

Youth and Climate Change

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Introduction

The survey focuses on young people's understandings of climate change, their involvement in adaptation and mitigation projects (including employment generating ones), the strategies they have chosen in adapting to climate change impacts and how these relate to their experience of vulnerability, including economic vulnerabilities. Three main issues are explored:

- Climate change in general and climate change impacts from youth perspectives.
- Youth participation in climate change response measures
- Youth adaptation to the impacts of climate change, with a focus on migration and roles of youth in supplementing the family income

Methodology

- Youth-led and peer-to-peer research
- Literature review
- Qualitative analysis using both semi-structured interviews and focus group discussions at local and national level. The target groups are youth aged from 15 to 28, national and local officers who are involved in climate change and natural disaster response activities in Vietnam. Total number of interviews are 33, plus 9 focus group discussions in both sites.
- The survey was conducted in two sites: an intervention site where there is a climate change adaptation project in which youth participate, and a non-intervention site (control site) nearby with similar socio-economic situations and climate change impacts. Details about the two sites are provided below.

Background information

Country Context

As a country often hit by hurricanes, Vietnam has a long tradition of disaster response, with the active participation of the government, NGOs and the communities. In recent years, especially since the end of 2008 when the National Target Program to Respond to Climate Change was launched, climate change has become a priority on the national agenda.

Youth participation in community activities, especially in rural areas, is usually organized and mobilized under the Youth Union, a mass socio-political organization in Vietnam. The Youth Union has millions of members across the country and its members are very active in many development activities, including disaster prevention and response. According to the Law for the Youth issued in 2005, Vietnam defines youth as those aged from 16 to 30 years old.



Site

Hau Loc District in Thanh Hoa Province is well-known for its vulnerability to natural disasters, in particular along its coast line. The two coastal communes chosen in this survey are Da Loc and Minh Loc, which experience typhoons, floods and droughts on annual basis.

Intervention Site – Da Loc Commune

Geographical position: North-Eastern tip of Hau Loc District,

Hamlets: Dong Hai, Dong Hoa, Dong Tan, Dong Thanh, Hung Thanh, My Dien, Ninh Phu, Van Thang, Yen Dong and Yen Loc.

Total area: 12.07 km²

Population: 7,694

Population density: 637 people /km²

Average annual income per capita (2009): ~ \$350

Poverty level: 23%

Main economic activities: Agricultural production and husbandry (48%), aquaculture and fisheries (20%), services & labour exports (13%), others sectors (19%)

Climate change related issues: Tropical cyclones, coastal erosion and salt intrusion, droughts and floods.

Climate change adaptation project: Community based mangrove plantation project, implemented by CARE Vietnam.
Youth roles in the project: Participate in the plantation and protection of mangroves, and in raising awareness about forest protection and environment issues.

Notable national policies specifically mentioning climate change:

- National Target Program to Respond to Climate Change
- National Strategy for Prevention, Reduction and Mitigation of Disasters of Vietnam to 2020.
- Action plan to respond to climate change in the natural resources and environment sector 2011-2015
- Action plan to respond to climate change in the agriculture and rural development sector 2011-2015
- Action plan to respond to climate change in the education and training sector 2011-2015

Non Intervention Site – Minh Loc Commune

Geographical position: Eastern part of Hau Loc District

Hamlets: Minh Hung, Minh Thang, Minh Hop, Minh Phu, Minh Thinh, Minh Tho, Minh Thanh, Minh Thành, Minh Duc and Minh Hai.

Total Area: 4.75 km²

Population: ~ 14,000

Population density: 2947 people/km²

Average annual income per capita (2009): ~ \$370

Poverty level: 18.1% (Vietnam poverty line is 20 USD/person/month)

Main economic activities: Agriculture production, fisheries and other sectors (small industries and business).

Climate change related issues: Tropical cyclones, droughts, floods & salt intrusion.

Key findings

1. Weather and climate change in the sites

□ The local climate has become more unpredictable compared to 5 - 10 years ago. People in both sites have noticed an increase in temperature and frequency of drought.

□ Water shortage and salt intrusion has become a major problem to both Da Loc and Minh Loc.

□ Typhoon season happens earlier with increasingly large typhoons in recent years.

□ The sea level has risen in the last few years.

“the local people... who participate in aquaculture here, they said that the tide is higher than in the past. They said that they usually banked their ponds at a height of around 1 metre. In the past water did not flow over the banks, but in recent years it has started to do so.” (NGO key informant in Da Loc)

...my grandparents tell me that now they do not know how to predict the weather anymore. Many years ago, my grandparents could tell, for example, in winter in which months it is going to be cold or in summer, when it's going to be hot, or hottest, or even they could predict when the rainy season comes. But now, my grandparents cannot tell anymore, that's what I heard from the adults... (Female Youth in Da Loc, 23 years old)

“The weather and climate in this community, compared with 5 years ago, have changed a lot. The weather is more irregular than before, drought happens much more frequently. There are times, in rainfall and stormy season, that storms come more often. The temperature seems to be higher.” (Youth Leader in Minh Loc)

1.1. Youth understanding of climate change in the sites

□ There are no clear gender differences in youth understandings of the term 'climate change' on both sites. The differences are clearer in term of their educational levels and ages. The older youths who have a higher level of education generally understand the term 'climate change' better than those who are younger and have a lower level of education. For the youth on the two sites, the term 'climate change' means:

Intervention site	Control site
<p><i>CARE project participants:</i></p> <ul style="list-style-type: none">□ The increase of the earth's temperature causing the ice in the poles to melt.□ The changes in the environment which cause changes in temperature and affect human life. <p><i>Non - participants:</i></p> <ul style="list-style-type: none">□ Natural disaster-related changes such as typhoons, droughts, floods and high tides.□ Unexpected changes in the weather which cannot be predicted.	<ul style="list-style-type: none">□ The changes in the surrounding environment such as amount of sunshine, rain, hot and cold periods.□ Irregular changes in the climate which do not follow any cycle.□ Unexpected weather changes□ Natural disaster changes□ Some said that they never heard the term before.

2. Impacts of climate change and extreme weather events in the sites

□ Unexpected weather changes and extreme events caused a lot of problems for the families of youth in both sites, especially for agricultural production and fisheries. Persistent impacts come from salt intrusion and drought in the recent years, which impacts on soil fertility and causes water shortages for both agricultural and household usage. This has resulted in the abandonment of cultivation lands and crop failures.

We used to have plenty of water for the spring crops three or four years ago. However, now it's difficult for us to pump the water. Now we can only pump the water for only 15 to 20 minutes, after that we have to turn off the water pump machine to check the salinity [to ensure that the water is fresh enough for the crops]... In the past we could leave the pump for two or three hours, or even for a day without worrying about the water salinity level (Community leader in Minh Loc)



□ Hurricanes and floods intensify existing problems (e.g. salt intrusions and lack of cultivation land) and result in long-lasting damage for agriculture (e.g. crop failures and abandon of cultivation lands) and livelihoods.

Since the storm went through my house and flooded the area here in 2005, sometimes when we grow crops, the productivity is not as good as in the past years. (A female youth in Da Loc – 23 years old).



This is a family house destroyed in typhoon Damrey in 2005 (image 2). With the support of the government and other organizations, this family was able to buy a new house (image 3) located just 50 meters further in land. The family has 4 children, one of whom died in typhoon while rearing the family's cattle in the field.

This field was once rice paddy field, located right behind the sea dyke that broke in 2005 during typhoon Damrey. The field since became saline and has yet to recover.

2.1. Youth perceptions about the local impacts of extreme weather events and climate change.

□ Youth on both sites realized that extended and extreme cold periods in winter, as well as prolonged droughts in summer are now the main factors in delaying the crop schedules and failures.

This year at the beginning of summer, we planted rice, but the crop failed due to extended drought. In the past, for example in our garden, when near Tet, the peanut usually starts to grow, and the rice seedlings are ready to be planted, sometimes we have them planted already. However now, with [cold] weather like this, we do not dare to grow peanut, and are wondering whether we should or not. And the rice seeds are not sowed yet, so we don't know after Tet how we will plant the seedlings, or even whether we can plant them at all. (A female youth in Da Loc – 23 years old).

□ Youth farmers and fisherfolk in both sites recognized that the impacts of climate and weather hardships have generated many economic difficulties for their families and themselves, leading in some cases, to youth dropping out of school and migrating to other places to work and support the family.

□ Weather induced impacts on agriculture also puts pressure on young people to contribute to the family income.

Because my parents are farmers they have no extra income. And I still have siblings who are at school ages. That's why I have to go to work to support my siblings' schooling and to help the family. I'm now working as a tailor and earning money is first priority. So while other workers only work 8 hours per day, I must work for 12 hours. (A female youth in Da Loc, 24 years old)

❑ Young people from both sites have different perceptions of weather and climate change risks. There are clear differences in perception in terms of age. The older ones (from 19 – 25) are often more aware of the risks and difficulties caused by weather changes and the case is clearer for those whose families are farmers or fisher folk. The high school students (from 15 – 18) are more concerned about their education.

❑ Most of them think climate change and extreme weather events have significant impacts, but consider it to be inevitable and are more concerned about their employment and education.

3. Response measures:

Typical response measures from the youth perspective include:

In the Intervention Site

- ❑ Planting and protecting mangroves to protect the sea dyke.
- ❑ Migrating to find jobs in other places.
- ❑ Saving electricity and water.
- ❑ Raising awareness for the people to protect the environment.
- ❑ Constructing and maintaining irrigation systems to prepare for droughts and floods.
- ❑ Shifting to more appropriate crops and changing crop schedules.
- ❑ Strengthening the house and moving properties to places safe from typhoons.
- ❑ Storing food for the livestock.
- ❑ Being aware of weather conditions and information updates in times of disasters (typhoon) through weather forecasts.
- ❑ Listening to the local radio programs to update information about agricultural activities and about extreme weather conditions to facilitate preparation.

In the Control Site

- ❑ Migrating to other places to find jobs.
- ❑ Migrating further inland to avoid typhoon damage.
- ❑ Desalinating the soil to improve soil fertility.
- ❑ Vaccinating the livestock to help prevent diseases.
- ❑ Following weather forecasts regularly to update information.
- ❑ Shifting to more appropriate crops and changing crop schedule.
- ❑ Strengthening the dyke and maintaining irrigation system to cope with droughts and floods.

❑ Migration to other places as a result of socio-economic and weather-induced difficulties are now widely adopted as a common response strategy for young people, both to earn money and to obtain skills.

❑ Local people, both youth and adults, also go abroad under labour export programs. Due to the high initial costs, only those who accept the risks have access to loans or have adequate family savings can afford to go.

“There are about 500-700 young people from Minh Loc go to other places to look for jobs annually. They usually work for companies and factories. They serve as workers and even go to work abroad”...

...today 70% of the youth who have finished high school go to other places to find jobs. In the past, most were men but now there are also a lot of women as well...

...They mainly go to Binh Duong, Ho Chi Minh City, Dong Nai, Vung Tau...not many of them go to the north.” (Key informant in Minh Loc)

❑ Young people in both sites are aware about the risks associated with migration such as housing problems and exploitation in the workplace (e.g. working over-time and poor working conditions).

Normally, the working day is 8 hours long, but many of them have to work extra time, and the payment is still insecure. (A young male in Da Loc, 25 years old).

There are few people that can get a contracted job. Also, few people receive salary on a stable basis. Roughly only 20% of the youth have an employment contract, the rest work in the informal sector. (A young male in Da Loc, 24 years old).

As a result, after graduating from secondary school, some have to work far away. The jobs they usually take are mostly working in small food shops or restaurants, or working as a guard etc. There are many of them. (A young male in Da Loc, 19 years old)

People in my community often want agricultural programs on TV where they teach people about how to take care of livestock, for example, how to keep them warm in winter. People here watch TV to learn and adopt the methods (A Young female in Minh Loc, 24 years old)

❑ Many are aware about the high weather-related risks associated with fishing in the sea. In recent years, more young fishermen choose to migrate or have other professions.

Many young people here become discouraged because the storms have killed many of them, so the young men are worried about being a fisherman. They are afraid of storms and strong winds. Many of the men tend to get married sooner too and then go to work in the cities. (A fisherman in Minh Loc, 24 years old)

❑ For the families who stay in both sites, the typical responses are to shift to different types of crops which are more appropriate to the local conditions such as changing from rice to sweet corn, or changing from rice planting to raising livestock (e.g. pig and poultry) and aquaculture (e.g. shrimp and oyster farming). The adaptation measures, however, are also facing both new and old problems such as animal diseases and water shortages.

...Our commune had to convert 30 ha of land into husbandry patterns because of salinization problems. If we don't change, the land will be left uncultivated... (Community leader in Minh Loc).

And in terms of drought recently, we also have some solutions such as turning rice fields into ponds for raising shrimp, crab and fish. Some saline fields in which rice can't be transplanted are turned into such ponds or can be planted with other kinds of crops that are suitable to salty environments. (Female Youth in Da Loc, 28 years old)

Sweet corn and pig rearing are now



adopted in both sites as response measures to the difficulties caused by weather changes.

❑ After the situation in 2005, government financial support for the strengthening the sea dyke and road systems has also led to improved conditions in both sites, especially for Da Loc.

❑ In coping with natural disasters such as typhoons and floods, the local communities are well aware of the situation and are prepared. Notable measures are to migrate further in land, to store food, fuel and water in typhoon season.

❑ Television is one of the most common sources of information for young people and local people, related to climate change and adaptation measures in agriculture in both sites.

“I have heard about climate change through watching TV. I know that the earth is getting warmer, and the ice is melting and causing difficulties for humans” (A young male, 24 years old, sharing in the focus group discussion in Da Loc)

❑ Youth participation in community measures (e.g. mangrove planting, protecting and maintaining dyke and irrigation system) to cope with extreme weather events such as typhoons, droughts and floods are considered crucial by the local authority and the community in the intervention site.

... We now realise that young people are an irreplaceable partner because they are very active and have a better knowledge foundation compare to other groups. So when they do a task the results are always higher. They have enthusiasm and active manners. (NGO key informant in Da Loc)

Because I am the one who directly leads the community in disaster response and mitigation I notice that the youth are very active in such actions and they bring great impact (Community Leader in Da Loc)

❑ Youth participation in the control site is not recognized as vital due to the fact that the majority of young people here have migrated to work in other places.

The role of the youth is currently nominal and negligible compare to the youth in the 1980's and earlier period. The young people in my time were much more active in participating in community movements and activities. (Community leader in Minh Loc)



Young people in Da Loc participating in mangrove planting. (Photo provided by CARE staff in Thanh Hoa)

❑ Youth engagement in communities' decision-making is ensured by the Youth Union.

Annually, at the end of the year when we make community development plans, all the sectors and socio-political organizations, including Youth Union, are engaging in the making of such plans (Community leader in Minh Loc)

...we engaged the youth from the executive board of Youth Union at village level. The voices of the Youth Union are very effective... (Community leader in Da Loc)

Conclusions

Young people and other locals are well aware about the changes in the local climate and weather patterns in recent years and their impacts on livelihoods. Notable changes include intensifying salt intrusions, prolonged drought, typhoons and rising sea levels. Their concern, however, is not for future climate change but rather for the existing impacts of changing weather patterns on their livelihoods.

The hypothesis laid out in the proposal consider that the linkages between young people's vulnerabilities, perceptions and responses to climate change and economic crises are to do with:

Their employment:

- Being forced to seeking employment in informal sectors with poor working conditions and low paid
- Having to migrate to seek jobs, thus increasing their vulnerability.

Social well-being and citizenship:

- The consequences of migration on young people's social capital
- Youth involvement in adaptation and mitigation policy.

Education and health effects:

- Reduced participation of young people in education due to the increasing burden of schooling costs, and the need for youth contribution in families income.
- Increased malnutrition amongst adolescents, increased level of reported stress and increased exposure to water-borne and vector-borne diseases

There is evidence supporting part of the hypothesis as mentioned above about the relation between the impacts of changing weather patterns and the situation as follows:

In terms of youth employment:

❑ Migration is considered to be a common strategy for dealing with socio-economic difficulties and unemployment at both sites. The impacts of extreme weather events on the agriculture and fishery sector, especially in causing crop failures and loss of cultivation lands, are some of the main reasons for migration to other places to find jobs. Other reasons for migration included low income status and unstable conditions of farming & fishing jobs.

❑ Young migrants from the two communes face specific problems. Many of them have to seek jobs in the informal sector as a result of their lack of qualifications and experience. Those who have higher education levels (university or college graduated) often have a better chance of finding a stable job.

In terms of their social wellbeing and citizenship:

❑ Youth active participation in response measures to extreme weather events is recognized by the local community in the intervention site as very important. The accepted roles for young people are for organizing awareness-raising campaigns and for participating in community efforts to prevent and mitigate natural disasters.

❑ Existing mechanisms for youth participation in community decision-making processes are managed by the Youth Union.

In terms of youth education and health effects:

❑ young people in both sites whose families are facing difficulties in paying for their education, as a result of weather-induced threats to their livelihoods (most notably in the agricultural sectors), tend to drop out of school to migrate and look for jobs.

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For further information

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