

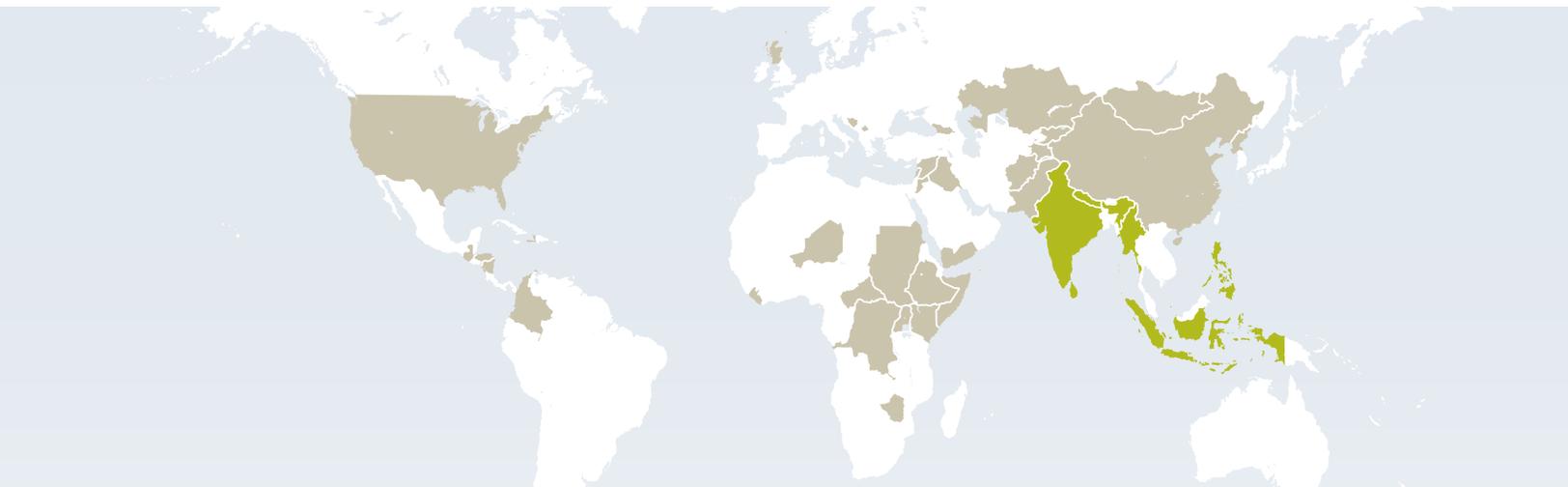


## Strategy Summary: Mercy Corps' Climate Change and Disaster Risk Reduction Interventions in South East Asia

Mercy Corps is an international, non-governmental humanitarian relief and development agency with headquarters in the USA and UK. With current operations in 40 countries reaching close to 20 million beneficiaries, the agency exists to alleviate suffering, poverty and oppression by helping people build secure, productive and just communities. Mercy Corps' work emphasizes community-led, market-driven interventions through public, private and civic sector partnerships.

Mercy Corps' South East Asia regional portfolio consists of the following South and Southeast Asian countries: India, Indonesia, Myanmar, Nepal, Philippines, Sri Lanka,

and Timor-Leste. Earlier operations also included work with Cambodian refugees in Thailand – the original purpose for which Mercy Corps was established in 1979 – as well as shorter-term assignments or support for relief efforts in Cambodia, Vietnam, and Bangladesh. Mercy Corps' four key intervention areas in the region include: 1) Economic Recovery and Development; 2) Climate Change and Disaster Risk Reduction; 3) Public Health; and, 4) Emergency Response. This pamphlet summarizes Mercy Corps South East Asia's strategy in the Climate Change and Disaster Risk Reduction arena, which includes work in climate change adaptation, disaster risk reduction, and energy poverty reduction.



# Guiding Principles and Methodologies for Climate Change and Disaster Risk Reduction Programming in South East Asia

The following principles underpin Mercy Corps' Climate Change and Disaster Risk Reduction interventions:

## We Work for the Poor

Mercy Corps believes in confronting the development challenge of poverty, and recognizes the link between poverty, climate vulnerability, and disaster risk. Interventions work to reduce vulnerability and energy poverty while protecting income poverty and food security gains.

## We work towards Evidence-Based Intervention and Knowledge Management

Mercy Corps believes in conducting analyses – including vulnerability and capacity analyses – that influence our intervention decisions and form the basis of quality measurement systems. We believe in synchronizing indicators internally and with best practices and in learning from this evidence base.

## Our Programs are Contextually Driven

Mercy Corps believes in tailoring solutions based on context. Analysis considers underlying causes of vulnerability, global and local influences, and prospects for systemic change within the specific contexts of the transitional environments in which we operate.

## We Work in Partnerships

Mercy Corps understands that no single organization can effectively address the challenges of climate change and disaster risk reduction. Effective partnerships between policy makers, researchers, and practitioners in the public, private and civic sectors are the cornerstone of effective and sustainable interventions.

Left to right: Sri Lanka – Thatcher Cook for Mercy Corps; Indonesia – Mercy Corps



## We Understand the Role of Inter-Generational Programming

Mercy Corps values the role of children, students and youth in influencing local, national, and regional thinking around climate change and disaster risk reduction. Whenever feasible, Mercy Corps complements community-focused work with parallel interventions with youth and in schools.

## We see that Crisis Creates Opportunities

Mercy Corps believes crisis can create opportunities. We respond to short-term needs (symptoms) while remaining aware of and focused on long-term development processes (causes) and the opportunities to 'build back better'. Climate-related hazards, while devastating, provide an opportunity for affected communities to come back stronger and more resilient to future hazards.

## We Use a Gender-Sensitive Climate Change and Disaster Risk Reduction Lens

Mercy Corps understands that in communities where women have traditionally had less opportunity to engage in decision-making processes and bodies, their engagement in community-based organizations can significantly improve the relevance, impact, and financial and environmental sustainability of interventions.

## We Strive towards Sustainability

Mercy Corps' interventions are based on the belief that the capacity to analyze changes and risk, and to organize for effective response, adaptation and mitigation, are far more important than the outputs of the temporal interventions themselves – community, government, and household knowledge, capacity, and resiliency, when combined with financial sustainability measures, greatly improves prospects for sustainability.



## The Challenge

The countries in Mercy Corps South East Asia regional portfolio have nominal Gross Domestic Product (GDP) figures per capita that range from below \$500 to over \$2,000 (International Monetary Fund, 2010), with 14% - 55% of the national populations living on less than \$1.25/day (Oxford Poverty & Humanitarian Development Initiative, 2010). Human development is slowed by chronic hunger, as exemplified by the fact that 21% to 43% of children under five years of age are classified as underweight (UNICEF, 2010). In the seven countries in which Mercy Corps currently works in the region, over 700 million people are classified as poor according to multi-dimensional poverty indices (Oxford Poverty & Humanitarian Development Initiative, 2010). At the same time, these countries rank among those most at risk of natural disaster and climate change: Indonesia is ranked 2nd on Maplecroft's natural disaster risk rankings, while India, Philippines, Sri Lanka, and Myanmar are considered "Extreme Risk" countries, and Nepal and Timor-Leste are considered "High Risk" countries, according to the same index (Maplecroft, 2010). Meanwhile, India, Nepal, Philippines, and Myanmar are ranked 2nd, 4th, 6th, and 10th in Maplecroft's climate change vulnerability rankings, respectively, while Indonesia and Timor-Leste each rank as "High Risk." Similarly, India and the Philippines rank in the top 10 countries globally according to the Germanwatch Decadal Climate Risk Index, while most South and Southeast Asian countries fall within the zones considered to be climate "Hazard Hotspots" by the same organization (Germanwatch, 1998-2007). By some estimates, over 38% of Asia's population lives within 100 kilometers of the coast, such that one meter rise in sea level would result in the loss of over 1,000 square kilometers of cultivable land (IPCC, 2010); at the same time, the effects of climate change on the mountains of the Himalayan range are a major cause for concern given rapid glacial melt and the subsequent effects on river basins.

## Strategy

Mercy Corps South East Asia implements climate change and disaster risk reduction interventions to reduce poverty and build resiliency for vulnerable urban and rural populations, through interventions that address root causes and core contributing factors, and through methodologies that emphasize local ownership and sustainability.

## Tactics

Mercy Corps recognizes that disaster and climate-related risk are caused, or exacerbated by, a range of factors, and are themselves both a cause and sometimes a consequence of poverty: the poor are often the most vulnerable to disasters, the least prepared to adapt to a changing climate, and the most likely to rely on local natural resources to meet basic needs. At the same time, the efforts of the poor to strengthen livelihoods, to achieve food security, or to access basic services are often consistently undermined by climate-exacerbated hazards.

These create situations in which poverty reduction gains can diminish or even vanish in the face of disaster or changing environmental factors. Contributing factors to disaster and climate-related risk include increasingly unpredictable weather patterns; inadequate knowledge about, organization around, and preparedness for disaster management and environmental changes; environmental degradation, often related to energy poverty; and, in some cases, a disempowering policy arena. These problems and contributing factors give rise to Mercy Corps interventions in the sectors and sub-sectors described below: Community-Based Disaster Risk Reduction; Climate Change Adaptation; Alternative Energy Promotion; and, Governance Linkages, Planning and Policy. These interventions are often reinforced by programming in complementary sectors, such as Public Health and Economic Recovery and Development. Mercy Corps recognizes that a key implementation success factor is sound vulnerability and capacity analysis, and therefore has developed and applies these tools to identify high-impact intervention points for at-risk households, communities, and sub-regions.

## COMMUNITY-BASED DISASTER RISK REDUCTION (DRR)

Whether a natural disaster is caused by climate change or not, the community-based measures required to prepare for, mitigate, respond to, and be forewarned of disaster are the same, as are the effects of the disasters themselves on communities. Mercy Corps' community-based DRR approach emphasizes four inter-related elements: preparedness; response capacity; early warning; and, mitigation.

## Examples

In the plains of Far Western Nepal, Mercy Corps and partners facilitated the formation and training of Disaster Preparedness Committees in communities and schools, and then worked with these committees and local government to expand flood early warning systems, create search & rescue and first aid teams, and carry out slope stabilization and bioengineering along riverbanks to protect homesteads and fields. When floods hit the next year, casualties in communities with DPCs were negligible, whereas casualties remained high in neighboring villages.

In coastal regions of West Sumatra, Indonesia, Mercy Corps formed, trained, and equipped Disaster Management Teams, and then worked with these teams and local government on response plans, evacuation routes and shelters, and tree plantation. When an earthquake and tsunami warning hit the following year, local government officials remarked that these DMTs were among the first and best prepared responders.

In post-Cyclone Nargis Myanmar, Mercy Corps integrated DRR training into the design of programming that helped affected communities to repair embankments to reduce saltwater intrusion; later, Mercy Corps established and worked with nursery businesses to rehabilitate damaged mangrove ecosystems.

## GOVERNANCE LINKAGES, PLANNING AND POLICY

Host government policies and engagement often make the difference between sustainable and unsustainable interventions, or between scale and a lack thereof, while effective partnerships allow organizations to tackle problems that cannot be solved by any single agency or sector. Mercy Corps works with host government at all levels, as well as with research and implementation partners, to improve the enabling environment for disaster risk reduction, climate change adaptation, and alternative energy promotion.



## CLIMATE CHANGE ADAPTATION

The effects of climate change range beyond acute natural disasters to include the chronic, but often more devastating effects of slow-onset weather changes that compromise ecosystems and resource-based livelihoods strategies including agriculture. Mercy Corps' climate change adaptation work therefore includes community-based DRR measures, flowing from vulnerability analyses conducted with communities and local government to address the longer-term environmental, livelihoods and food security impacts of the changes taking place.

## Examples

In two secondary cities of Sumatra and Java, Indonesia, Mercy Corps worked with communities and enterprises to design and implement adaptation measures such as reverse-osmosis saltwater filtration, slope stabilization, the use of bio-pores, and the creation of seawall barriers from recycled materials.

In Eastern Sri Lanka and North Eastern India, Mercy Corps worked with farmers groups to introduce System of Rice Intensification (SRI) and partial-SRI methods that reduced water requirements in the face of increasingly unpredictable rain patterns, and in some cases also linked farmers to micro-insurance solutions.

In two districts of Timor-Leste, Mercy Corps and partners are working with farmers to adopt Sloping Agricultural Land Technology (SALT), and to introduce maize seed varieties that were more tolerant of rainfall variations, to help farmers recoup yields that were falling under traditional cultivation practices.

In Nepal, Mercy Corps helped flood-prone communities to trial new raised water point designs and improved home-plastering techniques to help households protect their health and belongings in the face of more frequent inundation. In some of the same locations, Mercy Corps is trialing sugarcane-based siltation reduction measures that help control yearly siltation in agricultural fields while generating income.

## Examples

In Indonesia, Mercy Corps is working with public, private and civic sector actors to create City Resilience Plans for secondary cities, and to help municipal governments link to the civil society groups, donors, and information required for carrying out these plans.

In Nepal, Mercy Corps worked with partners and host government institutions to formulate a National Early Warning Strategy, and to pilot district-level implementation of this strategy.

In Jammu & Kashmir, India, Mercy Corps convened state government, business, and civil society stakeholders to discuss the impacts of climate change on local communities, and to formulate action plans. One outcome of the process was a partnership with the private sector to plant over 100,000 trees.

## ALTERNATIVE ENERGY PROMOTION

Recognizing the correlation between energy poverty and income poverty, as well as the correlation between energy poverty and environmental degradation, Mercy Corps works with micro, small and medium enterprises (MSMEs) to expand access to clean energy sources, thereby enhancing productivity, reducing fuel costs, and aiding natural resource management and environmental stewardship while reducing emissions.

## Examples

In Indonesia, Mercy Corps worked with tofu and tempe processors to cut costs by shifting to cleaner stoves, and to reduce water pollution by using waste to create biogas, thereby increasing processor profits while improving the cleanliness of food products marketed to consumers.

In three districts of Timor-Leste, Mercy Corps is linking alternative energy product developers to rural retailers, and is working to improve the business practices and product lines of rural retailers while linking retailers and clients to microfinance institutions so as to make alternative energy solutions more affordable for low-income households. At the same time, Mercy Corps is supporting reforestation efforts that address the effects of the traditional heavy reliance on fuel wood.

In Myanmar, Mercy Corps and partners facilitated the establishment of fuel efficient stove production businesses, which lift producers out of poverty through stove sales while allowing low-income households to halve their expenditures on fuel wood. At the same time, Mercy Corps is facilitating the formation of for-profit seedling nursery businesses to support forestry and reforestation efforts.