



United Nations
Educational, Scientific and
Cultural Organization

BREES

Biosphere Reserves for Environmental and Economic Security

A Climate Change and Poverty Alleviation Program in Asia & the Pacific

2010 - 2017

The Asia-Pacific region is home to two thirds of the world's poor. The rural poor – agriculturalists, forest plant collectors, hunters, and fisherman – have traditionally been economically and socially ignored, under-represented, and under-served.

The rural poor now have a real economic and social stake, and an opportunity to make sustainable development work. Climate change is here and now, and will be the most important challenge that this planet faces in the 21st century and beyond. Human activity emits 32 billion tons of CO₂ each year globally of which 15 billion tons stays in the atmosphere and contributes to climate change, and 17 billion tons are dissolved into the oceans and drawn in by tropical forests. The wise management of forest, coastal, and marine ecosystems by the rural poor are more critical than ever in ensuring the future survival of these important ecosystems including the communities that live in them.

Actions and policies are needed to:

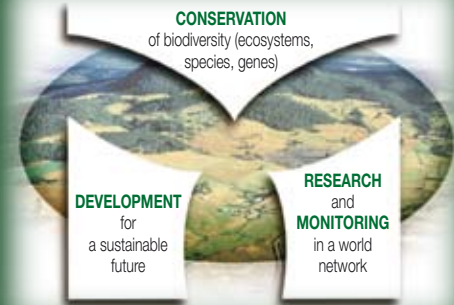
- develop policies to maintain and even expand carbon sinks;
- ensure the maintenance of environmental services through intact ecosystems;
- develop climate change adaptation measures into economic development;
- alleviate poverty in rural areas;
- stimulate the learning of new skills that stimulate local economies;
- promote education for sustainable development; and
- foster knowledge sharing between communities.



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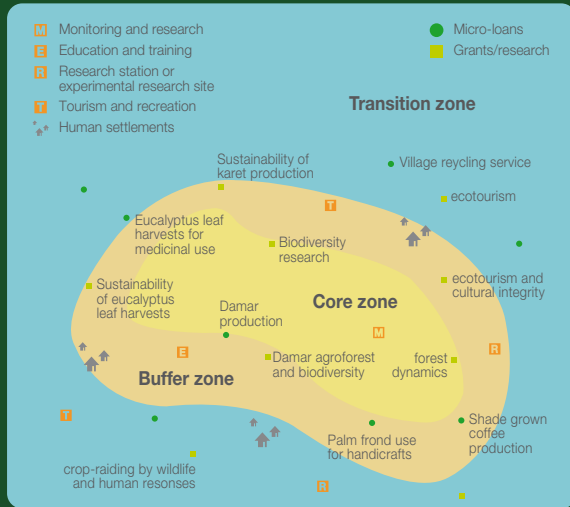
BREES is a long term regional climate change and poverty alleviation program that will work with communities, micro-finance institutions, educational institutions, government, and donor agencies to use biosphere reserves as learning centers for environmental and human adaptability to climate change effects and to improve economic conditions for the rural poor in and near biosphere reserves.

BREES will work with donors and micro-finance institutions to establish micro-financing and grant networks in communities surrounding the nearly 150 biosphere reserves in Asia-Pacific. BREES Program will invest heavily in community-based efforts to alleviate poverty, and establish a critical mass of resources and people to effectively safeguard important carbon sinks, and develop innovative solutions to enhance livelihoods of the rural poor.



What are biosphere reserves?

Biosphere reserves are 'living laboratories for sustainable development' and represent learning centers for environmental and human adaptability. Biosphere reserves are the only sites under the UN system that specifically calls for conservation and sustainable development to proceed along mutually supportive paths. Such mutuality requires cultural sensitivity, scientific expertise, and consensus-driven policy and decision-making. To date, there are 531 terrestrial, coastal, and marine biosphere reserves throughout the world including 147 reserves in 27 Asian and Pacific countries.



How can micro-financing help in sustainable development?

Micro-financing is a new economic movement popularized by the recent Nobel Prize winner Professor Muhammad Yunus to provide financial access and services to the poor. Micro-financing, particularly to women, has shown surprising results throughout Asia: exceptionally high returns and low delinquency rate; large-scale outreach; efficiency in providing financial and social services; and an important role in poverty alleviation, gender equality, social harmony, cultural preservation, and environmental sustainability.

Micro-finance can be an agent for sustainable development by encouraging ventures that promote: renewable energy; lower energy use; reduction of pollution; sound natural resource management; etc. Indeed these ventures have been carried out through micro-financing globally, and have shown great potential for sustainable development.

What role can UNESCO and biosphere reserves play in climate change and poverty alleviation?

Biosphere reserves through the BRES program are a perfect platform for reducing poverty and addressing climate change at the same time. They have a huge potential to: build on-the-ground partnerships that will harmonize needs of biodiversity conservation, climate change mitigation and adaptation and socioeconomic and cultural well being of communities; represent large natural areas that serve as carbon sinks; foster solutions that benefit the local economy and environment; promote local social and economic networks; and champion local solutions for global problem.



Target Countries & Key Approaches



1. Partnership Building, and Institutional Framework Analysis
2. Education and Capacity Building
3. Micro-loans to Communities and Groups
4. Grants to Researchers and Groups to Strengthen Future Sustainability
5. Direct Actions and Policy Changes
6. Environmental, Economic, and Social Monitoring
7. Knowledge Sharing and Regional Networking

POTENTIAL IMPACTS

Approaches and activities will contribute to the following short and long-term benefits:

- **Positive environmental impacts:** maintaining intact natural systems; providing environmental services; restoration; sustainable natural resource management
- **Positive economic effect on clients and communities:** building non-land assets; improving and diversifying local economies; reducing poverty; inclusive economic growth
- **Positive social effects:** community empowerment; providing educational, health, and other basic services; gender equality
- **Positive national level effects:** climate change planning; building rural finance networks; poverty alleviation
- **Positive regional level effects:** regional exchanges and knowledge sharing; regional climate change policies; improvement in education and sciences, poverty alleviation
- **Positive change of mindset** of rural poor people and other stakeholders regarding the harmony between development and conservation





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• **Produced with support of Japanese Fund-in-Trust**