

EXECUTIVE SUMMARY

The overall implementation of the project "Improving the Resilience of Vulnerable Coastal Communities to Climate Change Related Impacts in Viet Nam" has progressed well since its inception in 2017. At the project's midterm point, about 60 percent of the targeted number of storm- and flood-resilient houses have been completed, 60 percent of which have been handed over to poor female-headed households. Due to delays caused by challenges related to site selection, 36 percent of the midterm target for mangrove plantation and regeneration has been achieved. Midterm targets for community participation in CBDRA/CBDRM planning processes have been exceeded, providing more than 32,000 people (50% women) in 252 communes with improved climate change information focusing on disaster trends and climate projections. These community-level disaster management plans and maps to further inform their risk reduction efforts.

The Interim Evaluation carried out in December 2019 confirmed project relevance and alignment with government strategies on combating climate change, and project outcomes are expected to be sustainable beyond the project duration. The evaluation has also concluded that the project has strong sustainable development potential in terms of economic, social and environmental benefits, as well as gender considerations, and is on track to achieving its stated objectives.



ACRONYMS AND ABBREVIATIONS

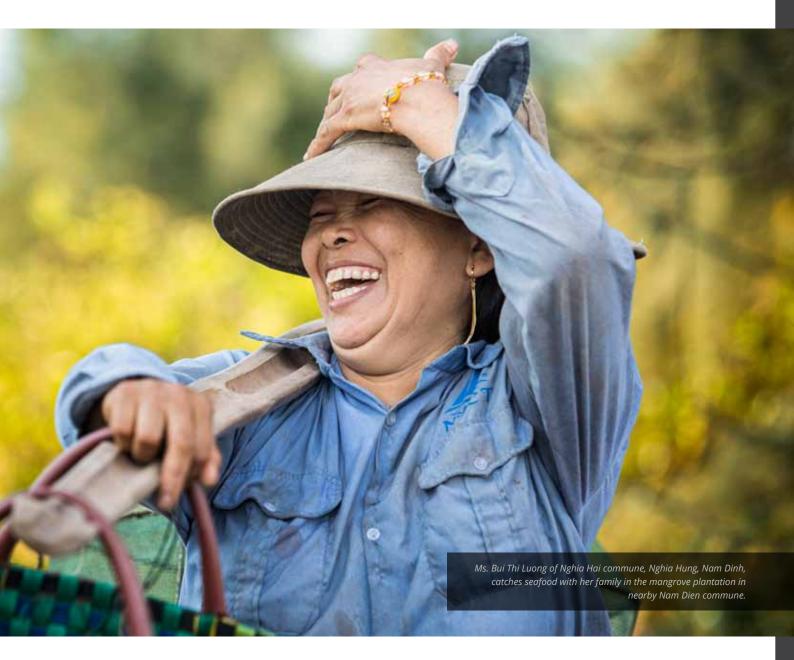
CBDRA	Community-Based Disaster Risk Assessment
CBDRM	Community-Based Disaster Risk Management
DRR	Disaster Risk Reduction
GCF	Green Climate Fund
GHG	Greenhouse Gas
MARD	Ministry of Agriculture and Rural Development
TOF	Training of Facilitators
TOT	Training of Trainers
UNDP	United Nations Development Programme
VNDMA	Viet Nam Disaster Management Authority



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Midterm Achievements



This report provides an overview of progress toward achieving the stated objectives and outcomes of the project **"Improving the Resilience of Vulnerable Coastal Communities to Climate Change Related Impacts in Viet Nam,"** funded by the Green Climate Fund and implemented by the Government of Viet Nam and UNDP. The report captures progress made from 2017-2019 and summarizes early signs of project success or gaps based on the findings of the Interim Evaluation carried out by an external team of evaluators in December 2019.

Viet Nam is one of 10 countries considered to be at extreme risk in terms of their vulnerability to climate change. Risk factors include high population density, geographic location and dependency on cyclone-, flood- and drought-prone agricultural land. Each year, approximately **60,000 houses are damaged or destroyed** by floods and storms in coastal provinces, and this situation is likely to worsen given climate change scenarios for Viet Nam. Some projections indicate a **57-73 cm rise in mean sea level** along the coast of Viet Nam by 2100, which would inundate approximately **30,000km²**, an area equivalent to **9.3% of the total national land surface**. A report released by the Intergovernmental Panel on Climate Change on the impacts of a **1.5°C rise in global temperatures** above pre-industrial averages named Viet Nam as one of nine countries where at least **50 million people** will be exposed to the adverse impacts of rising sea levels and more intense storms by 2040. The resultant economic impacts will make it increasingly difficult for vulnerable families to escape the cycle of poverty.

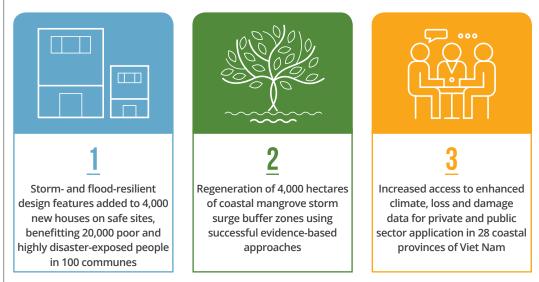
The project aims to scale up already-tested interventions to increase the resilience of vulnerable coastal communities in Viet Nam. Building on ongoing social protection programmes related to housing for the poor and marginalized, the project incorporates storm- and flood-resilient design features in new houses benefitting **20,000 poor and highly hazard-exposed people**. As part of an integrated response to managing cyclone and flood risks, **4,000 hectares of mangroves** are being rehabilitated and/or planted to function as storm surge buffers and provide ecosystem resources that can support coastal livelihoods. To support and sustain both the impact of this project and future requisite government policy adjustments that strengthen the resilience of coastal and other communities, resources will be dedicated to systematizing climate and economic risk assessments for private and public sector application in all 28 coastal provinces of Viet Nam.



PROJECT

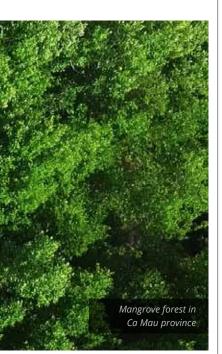
OBJECTIVES AND OUTPUTS

The overall objective of the project is to increase the resilience of vulnerable coastal communities to climate change related impacts in Viet Nam. The project expects to achieve this objective through three outputs:



The project has been developed in line with national policies and strategies regarding climate change adaptation. The Viet Nam Ministry of Agriculture and Rural Development (MARD), UNDP and other relevant stakeholders, including Provincial People's Committees and government and non-government institutions, have been involved throughout the development and implementation of the project.

KEY MIDTERM ACHIEVEMENTS



102 STORM- AND FLOOD-RESILIENT HOUSES

completed in 5 provinces, representing 60% of the overall project target

12,010 PEOPLE BENEFITTED

from completed storm- and floodresilient houses

1441 HECTARES OF MANGROVE

plantation/regeneration completed, protecting more than 129,000 people

15 LIVELIHOOD MODELS

developed in 11 communes across 5 provinces, giving more than 400 households (including 31 femaleheaded households) access to the livelihood models

DATABASE OF VIET NAM'S COASTAL FORESTS

developed and endorsed by MARD, benefitting national-level forestry and disaster management planning and decision-making

22 Tot TRAININGS

were implemented, with five at the central level and 17 at the provincial level (201 trained, including 79 women)

252 TOF TRAINING & CBDRA SESSIONS (6 DAYS EACH)

have been completed. 32,083 people representing communities and local authorities benefitted from these trainings and have access to the latest climate change and disaster-related data.



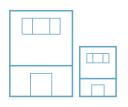
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Previously, every time there was rain or flooding, the house and yard could not be used... but now we are reassured and very happy.

MRS. LE THI TRA Hoang Truong commune, Hoang Hoa district, Thanh Hoa province



MIDTERM Progress





Storm- and flood-resilient design features added to 4,000 new houses on safe sites, benefitting 20,000 poor and highly disasterexposed people in 100 communes

ACTIVITY

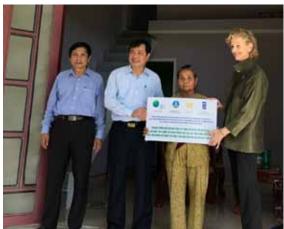
Grant support for cost of additional storm- and flood-resilient features for 4,000 houses

PROGRESS 2017-2019

- Housing models suitable to climatic and socioeconomic conditions in each locality selected and applied.
- Project beneficiaries selected through participatory and transparent process with priority given to poor, disabled and female-headed households.
- 2,402 safe houses completed in five provinces (60% of project target) with 60% handed over to poor and women-headed households.
- 90% of new houses use materials from old houses and locally available materials.
- Construction waste appropriately treated.
- Safe houses used for shelter during storms and floods in 2018 and 2019 no disaster-related loss of life or property was reported on these project sites.

Knowledge products developed based on lessons learned for policy makers and communities

- Beneficiaries can choose from six safe house designs developed by the Department of Construction in each province.
- Implementation has benefitted from technical support from UN-HABITAT and the Viet Nam Institute of Architecture
- Nation-wide housing program is being developed to build safe houses in 28 coastal provinces based on experience from this project.
- Two documentary films have been produced to share information on project activities and progress.



Mr. Tran Quang Hoai, Director General of the Viet Nam Disaster Management Authority, Ministry of Agriculture and Rural Development, and Ms. Caitlin Wiesen, Resident Representative of UNDP in Viet Nam, handing over a resilient house to a local household in Quang Ngai Province.

Output 1 has achieved all major midterm targets with no shortcomings.





Regeneration of 4,000 hectares of coastal mangrove storm surge buffer zones using successful evidence-based approaches

ACTIVITY	PROGRESS 2017-2019	
Regeneration/replanting of 4,000 hectares of mangroves in coastal areas vulnerable to climate change	 Forest restoration measures and cost norms developed based on field surveys and research. Technical guidelines for nine suitable mangrove species with site locations developed and approved by the Viet Nam Administration of Forestry. Manuals developed for techniques applied in afforestation and forest rehabilitation. 1,441 hectares of mangrove forests planted/regenerated/protected in 2018-2019. 1,000 local people employed in mangrove plantation/regeneration/protection activities including 40% women. The project's GHG emissions reduction from June 2018 to December 2019 was 34,414 tonnes of CO2 equivalent. 15 livelihood models developed in 11 communes involving 408 households including 31 female-headed households. 	
Community-based programmes on mangrove rehabilitation, maintenance and monitoring in target communities	 Community-based programme on mangrover rehabilitation, maintenance and monitoring for target communities was not initiated. Initially, this activity was planned under Output 2, but the Project Board decided to move it, together with the budget of 100,000 USD, under Output 3 to be integrated with community-based disaster risk management training. However, the mangrover focus has been diluted. 	
Knowledge products developed based on lessons learned for policy makers and communities	 Database of Viet Nam's coastal forests (28 provinces having coastal forests) has been developed and will be endorsed by MARD, benefitting national-level forestry and disaster management planning and decision-making. Technical guidelines and communication materials (leaflets, posters) distributed to relevant stakeholders. 	

Output 2 has achieved some midterm targets. Some activities required to strengthen community involvement in, and ownership of, mangrove forestry-based adaptation and climate risk reduction have been accomplished.





Increased access to enhanced climate, loss and damage data for private and public sector application in all 28 coastal provinces of Viet Nam

ACTIVITY

PROGRESS 2017-2019

Update disaster database and establish risk data repository with mechanisms for sharing/ disseminating information	 Completed review of VNDMA's DRR and climate risk information system and recommended using it as a basis for developing the Viet Nam Disaster Monitoring System. 22 TOT trainings (201 people trained, including 79 women) conducted to provide guidelines for TOF training and CBDRA activities at the commune level. 252 TOF training and CBDRA sessions implemented at the commune level, benefitting 32,083 local people and authorities (48% women).
Policy support for planning/line ministry staff at the national and sub- national levels to apply disaster/loss information to inform climate resilient planning	 Meeting organized between representatives from key ministries to discuss mainstreaming climate change risk information into annual planning.
Community-based climate and disaster risk mapping and planning	 Community-based climate and disaster risk mapping and mitigation solutions prioritized in 252 (48%) communes across seven provinces.
Analysis of risk transfer mechanisms for insurance, including for cases of large-scale coastal climate related disaster (loss of more than 3% GDP)	 Study on innovative financing for disaster and climate change impacts in Viet Nam conducted with recommendations on developing the insurance sector.



Output 3 has achieved most of its major midterm targets with no major shortcomings. The project has achieved most activities required to mainstream disaster risk management in development planning.

ADAPTIVE MANAGEMENT



The project is being piloted in seven coastal provinces, which were selected based on criteria proposed by experts. The project's adaptive management was good because the project had a two-day pre-inception workshop followed by a half-day inception workshop at the central level. Regular monitoring of the activities was done by the commune-level authorities and also by provincial agencies. Issues observed at the sites were resolved on site by the joint monitoring team of stakeholders from both central and provincial levels. Issues that were not resolved by the joint monitoring team were discussed and resolved at the Project Board where all relevant government agencies, UNDP and provincial heads are represented.

KEY MIDTERM CHALLENGES

- Limited awareness of the connection between climate change and natural disasters among local communities.
- Limited knowledge of mainstreaming climate change and disaster risk reduction in development planning among local leaders.
- · Coastal protection measures are not informed by best practices.
- Inadequate climate risk information prevents effective adaptation planning and resource mobilization.

SUSTAINABLE DEVELOPMENT POTENTIAL





ECONOMIC BENEFITS

The project has contributed to improving how target communes take climate change information into account in their decision-making and development planning work. Through upgraded community-based disaster, climate risk, vulnerability mapping and planning processes, **252 communes** (**32,083 people**, including 4,464 from local governments) have been able to access up-to-date climate change information on their localities and have worked together to conduct analyses and plan for future climate-related impacts. The process also collates historic disaster damage and loss data to make this data more accessible to planners. This mainstreaming process has been identified as an entry point to reduce disaster losses and improve the quality of information for decision-making and the development of financial risk management products, such as insurance.



SOCIAL BENEFITS

The project has increased access to safe housing for high-risk, low-income households, reduced injury and loss of life due to extreme climate disasters, strengthened inclusive planning and enhanced community engagement to protect natural heritage. Improved community-based assessment and planning exercises employ techniques that specifically aim to increase two-way information flow between communes and provincial budget planners. These exercises include specific requirements to include representatives from vulnerable groups, including those with disabilities, minority groups, youth and the elderly. The training curricula were also adjusted to provide orientation to community members on the importance of mangroves as typhoon buffer zones and the wider benefits of maintaining and protecting natural coastal ecosystems. The CBDRA activities gave commune leaders the opportunity to work closely with community members, and developed their capacity to analyze hazard, vulnerability and community risks in the face of climate change and disasters to better support local people in building resilience.



The project has contributed to GHG reduction through the replanting/rehabilitation of **1,441 hectares** of coastal mangroves. The project has also contributed to the protection of biodiversity and realized environmental benefits through the use of environmentally friendly materials in homes, improved application of environmental safeguards and reduced costs to maintain sea dykes due to improved mangrove buffers. The GHG emissions reduction generated by the project during June 2018 – December 2019 was **34,414 tons** of CO₂ equivalent.



GENDER CONSIDERATIONS AND BENEFITS

ENVIRONMENTAL BENEFITS

The project design has recognized the specific vulnerability of women to the risks associated with disasters and climate change and prioritized vulnerable women with disrupted livelihoods. Participatory project activities contribute to empowering women and advancing their resilience to disasters and climate change by raising awareness of climate risks and mitigation solutions and enhancing their adaptive capacities. Collaboration with the Viet Nam Women's Union at the national and provincial levels continues to ensure effective monitoring and gender inclusion during project implementation.

- **60% (1,441)** of resilient houses are handed over to poor female-headed households
- **40% (400)** of local people employed in mangrove plantation/regeneration/ protection activities are women

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- 8% (31) female-headed households have received livelihood program support
 - 48% (15,541) of local trainees are women

Previously, before the mangroves had been planted, the dyke and lagoon would break when heavy storms came and the aquaculture farmers would lose their assets. Now, it is different. The mangrove forest is like a solid wall protecting the dyke and lagoon and bringing livelihood opportunities for the local people in this commune.

MR. NGUYEN DUC THUY AND HIS WIFE TRAN THI LAN

Nam Dien commune, Nghia Hung district, Nam Dinh province

UÊN IANH CT DRI HRI MONG VÀ TNHH MBNH THứ

BARRIERS TO ACHIEVING PROJECT OBJECTIVES	 Selected beneficiaries are occasionally unable to receive housing support for various reasons (lack of land for house construction, ineligibility for housing loans, etc.). Scarcity of legally approved sites with clear tenure and community support, combined with increases in local costs for regeneration, has led to challenges in final site verification for mangrove regeneration.
PROJECT SUSTAINABILITY	The Interim Evaluation found that project outputs are likely to be sustainable beyond the project duration:
FINANCIAL SUSTAINABILITY	Long-term financial sustainability of the project appears likely given its relevance to the interests of the local and national government. The Ministry of Agriculture and Rural Development and partner institutions are committed to continuing their support for project activities, and the state government intends to use project information in planning exercises to mitigate risks posed by climate change and natural disasters. The extension of the Green Growth Strategy to 2030 ensures that the housing component of the project will be replicated across Viet Nam. Further engagement of private sector support for livelihood activities and insurance will contribute to ensuring the project's sustainability.
SOCIO-ECONOMIC SUSTAINABILITY	Increased awareness at the community level and among local authorities indicates the social sustainability of the project. Project activities including technical training sessions, livelihood activities and resilient housing to safeguard people and property will have long-term impacts on the communities in which they have been implemented.
INSTITUTIONAL SUSTAINABILITY	Provincial and national government agencies are directly involved in project activities and committed to their successful implementation. The project involves relevant ministries, research institutions, local government and community groups in its various activities. Commune- and provincial-level institutions are strengthened by training designed to enhance knowledge and provide a basis for evidence-based planning. This training can be replicated in other provinces across Viet Nam.
ENVIRONMENTAL SUSTAINABILITY	The Interim Evaluation found that project achievements will directly reduce vulnerability of life, property and ecology in coastal regions of Viet Nam. At the midterm stage of the project, the construction of houses, plantation/regeneration of mangroves, capacity development of institutions, information management to encourage development planning and livelihood activities have demonstrated environmental benefits. Project activities are expected to have a positive impact in the future, as the mature mangroves reduce vulnerability to disasters and climate change, resilient houses protect lives and property from damage caused by natural disasters, and enhanced information supports evidence-based development planning and disaster preparedness.



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Having spacious homes and expensive household items is possible thanks to the mangroves. Previously, I did not think that mangroves could provide honey. But after only one trial crop, I found that the yield and quality of honey from the mangroves was very good. So, I decided to cultivate the bee population.

MR. DAO VAN THUC

Ninh Phu village, Da Loc commune, Hau Loc district, Thanh Hoa province



INNOVATIONS

The Interim Evaluation concluded that both the design of the resilient houses and the poor household selection criteria were innovative. Key activities in 2019 included a resilient housing design competition devised to stimulate innovative thinking on how low-cost storm-resilient housing can become more mainstream, especially in coastal areas. 30 designs have been selected as sources of reference for a new resilient housing programme being developed by the government.

The project also introduced organic shrimp and crab farming practices without the use of chemicals, and trained farmers in innovative aquaculture techniques. The awareness raising activities associated with the project have improved communities' understanding of climate change and its connection to natural disasters. Enhanced knowledge among local-level leaders has facilitated evidence-based development planning, helping to mainstream climate change and disaster information in development planning.

REPLICATION & SCALABILITY

The project builds on existing government programs and draws on previous experiences related to resilient housing and mangrove plantation implemented in partnership with UNDP and other organizations. The extension of the Green Growth Strategy to 2030 indicates that the Government of Viet Nam is impressed with the outcomes of the project activities carried out to date. Based on project experience, a nation-wide housing program is being developed to build resilient houses in 28 coastal provinces. The government has also expressed interest in replicating training programs that have increased climate change and disaster awareness among local people and authorities.

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I have experienced suffering from natural disasters many times. However, this is the first time in my life that I can join a commune discussion about climate change risk reduction. I am happy to share my experience of how to protect our lives and property.

MRS. HUYNH THI XAO - 87 YEARS OLD

Pho Van commune, Duc Pho district, Quang Ngai province



RECOMMENDATIONS	The Interim Evaluation recommends the following actions to strengthen areas of weakness and improve program implementation and monitoring:
RECOMMENDATIONS For output 1: RESILIENT HOUSING	 The design of stairs in new houses in some provinces needs to be improved to be more accessible to the elderly and persons with disabilities House design should include a toilet that is female-friendly
RECOMMENDATIONS For output 2: Mangroves & Liveli- Hoods	 Enrichment plantation should be conducted to fill gaps created by saplings that do not survive There should be flexibility to transfer budget from one province to another. Any savings should be used strategically, including application of innovative approaches for mangroves, housing design and construction and alternative livelihoods for households impacted by the project (e.g. organic shrimp value chain) Knowledge exchange visits should be organized to share experience Promote salinity-tolerant fruit trees and other crops that provide economic returns and protection against floods to address low economic returns from mangrove plantation and farmers' corresponding lack of interest in their maintenance
RECOMMENDATIONS For output 3: Enhanced Climate Information	 Initiate insurance activities to transfer risk as soon as possible Database at the local level should be compatible with the national database so it can be used by the central government for planning purposes
RECOMMENDATIONS For project Implementation and Adaptive management	 Improve monitoring at the local and provincial levels to ensure enrichment plantation is done properly Involvement of Women's Unions (WUs) at the commune level is encouraging, but weak at the provincial and central level. WUs should also be included in the monitoring activities of the project Poverty status of households changes over time due to different factors, hence regular monitoring and updating of poor households should be carried out
RECOMMENDATIONS FOR SUSTAINABILITY	 Private investors should be attracted so more livelihood activities can be implemented, thereby improving the welfare of poor households and strengthening their ability to adapt to climate change Training should be offered to district-level leaders to support evidence-based planning and help mainstream climate change and disaster information in development and socio-economic planning

The project is relevant to addressing the environmental threats Viet Nam is facing and is well-aligned with the Government's strategic plans and programmes, including the **National Green Growth Strategy** 2011-2020; the **Sustainable Development Strategy** 2012-2020; the **National Strategy on Climate Change** 2011-2020; and the **National Strategy on Environment Protection to 2020 with Vision to 2030**. Project objectives are also aligned with Viet Nam's SDG targets, and the project has already been noted as a good practice example in the Nationally Determined Contributions Review process.

The project complements regional and global initiatives to achieve global climate change targets under the Paris Agreement, and contributes to Viet Nam's implementation of the Sendai Framework for Disaster Risk Reduction. The project also supports Viet Nam's actions to enhance climate risk management through ASEAN's Humanitarian Assistance for Disaster Management and APEC's Emergency Preparedness Working Group.

The project is on track towards achieving its two complementary transformative effects focusing on:

- 1. Increasing community participation and strengthening synergies between ongoing government programs to increase their effectiveness and sustainability.
- 2. Increasing quality of and access to data that can support more accurate risk planning and contribute to a more conducive environment for risk transfer product development in Viet Nam.

Receiving support from the GCF-UNDP project and the Government to build a resilient house has made us very happy. Without the project, we would never dream of having a house like this.

MS. MAI THI NUNG

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Nga Tien commune, Nga Son district, Thanh Hoa province





of the targeted number of stormresilient houses have been completed, **60%** of which have been handed to poor female-headed households



36% OF THE MIDTERM TARGET

for mangrove plantation and regeneration has been achieved, generating work for **1,000** people, **40%** of whom are women



are protected from storm surges by **1,441 hectares** of regenerated coastal mangrove forests



>**32,000**

in **252 communes** have participated in CBDRA/CBDRM planning processes and have access to improved climate change information regarding disaster trends and climate projections















Brie Midte

SINCE 2017

have been implementing a project titled **"Improving** the Resilience of Vulnerable Coastal Communities to Climate Change Related Impacts in Viet Nam."



RESILIENCE, ADAPTATION AND TRANSFORMATION

The project is largely funded by the **Green Climate Fund** and co-financed by the **Government of Viet Nam** and **UNDP**, and is designed to enhance the resilience of coastal communities to climate change impacts in the country.



Evaluation The Interim carried out in December 2019 confirmed project relevance and alignment with Government strategies on combating climate change, and project outcomes are expected to be sustainable beyond the project duration. The evaluation has also concluded that the project has strong sustainable development potential in terms of **ECONOMIC**, SOCIAL **ENVIRONMENTAL** AND **BENEFITS** as well as GENDER considerations, and is on track to achieving its stated objectives.

AN INTEGRATED APPROACH TO BUILD RESILIENCE:



CONSTRUCTION OF

storm- and flood-resilient resilient houses



PLANTATION & REGENERATION OF

hectares of **mangroves** for coastal protection

1.9m anticipated tonnes of CO₂ equivalent avoided

ACCESS TO CLIMATE CHANGE & RESILIENCE INFORMATION AT ALL LEVELS 20,000 people 520 communes in 0 coastal

coastal provinces

f Summary of rm Achievements



December 2019 marked the midterm stage of this five-year project.

ACHIEVEMENTS BY 2019

Over 2,402 storm- and flood-resilient houses constructed

 $(\approx 60\%$ of the overall project target achieved $(\approx 60\%$ of these houses belong to poor female-headed households).

1,441 hectares of mangrove planted and regenerated,
protecting over 129,000 people and reducing 34,414 tons of CO₂ equivalent.
15 livelihood models introduced in 11 communes across 5 provinces,
benefiting over 400 households, including 31 female-headed households.

32,083 people in 252 communes (48% women) trained on climate change and resilience (including 48% women) in 252 communes.

These communes have improved awareness on **disaster** and **climate risks**. They have developed commune-level **disaster management plans** and **hazard maps** to further inform their **risk reduction** efforts.









THE PROJECT **"IMPROVING THE RESILIENCE OF** VULNERABLE COASTAL COMMUNITIES TO CLIMATE CHANGE RELATED IMPACTS IN VIET NAM" 2017-2022

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