to undertake construction work

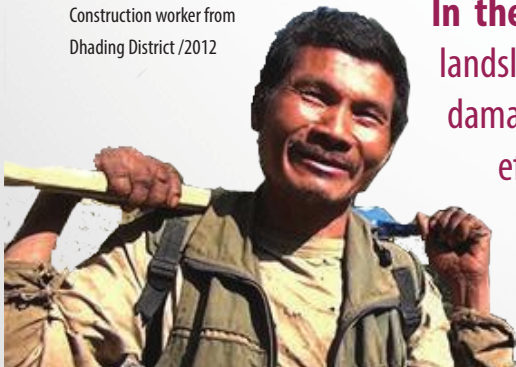


Thousands of people have been employed in sustainable rural roads



More roads are constructed using environmentally friendly construction methods, proper water management, bio-engineering and taking into consideration recommendations of Environmental Impact Assessments

Construction worker from Dhading District /2012



In the past we were using bulldozer, which was causing landslides, floods and other problems like deforestation, damage to wildlife and noise. We were not getting any benefits. **Now**, the environment is preserved and **we have jobs and earn money**. I can spend the money I earn on clothes and food for my family.



Nepal

Greening Nepal's future: Environmentally Friendly Local Governance and Green Roads



In its path to development, the Government of Nepal has turned its focus towards infrastructure development. A good example is road construction. Currently, many villages in the hills remain far removed and in some cases, completely disconnected from nearby towns and cities due to a lack of roads. To increase access to markets, reduce isolation of certain communities and increase rural people's access to services, local governments are spending great shares of their budgets on road construction. A rising concern with the increase in construction has been the environmental and social damage brought by reckless methods such as the use of bulldozers that fragment ecosystems and do not take into consideration the natural slope of the mountain. Villages, specifically in the hills, thus became more prone to landslides, shifting ground, loss of forest cover and substantial pollution and dumping of wastes that followed the construction.

In 2011, PEI supported the Ministry of Federal Affairs and Local Development (MoFALD) to carry out a study in two districts, Makawanpur and Dolakha, that analysed investments of local governments in roads. The study found that construction that utilized heavy machinery had high environmental costs compared to labour-based technologies that were both environmental friendly and a source of employment for surrounding communities. These technologies had around 30% more marginal economic returns than roads constructed with heavy equipment-based technologies.

The study recommendations were reinforced through advocacy by local media and CSOs against using heavy machinery. As a result, several local governments banned the use of heavy machinery to construct roads, and imposed fines on violators. Besides, MoFALD encouraged the shift to using labour-intensive technologies for construction. This provided thousands of green jobs for villagers, whilst reducing the environmental impact of the road. Public participation was encouraged and formal forums for voicing opinions were constituted. This was coupled with the formation of a user committee for payments and social welfare activities for workers. Public officials and villagers alike were trained both in the use of technology in constructing as well as maintaining these roads, thereby increasing local ownership over roads.

“ Last year, there were three big landslides in the northern part of Dhading, because of using heavy equipments while constructing roads. Three people have died because of this and the economic damages are around 10 million rupees.

Janak Sharma, planning officer in the Dhading District Development Committee / 2012



The Environmentally Friendly Local Governance policy will develop services and positive behaviours in 8 focus areas

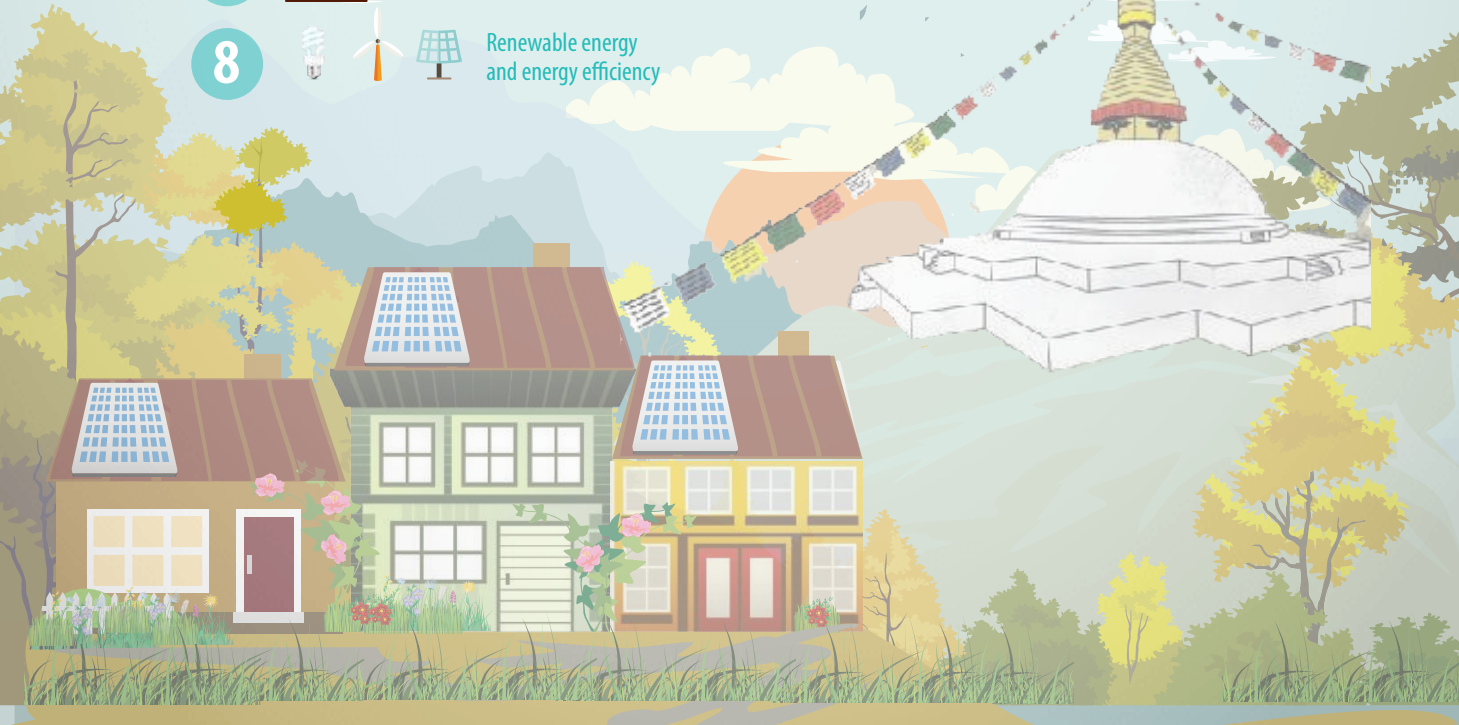
-  **1** Water, sanitation and hygiene
-  **2** Sustainable agriculture and promotion of greenery and beautification
-  **3** Climate change, disaster risk reduction, sustainable urban planning and infrastructure development
-  **4** Waste management and pollution control
-  **5** Biodiversity and ecosystems conservation
-  **6** Environmental Education and Awareness
-  **7** Environmental governance
-  **8** Renewable energy and energy efficiency



Shanta Bahadur Shrestha,
Secretary at the Ministry of
Federal Affairs and Local
Development (MoFALD)



We have come up with an integrated policy to make local bodies and people protect the environment and improve sanitation.



Jogimara Village in Dhading District is one such village that reaped the benefits of greener road construction methods. “Last year, there were three big landslides in the northern part of Dhading, because of using heavy equipments while constructing roads. Communities have realised that this is destructive in the longer run. Three people have died because of this and the economic damages are around 10 million rupees”, elaborates Janak Sharma, a planning officer in the Dhading District Development Committee. Identifying this need, villagers began constructing sustainable, labour intensive roads, involving planners and the Village Development Committee. The benefits of this change were apparent for all to see- increasing employment, improving standards of living and striving for environmental sustainability. As one labourer involved in the construction remarked, “In the past, we were using bulldozers which was causing landslides, floods and environmental problems like deforestation, wildlife damage and sound pollution. The communities were not getting any benefits. Now the environment is protected and we have a job and earn money. Now I can spend the money I earn on clothes and food for my family.”

Environmentally conscious initiatives like these eco-friendly rural roads are indicative of the government’s effort to strive for sustainable development. Building on the bedrock set by the National Adaptation Programme of Action, the Government of Nepal in October 2013 passed the Environmentally Friendly Local Governance (EFLG) framework as part of an umbrella public policy on Local Governance and Community Development. The EFLG framework, supported by PEI, marks a reinforced, all-embracing approach to ingraining environmental sustainability among all levels of society, right from the central government all the way down to individual households. Spanning across sectors like renewable energy, sustainable farming, waste management, biodiversity conservation, and water and sanitation among others, the EFLG presents a new way forward for Nepal.

Following its endorsement by the Nepal Cabinet of Ministers, the policy is ready to be rolled out in all 3915 Village Development Committees across 75 districts, via Phase II of the Local Governance and Community Development Programme (LGCDP) that

PEI supports in the country. The institutional changes envisioned by EFLG include the setting up of an executive committee to direct and coordinate among various sectoral and ministerial partners. In addition to this, a special Environmental Management Fund will be established under the District Development Fund and will be directed towards supporting various environmentally friendly initiatives at the local levels. A prime motivator for the successful implementation of the policy would be the strong volunteer network that would help mobilize households and community members into adopting environmentally-friendly behaviours.

Melting glaciers, soil erosion, water sources depletion and increased displacement of communities due to environmental degradation have managed to bring environmental sustainability to the Government’s political agenda. The eco-friendly rural roads scheme is exemplar of how development interventions can generate employment for the poor, while preserving ecosystems and increasing connectivity of marginalized communities. With over 25% of the population continuing to live under the poverty line and Human Development Indicators ranking among the lowest in the world, the EFLG seeks to promote and scale up these types of initiatives and make environmental protection, everyone’s business.



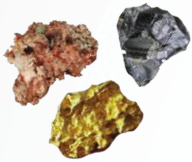
95.77 Population in millions ADB/2011



26.5 % Population living below the national poverty line ADB/2009



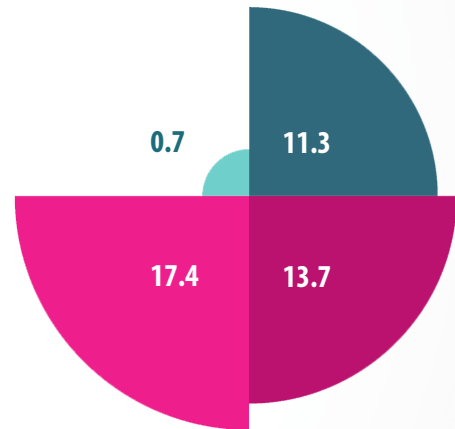
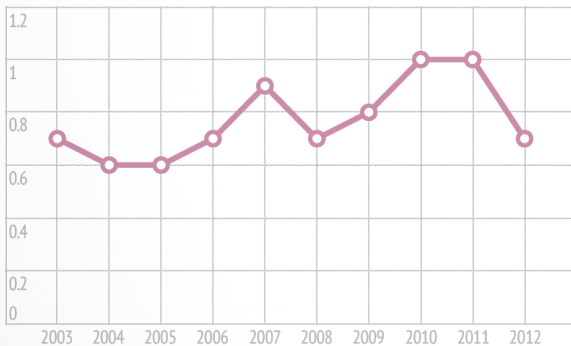
40 % of the population lives below the poverty line in over 16 provinces DILG/PEI



5th Philippines is the 5th most mineral rich country of the world

Government share in mining revenues from different regions Mendoza / 2013

Government share in mining revenues in the Philippines Senate / MGB / 2013



Lat in America OECD Africa Philippines

0.7 % Only 0.7% of government revenues come from mining Senate / MGB / 2013



30 m It is estimated that between 25 and 30 million people depend on forests IWGIA 2011



1 m Fisheries sector provided direct and indirect employment to over 1 million people ADB/WWF/GFN



70 % of the coral reefs are at risk because of unsustainable fishing practices ADB/WWF/GFN

Philippines

Revenues from natural resources help communities lead better lives



On the outskirts of Claver Municipality, in Surigao del Norte province, the sight of barren lands and the whirring sounds of heavy machinery blasting through hard rock in search of minerals is common. Located in the Caraga Region of the Mindanao Island, Surigao del Norte is a mineral hotbed, spanning almost 38,000 hectares. At present, the region hosts 8 mining companies and extractive businesses that continue to receive greater investments from both domestic and foreign sources. However contrary to this trend, mining contributes only to a very small share of national revenues, only about 0.7 % as of 2012. In addition, the export of minerals, as a result of these mining activities, stands at less than 4% of the total exports annually. The silver lining here lies in government revenues in the form of taxes, fees and royalties that have seen a steady increase since 2003. As of 2011, the Government of Philippines had received almost 22 billion PhP solely from the mining industry. A majority of these revenues remained concentrated at the level of central and provincial governments and only some were streamed down to the level of local government units (the LGUs), a key intermediary between extraction companies and the communities in the region that they were mining in. The costs of this kind of development have been high.

On the one hand, the environmental repercussions of open-pit mining, popular in municipalities like Claver, are often realized much after the entire mining project has been completed. Vast areas of agricultural land and forests are cleared away to extract

minerals, thus destroying precious habitat and means of livelihood for many local communities. Local rivers, lakes and water bodies are turned into dumping sites for toxic refuse left behind during and after the drilling. As recent as 2012, almost 20 million metric tons of tailings waste, left over from the mining, spilled over into Balog and Ango rivers in the neighbouring province of Luzon. This resulted in the death of fish in the rivers, destroying not just veritable ecosystems that thrived there, but also the subsistence of various fishing communities that lived by the rivers.

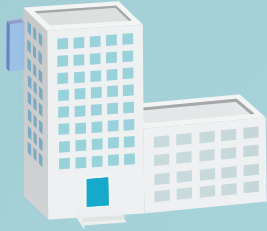
Indigenous communities that inhabit some of these areas are forced to relocate and in other cases, local communities and villages are not consulted regarding the kind of impact development activities could have on their lives and livelihoods. Augustina Ibbaro, living in Claver questions, "At times I wonder what will happen when the mining stops?" Echoing her concern, Nestor Fangwan, provincial Governor of Benguet, in neighbouring Luzon says, "Some of the mines here, they have left nothing ...After they (mining companies) left, the Church fell down, then the schools and the same for houses in the town."

These challenges are uniform throughout the country and recognising this, the Government of Philippines in 2012 issued Executive Order 79. As a result of this, the Government turned its attention towards promoting responsible mining practices that complied with laws, factored in environmental and social



National wealth

Revenues from natural resources
Managed by the Central Government



Distributed to Local Government Units



Electronic Tax Revenue
Assessment and
Collection System



Taxes



Natural Resources

Extraction

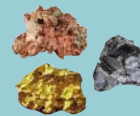
Hydropower



Wind



Minerals



Forests



Marine & coastal
ecosystems



Public Infrastructure



Electrification
Roads
Buildings
Parks
Sewerage treatment facilities
Waste
Sanitary toilets
Drainage canals, pipelines
Sports facilities

Health



Health centers
Livelihood enhancement
centers

Education



Schools
Training centers

Agriculture
& fisheries



Green initiatives



Renewable energy
biodiversity &
ecosystems
Energy efficiency
Organic farming
Waste management

Operations



Human resources
LGU operations
Logistics
Administration

costs and involved all key stakeholders in decision making processes. It also brought into focus measures that would ensure that government revenues are shared among LGUs and transparency and accountability of both government and corporate players are given importance.

PEI, since 2011, has been working with the Government of Philippines to strengthen laws and provide technical assistance in promoting responsible mining practices. In Surigao del Norte, PEI's key focus over the years has been to help put in place systems and processes that help manage and utilize financial resources in this sector in better ways. The Electronic Tax Revenue Assessment and Collection System that PEI is supporting in the implementation of, is one such way. Having carried out studies and analysis into how revenues are estimated and how these funds are transferred in 2012, the following year, PEI developed a computerized system for the Mines and Geoscience Bureau to properly document and monitor fees, taxes and royalties paid by mining companies and other stakeholders in the mining process.

Along with documentation, special emphasis was placed on public disclosure and providing citizens with access to information about how these funds collected were reallocated among LGUs. This is a strong step towards fostering transparency and accountability in public institutions and processes involved in the management of the environment and natural resources. Furthermore, it has strengthened the ability of officials at the LGU level and Barangay Captains to better control and advocate for better allocation of these revenues among local governments.

Barangay Taganito is one such village in Claver that has reaped the benefits of responsible mining activities, supported by PEI. Over the years, almost 98% of its income has come through mining company revenues. A share of this revenue was invested in improving public infrastructure in the village, electrification purposes and towards education. In addition, senior citizens and differently-abled persons in the village also benefited through social welfare schemes that were funded through these revenues. Besides this, mining companies in the village have also been encouraged towards investing more in public education

and have even adopted and funded local schools as part of their corporate social responsibility initiative.

The Taganito Mining Corporation, the biggest mining company in the Barangay has been working towards involving and supporting host communities in new ways. Roger Cabautan, Manager at Taganito Mining Corporation explains, "We do some projects with the Barangay Council as well as with the host communities. We support the host communities where we operate through social development programmes in health, education and cultural development. With indigenous people, we resettled them in a resettlement area and set up a school there worth 10 million PhP. We have provided 120 housing units for 120 families and they also have a tribal people's medical clinic." This public-private collaborative model is fast catching up in other Barangays in Surigao del Norte. This has resulted in improved healthcare, with better facilities and infrastructure at the Surigao del Norte Community Hospital and the Siargao District Hospital as two main beneficiaries. School education programmes have been strengthened by investing in better school facilities, buildings and better pay for teachers. Along with this, scholarships for students with indigenous backgrounds are also growing due to increased funding coming from the revenues.

The year 2013 proved to be rather mixed for the country of Philippines. While on the one hand, Typhoon Haiyan wreaked devastation affecting over 7 million lives, the economy seemed buoyant with a 6.6 % GDP growth rate and inflation curbed at 3.3 %. The recovery from one of the biggest natural disasters in recent times has brought poverty-environment concerns under the spotlight, now more than ever. Integrating these imperatives into LGU's comprehensive development plan and comprehensive land use plans, PEI has helped in making sustainable development a key priority for both the mining corporations as well as local governments in Philippines. Responsible mining will continue to be a significant link in the chain of environmentally and socially sustainable development for Philippines and its people.



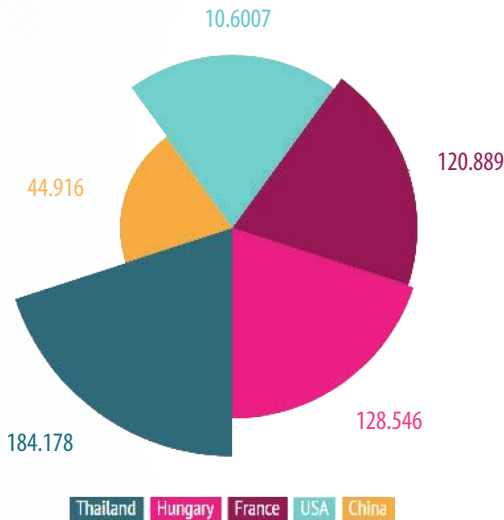
67 Population in millions ADB /2012

Thailand



13.2% Population living below the national poverty line ADB /2011

Top exporters of corn (metric tonnes, 2012) FAOSTAT/2012



Top agricultural exports of Thailand (by quantity) FAOSTAT/2012



฿2 b

In 2013, the Thai market of organic products reached 2 billion Thai Baht Bangkok Post / 2013

10%

Growth of Thai organic market from 2012 to 2013 Bangkok Post / 2013

80%

of shipments go to Europe, which remains the main market Bangkok Post / 2013



Europe is the main market for Thai organic products, followed by the United States, Australia and New Zealand Bangkok Post / 2013



Thailand

Maize standards set the way for sustainable farming in Thailand



The yearly retreat of the monsoons marks a time for celebration for Duang and her family in Nan Province, as they prepare for the harvesting of new maize corn. With cornfields stretching across many acres of hillside, community life for this small family revolves around the cultivation of this highly valued crop. Grown alongside rice paddy fields, maize thrives in poor soils but is highly labour intensive, with farmers devoting a majority of work hours towards weeding and pest eradication.

Maize corn has proved to be the primary money-spinner for farmers and livestock breeders like Duang who occupy rain-fed areas, especially in the Northern and Northeastern parts of the country. Coupled with subsidies, agricultural loans and incentive schemes from the Government of Thailand in the early 1990s, maize production grew by leaps and bounds, with more farmers making the most of the short harvest cycles of the crop. “Twenty years ago, everyone wanted to grow it. [Maize] was a hero that would generate huge income for us,” explains Benchamas Chhotthong, a researcher in agriculture.

Interestingly, in comparison to rice, the consumption of maize by local communities is relatively low. Maize farmers only retain a small portion of the year’s harvest to be used as mill feed for livestock, selling the majority to feed mill farm dealers, merchants and agricultural cooperatives. These retailers, in turn, supply raw stock to larger multinational companies that produce

food products with maize as key ingredients such as processed foods and confectionery. In addition to this, Thailand also serves as a major exporter to other countries in the region and around the world. This rising demand and intricate supply chain has turned the heat on small farmers, driving them to use more unsustainable growing methods in a bid to increase crop yield.

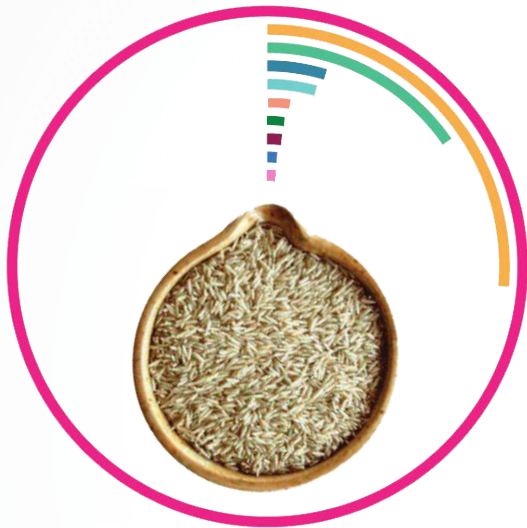
The persistent thrust towards increasing maize production has come with its set of repercussions. The excessive use of chemical pesticides and fertilizers has left the soil replete of nutrients and posed major risks to the health of farmers. The clearing of precious forest land and the consequent destruction of biodiversity for the sole plantation of maize has had direct implications on the livelihoods of small farmers, threatening income security in the long run.

In a bid to address this poverty-environment puzzle, there are dialogues underway among all parties in maize cultivation to discuss more sustainable methods of maize production. An important agenda in these discussions is the development of “standards” and certifications that will distinguish sustainably grown maize from other kinds. This concept of devising sustainable standards has seen great success in the cultivation of many crops in the Asia Pacific region such as palm oil and soy among others.

The nascent industry of organic farming in Thailand

Organic agricultural land (ha)

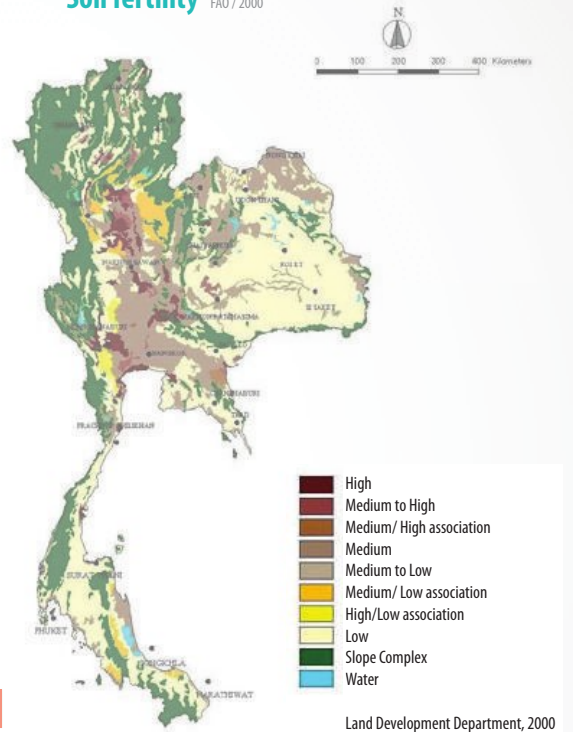
Source of data: FiBL and IFOAM 2012; based on information from the private sector, certifiers, and governments



0.2 % Share of organic agricultural land of total agricultural land FiBL and IFOAM 2012

60 % of land are classified as areas facing serious problems of soil fertility FAO / 2012

Soil fertility FAO / 2000



These standards clearly prescribe ideal practices and limits for the use of pesticides, the extent of planting area, the choice of water source, among other environmental factors. In protecting social interests of communities, the standards seek to provide guidelines on working conditions of farmers and health and safety guidelines among others.

The development of these standards has thus far been a consultative process, bringing together academics, government agencies such as the ministries for agriculture and forests, large private retailers and maize farmers through organized public forums. The private sector in particular has a major role to play in regulating demand, managing produce and transporting and stocking crop yield. Discussions are underway to seek ways to encourage private players to follow these standards.

PEI's planned support through capacity building and pro-poor environment planning will open up new doors for policy makers and communities alike to write their own development success stories. PEI will seek to be a platform for consultation, coordination and collaboration among these various stakeholders.

The potential role of the Government as a unanimously recognized "certifying body" is also being considered as a way of institutionalizing these standards. The Agricultural Land Reform Department under the Ministry of Agriculture is set to take on a greater role, in this regard. This is highly opportune, as by mandate, this department oversees the allocation of lands for farming communities and seeks to bring reforms to protect the welfare and rights of many downtrodden maize farmers.

A final focus in this field is to find innovative incentives to urge local farmers to adopt these standards and quality assurances. This has crystallized into a smaller project, funded by the UNDP Global Innovation Fund, aimed at pilot-testing the feasibility of various incentive schemes and to test standardized maize production in key deforested areas.

With a strategy of responding to both environmental and social welfare concerns, this work has the potential to affect the working of many wide groups involved in maize production, not

just within Thailand but also with the country's trading partners and can serve as a model for other global producers.

The Kingdom of Thailand occupies a distinctive position in South East Asia, being a bulwark among the countries in the region. The steady economic growth the country has witnessed has come at the expense of political instability, rampant environmental degradation and social exclusion. With a majority of poor and vulnerable populations highly dependent on natural resources, steps like the development of standards and sustainability assurances can help bring the interests of the economically and socially disadvantaged people and the environment to the forefront. PEI with its support towards the effective implementation of these standards, is committed to helping these vulnerable communities of Thailand reap the benefits of this growth, for now and for future generations.



For more information: www.unpei.org



<http://www.youtube.com/user/PEIAAsiaPacific>



<https://twitter.com/PEIGlobal>



<https://www.facebook.com/ThePovertyEnvironmentInitiative>



*Empowered lives.
Resilient nations.*

