

Viet Nam

Country Statistics

Population ¹	89,708,900
Income per capita ²	\$4,892
HDI Rank ³	121 st
Vulnerability Rank ⁴	76 th
Extreme Events Rank ⁵	6 th



Map of Viet Nam, Irish Aid

3 ibid

¹ Population in 2013: World Bank (2014) http://data.worldbank.org/indicator/SP.POP.TOTL Available at 28th July 2014.

² Gross National Income per capita in 2013, 2011\$ PPP; UNDP (2013) International Human Development Indicators; http://hdr.undp.org/en/countries Available at 29th July 2014.

⁴ ND GAIN (2013) http://index.gain.org/ranking Available at 20th June 2014. The rank quoted is an inversion of the ND GAIN vulnerability index which gives a higher rank to the least vulnerable. We have inverted so that 1st place is most vulnerable and 183rd place is least vulnerable.

⁵ Average over 1993-2012. Higher rank denotes greater losses from extreme events; Germanwatch (2014); Global Climate Risk Index 2014, http://germanwatch.org/en/download/8551.pdf Available at 20th June 2014

Bilateral Programme 2013 EUR⁶

Climate Finance; Adaptation ⁷ (UNFCCC)	3,390,000
Climate Finance; Mitigation ⁸ (UNFCCC)	502,275
UN Convention on Biological Diversity (UNCBD)	600,000
UN Combat Desertification and Degradation (UNCCD)	0
Disaster Risk Reduction (DRR) (UNISDR)	2,790,000
Irish Aid Support for Irish Civil Society Programme Partners in Vietnam	0



Women delivering firewood by bicycle in Dien Bien Province, Viet Nam. Frank Miller, 2010

⁶ These figures should not be aggregated as some disbursements have multiple co-benefits and are therefore marked for multiple environmental impacts. Total climate finance in 2013 is €3,392,275.

⁷ Climate relevant disbursements where the principal climate marker is applied are counted at 100% whereas climate relevant activities to which the significant marker is applied are discounted by a coefficient factor of 50%. The principal marker indicates that the specified cross-cutting theme, in this case, climate adaptation, was a main objective of the activity. It implies that the activity may not have gone ahead if not for the climate dimension. The significant marker indicates that the activity had other principle objectives which were the focus of the activity but that co-benefits were planned or mainstreamed into the activity. The application of the 50% coefficient to significant expenditures is a proxy representation of this lesser role of the environmental dimension in the disbursed amount

⁸ As above.

Viet Nam, Climate Change and the UN Framework Convention on Climate Change (UNFCCC)

Recent Climate Trends in Vietnam

Average annual temperature has increased by 0.4°C since 1960. The warming has been more rapid in the southern parts of Vietnam than the central and northern regions. The frequency of hot days and hot nights has increased significantly since 1960. There has been no apparent change to rainfall patterns since 1960. In Viet Nam in April/August, current temperatures are already approaching critical levels during the susceptible stages of the rice plant (IPCC, 2014).

Projections of Future Climate in Vietnam

The average annual temperature is projected to increase by 0.8 to 2.7°C by the 2060s. The projected rate of warming is similar in all seasons and across all regions of Viet Nam. All projections indicate substantial increases in the frequency of days and nights that are considered 'hot' in the current climate. Despite projected reductions in rainfall in the February – April period, annual rainfall is projected to increase due to larger increases in rainfall in the August – October period. The proportion of total rainfall that falls in heavy events annually is projected to increase though with variation between months. Whilst evidence indicates that tropical cyclones are likely to become, on the whole, more intense under a warmer climate as a result of higher sea-surface temperatures, there is great uncertainty in changes in frequency, and changes to storm tracks and their interactions with other features of climate variability such as El Nino. Viet Nam's coastal lowlands are also vulnerable to sea-level rise which is already bound to occur based on existing emissions, though the extent is dependent on the rate of future global emissions.

About 7% of Vietnam's agriculture land may be submerged due to sea-level rise. Peri-urban agriculturalists in the Vietnamese Mekong Delta are facing a multiple burden since they are often exposed to overlapping risks resulting from (a) socio-economic transformations, such as land title insecurity and price pressures, (b) local biophysical degradation, as peri-urban areas serve as sinks for urban wastes and (c) climate change impacts as they do not benefit from the inner-urban disaster risk management measures.

Observations of climate change in the lower Mekong river basin over the past 30-50 years include an increase in temperature, an increase in rainfall in the wet season and decreases in the dry season, intensified flood and drought events and sea level rise. Agricultural output has been noticeably impacted by intensified floods and droughts. Vietnam, along with Cambodia, is the most vulnerable to climate impacts on fisheries. The lower Mekong river basin supports the largest freshwater capture fishery in the world. Existing studies about future climate impacts in the Mekong basin share a set of common themes...increased temperature and annual precipitation; increased depth and duration of flood in the Mekong Delta...prolonged agricultural droughts in the south and east of the basin and sea-level rise and salinity intrusion in the Mekong delta. Transboundary adaptation planning across the Lower Mekong Basin does not exist to date.

Second National Communication of Viet Nam to the UNFCCC

Viet Nam submitted its Second National Communication to the UNFCCC in 2010. This outlined the national circumstances of Viet Nam, its climate change impact scenarios, its greenhouse gas inventory and identified a number of implemented and priority initiatives. Primary energy consumption in Viet Nam increased by 6.5% per annum from 2000 up to 2007 which may be linked to population growth of 1.36% per annum and economic growth of 7.5% per annum in the same period. On the other hand, the area of forestry in Vietnam grew from 35.2% of land area in 2000 to 38.7% in 2008.

The Second National Communication describes scenarios of expected climate change impacts and identifies an adaptation response. It is anticipated that annual flows of rivers in the North and North Central Coast of Viet Nam will increase while annual flows of rivers in the south are expected to decrease. Adaptation measures need to focus on incorporating climate change in to planning new systems of reservoirs, dams and dykes which are part of water resources management in Viet Nam. With sea-level rise, the Mekong delta will be most impacted. It is estimated that by 2100, 5,469km² of arable land will be lost and 168km² and 320km² of aquaculture and forest land will be submerged. Adaptation will require a choice between three categories of action; full protection, adaptation and withdrawal. In agriculture, short term measures for adaptation include controlling erosion, building reservoirs, and picking crops to suit new climatic conditions. Climate change is also expected to impact forestry with a reduction in native forest cover, increased risk of forest fires and increased pests. Establishing forest fire management and prevention, as well as further research will be important for adaptation in this sector. The National Communication also identified the need for improved urban planning to address heat load and drainage, and to reflect impacts of natural disasters. Improved weather forecasting and disaster and disease outbreak warnings with improved communication of these was identified as a national priority.

The 2nd National Communication primarily identified mitigation options in the agriculture, energy and forestry sectors. Activities include energy efficiency across sectors, a switch from coal to gas in household cooking, energy efficient appliances, energy efficient coal stoves, solar water heating, switching public transport from diesel to gas, expansion of gas in electricity generation, small scale hydropower, wind power, bio-gas in agriculture and rural communities, improved drainage of paddy fields, sustainable management of existing forestry and afforestation.

Resources:

IPCC 5th Assessment Report (2014), Working Group II Impacts, Adaptation and Vulnerability: http://ipcc-wg2.gov/AR5/

UNDP climate change profile for Viet Nam:

http://www.geog.ox.ac.uk/research/climate/projects/undp-cp/index.html?country=Vietnam&d1=Reports

2nd National Communication of Viet Nam to the UNFCCC (2010): http://unfccc.int/resource/docs/natc/vnmnc02.pdf



Vietnamese woman outside her house in village which has benefited from irrigation canal built with Irish support. Pham Quang Hoa, 2013

Viet Nam & the UN Convention on Biological Diversity (UNCBD)

Biodiversity makes a significant contribution to the Vietnamese national economy by ensuring food security, maintaining gene resources of livestocks and plants, and providing materials for fuel, medicine and construction. The Government of Vietnam has taken significant steps to protect this natural resource. By 2006, forest coverage, including both natural forest and plantation forest, had increased by 38.2%. In late 2008, the Prime Minister approved a system of 45 interior protected wetlands. Another system of 15 marine protected areas has also been planned and submitted to the Government for approval. There are five million hectares of protected forests. A system of 128 protected areas has been established and developed in all eco-regions nation-wide covering an area of 2.5 million hectares or about 7.6% of the territory. Moreover, two World Natural Heritages sites, four ASEAN Natural Heritages, two Ramsar Wetlands and six Biosphere Reserves have been internationally recognized.

Nevertheless, many threats exist to biodiversity in Viet Nam. The increase of population and consumption has put pressure on natural resources, leading to overexploitation. Rapid socio-economic development has led to changes in natural landscapes. Changes in land use and mass development of infrastructure have reduced natural areas, increased ecological fragmentation, and damaged wildlife habitats. The construction of many dams has blocked the flows of migratory fish. The increase in forest coverage is positive but half the increased area is plantation and regeneration forests with low biodiversity. Meanwhile, rich and primary forests are small and continue being degraded. The total number of endangered wildlife species in Vietnam is now 882 (Vietnam Red Book, 2007), an increase of 161 species since the previous Red Book edition (1992-1996). In particular, nine animals and two Lady's slipper orchid (Paphiopedilum) species are now considered extinct in the wild. Many other valuable and rare species have seen a serious decline. Besides, there are many challenges in biodiversity management in Vietnam, including; fragmented management; inconsistent legislation; poor community participation; weak planning for biodiversity, conservation and development, at provincial, regional and national levels; and limited investment in biodiversity conservation.

The National Biodiversity Action Strategy and Action Plan of 2007 consists of five major goals. Each goal contains several specific objectives including inter alia: consolidation and development of the special-use forest system; regeneration of 50% of degraded watershed forests; effective protection of those valuable and endangered plants and animals being threatened with extinction; establishment of 1.2 million hectares of internationally and nationally important protected wetlands and marine protected areas; regeneration of 200,000 hectares of mangrove forests; development of demonstrations for sustainable use of plants and animal resources; control, prevention and cessation of exploitation, trade, and consumption of endangered wildlife species; education and public awareness raising about; biodiversity conservation, development and sustainable use so that 50% of the population regularly receive information about biodiversity.

Resources:

UNCBD Country Profile: http://www.cbd.int/countries/?country=vn

4th National Report: http://www.cbd.int/doc/world/vn/vn-nr-04-en.pdf

Viet Nam & the UN Convention to Combat Desertification (UNCCD)

Viet Nam produced a National Report to the UNCCD in 2002. It outlined four types of land degradation experienced in Viet Nam;

- soil erosion and laterisation⁹ in the North and Central region
- Land affected by sand movement and land skip along the central coastal areas
- Water logging, salination and acidulation in the Cuu Long river delta
- Land affected by drought in dry season or permanently especially in south-central and central highland areas.

Afforestation, improved protection of national parks and other nature reserves, watershed protection, soil-erosion control, irrigation, poverty alleviation are mentioned in the 2002 report of Viet Nam to the UNCCD as different means to address land degradation. Vietnam's long term priorities in this area are;

- A sustainable forestry exploitation based on establishing a balance between forest resources use and an ecologically-safe forest coverage,
- A sustainable land use at all levels of landholders or landowners on the principle of upholding the biological productivity of the land with all its ecological and socio-economic value for the present and the future generations,
- A proper reclamation/rehabilitation of degraded land to mitigate its negative effects and give back its original values as a fundamental property for human existence,
- A significant improvement in water resources management to ensure quality water supply for various purposes under different circumstances, especially in drought-affected areas

Part of the irrigation canal built with Irish support embracing a high mountain before going further to bring water to the rice terraces. Pham Quang Hoa 2013



- Strengthened and up-to-date management capacity and technical facility for monitoring and evaluation for early warning system to forecast in-time flood and drought information
- A significant improvement in rural livelihood, no poverty, hunger and illiteracy. A campaign of new rural development in every area. The regions important for natural resource and environment protection of the country continued being sustainably developed.

Resources:

Viet Nam National Action Program under the UNCCD (2002): http://www.unccd.int/ActionProgrammes/vietnam-eng2002.pdf

⁹ Laterisation is a form of chemical weathering that involves oxidation, carbonation and leaching. It increases the acidity of soil and can also affect soil texture. This has impacts on soil's capacity for water retention and ultimately impacts on the suitability of the land for agricultural productivity.

Key Partner Country's Bilateral Projects and Programmes

1. Programme 135

The National Targeted Program on Sustainable Poverty Reduction Program 2012 - 2015 focuses on the following 4 projects: (i) support construction of infrastructures in poor districts, most disadvantaged communes in coastal areas and islands; (ii) support construction of infrastructures in most disadvantaged communes, frontier communes, safe zone communes and most disadvantaged villages; (iii) replication of poverty reduction models; and (iv) support capacity building, communication, monitoring and evaluation of the program implementation. Irish Aid provides earmarked budget support to the most disadvantaged communes in improving their basic infrastructure and accessibility to services for poor ethnic minorities. The infrastructure and services also support the climate resilience of these communities. This support is therefore marked as significant for adaptation and is counted at 50% towards climate finance.

2. Technical Assistance to Programme 135, UNDP

This project is also titled "Support to the implementation of the Resolution 80/NQ-CP on directions of sustainable poverty reduction 2011-2020 and the National Targeted Program on Sustainable Poverty Reduction 2012-2015 (PRPP)". The aim of the project is to help mainstream poverty reduction in ministries' plans and policies and to help the National Targeted Program on Sustainable Poverty Reduction (NTP-SPR) be designed and implemented effectively, contributing to rapid poverty reduction in poorest districts, communes and villages and of ethnic minority people. The project will help by providing necessary technical assistance and capacity development support in planning, developing guidelines, undertaking studies, and providing policy recommendation and advice for poverty reduction. The technical assistance offered by this project is considered crucial to (i) monitor and understand thoroughly the situation of poverty relapse and vulnerability increase due to the impacts of economic shocks, diseases, national disasters and climate change and to use this understanding to design, operate/implement poverty reduction policies and programs. The expected outcome of this project is that by 2016, key national institutions formulate and monitor people-centred, green and evidence-based socio-economic development policies to ensure quality of growth as a middle income country. This activity is marked as 'significant' for climate adaptation and is thus counted at 50% towards climate finance.

3. Green Living Exhibition, Action for the City

This initiative aims to promote the exchange between Irish and Vietnamese communities through highlighting local environmental actions. A photo exhibition was organised to promote Green Living program of Vietnam and the community actions in Ballymun, Dublin. This

supports the environment by improving public awareness of green issues. As this project also aims at reducing the carbon footprint, it is marked as 'significant' for mitigation and is counted at 50% for climate finance.

4. Post Emergency Recovery, CRD;

The aim of this initiative was to upgrade construction of schools affected by Wutop and Nari typhoons in Quang Binh and Quang Tri provinces. This project is located in the central region of Vietnam which has the highest frequency of typhoons. The long term objective is to improve the skills of teachers, pupils and local people on prevention of natural disaster and adaptation to climate change. School repairs will be used as a model for disaster risk reduction. The project will improve the capacity of stakeholders on emergency preparedness and post-emergency recovery projects. As this activity is directly aimed at disaster risk reduction and adaptation, it is marked as 'principal' for climate adaptation and is counted at 100% towards climate finance.

5. One UN Viet Nam;

In the period 2012-2016 the UN will work with the government and people of Viet Nam to ensure a balance between economic, human and sustainable development objectives. It will support the government to achieve inclusive, equitable and sustainable growth, access to quality essential services and social protection, and enhanced governance and participation. The first of three focal areas includes the aim to "protect and improve the environment, take initiative to prevent natural disaster and effectively respond to climate change." Key national and sub-national agencies will have resources to support implementation of relevant international conventions, and effectively address climate change adaptation, mitigation and disaster risk management. As this activity addresses climate change in addition to a number of other goals, it is marked as 'significant' for both mitigation and adaptation and is thus counted at 50% towards climate finance. The Viet Nam embassy has also supported climate relevant activity in the region, as in Burma below.

6. Livelihoods and Food Security Trust Fund (LIFT), UNOPS;

The aim of this fund is to provide support to the poorest population in urban and rural areas in selected States and Divisions of Burma/Myanmar. The expected results of the Fund include: (i) diversified and increased household income; (ii) re-established and increased (rural and urban) crop and livestock production, fisheries and sustainable harvesting of non timber forest products; and (iv) improved food and nutrition security, and mechanisms providing social protection. Myanmar is disaster prone, and the country is feeling the impacts of long-term climate change. Long term sustainability of measures to enhance food security and livelihoods will be undermined unless climate change adaptation measures are put in place. LIFT will be sensitive to climate change issues and when opportunities arise, will support programmes that link climate change efforts with intensification of agricultural systems. Improving access

to water for agriculture, especially in the Dry Zone, is a key adaptation measure to climate change that LIFT will support. It will also seek opportunities to dialogue with the government on climate change issues. As adaptation is a key secondary objective of this activity it is marked as 'significant' for adaptation and is counted at 50% towards climate finance.

Mapping of Bilateral Expenditure

	Project/Programme	2013 Actual	2014 Planned	ENV	CBD	CC Mit	CC Ad	CCD	Agri	DRR	СВ	TT	REDD	Private
1	Programme 135, Local Aid Recipient	4,430,000	4,430,000	0	0	0	1	0	0	1	1	0	0	0
2	Technical assistance to P135, UNDP	1,000,000	1,000,000	0	0	0	1	0	0	0	2	0	0	0
3	Green Living Exhibition, Action for the City Development	4550	0	2	0	1	0	0	0	0	0	0	0	0
4	RI.2013.VN.4: Post - emergency recovery, CRD Vietnam	75,000	0	0	0	0	2	0	0	2	0	0	0	0
5	one un Vietnam, UNDP	1,000,000	0	1	1	1	1	0	0	1	0	0	1	1
6	UNOPS, December 2013	200,000	0	1	1	0	1	0	2	0	0	0	1	0

Significant versus Principle Markers

The OECD DAC Rio Markers and the anticipated Disaster Risk Management Rio Markers work on a three-score system. Activities can be identified with;

- Principal marker of 2
- Significant marker of 1
- Or not targeted; 0.

The choice of principle, significant or not-targeted relates to hierarchy of objectives, goals and intended outcomes in the programme or project design. A principle marker is applied if the marker policy is one of the principle objectives of the activity and has a profound impact on the design of the activity. A significant marker is applied if the marker policy is a secondary objective, or a planned co-benefit, in the programme or project design. The zero marker is applied to show that the marker policy was not targeted in the programme or project design. If this is unknown, the marker is left blank.