The report targets two groups of readers: Vietnamese people and regional and international civil society organizations, with the hope that this will serve as a powerful voice calling for urgent actions to protect the environment.





OVERVIEW

9

## AN OVERVIEW

# OF THE MARINE LIFE DISASTER IN VIETNAM

# AN OVERVIEW OF THE MARINE LIFE DISASTER IN VIETNAM

**GREEN TREES** 

"Man has the fundamental right to freedom, equality and adequate conditions of life, in an environment of a quality that permits a life of dignity and well-being, and he bears a solemn responsibility to protect and improve the environment for present and future generations" (Principle 1 in the Stockholm Declaration on the Human Environment, 1972)

"Human beings are at the centre of concerns for sustainable development.

They are entitled to a healthy and productive life in harmony with nature."

(Principle 1, Rio d' Janeiro Declaration on Environment and Development, 1992)

With these understandings in mind, Green Trees publishes the report "An Overview of the Marine Life Disaster in Vietnam". This report provides the readers with a comprehensive overview of the disaster which has caused massive fish deaths and marine death in the Central region of Vietnam in 2016 and whose impacts may last for tens of years to come. The report targets two groups of readers: Vietnamese people and regional and international civil society organizations, with the hope that this will serve as a powerful voice calling for urgent actions to protect the environment.

This report is made in three versions: Vietnamese, English and Chinese (Taiwanese dialect)...

#### **GREEN TREES**

Green Trees is a non-profit, independent from the state, civil society organization in Vietnam, specializing in environmental protection. In its early days, Green Trees started as a facebook group called Vi Mot Ha Noi Xanh (For a Green Hanoi), founded on 30 March 2015 in a movement to protect trees in Hanoi from being felled massively in the project of "overhauling and replacing 6,700 urban trees" implemented by the city authorities.

Although **Green Trees'** mission is to protect the environment, during our work we came to realize that Vietnamese people's right to live in a clean environment is strongly intertwined with other basic human rights such as: the right to free expression, the right to peaceful assembly, the right to participate in politics and public governance; as well as state's responsibilities such as transparency and accountability.

Therefore, in addition to environmental protection, **Green Trees** also strives to promote the state's transparency and accountability, and we do this through exercising basic human rights. Since our inception (March 2015), we have organized many peaceful demonstrations to call for environmental protection and transparency. Moreover, **Green Trees** also carries out a long-term legal struggle, pushing for appropriate punishment for individuals and government agencies that violate the law.

#### CORE MEMBERS (\*)

Le Kien Cuong **Nguyen Manh Cuong** Vu Quoc Cuong Vu Chi Dung **Nguyen Trung Dung** Ta Ngoc Duy Nguven Dinh Ha Trinh Dinh Ha Nguven Thi Hoan An Duy Hoang Dao Thi Huong Dao Trang Loan Dang Vu Luong Trieu Hong Minh Luu Van Minh Tran Quang Nam Nguyen Thi Kim Quy Le Thuy Tien Trinh Hoang Thanh **Hoang Thanh** Dinh Phuong Thao Nguyen Truong Thinh Cao Vinh Thinh Bui Van Thuan Le Thu Thuy Pham Doan Trang Nguyen Anh Tuan Nguyen Anh Tuan Trinh Anh Tuan

musician BA in banking law student BA in Economics iurist artist jurist teacher accountant BA in IT BA in finance pharmacist IT engineer law student salesperson salesperson university lecturer pharmacist BA in IT performing artist doctor artist BA in journalism teacher MA in environment iournalist pharmacist architech

BA in IT

<sup>\*</sup> In alphabetical order by first name.

This report is a collection of articles written by **Green Trees** and those that have been published in the Vietnam mass media regarding the marine death - fish death disaster caused by **Formosa steel corporation** (**Taiwan**), with initial consequences first surfacing since April 2016 in Vung Ang. By "mass media", we mean both mainstream press and social media.

Articles included in this report come from four types of sources: 1. Articles written by Green Trees; 2. Articles published on Vietnamese mainstream press such as VietNamNet, Tien Phong, VnExpress, etc.; 3. Articles written by Vietnamese bloggers and facebookers, many of whom are lawyers, social activists, famous writers, etc; 4. Articles published by international press.

Green Trees would like to express our gratitude to Vietnamese and international reporters and journalists who have collected information for press reports and TV reports on the marine catastrophe in the Central region despite paramount danger and difficulties. We also want to thank the popular bloggers and facebookers, many of whom are lawyers, journalists, architects and artists. They have tirelessly attracted attention to this catastrophe by means of reports, images, information and materials. Some we could name are Trung Bao, Nguyen Tieu Quoc Dat (a.k.a. Tie Suc), Le Cong Dinh, Bach Hoan, Duong Minh Phong (a.k.a. Cu Lang Cat), Le The Thang, and many others.

We appreciate the support from civil society organizations, registered and unregistered alike, including Change, Live&Learn, No-U Hanoi, No-U Saigon, Vietnam Path Movement, VOICE Vietnam, etc. who were engaged in humanitarian aid, raised their voice in advocacy of human rights, shared knowledge and supported us in making this report.

We are especially grateful to these activists: Pham Le Vuong Cac, Hoang Van Binh, Le Xuan Dieu, Nguyen Nu Phuong Dung, Hoang Dung, Nguyen Van Hoa, Vu Huy Hoang, Hoang Minh Hong, Bui Tien Hung, Trinh Huu Long, Ma Vi Luc, Tran Thu Nguyet, Bach Hong Quyen, Lau Nhat Phong (A Lau), Chu Manh Son, Le Van Son, Truong Minh Tam, Mai Phuong Thao, Nguyen Lan Thang, Tran Quang Trung (Ly Quang Son), Nguyen Anh Tuan, Nguyen Chi Tuyen, and many others. They have been among the first to arrive at the Central coast, provide aid to fishermen and publicize images and information about the disaster, or/and have seen raised their courageous voice to protect the people, the public interests and the right to live in a clean environment that belongs to all of us.

We are not able to thank everyone in these few lines; **Green Trees** would like to express our most sincere and deepest gratitude to all of you.

#### GREEN TREES – FOR A GREEN VIETNAM

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#### INTRODUCTION

Vietnam is endowed with tremendous marine riches: a coastal line that runs for more than 3260km, all the way from the North to the South, with an exclusive economic zone covering more than 1 million km2. Annually, Vietnam alone harvests over 2 million tons of seafood out of the 90 million tons worldwide. The Vietnamese sea also possesses a unique ecosystem and is considered one of the 16 biodiversity centers of the world. <sup>1</sup>

With these characteristics and in the context of the 21st century which is viewed by countries in the Asia-Pacific region as "the century of the ocean", in early 2007, the Vietnam Communist Party (VCP) - the only ruling party in Vietnam - passed a resolution titled "On the strategies for Vietnam sea until 2020". This resolution emphasizes on developing the country to become "a nation strong in the sea, enriched from the sea", aiming to make the most use of marine potentials, and before 2020, revenues from the sea and coastal region should contribute 50-53% of gross domestic products.

The strategy had yet to come into effect when it seemed to stimulate maritime sovereignty disputes between Vietnam and other countries in the

<sup>&</sup>lt;sup>1</sup> Institute of Marine Resources and Environment, "An inquiry into and assessment of the marine life resources in Vietnam"", 2011: <a href="http://www.vast.ac.vn/khoa-hoc-va-phat-trien/dieutra-co-ban/1110-dieu-tra-danh-gia-nguon-loi-sinh-vat-bien-viet-nam-2">http://www.vast.ac.vn/khoa-hoc-va-phat-trien/dieutra-co-ban/1110-dieu-tra-danh-gia-nguon-loi-sinh-vat-bien-viet-nam-2</a>

region, especially China, and arouse tension in the Sino-Vietnam relationship.

**In late 2007,** China established the Sansha administrative division to administer the Spratly Islands and the Paracel Islands. This event led to some protests in Vietnam, which had not happened since the Communist Party seized ruling power in the whole country in 1975. Protests originated from appeals stirring among bloggers on the Yahoo! 360° social network and they were violently suppressed. From there, a confrontation between the authorities and pro-democracy bloggers started.

In November 2008, information about a mega-project exploiting bauxite in the Central Highland by Chinese investors spread widely on both mainstream press and the Internet. Some people raised their voices to oppose this project, which devastated the environment, threatened national security and defense, and hardly brought economic benefits

In May 2011, a Chinese marine surveillance vessel cut the cable of Binh Minh 2, a vessel belonging to the state-owned oil and gas corporation Petro Vietnam. This incident happened within Vietnam's exclusive economic zone. A number of protests broke out and were suppressed. However, from then on, for the first time, protesters joined hands to form civil society organizations (CSOs) independent from the state, working to promote democracy and human rights in Vietnam.

**In May 2014,** China employs a giant oil rig, Haiyang Shiyou 981, in the Southeast Asia Sea, in the water near the Paracel Islands. For the first time, independent CSOs came together and called for demonstrations. Protests broke out, yet unfortunately, a riot took place

in the Binh Duong industrial zone and the Vung Ang economic zone in Ha Tinh.

All of the events described above are major events with deep impacts on the society and the movement to struggle for democracy in Vietnam. However, the event with the strongest and longest impact, up to now, perhaps is the marine death - fish death catastrophe in the Central region of Vietnam, starting from the Vung Ang sea in April 2016.

#### **OVERVIEW**

The first sign of the catastrophe was massive fish deaths in Vung Ang, and then it spread to Quang Binh, Quang Tri, Thua Thien-Hue, and other regions. Fishermen in Ha Tinh discovered a giant waste discharge pipe buried undersea, connecting directly to the Formosa project area in the Vung Ang economic zone. News surfaced about mass food poisoning cases after eating seafood. Worst of all, a fisherman died of intoxication after sea diving.

Governments at different levels, in the mean time, reacted slowly and inconsistently. They showed signs of withholding information, and their statements aimed to cover up and defend the trouble-maker, even though all fingers seem to point to Formosa.

Boiled with anger, on Sundays in the first half of May and June, citizens in Ha Noi, Ho Chi Minh City, Hai Phong, Da Nang, Nha Trang and Vung Tau protested on the street to demand that the government publicizes the causes of fish death. The authorities continued to handle the crisis in an oppressive manner as they ordered the police, civil security staffs and other forces whose functions were ambiguous to openly suppress and extinguish

the protests. This reaction only deepened conflict, or at least widened the distance between the government and the people.

By the end of June, the Formosa (Taiwan) steel corporation was identified as the culprit causing this once-in-a-century environmental catastrophe, as they themselves admitted in a public press conference in the afternoon of 30 June 2016. The Vietnamese government, however, accepted reparation worth USD \$500 million. The whole negotiation process between Formosa and the Vietnamese government took place in complete secrecy, with neither participation nor monitoring from any judicial authorities or an independent third party.

USD \$500 million is an outrageously low amount. If this reparation is divided to the population, each household in the Central region should receive USD \$131 to compensate for the consequences of the catastrophe. Meanwhile, marine resources have been severely damaged and this amount is no use in rehabilitating the marine ecosystem in the tens of years, or even a century to come.

Lastly, this event became a true crisis. It reveals how the current Vietnam political system has come to a deadlock regarding the management and handling of environmental disasters, as well as the protection of the Vietnamese people's rights and interests.

#### STRUCTURE OF THE REPORT

This report, titled "An Overview of the Marine Life Disaster in Vietnam" primarily aims to provide information so the reader will gain an overview of the incident, from developments recounted in a timeline, to the

impacts and consequences it has left on Vietnam's environment, economy and society, to other serious issues analyzed from legal and political perspectives. The report hopes to change and/or improve Vietnamese citizens' awareness regarding environmental protection as well as the role civil society plays in ensuring sustainable development.

This report has an English and a Taiwanese version so that international readers, especially international non-governmental organizations (NGOs) and the civil society sector in Taiwan can gain a better understanding of the environmental catastrophe and its regional impacts. As a result, they may be better equipped to provide appropriate assistance for the Vietnamese people.

**Chapter I** of the report offers analysis of a legal framework which is relevant international laws on human rights and environment. This chapter serves as the theoretical basis for the report.

Chapter II described the event in a timeline on these aspects: developments and a summary of reactions, viewpoints and actions of different stakeholders. This part is further elaborated in Chapter IV and Chapter V.

**Chapter III** is a brief history of Formosa - a steel production corporation notorious for causing environmental pollution.

**Chapter IV** provides a number of commentaries and assessments from Green Trees - in its role as an independent CSO - about the role played by the Vietnamese government and their incompetence in crisis management, which serves as an example of the overall governance capability of the regime.

**Chapter V** discusses the role of civil society, focusing on non-registered organizations that are not recognized by the State, in a struggle with Formosa to protect the Vietnam marine environment.

**Chapter VI** is an evaluation of Formosa as seen from international media, mostly Western press.

**Chapter VII** revolves around the impacts and consequences this marine disaster in the Central region in 2016 has inflicted upon the local communities, Vietnam's as well as the region's socio-economic conditions.

The last part of the report, **Chapter VIII**, provides several conclusions and general recommendations.

#### LIST OF ABBREVIATIONS

**ASEAN** Association of Southeast Asian Countries **CSO** civil society organization foreign direct investment FDI Hung Nghiep Formosa Ha Tinh Steel Co., Ltd. FHS Ministry of Agriculture and Rural Development MARD MIC Ministry of Information and Communications MOIT Ministry of Industry and Trade **MONRE** Ministry of Natural Resources and Environment MOST Ministry of Science and Technology Ministry of Planning and Investment MPI NGO non-governmental organization state-owned enterprises SOE **VCP** Vietnam Communist Party

#### CHAPTER I: LEGAL FRAMWORK AND RESEARCH METHODS

#### LEGAL FRAMEWORK

Pollution of marine environment is a very serious problem that goes beyond a nation's control. A close cooperation among nations is required in dealing with the issues relating to marine environment as well as building up a common international legal framework to regulate the protection of marine environment. Based on the United Nations Convention on the Law of the Sea - UNCLOS (to which Vietnam is a signatory), this report focuses on the requirements to protect and preserve marine environment and exercises the rights, responsibilities, and liabilities of the states as follows:

- States are responsible for the fulfillment of their international obligations concerning the protection and preservation of the marine environment. They shall be liable in accordance with international law. (Paragraph 1, Article 235).
- States shall determine the sources of pollution, take measures to prevent and control them. They shall act so as not to transfer damages or

hazards from one area to another or transform one type of pollution into another. (Article 195).

- States shall take all measures necessary to prevent pollution of marine environment resulting from the use of technologies under their jurisdiction or control, or the intentional or accidental introduction of species, alien or new, to a particular part of the marine environment, which may cause significant and harmful changes thereto. This includes the impact or measures for protection of valuable and rare ecosystem and habitat for other marine creatures. (Article 194).
- States shall work out contingency plans against pollution for responding to pollution incidents in the marine environment which is under their jurisdiction. (Article 199).
- Laws, regulations and other measures adopted by the states shall at least have the same effect as that of generally accepted international rules and standards established through the competent international organization or general diplomatic conference. They shall ensure that recourse is available in accordance with their legal systems for prompt and adequate compensation or other relief in respect of damage caused by pollution of marine environment by natural or juridical persons under their jurisdiction. (Article 235).
- States, in accordance with their capabilities, and the competent international organizations shall cooperate, to the extent possible, in eliminating the effects of pollution and preventing or minimizing the damage. (Article 199).
- States shall cooperate, directly or through competent international organizations, for the purpose of promoting studies, undertaking programs

of scientific research and encouraging the exchange of information and data acquired about pollution of marine environment in general and marine pollution in particular. (Article 200).

Safe environment and promotion of human rights, in fact, are closely integrated goals that help each other to make up core elements for sustainable development of any nation. The reciprocity of these goals is reflected in various aspects:

- Ecosystems and their products such as food, water, control of epidemic diseases, climate condition, and perfect spirit, are the prerequisites for us to enjoy full human rights, including the right to live, to be guarantee for health, and to have food.
- Attempts at fostering sustainable environment would be effective only if they were put in an effective legal framework and actively supported with a number of human rights such as the right to information, right to participation of the public in decision making, construction and access to justice. <sup>2</sup>

In Vietnam, the right to live in healthy environment has been specified in Article 43 of the 2013 Constitution as follows: "Everyone has the right to live in fresh environment and has the duty to protect the environment."

In addition, in the field of environmental laws, the latest development was that Vietnam signed the Paris Agreement which is the largest international agreement ever on environmental protection on this year's Earth Day, April 22, at the UN headquarters in New York. Consequently, member countries shall implement national policies to reduce emissions from the power plants, and step-by-step change to renewable and green

<sup>&</sup>lt;sup>2</sup> Hoang Thao Anh, "Factsheet on Human Rights and the Environment (UNEP)", Luat Khoa Tap Chi: http://luatkhoa.org/2016/06/nhan-quyen-dan-chu-moi-truong-ky-1-ca-va-nuoc/

energy. One month later, on May 22, Vietnam issued a joint communiqué with the US government, promising to ratify the Agreement in late 2016.

Doan Nha An, the writer of an article introducing the Paris Agreement on Luat Khoa Tap Chi (Jurisprudence Journal, <a href="www.luatkhoa.org">www.luatkhoa.org</a>) on August 25, 2016, considered it "a hope for environmental activists in speeding up and completing environmental laws in Vietnam in accordance with international standards, thence coping with the consequences of environmental damage in Vietnam will also be enhanced."

"Particularly foreign companies and groups shall not only be sanctioned by Vietnam's laws but also must be responsible under the provisions of international laws such as the Paris Agreement if they are applicable, for any environmental disaster they may bring. And the protection of environment for future generations in Vietnam shall have more positive solutions in the near future." <sup>3</sup>

#### RESEARCH METHODS

In this report, there are two main research methods used, "Literature Review" and "Field Assessment.".

#### Literature Review

Literature Review is a process of searching for and analyzing information (data, concepts, doctrines, theories, results, conclusions) which

<sup>&</sup>lt;sup>3</sup> Doan Nha An, "Paris Agreement on environmental protection: a new mechanism to protect the environment in Vietnam", Luat Khoa Tap Chi <a href="http://luatkhoa.org/2016/08/hiep-uoc-paris-ye-moi-truong-co-che-moi-de-bao-ve-moi-truong-tai-viet-nam/">http://luatkhoa.org/2016/08/hiep-uoc-paris-ye-moi-truong-co-che-moi-de-bao-ve-moi-truong-tai-viet-nam/</a>

was made concerning the subject to be researched, in an attempt to provide an overview which was referred to by previous researches, and above all, revealing the starting point of the tasks to be performed.

The following jobs have been done:

- to find and search for reports on the environmental disasters by ISDR, IPCC, and UNEP to specify the definitions, concepts and their presentation;
- to find articles, both local and overseas with regard to the subject;
- to summarize, categorize, and rearrange the above documents chronologically to build up a general overview of the disaster;
- to analyze the posts on facebook pages such as "Green Trees", "Con Đường Việt Nam" (Vietnam Path Movement), "Cứu Biển Cứu Dân" (Save the Sea, Save the People), group pages "Vì Một Hà Nội Xanh" (For a Green Hanoi), "Diễn đàn Nhà báo trẻ" (Young Journalists Forum), "Chống Thực phẩm Bẩn" (Fighting Dirty Foods), the online writings by famous facebookers and bloggers, in order to bring about a variety of views about the disaster.

The research team has conducted recorded interviews with some leading scientists in the field of environment in Vietnam to obtain extensive professional expertise to evaluate correctness of the existing scientific articles and reports, consequently setting a limit and the gaps to fill for the overview of the disaster in Central Vietnam.

#### Field Assessment

In July and August of 2016, the research team has conducted a survey in the provinces of Nghe An, Ha Tinh, Quang Binh, Quang Tri, and Thua

Thien - Hue, which were directly affected by the disaster. The following jobs have been performed:

- to collect sea water and sea food samples for tests for toxic pollution;
- to hold direct interviews, make videos of fishermen of different ages to find out difficult situations they are facing with;
- to examine and assess the policies and measures introduced by the government, and aiding activities of civil societies against the disaster to see if they are effective or not;
- to determine the direct and indirect causes of the impact;
- to collect and select data and information, analyze and assess the impacts of the disaster on the environment and society;
- to collect opinions reflecting people's views and aspirations in order to put forward policy recommendations.

### CHAPTER II IN A TIMELINE

#### **APRIL**, 2016

#### - April 4 -

Fisherman Nguyen Xuan Thanh (36 years old, resident of Ba Dong hamlet, Ky Phuong commune, Ky Anh district, Ha Tinh) dived into the sea and unexpectedly discovered a giant waste discharge pipe. This pipe has a diameter of about 1m. It was discharging a yellow liquid.

The pipe was identified as a submerged pipe belonging to the Formosa corporation, 1.5km in length, buried under seabed. Formosa confirmed that they have an underground sewage system connecting directly from the Formosa project site in the Vung Ang economic zone to the sea.

#### "Already discovered it three years ago"

Mr. Nguyen Trung Huynh (born in 1968, resident of Ky Anh commune) has worked as a sea diver for tens of years. He said three years ago, around 2013, he discovered a pipe buried under the seabed. åAt the time I was working for Belgium. The people here said the pipe must be from Belgium, but when I checked, I told them it wasn't, this pipe belonged to Formosa. I notified the environmental police.

The police, the marine police and the environmental police hired me to dive and reached that area. I did so, took some video footage and photographs and submitted everything to them. They said, 'We will investigate this issue.' Then we didn't hear from them for years, the local people continued to fish as usual. In April 2016, we discovered that they discharged waste liquid".

(Mr. Nguyen Trung Huynh discussed with Green Trees, on 19 August 2016.)



Vietnam Administrative Map



Area where dead fish appeared from early April 2016. (Source:Zing)

#### - April 6 -

Residents in the two hamlets, Hai Phong 1 and 2 (Ky Loi commune, Ky Anh district, Ha Tinh) lost over two tons of groupers and red snappers when they were almost ready for harvest. 4

According to Nguyen Thai Bao (resident of Tay Ha hamlet, Ky Ha commune, Ky Anh district, Ha Tinh), until the noon of April 6, more than 4,000 red snappers and sea basses - which were over a month old and raised in cages - still ate and moved around as usual. However, around 2

<sup>&</sup>lt;sup>4</sup> Ngo Tuan, "People in distress due to mass fish deaths for unclear reason", Ha Tinh newspaper, April 8, 2016: <a href="http://baohatinh.vn/kinh-te/dan-dieu-dung-vi-ca-chet-hang-loat-khong-ro-nguyen-nhan/111907.htm">http://baohatinh.vn/kinh-te/dan-dieu-dung-vi-ca-chet-hang-loat-khong-ro-nguyen-nhan/111907.htm</a>

p.m. of April 7, when the tide rose and pushed sea water in, the fish swam slowly and then died en mass. <sup>5</sup>

Not only farmed fish, but wild (free swimming) fish also died. "Around 9 a.m. on April 6, Mr. Chu Van Dai - a diver working in the area undersea where Formosa Steel Plant discharged waste in Vung Ang (Ha Tinh) - discovered many dead fish surrounding the pipe's opening. Mr. Dai felt a bitter sensation in his mouth, exhaustion and toxin in the water. The whole team of 15 divers felt that seawater tasted different and toxic. Their bodies felt ill so they asked to be off work. A few days later, the local people saw many dead fish drifted to the seaside of different types, some lived in deepwater." <sup>6</sup>

#### - April 6-8 -

During these three days, in the three communes Ky Loi, Ky Ha, Ky Ninh (Ky Anh town), all of the fish belonging to 14 households raising fish in cage, with 18 cages containing different types of fish (red snapper, cobia, grouper, sea bass, etc.) died en mass. Among these were 37,200 breeders, 2,120 kg commercial fish. The damage was over 1 billion Vietnamese dong, approximately USD \$45,000.

<sup>&</sup>lt;sup>5</sup>http://baohatinh.vn/kinh-te/dan-dieu-dung-vi-ca-chet-hang-loat-khong-ro-nguyen-nhan/111907.htm

<sup>&</sup>lt;sup>6</sup> Lam Chi Cong - Quang Dai, "Fish death catastrophe along the Central coast: A journey of 85 days to search for the cause and perpetrator", Lao Dong (The Laborer), June 30, 2016: <a href="http://laodong.com.vn/thoi-su-xa-hoi/tham-hoa-ca-chet-ven-bien-mien-trung-hanh-trinh-85-ngay-tim-nguyen-nhan-va-thu-pham-567878.bld">http://laodong.com.vn/thoi-su-xa-hoi/tham-hoa-ca-chet-ven-bien-mien-trung-hanh-trinh-85-ngay-tim-nguyen-nhan-va-thu-pham-567878.bld</a>

Wild fish also died en mass in Vung Ang sea (around Son Duong island, Vung Ang port and Vinh river's estuary). 7



Ha Tinh's location on Vietnam's map

#### - April 10 -

Dead fish drifted into the coast along Quang Dong commune, Quang Trach district, Quang Binh. Dead fish continued to spread southward, to seaside along Nhan Trach, Nhat Le, Bao Ninh, Ngu Thuy, etc. 8

#### - April 11 -

The Northern Environmental Monitoring and Aquatic Diseases Center (Aquaculture Research Institute 1 - MARD) published an announcement about the results of their unscheduled monitoring after the abnormal fish deaths took place in Ky Anh, Ha Tinh.

The announcement concluded that virus causing disease was not the

<sup>&</sup>lt;sup>7</sup> Tuan Nghia, "Fish died en mass in Vung Ang sea due to water pollution", Ha Tinh newspaper, April 13, 2016: <a href="http://baohatinh.vn/nong-nghiep/ca-chet-hang-loat-o-bien-vung-ang-do-o-nhiem-nguon-nuoc/112165.htm">http://baohatinh.vn/nong-nghiep/ca-chet-hang-loat-o-bien-vung-ang-do-o-nhiem-nguon-nuoc/112165.htm</a>

<sup>&</sup>lt;sup>8</sup> S. Lam - M. Huyen, "Collecting dead fish along the coast, preventing pollution", Cong an Nhan dan (The People's Police) newspaper: <a href="http://cand.com.vn/Xa-hoi/Thu-gom-ca-chet-doc-bo-bien-tranh-o-nhiem-moi-truong-390218/">http://cand.com.vn/Xa-hoi/Thu-gom-ca-chet-doc-bo-bien-tranh-o-nhiem-moi-truong-390218/</a>

cause of this phenomenon, rather fish died en mass due to "toxic agents in the water" in Vung Ang coast. According to this Center, toxin agents originated from untreated waste water discharged directly into the sea and rivers, polluting seawater and intoxicated fish. <sup>9</sup>

#### - April 15 -

Tens of fish cages belonging to 60 households living in An Cu Dong, Lang Co town, Phu Loc district, Thua Thien-Hue died en mass in a few days, with the largest number of fish dying on April 15. Damage was estimated to be up to hundreds of millions of dong.

Accorning to Mr. Mai Van Xi - Deputy Head of the Division of Agriculture and Rural Development in Phu Loc district, not only farmed fish but also wild fish living in the Lang Co lagoon died.

#### - April 19 -

After eating fish collected on the seaside, Tran Thanh Thuy (8 years old, Quang Phu commune, Quang Trach district, Quang Binh) vomited and had diarrhea. Her family took her to the commune medical center and she was treated with intravenous drip and monitored. VietNamNet reported this incident and advised people not to buy and sell or eat dead fish while waiting for the authorities to identify the toxic agents. <sup>10</sup>

<sup>&</sup>lt;sup>9</sup> Tuan Nghia, "Fish died en mass in Vung Ang sea due to water pollution", Ha Tinh newspaper, April 13, 2016: <a href="http://baohatinh.vn/nong-nghiep/ca-chet-hang-loat-o-bien-vung-ang-do-o-nhiem-nguon-nuoc/112165.htm">http://baohatinh.vn/nong-nghiep/ca-chet-hang-loat-o-bien-vung-ang-do-o-nhiem-nguon-nuoc/112165.htm</a>

<sup>&</sup>lt;sup>10</sup> Duy Tuan - Hai Sam - Quang Thanh, "Vung Ang dead fish whiten the Central Coast, suspected cause is intoxication from Vung Ang", VietNamNet, April 20, 2016. This article is no longer available on the Internet.

#### - April 20 -

A report from the Department of Agriculture and Rural Development in Thue Thien-Hue stated that the amount of PO4 (phosphate) at benthic layer is 1mg per litre, while the maximum allowable norm is 0.5 mg per litre only. This increased pH concentration. A suden and drastic increase of PO4 and pH in the water may have shocked the fish and kill them. <sup>11</sup>

#### - April 21 -

The Deputy Director of the Aquaculture Department under MARD, Pham Khanh Ly, told the press that the government task force is vertical management agencies, however, the Vung Ang industrial zone (including the Vung Ang Thermal Power Plant and Formosa industrial zone) has foreign elements, so they need to form an interdisciplinary task force, with the Prime Minister's direction, before they can carry out an inspection. <sup>12</sup>

#### - April 22 -

On the night of 21st and early morning of 22nd April, more than 20 residents of Bo Trach district, Quang Binh province were rushed to emergency service after they ate poisonous seafood in a restaurant in Phuc Trach commune. Most of the 200 guests who ate the same meal had symptoms of stomachache, nausea and diarrhea.<sup>13</sup>

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<sup>&</sup>lt;sup>11</sup> Dac Duc, "Sea fish died in 4 Central provinces", VnExpress, April 20, 2016: http://vnexpress.net/tin-tuc/thoi-su/ca-bien-chet-doc-4-tinh-mien-trung-3390131.html

<sup>&</sup>lt;sup>12</sup> Kien Trung - Bao Han, "About fish deaths: 'We can't inspect Vung Ang industrial zone", VietNamNet, April 21, 2016: <a href="http://vietnamnet.vn/vn/thoi-su/tam-diem/300746/vu-ca-chet-chung-toi-khong-the-vao-kiem-tra-kcn-vung-ang.html">http://vietnamnet.vn/vn/thoi-su/tam-diem/300746/vu-ca-chet-chung-toi-khong-the-vao-kiem-tra-kcn-vung-ang.html</a>

<sup>&</sup>lt;sup>13</sup> Hoang Phuc, "Almost 200 people poisoned after eating seafood 'suspected' of being intoxicated", Nguoi Lao Dong, April 22, 2016: <a href="http://nld.com.vn/thoi-su-trong-nuoc/gan-200-nguoi-bi-ngo-doc-sau-khi-an-hai-san-nghi-nhiem-doc-20160422200215802.htm">http://nld.com.vn/thoi-su-trong-nuoc/gan-200-nguoi-bi-ngo-doc-sau-khi-an-hai-san-nghi-nhiem-doc-20160422200215802.htm</a>

Minister of Industry and Trade Tran Tuan Anh signed a document about sending a task force to the Hung Nghiep Formosa Ha Tinh Co, Ltd. (FHS). <sup>14</sup>

An inspection team of the MONRE led by the Head of the Department of Environment, Nguyen Van Tai, carried out an inspection at the Petro Vietnam Power Corporation in Ha Tinh (Ky Anh Town, Ha Tinh) and the FHS (Vung Ang economic zone, Ha Tinh). <sup>15</sup>

The General Secretary of the VCP, Nguyen Phu Trong, also led a mission to visit and check on the Formosa project's progress, specifically the Iron and Steel Complex Project and the Son Duong Formosa Ha Tinh (FHS) deep-sea port. In addition, he also visited some production sites in Ha Tinh. He did not once mention the ongoing fish death. <sup>16</sup>

#### - April 23 -

Responding to an interview question from the Giao Thong (Transportation) newspaper about whether people should continue to eat sea fish and swim in waters where dead fish no longer appeared, Mr. Dang Ngoc Son, Vice-Chair of the Ha Tinh Provincial People's Committee, said: "For now, many aquatic products raised in cages in Vung Ang (Ha Tinh) are growing normally. Seafood such as: squid, shrimp, crab and fish that

<sup>&</sup>lt;sup>14</sup> "Investigation on environmental law implementation at Formosa, Tuoi Tre, April 23, 2016: <a href="http://tuoitre.vn/tin/kinh-te/20160423/vu-ca-chet-hang-loat-kiem-tra-formosa/1089151.html">http://tuoitre.vn/tin/kinh-te/20160423/vu-ca-chet-hang-loat-kiem-tra-formosa/1089151.html</a>
<sup>15</sup> Ibid

<sup>&</sup>lt;sup>16</sup> Xuan Sinh, "General Secretary Nguyen Phu Trong visited and worked in Ha Tinh", Dan Tri (People's Knowledge), April 22, 2016: <a href="http://dantri.com.vn/chinh-tri/tong-bi-thu-nguyen-phu-trong-tham-va-lam-viec-tai-ha-tinh-20160422160259021.htm">http://dantri.com.vn/chinh-tri/tong-bi-thu-nguyen-phu-trong-tham-va-lam-viec-tai-ha-tinh-20160422160259021.htm</a>

are alive can be consumed. Furthermore, people can swim in these waters without feeling worried." <sup>17</sup>

#### - April 24 -

Le Van Ngay (born 1970, from Khanh Hoa), a diver working for Nibelc Company (the building contractor for Formosa's breakwater in Son Duong port), died mysteriously at hospital. A few hours before, he suffered from chest pains and breathing difficulties during work and was taken to hospital for emergency treatment. <sup>18</sup>

#### - April 25 -

Mr. Chou Chun Fan, Deputy Head of Formosa's External Relations Department, Head of the Formosa Office in Ha Noi, said this in a conversation over-the-phone with Tuoi Tre (Youth) newspaper: "It is impossible to build a steel plant here without leaving any impact on fish and shrimp. Of course, we try to build a plant that meets the State's requirements. Yet it is normal to lose some things as you gain some things. Just like how when we use this area to build our plant, the soil here is no longer good for growing rice. Between these two things, we must choose one, whether I want to catch fish and shrimp or I want to build a modern steel industry? When this area was cleared the local authorities already made a plan to support fishermen to switch jobs, why do they need to keep fishing in this area.

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<sup>&</sup>lt;sup>17</sup> Van Thanh - Tran Loc, "Ha Tinh Vice-Chair: Rest assured, you can eat fish and swim in Vung Ang", Giao Thong (Transportation) newspaper, April 23, 2016: <a href="http://www.baogiaothong.vn/pho-chu-tich-ha-tinh-yen-tam-an-ca-tam-bien-o-vung-ang-d147239.html">http://www.baogiaothong.vn/pho-chu-tich-ha-tinh-yen-tam-an-ca-tam-bien-o-vung-ang-d147239.html</a>

<sup>&</sup>lt;sup>18</sup> Thuy Phan, "Diver in Formosa project site dies mysteriously", Giaoduc.net, April 25, 2016: http://giaoduc.net.vn/Xa-hoi/Mot-tho-lan-o-cong-trinh-du-an-Formosa-chet-chua-ro-nguyen-nhan-post167405.gd

Do you want to keep fishing or do you want to keep the plant, go ahead and make your decision. If you want both, even the Prime Minister can't satisfy you..." <sup>19</sup> Mr. Chou Chun Fan's comment angered the Vietnamese public on the Internet.

#### - April 26 -

Quang Binh province called for an urgent meeting. The Chair of the Provincial People's Committee, Mr. Nguyen Huu Hoai, ordered a ban on swimming in the sea during this time to prevent any mishaps.

The Thua Thien-Hue Department of Natural Resources and Environment announced that they received the analysis result from the water sample taken from Lang Co lagoon and Lang Co seaport (Lang Co town, Phu Loc), the seaside along Quang Cong commune (Quang Dien), Dien Huong, Dien Hai (Phong Dien). According to the analysis, the total nitrogen content (nitrogen, chemical symbol N) calculated on ammonium content (NH4), heavy metal chromium content (chromium, chemical symbol Cr) exceeds the limit allowed by the National Technical Regulation on seawater quality and National Technical Regulation on surface water quality. This result also pointed out that the cause of both wild fish and farmed fish's death was not a disease but rather a very powerful agent - a toxic in the water originating from somewhere north of Thua Thien-Hue province. <sup>20</sup>

<sup>&</sup>lt;sup>19</sup> "Formosa respresentative: 'Want to catch fish and shrimp or want a plant, make a choice!', Tuoi Tre, April 25, 2016: <a href="http://tuoitre.vn/tin/chinh-tri-xa-hoi/20160425/dai-dien-formosa-muon-bat-ca-bat-tom-hay-nha-may-chon-di/1090468.html">http://tuoitre.vn/tin/chinh-tri-xa-hoi/20160425/dai-dien-formosa-muon-bat-ca-bat-tom-hay-nha-may-chon-di/1090468.html</a>

<sup>&</sup>lt;sup>20</sup> Nhat Linh, "Fish died in Thua Thien Hue due to heavy metals in seawater", Tuoi Tre, April 26, 2016: <a href="http://tuoitre.vn/tin/kinh-te/20160426/thua-thien-hue-ca-bien-ca-nuoi-chet-do-chat-cuc-doc/1090879.html">http://tuoitre.vn/tin/kinh-te/20160426/thua-thien-hue-ca-bien-ca-nuoi-chet-do-chat-cuc-doc/1090879.html</a>

On the same day, the Ha Tinh newspaper published an article titled "The sea is now clearer, the environment is no longer polluted", <sup>21</sup> This article encouraged fishermen to continue their work, and "overcome obstacles and losses". This article was criticized by even mainstream press (such as the Petro Times). <sup>22</sup>

In the afternoon, Mr. Chou Chun Fan and the management team in Ha Tinh organized a press conference and bowed to apologize for their statement of "choose fish or choose steel."

A petition signed by Vietnamese people appeared on the website "We the People" managed by the White House. This petition requested the American government to assist Vietnam in evaluating the environmental impacts that Formosa Steel Plant was making. This petition was created in English by a person named T.N..

#### - April <mark>27</mark> -

The Quang Binh Department of Culture - Information & Tourism reported that about 30% tourists coming to Quang Binh cancelled their tours and hotel bookings at hotels along the beach in Dong Hoi city during the holiday 30/4-1/5. All restaurants along the beach suffered from slow business due to the fish death

The first press conference about the fish death crisis was scheduled to begin at 4 p.m. in Ha Noi to announce the cause. However, the press

The Internet version has been revised to "Sea is now clearer, fishermen strive to restore production", Ha Tinh newspaper, April 26, 2016: <a href="http://baohatinh.vn/kinh-te/bien-da-sach-hon-ngu-dan-no-luc-khoi-phuc-san-xuat/112841.htm">http://baohatinh.vn/kinh-te/bien-da-sach-hon-ngu-dan-no-luc-khoi-phuc-san-xuat/112841.htm</a>

<sup>&</sup>lt;sup>22</sup> "What a Surprise: Sea is clean! Pollution is gone", PetroTimes, April 27, 2016: http://petrotimes.vn/bao-ha-tinh-bien-da-sach-hon-moi-truong-khong-con-o-nhiem-412701.html

conference was called off, while hundreds of reporters were still waiting outside.

Finally, around 8 p.m., the press conference began and was chaired by the Deputy Minister of Natural Resources and Environment, Mr. Vo Tuan Nhan. The MONRE considered two possible causes of the mass fish death: "One cause could be toxic chemicals discharged from human activities on land and in sea. The second cause could be abnormal natural phenomenon, in combination with human impact, which leads to algal bloom, or red tide as it is commonly known around the world."

Mr. Vo Tuan Nhan also said: "Up to now, through inspection and collection of evidence, we have not been able to infer the relationship between Formosa's plants and the mass fish death." <sup>23</sup>

A female reporter raised a question about heavy metals found in seawater, according to the report prepared by the Thua Thien-Hue Department of Natural Resources and Environment, and the coming tourist season. Deputy Minister Vo Tuan Nhan interrupted her: "Don't ask that question. That question damages our country."

The press conference only lasted for 10 minutes and did not provide sufficient information for hundreds of reporters. It disappointed many people.

#### - 28/4 -

Minister of Natural Resources and Environment Tran Hong Ha and local authorities and scientists had a working session at the FHS. After

<sup>&</sup>lt;sup>23</sup> "No evidence of Formosa's involvement", BBC Vietnamese, April 27, 2016: http://www.bbc.com/vietnamese/vietnam/2016/04/160427 formosa presser cancellation

that, he told the press that he would bear the responsibilities. <sup>24</sup> He also said that, according to Vietnamese law (Article 101 of the Environmental Protection Law, effective since 2015), discharging waste liquid through an underground pipe is not allowed; and he would order Formosa to bring the underground pipe to the ground for monitoring. <sup>25</sup>

The MARD reported the result of water sample testing in a governmental meeting, rejecting the theory of red tide. "We can eliminate the cause of abnormal natural phenomenon in combination with human impact to create algal bloom, which is commonly known as red tide around the world." <sup>26</sup>

The human rights activist Truong Minh Tam, a member of the Vietnam Path Movement, was arrested by the Ha Tinh and Quang Binh police for "shooting video and taking photographs in Ky Loi commune, Ky Ha commune and Dong Yen parish" in Ky Anh commune.

Hundreds of fishermen in Canh Duong commune, Quang Trach district, Quang Binh province protested fiercely during hot noon on the 28th, 29th and 30th of April, demanding the government to expel Formosa from Vietnam and return clean sea to the people. The protest blocked traffic on National Highway 1 - the connection between the North and the South.

<sup>&</sup>lt;sup>24</sup> Van Dinh, "Minister of Natural Resources and Environment Tran Hong Ha: I admit my shortcoming", Tuoi Tre, April 28, 2016: <a href="http://tuoitre.vn/tin/chinh-tri-xa-hoi/20160428/botruong-bo-tnmt-tran-hong-ha-toi-nhan-khuyet-diem/1092358.html">http://tuoitre.vn/tin/chinh-tri-xa-hoi/20160428/botruong-bo-tnmt-tran-hong-ha-toi-nhan-khuyet-diem/1092358.html</a>

<sup>&</sup>lt;sup>25</sup> Xuan Long, "Minister Tran Hong Ha forces Formosa to bring up discharge pipe", Tuoi Tre, April 30, 2016: <a href="http://tuoitre.vn/tin/chinh-tri-xa-hoi/20160430/bo-truong-tran-hong-ha-buoc-formosa-dua-ong-xa-thai-len/1093249.html">http://tuoitre.vn/tin/chinh-tri-xa-hoi/20160430/bo-truong-tran-hong-ha-buoc-formosa-dua-ong-xa-thai-len/1093249.html</a>

<sup>&</sup>lt;sup>26</sup> "Red tide rejected as a cause", BBC Vietnamese, April 28, 2016: http://www.bbc.com/vietnamese/vietnam/2016/04/160428 formosa opinions

## - April 30 -

The Director of Da Nang Department of Natural Resources and Environment, Mr. Nguyen Dieu, and many other staffs of the Department in this city swam in the sea at Pham Van Dong beach (Son Tra district), in order to confirm that seawater in Da Nang was not polluted. Up to that point, dead fish still appeared and drifted to Da Nang seaside. <sup>27</sup>

Facebooker Chu Manh Son was arrested in Quang Trach District, Quang Binh Province by the Ha Tinh police while he was filming the demonstration on National Highway 1A using a mobile phone.

## MAY, 2016

## - May 1 -

Thousands went on demonstrations in major cities such as Hanoi, Saigon, Da Nang, Nha Trang, and Vung Tau. In Hai Phong, demonstrations were held with banners hung on buses.

Minister of Information and Communications Truong Minh Tuan and a group of journalists went out to eat "Vung Ang sea food" to show that the sea had been free from pollution already, that patriotism meant to eat fish and take sea swimming...

# - May 2 -

The 19.00 TV newscast by Vietnam Television (VTV) relayed reportage from the ANTV (a TV channel owned by the police) announcing

<sup>&</sup>lt;sup>27</sup> Nguyen Dong, "A number of key staffs in Da Nang swim in the sea to disprove rumor", VnExpress, April 30, 2016: <a href="http://vnexpress.net/tin-tuc/thoi-su/hang-loat-can-bo-chu-chot-da-nang-tam-bien-de-xoa-tan-tin-don-3395852.html">http://vnexpress.net/tin-tuc/thoi-su/hang-loat-can-bo-chu-chot-da-nang-tam-bien-de-xoa-tan-tin-don-3395852.html</a>

that the police of Ha Tinh and Quang Binh "took into custody two guys who incited people", i.e. activists Truong Minh Tam and Chu Manh Son

## - May 4 -

People of Nhan Trach Commune (Bo Trach District, Quang Binh Province) found a reddish brown line of about 1.5 km long, 10 m wide, running along the coastline of 5 villages, very close to the shore. Prof. and Ph.D. Nguyen Ngoc Lam of Nha Trang Oceanography Institute assumed that it might be signs of algal bloom or red tide. In the morning of the following day, May 5, the coloured line disappeared. <sup>28</sup>

## - May 5 -

20:00, two Chinese-born Vietnamese citizens, Lau Nhat Phong (A Lau) and Mac Vi Luc held a sit-in on Nguyen Hue walking street of Ho Chi Minh City to raise their voice on the dead sea disaster in central Viet Nam. Just in about 10 minutes, both were captured and detained in the police station of Ben Nghe ward until dawn the next day.

# - May 8 -

Public protests continued to break up in Ha Noi, Saigon. They were brutally suppressed. In Saigon, the local government deployed strange forces, whose functions were unknown, to snatch slogans, beat and arrest protesters. Hoang My Uyen, a young woman who was carrying her child in the march, was blew up and kicked on her face. Her photo, with scratches on the face, hugging her child in a panic, provoked public indignation on

<sup>&</sup>lt;sup>28</sup> Hoang Tao - Hoang Phuong, "Redish brown line appears close to Quang Binh shore", VnExpress, May 4, 2016: <a href="http://vnexpress.net/tin-tuc/thoi-su/xuat-hien-vet-nuoc-do-1-5-km-sat-bo-bien-quang-binh-3397303.html">http://vnexpress.net/tin-tuc/thoi-su/xuat-hien-vet-nuoc-do-1-5-km-sat-bo-bien-quang-binh-3397303.html</a>

the Internet. Dozens of people were arrested and held at local "social protection centers". They were beaten, electrocuted, and locked for 2-3 days.

In Hanoi, dozens of people were also arrested and held at various police stations. However, they were released within the day.

## - May 13 -

A newspaper named "Nong thon Ngay nay" (Countryside Today) got a fine of VND 140 million for publishing two articles on the "The gioi Tiep thi" (Marketing World) magazine. The articles were titled "The people are always those left behind" and "The lament of fish."

Paulus Nguyen Thai Hop, Bishop of Vinh Diocese, sent an open letter titled "Public letter on the catastrophic pollution of marine environment in central Vietnam." The Vietnam Television described the letter as "a biased depiction of the occurrence, exaggerated, causing anxiety, and using provocative language to abet the parishioners."

The Office of the United Nations Commission on Human Rights (OHCHR) in Bangkok proclaimed their worries about the increasing violence against the demonstrators for Vietnam's environment.

# - May 14 -

HCMC Police gave information to the press that, "Upon investigation and collection of information, it is affirmed that the terrorist organization named Viet Tan held a crowded muster, disturbing public order in the city on May 1st and 8th." The police also blackened Huynh Thanh Phat, a young blogger, said Phat "had two previous convictions, hometown in An

Giang but wandering mainly in HCMC like a vagabond. He participated actively gathered and disturbed in a spontaneous manner." <sup>29</sup>

## - May 15 -

In Quynh Luu district, Nghe An province, thousands of parishioners surrounded the district's committee office, asking to carry out investigation and clarify the cause for mass fish deaths.

In Saigon, the police suppressed, breaking up every gathering at April 30 Park. Huynh Ngoc Chenh, an ex-journalist, held a sit-in by himself. He was taken photo by a blogger and photojournalist named Bui Dzu. The photograph soon became famous, captioned "The Lonely Man", clearly reminiscent of "The Tank Man" in the 1989 Tiananmen Square protest.

At the end of the day, still a small protest broke out like a streak of lightning at An Dong market, participated by Nguyen Nu Phuong Dung (a.k.a. Miu Manh Me), Lau Nhat Phong (A Lau) and some other young people.

In Hanoi, after walking along Hoan Kiem lake for about 3 or 4 minutes, a group of about 20 youths wearing fish-shape masks was arrested by the police and civil defense force. They were soon pushed up on a bus and taken into custody for hours.

<sup>&</sup>lt;sup>29</sup> Vien Su, "Viet Tan incites public disorder, taking advantage of the fish death incident", Tuoi Tre, May 14, 2016: <a href="http://baomoi.me/xa-hoi/to-chuc-viet-tan-to-chuc-gay-roi-nhan-vu-ca-chet-o-mien-trung">http://baomoi.me/xa-hoi/to-chuc-viet-tan-to-chuc-gay-roi-nhan-vu-ca-chet-o-mien-trung</a> tin552119.html

## - May 23 -

Traffic Police Squad 14 (the Hanoi Police) uncovered and seized a truck carrying about four metric tons of rotten fish en route Hanoi. <sup>30</sup>

## - May 29 -

In VTV's talk-show "60 Open Minutes", whose theme was "Sharing on social media, what is it for?", MC Ta Bich Loan questioned Phan Anh, another MC, on his sharing of a clip by VTC News about an experiment on dead fish that the VTC team carried out in Vung Ang. Loan asked Phan Anh what his motive was in sharing the clip. Hong Thanh Quang, a police-background journalist, and Pham Manh Ha, a behavioral psychologist, also questioned him aggressively. The program aroused a storm of public opinion among the facebookers. The great majority of people supported Phan Anh and were indignant with Loan and Quang. After the talk-show, Phan Anh became even more famous for his words, "Don't be silent."

The VTC's video clip was about an experiment in which "the fish died within only 2 minutes swimming in Vung Ang' sea water". It was broadcast in the VTC's Evening News of April 26 and got bitterly criticized by state-owned newspapers and du luan vien (public opinion shapers), who alleged it to be "dishonest" and "misleading."

<sup>&</sup>lt;sup>30</sup> Huy Nam, "Truck filled with 4 tons of dead fish caught running to Hanoi", VnMedia, May 24, 2016: <a href="http://vnmedia.vn/dan-sinh/201605/bat-giu-xe-cho-4-tan-ca-chet-dang-tuon-vao-ha-noi-532015/">http://vnmedia.vn/dan-sinh/201605/bat-giu-xe-cho-4-tan-ca-chet-dang-tuon-vao-ha-noi-532015/</a>

# THÁNG SÁU, 2016

### - June 1 -

Blogger Nguyen Chi Tuyen (a.k.a. Anh Chi) started a campaign, "**To knock pans for transparency**": Everybody knocked their pans in the kitchen at a certain time to ask the government to clarify information about the cause of dead fish, and, at the same time, wrote slogans on the wall of the kitchen. The activities would be live streamed on facebook, or filmed and replayed later.

### - June 2-

Mai Tien Dung, Minister and Chairman of the Government Office, announced at the government's monthly press conference that "the reason for mass fish deaths had been found but not yet made public, for it is pending counter argument", that is they were waiting for independent consultancy, both local and international, to ensure objectivity. <sup>31</sup>.

## - June 5-

Green Trees held a protest march in Hanoi in celebration of the World Environmental Day, sending out the message of "Our future in our hands." The protesters urged for transparency of mass fish deaths and questioned the role of the National Assembly in the crisis. The march lasted only 10 minutes before it was broken up by the police and civil defense force. The protesters were taken on buses to police stations again.

<sup>&</sup>lt;sup>31</sup> K. Hung - Le Thanh, "We have found the cause of the fish deaths, but not publicized yet to wait for counter argument", Tuoi Tre, June 2, 2016: <a href="http://tuoitre.vn/tin/chinh-tri-xa-hoi/moi-truong/20160602/ba-bo-truong-tham-gia-hop-bao-quanh-vu-ca-chet/1111879.html">http://tuoitre.vn/tin/chinh-tri-xa-hoi/moi-truong/20160602/ba-bo-truong-tham-gia-hop-bao-quanh-vu-ca-chet/1111879.html</a>

## - June 9 -

Angelina Trang Huynh, a member of the Viet Tan (Viet Nam Reform Party, an exile Vietnamese political party in the US), wrote on her Facebook page: The US Ambassador to Vietnam, Ted Osius, had spoken at the briefing on June 9th at the Center for Strategic and International Studies (CSIS), Washington D.C., that he used to put forth an official expression to Hanoi's leaders, saying that the United States could help find out the cause of fish deaths and deal with the environmental disaster, but Hanoi refused. To his knowledge, until then, some Vietnamese and US scientists still had some cooperation, but the Vietnamese government had denied any official assistance

## - June 10 -

Quang Tri's Department of Health issued the official document No. 549 to the local People's Committee regarding the inspection, testing and processing of the frozen sea food which could not be sold due to extremely toxic chemicals found in the fish following the mass fish death incident. <sup>32</sup>

#### - June 11 -

Inter-branch forces of Quang Tri sealed and confiscated 25 metric tons of scads contaminated with phenol, an extremely toxic chemical, at Dung Thuoc enterprise (An Duc 3 village, Cua Tung townlet, Vinh Linh District, Quang Tri province). <sup>33</sup>

<sup>&</sup>lt;sup>32</sup> Nguyen Vuong, "What does the local government say about the 25 tons of fish containing phenol?", VTCNews, June 12, 2016: <a href="http://www.vtc.vn/25-tan-ca-nuc-chua-doc-to-phenol-so-nnptnt-quang-tri-noi-gi-d261483.html">http://www.vtc.vn/25-tan-ca-nuc-chua-doc-to-phenol-so-nnptnt-quang-tri-noi-gi-d261483.html</a>

<sup>33</sup> Ibid

Vo Van Hung, Director of Quang Tri's Department of Agriculture and Rural Development, assumed that the issuance of certificate of offshore fishing and certificate of safe sea food were rather proper. "Issuance of such certificates is to affirm that the fish is clean, yet it does not guarantee safety." <sup>34</sup>

### - June 12 -

Hundreds of parishioners in Quynh Luu district, Nghe An province marched on National Highway 37, starting from Phu Yen Church, to ask the government to "protect the environment, the Vietnamese race and the country." They also raised objection against blackening Reverend Father Paulus Nguyen Thai Hop by the Vietnam Television.

## - June 20 -

At 9:00 p.m. Hanoi time, PTS Our Island, a Taiwanese broadcast, released a TV report on the fish death disaster in central Vietnam.

The report was also posted on PTS' YouTube video channel and translated into Vietnamese by Vietnamese activists, evoking strong emotions from the audience. That was the first time a media agency made a TV report about the desperate situation of the fishermen and protesters for environmental protection in Vietnam. Ironically the media agency was a foreign company, and even more, it was from Formosa's homeland, Taiwan.



-35-

### - June 30 -

Tran Hong Ha, Minister of Natural Resources and Environment, told the VnExpress news site that he had experienced 84 stressful days. He said: "Formosa Ha Tinh could not deny (its responsibility) as we made a list of 53 violations they committed, ranging from the defects in design and construction to poor operation." "Phenol and cyanide are the main and direct cause of mass fish deaths. We have full data and unbiased evidence to affirm that phenol and cyanide were from the coking plant of Formosa Ha Tinh.". 35

At 17:00, the government held a press conference to proclaim the cause of fish deaths: It was Hung Nghiep Formosa Ha Tinh Steel Co, Ltd. (FHS) that was the perpetrator. Chen Yuan Cheng, chairman of the company, apologized and pledged to pay VND 11,500 billion (approx. USD \$500 million) as compensation.

Minister and Chairman of the Government Office Mai Tien Dung stated, "Formosa admitted its wrongdoings before the Vietnamese people and made five commitments on compensation and assistance. One should not hit a man when he is down," "A prosecution against it is something that needs considering. The Vietnamese are naturally tolerant and generous."

In the evening and at night, dozens of famous facebookers, including lawyers, journalists, human rights activists, etc., raised their frustrated voice to protest vehemently the government who used its discretionary power to negotiate with Formosa and accept an utterly irrelevant

<sup>&</sup>lt;sup>35</sup> Pham Hieu - Vo Van Thanh, "I've experienced 84 stressful days', said Minister Tran Hong Ha", VnExpress, June 30, 2016: <a href="http://vnexpress.net/tin-tuc/thoi-su/bo-truong-tran-hong-ha-toi-vua-trai-qua-84-ngay-cang-thang-nang-triu-3428300.html">http://vnexpress.net/tin-tuc/thoi-su/bo-truong-tran-hong-ha-toi-vua-trai-qua-84-ngay-cang-thang-nang-triu-3428300.html</a>

compensation. From urging investigation and advocating transparency, independent CSOs now changed their goals to petitioning for criminal proceedings against Formosa or its expulsion from Vietnam, "Formosa get out."

## **JULY, 2016**

## - July 4 -

MONRE leader Tran Hong Ha once stated that Formosa would be forced to bring the underwater waste pipe to the ground for monitoring but now toned down his voice, "The problem is not the underwater pipeline but waste water. Is the waste processed in accordance with environmental standards before it is discharged into the environment through the pipeline? Is the control over it to ensure that the waste is safe made explicit, and if there is a breakdown, what is the possible alternative for it? In case the processed waste reaches the standards, it may be discharged through the current underwater pipeline." <sup>36</sup>

# - July 7 -

Around 3,000 people of Con Se parish, Ba Don town, Quang Binh province, which is 50 km from the Formosa, went on a march, asking the government to shut down the steel company.

# - July 11 -

The inspectorate of Ha Tinh's Department of Natural Resources and Environment, together with environmental police, entered the farm of Le

<sup>&</sup>lt;sup>36</sup> Tuan Anh - Manh Quan, "Following the Formosa disaster, many major issues need adressing", Dan Tri, July 4, 2016:: <a href="http://dantri.com.vn/kinh-doanh/sau-tham-hoa-formosa-gay-ra-nhieu-van-de-lon-phai-giai-quyet-20160704150716798.htm">http://dantri.com.vn/kinh-doanh/sau-tham-hoa-formosa-gay-ra-nhieu-van-de-lon-phai-giai-quyet-20160704150716798.htm</a>

Quang Hoa (director of Ky Anh Urban Environment Company) in Ky Trinh Ward, Ky Anh town, to examine its operation. Over 100 tonnes of waste from Formosa was found illegally buried underground.

Mr. Hoa explained to Tuoi Tre newspaper that the 100 tonnes was domestic waste of the plant, "It is normal mud, not hazardous waste. It is from some waste treatment stations inside Formosa." <sup>37</sup>

Although Ky Anh Urban Environment Company was not the unit to deal with industrial waste, it had before signed a processing contract with Formosa.

## - July 12 -

Liberty Times Net, a Taiwanese website, reported that on July 11, Fu Yuan Hong, Deputy Chairman of Formosa Chemicals and Fibre Corporation, provided data to reverse and deny the investigative conclusion by the Vietnamese government. Hong's act was commonly understood as "retracting the statement." 38

# - July 13 -

Upstream dams near Formosa's waste landfill site in Ky Anh district suddenly discharged a great amount of water, which was thought to be at

<sup>&</sup>lt;sup>37</sup> Van Dinh, "100 tons of Formosa's wastes found buried in a farm director's garden", Tuoi Tre, July 12, 2016: <a href="http://tuoitre.vn/tin/chinh-tri-xa-hoi/20160712/formosa-chon-100-tan-chat-thai-o-trang-trai-sep-cong-ty-moi-truong/1135543.html">http://tuoitre.vn/tin/chinh-tri-xa-hoi/20160712/formosa-chon-100-tan-chat-thai-o-trang-trai-sep-cong-ty-moi-truong/1135543.html</a>

<sup>&</sup>lt;sup>38</sup> Available in Taiwanese at: http://news.ltn.com.tw/news/business/paper/1010168

Formosa's request. Local people suspected that such discharge was to destroy the evidence of buried waste. <sup>39</sup>

## - July 15 -

The Radio Free Asia (RFA) published results of the first independent test on fish in central Viet Nam. Nguyen Anh Tuan, a pharmacist in Hanoi, who did the test in late June in Quang Ngan commune, Quang Dien District, Thua Thien Hue Province, reported that every index for the scad was below safety standard, or that the scad contained cyanide, phenol, asen, cadmium, and lead. The cuttlefish was contaminated with phenol, a poison not allowed in food.

This independent test, he said, meant that the state should immediately provide a list of the toxic chemicals that caused massive fish deaths and use it as a base to thoroughly and precisely assess the quality of marine products, thereby find ways to help fishermen with their livelihood, to ensure food safety and protect consumers.

# - July 23 -

Nguyen Thi Kim Ngan, Chairwoman of the Vietnam National Assembly, presided the first press conference one day after taking office. She said the National Assembly would supervise and monitor closely the case of Formosa, and she would personally meet Vo Kim Cu (former secretary of the party cell and chairman of Ha Tinh province, currently a deputy of the 14th National Assembly) for a warning. However, with regard to the protection of national sovereignty, she said, "A number of

<sup>&</sup>lt;sup>39</sup> "Water discharge near the processing site under Formosa's request", Doi song & Phap luat (Life & Law), July 14, 2016: <a href="http://www.doisongphapluat.com/tin-tuc/tin-trong-nuoc/xa-dap-gan-noi-chon-chat-thai-la-do-yeu-cau-cua-formosa-a153720.html">http://www.doisongphapluat.com/tin-tuc/tin-trong-nuoc/xa-dap-gan-noi-chon-chat-thai-la-do-yeu-cau-cua-formosa-a153720.html</a>

organizations and individuals raised their voice to call upon the people to do something, but what have they done for the country? Nothing yet."

## - July 24 -

Vo Kim Cu confirmed with the Tuoi Tre that the issuance of the 70-year investment license to Formosa is in accordance with the laws.

"On assessment of the project, there were opinions of 12 concerned ministries, including the offices of interior section, national defense, and security... Then it was reported to the government and it was agreed that Ha Tinh would grant the license. Legal basis for the 70-year land lease for Formosa includes the Investment Law, Land Law, Decision No. 72 and Decree No. 108 by the government, as well as other legal documents regulating foreign direct investment. The 70-year investment license is (also) based on Article 36 of the Investment Law, which deals with investment projects of large size, slow capital recovery, meeting the criteria to encourage investment in sectors such as steel, sea ports, electricity, and with employment of 5,000 workers and above. The project of Formosa met all the four criteria, so the license issuance is in accordance with the laws." <sup>40</sup>

# - July 25 -

Green Trees sent a petition to dismiss Vo Kim Cu from his deputy title for his violations of law when signing a document beyond his authority, slackening control, giving Formosa full powers to cause a lot of faults which lead to the environmental disaster. The petition was submitted to

<sup>&</sup>lt;sup>40</sup> Vien Su, "Formosa would have created huge revenues had the incident not occurred, said Mr. Vo Kim Cu", Tuoi Tre, July 24, 2016: <a href="http://tuoitre.vn/tin/chinh-tri-xa-hoi/20160724/ong-vo-kim-cu-neu-khong-co-su-co-formosa-tao-nguon-thu-lon/1142761.html">http://tuoitre.vn/tin/chinh-tri-xa-hoi/20160724/ong-vo-kim-cu-neu-khong-co-su-co-formosa-tao-nguon-thu-lon/1142761.html</a>

Nguyen Thi Kim Ngan, Chairwoman of the National Assembly, and the Standing Committee of the National Assembly as well, but there was no feedback.

### AUGUST, 2016

## - August 1 -

Su Chih Fen, a Taiwanese congresswoman, member of the Democratic Progressive Party, had her passport confiscated and was detained at Noi Bai International Airport for nine hours while she was leading a delegation to Vietnam to inspect FHS. Vietnamese state-owned newspapers published a piece of news that there was a Taiwanese congresswoman going to Ha Tinh to inspect FHS, without mentioning the fact that she was blocked at the airport by the MPS and prevented from doing entry procedures. Thanks to the help of Nguyen Anh Tuan, a civil society activist, together with numerous local people, Su managed at last to get to Ha Tinh (with stringent limits), accompanied by two victims of the Formosa disaster the next day, August 2.

# - August 7-

Thousands of parishioners in Dong Yen parish, Ky Anh district, Ha Tinh province went on a march to call for environmental protection, "Clean environment, clean conscience, and clean morality." The march got to the main gate of FHS. The police, especially mobile ones, were deployed in great number to defend the corporation.

## - August 15 -

Over 4,000 parishioners of Quy Hoa parish, also in Ky Anh District, Ha Tinh Province took a march from the church to the district people's committee, asking for the local government's transparency of compensation to fishermen.

## - August 21 -

The parishioners of Quy Hoa continued to march.

# - August 22 -

In Dong Ha City (Quang Tri Province), in the morning, the MONRE and Vietnam Academy of Science and Technology held a conference to review the assessment results of the current state of marine environment of the four provinces (Ha Tinh, Quang Binh, Quang Tri and Thua Thien - Hue). Tran Hong Ha, Minister of MONRE, asserted, "Nearly all the waters in central Vietnam are safe." He said it is now safe to swim and raise aquaculture, and that there are only some areas 15 km from the coastline, such as Son Duong, east of Nhat Le sea, Son Tra... that need more monitoring on safety level.

At noon, Mr. Ha together with more than ten leaders of the central provinces went swimming at Cua Viet beach and ate seafood at a restaurant in the area

# - August 25 -

Nguyen Thanh Phong, Head of Department of Food Safety and Hygiene (Ministry of Health), said to the VnExpress that "Even if the environment were restored and the seawater gained standard requirements

for swimming, it would not be sure that the seafood will be safe to eat," "The result of observation on phenol and cyanide is for reference, with the MONRE to assess the pollution of marine environment, not the basic data on which food safety level is rated." <sup>41</sup>

## SEPTEMBER, 2016

# - September 1 -

Approximately 2,000 people in Ky Ha (Ky Anh, Ha Tinh) held a peaceful rally to urge the government to expel Formosa and end its operation in Vietnam. The local authorities sent in police forces accompanied by propaganda bandwagons, but these forces were unable to disperse the rally.

At midday, local authorities agreed to meet some representatives of the protesters. The meeting, held at the Ky Anh People's Committee office, was fruitless: the local government said they had no jurisdiction in the case; it's the central government's business. Moreover, they denied to recognize the disaster as an environmental disaster, insisting that it was "an environmental incident" only. Obviously this was an euphemism to make the disaster more acceptable to the public.

# - September 22 -

1,088 families in Ky Loi (Ky Anh, Ha Tinh) collectively requested to be given a compensatory payment of over 2,000 billion VND (approximately USD \$80 million).

<sup>41</sup> 

<sup>&</sup>lt;sup>41</sup> Nam Phuong, "That the sea is clean enough for swimming does not guarantee the fish are safe to eat, said the Ministry of Health", VnExpress, August 25, 2016: <a href="http://suckhoe.vnexpress.net/tin-tuc/suc-khoe/bo-y-te-bien-dat-chuan-de-tam-chua-chac-ca-da-an-toan-de-an-3458251.html">http://suckhoe.vnexpress.net/tin-tuc/suc-khoe/bo-y-te-bien-dat-chuan-de-tam-chua-chac-ca-da-an-toan-de-an-3458251.html</a>

## - September 26-27 -

Thousands of people based in the two districts of Quynh Luu and Ky Anh in Ha Tinh province filed civil petitions against Hung Nghiep Formosa Ha Tinh Steel Co., Ltd. The Ky Anh People's Court itself received more than 500 petitions.

## OCTOBER, 2016

### - October 2 -

About 13,000 people attended the biggest ever demonstration against Formosa in Ky Anh district. The protesters surrounded the steel company, holding signs demanding Formosa to get out of Vietnam. Police and army troops were deployed to protect the Taiwanese investor, who closed all its doors to the angry crowd.

At 9.30, troops were put to flight. Live video footages taken at the scene showed police and soldiers fleeing in panic. The protesters scaled walls, waving flags and banners, and chanting, "Formosa has collapsed," "Authorities, close Formosa down for the future of our nation." The demonstration remained peaceful, however. At midday, the crowd dispersed in an orderly and peaceful manner.

Though the crowd flocked to thousands of people in the biggest ever demonstration, state-controlled media did not mention it at all. The Thanh Nien's website published a brief piece of news covering the event, but it was quickly removed after a few minutes. The Voice of Vietnam (VOV) and the local Ha Tinh newspaper, at the same time, reported that there was a gathering of Catholics to cause public disorder and disrupt Formosa's operation.

# CHAPTER III: FORMOSA, WHO ARE THEY?

It was not until the press publicized the information that "Over 3,000 Chinese illegal workers are working at Formosa" <sup>42</sup> in 2014 that the name Formosa started to get public attention. The information on the corporation's history, as exposed by the press, was shocking to everyone.



Entrance into Hung Nghiep Formosa Ha Tinh Steel Company, Ltd. (Source: Nguyen Dinh Ha/RFA)

<sup>&</sup>lt;sup>42</sup> Minh Thuy, "Over 3,000 Chinese laborers working without permit in Vung Ang", Tien Phong, October 9, 2014: <a href="http://www.tienphong.vn/xa-hoi/hon-3000-lao-dong-trung-quoc-lam-viec-khong-phep-tai-vung-ang-768996.tpo#epi\_web">http://www.tienphong.vn/xa-hoi/hon-3000-lao-dong-trung-quoc-lam-viec-khong-phep-tai-vung-ang-768996.tpo#epi\_web</a>

On March 25, 2015, the name Formosa was once again brought up after a scaffolding collapse killed many people at one of Formosa's construction sites. <sup>43</sup> What exactly was going on? People started to look for a connection between events, and asked one another "What on earth is Formosa?"

## BRIEF COMPANY HISTORY

Formosa Plastics Group, FPG, was established in 1954. This is a Taiwanese conglomerate, founded by Wang Yung-ching and his brother Wang Yung-tsai.<sup>44</sup>

From its beginning as a specialized plastics manufacturer, FPG developed an enormous network consisting of hundreds of subsidiaries. Besides plastic and petrochemical products, FPG also invested in other industries such as steel, solidstate materials, electricity, etc. Its four biggest units were:

- Formosa Plastics Corp;
- Nan Ya Plastics;
- Formosa Petrochemical;
- Formosa Chemicals & Fibre;

Except for Nan Ya, the other three companies were incorporated in the list of the world's 1,000 largest public companies in 2012, according to Forbes.

<sup>&</sup>lt;sup>43</sup> Duc Ngoc, "Scaffolding collapse in Formosa kills 14, injures 18", Nguoi Lao Dong, March 25, 2015: <a href="http://nld.com.vn/thoi-su-trong-nuoc/sap-gian-giao-o-formosa-14-nguoi-chet-18-nguoi-bi-thuong-20150325234933354.htm">http://nld.com.vn/thoi-su-trong-nuoc/sap-gian-giao-o-formosa-14-nguoi-chet-18-nguoi-bi-thuong-20150325234933354.htm</a>

<sup>&</sup>lt;sup>44</sup> Wikipedia, Formosa Plastic Corp. <a href="https://en.wikipedia.org/wiki/Formosa\_Plastics\_Corp">https://en.wikipedia.org/wiki/Formosa\_Plastics\_Corp</a>

Both of its founders were deceased. Ms. Cher Wang, daughter of Wang Yung-ching, is now known as the chairwoman and founder of HTC Corporation, a smart phone manufacturer. Mr. Wang Wen-yuan "William" is currently serving as chairman of Formosa Corporation in Taiwan.

## NOTORIETY FOR ENVIRONMETAL DESTRUCTION

Despite the group's significant contributions to the industrialization process of Taiwan, it has also gained bad reputations for its environmental violations in Taiwan as well as many other countries <sup>45</sup>:

- 1. In Taiwan, researchers from Taiwan National University announced the pollution of carcinogens and liver tissue damaging chemicals, caused by Formosa's oil cracking technology in Yulin.
- 2. Protests were staged in front of Formosa's headquarters to denounce the damages it caused to the environment (Taipei Daily newspaper, 24/2/2014).
- 3. In Texas and Louisiana (U.S), Formosa's factories were discovered discharging poisonous chemicals such as 1.2-dichloroethane (EDC), dioxin and chroroform... into the land and underground water, even into rivers, including the Mississippi.
- 4. In 2009, Formosa had to pay a civil fine of \$2.8 million, imposed by the United States Environmental Protection Agency (EPA), and another \$10 million to tackle the environmental pollution in Texas and Louisiana.
- 5. In Cambodia in 1998, Formosa involved in a fatal case. That year, Formosa "exported" to Cambodia 3,000 tons of mercury

<sup>&</sup>lt;sup>45</sup> Tran Bac Hai (from Australia), "Bad dossiers on environment for Formosa", April 25, 2016: http://soha.vn/ho-so-moi-truong-com-can-cua-formosa-20160425104149678.htm

contaminated waste transported by Chang-Shun Ship to Sihanoukville port.

Wastes included compressed blocks wrapped in rather thick plastic bags. People flocked to the area around the landfill and found the plastic sheet that could be used for roofing. They peeled the intoxicated plastic wrap using knives, hands, even teeth.

Just a few days later, many people got fever and diarrhea. A cleaner working at the harbor to clean up the hatches of Chang-Shun Ship was hospitalized and died within that day. Right after the information of mercury contaminated wastes came out, local people got angry and sabotaged the offices. Dozens of thousands of people were scared and left the city in panic, leading to five more deaths.



Hazardous waste of Formosa Plastic was contained in rudimentary containers without barricades, stored in a landfill in Sihanoukville, Cambodia in 1999.

In that case, Vietnam launched an aid of 500 clothes and respirators to help detoxification to Cambodia. After that Formosa was forced to retrieve all of their mercury contaminated items.

It is remarkable that Formosa is the largest PVC manufacturer in the world. Due to its use of mercury in the process to produce caustic soda used for PVC manufacturing, they may have accumulated thousands of tons of hazardous wastes without any disposal place accepted.

In addition, in many environmental scandals abroad, Formosa leaders attempted to conceal or mitigate the damages that they caused to local people, and even bribed the local authorities.

Environmental profile of Formosa was so concerning that it has become an example illustrated in the textbooks on environmental laws of Barry Hill, US. (Environmental Justice, Legal Theory and Practice, Barry Hill, 3rd edition, 2014)

In a lawsuit in Louisiana, US., team of lawyers on behalf of residents of the damaged areas pointed out: Formosa not only gave no warning to people about the harmful effects of waste on the environment and health, but the corporation also concealed that they had been fined with millions dollars for many violations in Texas.

In the case of Sihanoukville in Cambodia, Formosa spokesperson said that the wastes transported by Chang-Shun Ship only contaminated with mercury at "a little higher than specified level" (0.2 ppm). However, when the Cambodian government sent the samples to another foreign country for test, the result for all the samples showed mercury contamination at hazardous levels. Test results at Hong Kong showed this index of 10,971 ppm!

The Cambodian government also accused Formosa of bribing total 3 million dollars to local officials, and about 30 officials were suspended for this case by the government.

#### FORMOSA IN VIETNAM

There are two large investment projects in Vietnam, including Hung Nghiep Formosa complex in Dong Nai province with total investment of nearly USD \$1 billion and the iron - steel complex and Son Duong port project (Formosa Ha Tinh) in Vung Ang economic zone, with total investment up to USD \$28 billion. Both projects are foreign investment projects with the largest scale nowadays.

Since 2001, FHS received investment certificate from MPI to develop the yarn-dye weaving complex project located in Nhon Trach III industrial zone, Dong Nai province, with an area of 300 hectares. Formosa Dong Nai is one of the largest FDI companies operating in Vietnam.

Formosa Dong Nai hired most of total 300 hectare area in Nhon Trach Industrial Park 3 to construct the complex of yarn - plastic beads - thermoelectric factories, etc. Major products consist of yarn, textiles and plastics products.

In this locality, there is a list of members of Formosa in numerous fields such as Formosa Taffeta Dong Nai, Formosa Taffeta Vietnam (specializing in weaving - dyeing), and Formosa Gear (mechanical components manufacturer), etc. They all have high capital and revenue scale up to hundreds of millions of US dollars.

After the success in Dong Nai, this corporation launched the second project but the largest one in Vietnam, cast iron - steel complex and Son Duong port project (Formosa Ha Tinh) invested in Vung Ang economic zone. There are 9 shareholders contributing capital to Formosa Ha Tinh, seven of whom are member companies of Formosa Group with nearly 95% of shares.



Son Duong deep water port, August 2016. (Source: Ngjuyen Dinh Ha/RFA)

On April 09, 2008, Vice Chairman of Ha Tinh province, Mr. Vo Kim Cu, signed the document coded 858, confirming some investment incentives to Formosa Group. The mentioned also showed the commitment of Ha Tinh province to Formosa about numerous incentives such as:

compensation, site clearance and resettlement; infrastructure support; support for training of human resources, etc.

On July 03, 2014, Deputy Inspector General Nguyen Duc Hanh signed and published inspection conclusions No1538 about "Compliance of legal regulation on basic construction investment and management and use of land for some projects in Ha Tinh province." Detailed conclusions are as follows:

"Regarding the investment project of construction of cast iron - steel complex and Son Duong deep water port project of Hung Nghiep Formosa Ha Tinh Steel Co., Ltd.; based on the investment report of cast iron - steel complex and Son Duong deep water port project prepared by Formosa in 2008 with the period of 70 years, Ha Tinh PPC issued Document No1125/UBND - CN2 dated May 8, 2008 to other concerned ministries and branches for comments."

Thus, in April 2008, Vo Kim Cu committed the period of land hire of 70 years to Formosa when no response and comments from other ministries and branches were issued. The reason for this violation is not exposed until now.

This project commenced in July 2008, on a total area of over 3,300 hectares, including the marine area (Son Duong port) with the land lease term of 70 years.

With the model of complex production and export, Formosa invested up to 28.5 billion dollars into this project and created jobs for 35,000 workers. The project is operated based on iron and steel refining factory, deep water port with the capacity of 30,000 tons ship, and thermal power plant of 2,100 MW, etc.

The steel factory particularly achieved over 7 million tons of steel/year in Phase 1 with an investment of about 10 billion US dollars/year.

The cast iron - steel complex and Son Duong deep water port project of Formosa, Phase 1 is expected to be completed in late 2016 and will be one of the largest iron and steel complex in Southeast Asia.

Total investment of Phase 1 of the project is about 10 billion US dollars, including steel production complex, thermoelectric plant and deepwater port at Vung Ang economic zone in Ha Tinh.

In April, 2015, the website portal of Quang Binh posted the information that Formosa Group proposed to invest an ore processing factory, a by-product processing factory for Vung Ang iron and steel industrial zone in this locality.

The chair of Quang Binh province requested a detailed report, with detailed information about the required area, human resources, especially environmental impact issues for consideration.

#### INCOMPREHENSIBLE FACTS...

If it is normal for an FDI enterprise to be granted incentives, this project is considered to have been granted "excessively", "causing inequality among domestic enterprises and foreign enterprises." In particular, Formosa's the iron and steel complex project has received great incentives from the government of Vietnam, such as:

- 70-year lease of land, without having to pay rent until the 16th year.

- Only when it generates taxable income will it be subject to corporate income tax, which is 10% instead of the usual 25% ratio (from 1 January 2016 the tax is 20%);
- When the project generates taxable income, it is exempt from corporate income tax for 4 years, and during the next 9 years 50% of the total corporate income tax payable is reduced;
- 50% reduction of personal income tax for high income earners;
- Duty-free import of machinery, equipment and means of transport;
- Exemption from environmental resources consumption tax;
- 40% reduction of the fee for environmental protection for activities such as sand pumping, ground leveling...

Vietnam has given incentives by exempting too much tax, which would definitely cause damage to the economy because what the state gets is nothing else but tax.

Regarding land rent, the management unit of Vung Ang economic zone applies special incentive policy to land lease term. Under the land lease contract signed between the Management Board of Vung Ang economic zone and FHS, land lease period is up to 70 years and shall be exempt from rent for 15 years. The company has rented more than 33 million m² of land and water surface, with only 80 dong/m2/year of land rent and 10 million/km2/year of water surface rent, inclusive of value added tax. In total, in 70 years, Formosa will have to pay only nearly 94 billion dong <sup>46</sup>, or USD \$4 million. (Some other sources would say it is 96 billion VND instead.)

<sup>&</sup>lt;sup>46</sup> "Binh Nguyen, "Formosa with its 15-year-investment history in Vietnam", Zing, June 30, 2016: http://news.zing.vn/formosa-voi-15-nam-dau-tu-tai-viet-nam-post645399.html



Perspective of Formosa Project in Ha Tinh (Source: CafeF)

Based on the contract, the handover of land is done in two phases. The land is handed over the first time in January 2009 with an area of more than 28 million m<sup>2</sup> (including 14.5 million m<sup>2</sup> of land and 13.5 million m<sup>2</sup> of water surface). The second handover takes place in December 2009 with an area of over 5.1 million m<sup>2</sup>.

Together with two-phase handover of land, rent payment is divided into two installments. The first installment is 71.4 billion (including 64 billion for the land and 7.4 billion for water surface). The second installment is 22.4 billion remaining from the total amount of the signed contract.

It is clearly indicated in the contract that in adition to the aforementioned land rent, within 70 years, the lessee does not have to pay any aditional amount or land use fees and other taxes on the land to the land owner.

Formosa is known to be an infamous corporation in the world for environmental destruction. Nevertheless, after Formosa submitted project proposal to invest and build a steel plant in Vung Ang with total investment of 15 billion dollars, the government of Vietnam has rejected all recommendations and quickly handed over 2,000 hectares of land and 1,200 hectares of water surface to this corporation.

Formosa's project led to land acquisition, house clearance of 3000 families, affecting the life and livelihoods of some 20,000 people. Not to mention 15,000 graves were exhumed and 58 churches were dismantled. Many protests have occurred but were suppressed. At that time, the government of Vietnam accused the clergy of the diocese of Vinh of abusing religion and provoking resistance among parishioners against the policy of the Party and state. 47

In recent years, the governing body of Ha Tinh Formosa was constantly demanding more incentives. For example, it requested approval

<sup>&</sup>lt;sup>47</sup> Nguoi-Viet News (Westminster, California, USA), 12/7/2016: <a href="http://www.nguoi-viet.com/viet-nam/chuyen-dai-formosa-cang-chua-cang-chay-lon/">http://www.nguoi-viet.com/viet-nam/chuyen-dai-formosa-cang-chua-cang-chay-lon/</a>

for the establishment of "Steel Special Economic Zone of Vung Ang" whose management unit is put "under the Government Office", proposed to set up a protection mechanism for the steel industry, asked for privilege in foreign currency balance within its business categories, direct loans from foreign financial institutions, exemption from withholding tax, exemption from import tax of machinery, equipment and materials... Not to mention the governing body of Formosa Ha Tinh also requested "permission to sell land to about 15,000 employees and if family members are included, the number will be about 60,000 people, in order to build a town in Vung Ang."

Giving permission to Formosa to invest in Vung Ang was warned as harmful to the environment by many experts; all the incentives granted to Formosa were criticized as unusual, even as violations of Vietnam's law (e.g., provincial governments are authorized to lease land for a maximum of only 50 years, but when the Ha Tinh government allowed 70-year lease of land for Formosa, Vietnam's Prime Minister at the time, Mr. Nguyen Tan Dung, approved). Not one has been able to stop the support that Vietnam bureaucracy provided Formosa, though.

Even the proposal to give Vung Ang to the navy considering its high mountain shielding, depth, width suitable for receiving aircraft and easy refueling which helps strengthen the capacity to protect the Gulf of Tonkin, strengthen the capacity to control land traffic and sea traffic from the Southern and Central Vietnam to Northern Vietnam was turned down. Vung Ang was eventually handed to Formosa, although it creates all sorts of risks to both the economy and national defense.

Green Trees team conducted a survey at Ky Anh commune, Ha Tinh province, where FHS's headquarter is located. According to local residents, after the riots in Vung Ang in May 2014, security had been tightened. Everyone is required using a card to go in and out; if the card is left unused for 15 days, it will automatically become invalid.

Since then, Taiwanese employees of Formosa have barely stepped outside. Formosa Ha Tinh has become an autonomous region-like area with factories, houses, entertaining area, mall and many nine- or ten-floor buildings.



Mr. Tran Hong Ha, Minister of Natural Resources and Environment

"After the inspection, Formosa was found to have had 53 administrative violations, including violations in terms of design, operation, construction and establishment of treatment system which are non-compliant to regulations and criteria stipulated by management agency.

Especially, it arbitrarily changed mug processing technology, from dry technology (which is environment-friendly) to wet technology (which produces a lot of waste, particularly waste gas.") 48

<sup>&</sup>lt;sup>48</sup> "FHS commits 53 administrative violations", Xuan Hai/ Lao Dong, July 11, 2016: http://laodong.com.vn/chinh-tri/cong-ty-formosa-ha-tinh-co-53-hanh-vi-vi-pham-hanh-chinh-571718.bld

"This project was approved very quickly. Environmental impact assessment was also approved very fast. Then its request for various kinds of incentives was also approved very fast and ultimately fast came disastrous consequences." <sup>49</sup>



Ông Hà Ngọc Chiến, Chủ tịch Hội đồng Dân tộc của Quốc hội Việt Nam



Mr. Do Ba Ty, Vice-Chairman of the National Assembly, in charge of national defense and security

"Formosa is still a long-term potential problem. Without anticipation, the situation will turn out very complicated, not only economically but also in terms of national defense and security." <sup>50</sup>

<sup>49 &</sup>quot;In FHS lies problems regarding security and national defense", Tuoi Tre, July 12, 2016: http://tuoitre.vn/tin/chinh-tri-xa-hoi/20160712/formosa-tiem-an-van-de-quoc-phong-an-ninh/1135366.html

<sup>50</sup> Ibid

At that time, Mr. Ha Ngoc Chien was assuming the position of Deputy Head of Internal Affairs Department under the Central Committee of the VCP, and Vice-Chairman of the Ethnic Council. Mr. Do Ba Ty was the Deputy Minister of National Defense and army Chief of Staff.

Looking at these incentives, many economists said that the policy of Vietnam is inadequate, creating an unequal business environment among domestic enterprises and FDI enterprises. On the other hand, this inadequacy is the biggest barrier of the business environment, downgrading the business environment of Vietnam in the eyes of investors.

## **DEROGATION**

At first, It was discovered employing about 3,000 Chinese unlicensed workers in Vung Ang. In 2014, at the time of government inspectorate, the Vung Ang economic zone had 6,121 foreign workers, but only 3,261 had the license. And only 1,400 out of 4,154 Chinese workers were licensed. According to the Decree 102/2013 of the Vietnamese government, the companies which need to use foreign workers have to apply for the work permits to the Department of Labor and Social Welfare Service, where the employee worked.

On March 25, 2015, the press simultaneously posted "A scaffolding collapse at Son Duong Port in Formosa Industrial Park" (Vung Ang Economic Zone, Ky Anh town, Ha Tinh). That consternated accident caused 13 deaths and injured 29 people.



The collapsed scaffold on March 25, 2015 at the construction site of Son Duong deep-water port which belong to Formosa Industrial Park is one of the scandals associated with the Conglomerate from Taiwan.

(Source: Tien Phona - The Pioneer)

 $(Source: Tien\ Phong\ -\ The\ Pioneer)$ 

On March 05, 2016, Formosa was discovered discharging waste including bottles, foam, rubber, plywood, cotton, fabric, plaster, steel, chemical-filled barrels, etc. into an area adjacent to the road in Ky Lien ward. Only from the time after the Lunar New Year (February) until then, more than 15 trucks carrying hundreds of tones waste from Formosa discharged nearby residential areas and caused serious environmental pollution. The incident brought about discontented with popular opinion in March.

Earlier, Formosa Ha Tinh sent documents for the approval for the construction of the temple project in the Formosa area, but Ha Tinh province had rejected about that. Nonetheless, they began work on the building. Were they abusing of power as their own autonomous area? It seems like they did not care about the permit.



On December 25, 2015, almost four months before the incident that mass fish and shrimp death in central Vietnam, the first batch of hot rolled coil steel was produced at Formosa's steel complex.

And on June 04, 2016, the environmental disasters in Central part started. Tons of dead fish spread out four provinces: Ha Tinh, Quang Binh, Quang Tri, Thua Thien-Hue.

The disaster started from the Ky Anh town, Ha Tinh province - near Vung Ang industrial zone of Formosa - then spread to Hon La, Nhat Le Beach, Hai Ninh, Le Thuy. At least 70 tonnes of dead fish all around four provinces drifted on shore. The whole marine ecosystem along the central Vietnam coast was strongly destroyed, which may take more than a century to possibly recover.

This is a serious damage which affects dozens of industries and brings misfortunes on many generations later.

# THE HUGE GROUP BEHIND FHS 51

Up to the time of the disaster in Formosa project, there were 92 building contractors, including 36 main contractors and 56 subcontractors (15 from China, 12 from Taiwan, 21 from South Korea 21, 43 from Vietnam and 1 from Belgium). Among them, there is a large corporation running under the cover of Formosa: MCC.

MCC means Metallurgical Corporation of China Ltd. All news related to the role of the MCC in project Steel Complex and Son Duong port Formosa Vung Ang, Ha Tinh, is clearly published with full pride on the official MCC's website:

( <a href="http://www.mcc.com.cn/mccen/about\_mcc/about\_mcc60/index.html">http://www.mcc.com.cn/mccen/about\_mcc/about\_mcc60/index.html</a>)

MCC is a state-owned enterprise in China, of which the headquarter is in Beijing, specializes in the designing, tendering and constructing, exploiting natural resources, papermaking, manufacturing equipment, and

<sup>&</sup>lt;sup>51</sup> Cited from an article by Cam Binh, published by the Mot The Gioi (One World) on July 9, 2016. The article was later removed from net.

real estate business. MCC is one of the largest equipment manufacturer, is a pioneer as well as the strength of the metallurgical industry in China and it is also the only one which is allowed to transport the papermaking in China and abroad.

On December 18, 2015, MCC was merged and became the company wholly-owned by China Minmetals.

In Vietnam, MCC operates under the name of Hung Nghiep Formosa HaTinh Steel Limited Company.

### RELATIONSHIP BETWEEN MCC AND FHS

FHS is a branch of Formosa Plastics Group (FPG) in Taiwan. FPG was founded in 1958, based on the specialized plastics manufacturer and PVC, now becomes a multi-industry enterprise which has developed an enormous network in four biggest units consisting of hundreds of subsidiaries.

Its four traditional biggest units are: Formosa Plastics Corp, Nan Ya Plastics, Formosa Petrochemical, and Formosa Chemicals & Fiber.

MCC is the prime contractor for FHS. A solemn ceremony was held at the headquarters of MCC on October 10, 2012 which welcomed the signing Letter of Intent between MCC Group and FHS.

Accordingly, at the beginning, the three subsidiaries of MCC are:

- The CISDI Engineering Group;
- Changtian International Engineering Corporation of MCC (CIE);

- Refractory Engineering Consulting Corporation of MCC (ACRE)

will take turn and in charge of various projects of Formosa Ha Tinh including:

- Building blast furnace;
- Designing, supplying processing equipment and building fireplace;
- Designing caking;
- Equipping and training courses;
- Constructing, designing and equipping the coke retort;

On the home page of subsidiary MCC Shanghai Baoye Group Corp. Ltd., in the topic of introducing the projects from oversea, they had displayed the images of FHS as well as the Zheng Yang Paper Factory in Vietnam

On September 18, 2013, the Baoye Shanghai Company (belonging to MCC) posted on facebook about hiring staffs and self-described as followed:

"The joint-stock enterprise of Zhongye Group (MCC) now is one of the largest leaders in metallurgical industry all around the world. Up to the present time, the MCC is in charge of all the major construction works in China. MCC currently has many representative offices and major projects in different countries. The MCC is ranked 280 among the top 500 most powerful corporations in the world."

The Baoye Shanghai Company (belonging to MCC) now is the main contractor of Formosa project for building the Steel Complex in Ha Tinh province. Currently, the Formosa project has the biggest amount of investment in Vietnam.

### MCC CHAIRMAN AND THE VISIT TO HMS

On April 23-24, 2015, MCC Chairman Guo Wenquing had a meeting with Mr. William Wang, Chairman of Formosa Plastics Group (FPG), and Mrs. Susan Wang, Vice-Chairman of FPG, and Mr. Yuan-Cheng Chen, Chairman of FHS.

The meeting aimed at tightening the historical relation between the two groups and discussing new cooperation in the future. This was regarded as a "historical relation" as in 1989, after the "Tiananmen Massacre", while the worldwide was chilled over the brutality of the Chinese government and all foreign trading and investment were ceased, FPG Formosa Plastics Group in Taiwan was the first company investing in China without any considerations to serious human rights violations in this country.

After giving excessive compliments on MCC as a typical image of Chinese metallurgical industry, offering all kinds of services including survey, design, construction, repair and coordination, Guo Wenqing praised the accountability of FPG workers, showing his patriotism and brotherhood towards Chinese citizens working in the mainland on the occasion of anti-China protests in Vietnam in 2014, and the close connection of overall goals of the two corporations.

Guo emphasized that the two solely metallurgical projects in the world with the productivity of 10 million tons were FHS and Zhanjang Guangdong, signed in cooperation with MCC (Zhanjang project was implemented by Baosteel company), proving the competitiveness of MCC in the field of constructing metallurgical companies as well as the trust of FPG toward the MCC.

"Despite all break-down in the past, along with Vietnam geographical environment, climate and specific logistics imposing on MCC, the progress of FHS project still meets the international criteria. With careful analysis, scientific planning and management, MCC is confident to assure FPG that the main part of FHS project will have been completed by October this year and the plant will go on operation in early March next year."

Guo promised that MCC would try its best to support FPG and assign the best staff and teams who could make use of innovations to face with objective difficulties and complete FHS project on schedule, in response to FPG's sense of responsibility towards MCC workers. MCC would continuously optimize its technique and construction to turn FHS into a world example in the metallurgical industry.

In addition, after the plant went into operation, MCC would assign some personnel to be in charge of pillar and construction techniques. Baosteel Technology Services Co. Ltd. was responsible for setting up a professional team to found MCC FPG Ha Tinh Steel Service Company, which aimed at providing services such as production, maintenance, coordination to ensure the smooth operation for metallurgical companies.

Mr. Guo Wenqing concluded that in addition to existing projects, FPG and MCC also needed to promote in-depth cooperation in the future to maximize the profitability of each party.

As for FPG, Chairman William Wang and Vice President Susan Wang described FHS's project as a good example of collaboration between the two groups, FPG and MCC, and gave compliments on the plan of establishing MCC-FPG-Formosa Ha Tinh Steel Service Company to track and run the operation of the plant.

Mr. Chen Yuan-cheng, Chairman of FHS, expected that MCC could allocate resources such as manpower and equipment / tool more effectively to ensure that the main projects would be completed before the upcoming rainy season and the project would be put into operation in March next year as expected.

In the meeting between FFG/FHS and main contractor MCC, there were representatives of subcontractors which are subsidiaries of MCC in FHS project:

- Zhang Mengxing, Chairman and Chief Accountants of international MCC,
- Xiao Xuewen, Chairman of CISDI/MCC Group,
- Tian Ye, Chairman of The China 19th Metallurgical Corporation Company,
- Zhou Qing, Chairman of Baosteel Technology Services Co, Ltd.,
- Wang Shilei, Chairman of Shanghai Baoye Group Corp., Ltd.,
- Xu Yongjie, Director of MCC Department of Oversea Project Management,
- Fan Yaozhong, General Representative of MCC in Vietnam,
- Wu Guoxiong, General Director of Formosa Heavy Industry,
- Hong Chongfa, Deputy Director of Formosa Heavy Industry,
- Zhang Funing, Deputy Director of Formosa Ha Tinh.

### FIRST STEP OF SELF-DEFENSE IS TO FACE DANGER

MCC's website denoted that the presence of this corporation were not only limited in FHS's project but also in almost all major industrial projects in Vietnam.

In the process of establishing FHS, the state of Vietnam had agreed to let FPG stand as a cover for MCC; hence, all MCC subsidiaries had the entire right to decide about personnel, equipment and tools to operate FHS.

Therefore, the state of Vietnam must have known that they was about to face with Chinese government when the marine environment disaster first took place in Vietnam as MCC and its subsidiaries were all SOEs. That was the reason to explain for the delay in tracking the culprit of environmental pollution, and for the refusal of investigation offers from the UN and the US.

Green Trees believe that it was necessary to know why the strong resistance of the Vietnamese people was suppressed and suffered from conspiracy of the Chinese (under the representation of Vietnamese government) and why it needed the drama of FHS pleading its guilty and promising to compensate the ridiculous amount of 500 million US dollars?

## GAS ENERGY AND POISONOUS AIR IN YUNLIN, TAIWAN 52

The hydrocarbon processing plant of Formosa Plastics Corporation in Yunlin county (Yunlin, Taiwan) as well as the story of this corporation's environmental damage on the lives of residents in surrounding cities should be considered as a costly lesson about environment protection to all of us. At the same time, story about cancer villages right in Yunlin and neighboring provinces such as Changhua county helps clarify vividly and informatively reasons why we should have the responsibility to encourage

<sup>&</sup>lt;sup>52</sup> Cited from the article "From Paris to Yunlin: What might we leave for our offspring?" by Doan Nha An, published by Luat Khoa Tap Chi on August 24, 2016: http://luatkhoa.org/2016/08/tu-paris-den-van-lam-chung-ta-con-de-lai-gi-cho-con-chau/

and push governments, including the Vietnamese one, quickly to respect environment protection legislations, as well as approve and comply with the Paris Agreement on climate change.

Taipei is a few hours southward from Yunlin. However, the atmosphere in the two places is totally opposite. On a same day, if we depart from Taipei capital, passing Taichung, both being green with many trees and a clear sky, yet the moment you set foot in Yunlin province, immediately you will have to face an area covered by heavy grey clouds forming a suffocating atmosphere.

Yunlin county is a seaside area in Taiwan where most of residents earn a living on agriculture and poultry. A person there reveals to me that Yunlin is still considered one of the poorest provinces in Taiwan with much less population compared to other areas in Taiwan.

On the contrary, Formosa Plastics Corporation is one of the biggest companies in Taiwan. Since the past decades, they have had very big industry development projects in this island country including their hydrocarbon processing plant in Yunlin County, Taiwan. More than 20 years ago, in a project to enhance economy landscape, the Taiwanese government allowed Formosa Plastics Corporation (parent company of FHS) to be in charge of a construction invading the sea to open an industrial zone in Mailiao city, a county of Yunlin. As a result, Formosa hydrocarbon processing plant came to life.

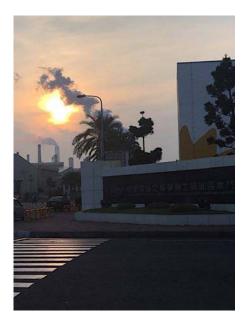
Upon starting to develop industry zone in Mailiao - Yunlin, Formosa Plastics made promises about economic development for the county and this area. However, after 20 years in operation, the amount of work that Formosa Plastics for Mailiao county cannot be compared to the number of residents who decided to leave due to serious air and water pollution.

According to environment activists in the area, Formosa Plastics corporation has brought terrible harm for water sources and atmosphere in Yunlin as well as Chiang Hua, the province nearby..



Two photographs taken by Doan Nha An on the same day, 45 minutes from each other in Yunlin and Taichung train stations

On November 3, 2011, a professor in Taichung, Mr. Tsuang Ben-jai, released an independent report in a conference of Environmental Impact Assessment Committee organized by Environmental Protection Administration (EPA). The report of Tsuang concluded that the amount of heavy metal and carcinogenic substances in the air dumped from Formosa's hydrocarbon processing plant in Mailiao, Yunlin, Taiwan is the reason why some residents in this county got cancer. Some environmental activists in Taiwan consider Professor Tsuang's report as an important contribution for the Taiwan public to voice against industry development of Formosa in their country.



Formosa industry zone in Mailiao, Yunlin, Taiwan. (Source: Doan Nha An)

From the story of Mailiao, Yunlin, Taiwan about environmental impacts after 20 years since the hydrocarbon processing plant of Formosa Plastics Corporation went into production, we can realize the necessity of Paris Agreement and efforts to reduce global warming, and the change into green and recyclable energy alternatives.

As a signatory to the Paris Agreement, the Vietnamese government has shown their understanding of the importance of environment protection and using clean energy sources to minimize harming to environment such as climate change and global warming.

Formosa Plastics Corporation and FHS have been the center of Vietnamese public in the last few months after the massive death of fishes in Central provinces. The fact that the Vietnamese government joined the Paris Agreement may help increase legislation on environmental protection in a national level, complying with international standards and therefore, help solving the consequences of environment harming cases such as FHS and more importantly, to avoid their happenings in the future.

# IN LIGHT OF TRUTH, ALL CRIMES WILL BE UNMASKED 53

As time passes and new information is unveiled daily, by and by we see that Formosa is no longer a suspect. Its guilty face is becoming more defined daily.

<sup>&</sup>lt;sup>53</sup> The author is a famous facebooker in Vietnam, nicknamed Lang Anh. This is a post dated May 6 on facebook account Lang Anh and attracted 5.600 likes, 1.541 shares (figures on August 25, 2016)..

Many ask why are we still seeing new chemical currents, such as the dull red sea current that thoroughly cleaned fishing nets like a bleach <sup>54</sup>, or an abnormal black current <sup>55</sup>. They say that the culprit is not so dumb as to continue their dumping when the whole of society is watching. I don't think so.

Popular psychoanalysis indicates that culprits will do everything they can to dissolve evidence. The culprits that polluted the Central Coast will not stop, even when all eyes are on them. They will find ways to dissolve the evidence, continue to discharge remaining wastewater in the pipe to destroy the evidence and cleanse their system - it's only logical and predictable. Thus, newly polluted currents are entirely explainable.

A learned analysis indicates that, a 7-tonne capacity steel factory which demands an investment of USD \$10 billion (equaling the scale of Formosa's on-going phase 1) will need to allocate USD \$2 billion to the waste water treatment system. Yet, the figure published by Formosa is a mere \$45 million USD <sup>56</sup>. Whom do they think they are fooling? Perhaps Vietnamese are too dumb to grant themselves access to research available universally? Or do they think Vietnam is too poor and dumb, so much as to feel dizzy of the USD \$45 million devoted to waste treatment from a \$10 billion-scale steel factory?

I don't think the Vietnamese government will dare to cover up this mess. The scale of the disaster and its future threats are too great to turn a blind eye. The whole coastal area that runs the length of four provinces and

<sup>&</sup>lt;sup>54</sup> http://soha.vn/vet-nuoc-la-mau-o-quang-binh-khong-phai-thuy-trieu-do-20160506121214047.htm

<sup>55</sup> http://tuoitre.vn/tin/chinh-tri-xa-hoi/20160506/xuat-hien-vet-nuoc-sam-khac-thuong-cachbien-vung-ang-20km/1096378.html

<sup>&</sup>lt;sup>56</sup> https://www.facebook.com/kien2t/posts/10204919599624648

extends 20 leagues from coast to sea was destroyed, the sea floor water and coral reef ecosystem that were killed will need hundreds of years to recover <sup>57</sup>, the central coast's sea floor is now nothing more than a cemetery <sup>58</sup>. If they dare to cover this up, when this humongous industrial waste generator goes into production and discharges its waste everyday of the year, thousand upon thousand kilometers of Vietnam's coast will be in jeopardy. Then, this regime will not last in the face of the people's anger.

The culprit has to be found instead of pacifying people by such stupid measure as having high-ranking officials calling on each other to eat fish. (God knows where they got those fish from.) This political system needs to regain people's faith by finding the culprit. I believe that we need to impose a fine of at least USD \$1 billion in order to repair the environment and to prevent those bastards from committing their crime again.

From what we know by looking at licenses that were granted to Formosa in disregard of legal parameters <sup>59</sup>, a reasonable doubt could be entertained that many corrupted officials have stuffed themselves up to the nose with money from the culprit. They will put up barriers because they are a bunch of venal and callous officials indifferent to the survival of our society.

However, the threat is too great, and this regime will be overturned if it doesn't stem the source of national destruction. Thus, I personally believe that this regime will act. In fact, in the past few days the wind has shifted.

<sup>&</sup>lt;sup>57</sup>http://www.tienphong.vn/xa-hoi/bo-nnptnt-co-ket-qua-phan-tich-mau-ca-chet-1000865.tpo <sup>58</sup> The link to the article died.

<sup>59</sup> http://thanhnien.vn/thoi-su/ha-tinh-cap-phep-dau-tu-70-nam-cho-formosa-khi-chua-duocchinh-phu-dong-y-544953.html

Look at China. China's GDP currently stands at USD \$9,000 billion, but to counter environmental damages, it is estimated that China will need to dole out no less than USD \$12,000 billion and need half a century for the environment to recover. Pursuing growth while paying no mind to sustainability will only bring about destruction.

# CENTRAL VIETNAM'S ENVIRONMENTAL DISASTER AND THE QUESTION ON REGULATIONS IN VIETNAM $^{60}$

In recent days, the whole country is feverish with assumptions, conspiracy theories and even by-the-book "*Red Tide*".

There is almost a complete absence of news channels investigating the incident by looking at the regulations instituted by the MONRE that apply to Formosa's wastewater discharge. And nobody has posed the question of whether those standards and regulations are... standard, or the waste discharge license was granted to Formosa on which basis or compliant to which regulation.

There are two regulations that Vietnam uses to apply to and reflect on Formosa's discharge practice:

 National Technical Regulation on sea water quality: QCVN 10\_MT: 2015/BTNMT promulgated in 2015 to replace QCVN 10-MT: 2008/BTNMT

<sup>&</sup>lt;sup>60</sup> This was posted on the personal facebook page of author Pham Hong Phong on April 29, 2016 and attracted 1,700 likes, 2.438 shares (figures collected on August 25, 2016). Emphases in bold are made by the author of this report.

2. National Technical Regulation on industrial wastewater in steel production: QCVN 52: 2013/BTNMT, promulgated in 2013

Discharge license numbered 3215/GP-BTNMT granted by the MONRE to Formosa was signed by Vice Minister Nguyen Thai Lai on December 11, 2015 based on the National Technical Regulation on industrial waste water in steel production: QCVN 52: 2013/BTNMT, promulgated in 2013.

According to this license, industrial wastewater after treatment is allowed to be discharged into receiving environment (in Formosa's case, the sea along the gulf of Son Duong hamlet, Ky Phuong commune, Ky Anh, Ha Tinh), and the concentration limits of pollution parameters (in after-treatment wastewater) are calculated based on QCVN 52: 2013/BTNMT regulations as follows:

$$C_{\text{max}} = C \times K_{\alpha} \times K_{f}$$

 $C_{\text{max}}$  is the maximum permissible value of a pollution parameter,

C is value of the industrial waste water pollution parameter in column B (when discharged into water sources not used for daily human usage) in the table below:

 $K_q$  is the co-efficient of receiving waters, in this case Son Duong gulf and the MRE assigned the value of 1.3 for the sea water by the coast not used for marine protection, sports and entertainment.

Table 1: C value and pollution parameters in industrial waste water from steel production used for calculation of maximum permissible value

Order	Parameter	Unit	C value		
	rarameter	Unit	A	В	
1	Temperature	°C	40	40	
2	pН	-	6 to 9	5.5 to 9	
3	BODs (20°C)	mg/l	30	50	
4	COD	mg/l	50	100	
5	Suspended solid	mg/l	50	100	
6	Total mineral oil	mg/l	5	10	
7	Total phenol	mg/l	0.1	0.5	
8	Total cyanide	mg/l	0.1	0.5	
9	Total nitrogen	mg/l	20	60	
10	Mercury	mg/l	0.005	0.01	
11	Cadmium	mg/l	0.05	0.1	
12	Chromium (VI)	mg/l	0.05	0.5	

 $K_{\rm f}$  is the co-efficient of the flow rate of receiving waters. In the license granted to Formosa by the MRE, the  $K_{\rm f}$  co-efficient used is 0.9, which translates to the quantity F >5.000 m³/24h (the largest quantity in the table below because there is no larger value), in order to calculate the concentration limits of pollution parameters allowed to be discharged to receiving water (Son Duong gulf).

Table 2: Co-efficient of quantity of waste source  $K_f$ 

Flowrate of receiving waters (F) Measurement Unit: m <sup>3</sup> / 24h	Hệ số K <sub>f</sub>		
F ≤ 50	1.2		
50 < F ≤ 500	1.1		
500 < F ≤ 5,000	1.0		
F>5000	0.9		

The flow rate of receiving waters is calculated according to the highest flow discharge rate indicated in the report of environmental impact assessment, environmental protection commitment.

Formosa is a gigantic project that registered for a license allowing for a discharge flow of 45,000 m<sup>3</sup>/24h, thus its discharge flow is easily above the value of >5,000 m<sup>3</sup>/24h, only 9 times as much.

Calculations show that with the license granted, Formosa can specifically discharge water: with a temperature below 40 degree Celsius; pH level between 5,5-9; suspended solid: 117mg/l; total mineral oil about 11,7mg/l; total phenol: 0,585mg/l, total cyanide: 0,585ml/l; Nitrate: 70mg/l; mercury: 0,0117mg/l.

Total flow rate of discharge permissible: 45.000 m<sup>3</sup>/24h. Thus, according to the discharge license and QCVN 52: 2013/BTNMT, after-treatment wastewater containing substances below the above-mentioned limits from Formosa can be discharged directly to the sea.

If we want to compare these figures with the National Technical Regulation on Seawater Quality: QCVN 10-MT: 2015/BTNMT (above) regulating maximum levels of seawater parameters, used to assess and control seawater quality in marine areas, serving the purposes of marine sports and entertainment, aquaculture, marine protection and other purposes, look at the table below:

Table 3: comparing several permissible values in seawater according to QCVN 10-MT:2015/BTNMT and those deemed permissible for Formosa's wastewater discharge

Parameter	Unit	Permissible parameters according to QCVN 10- MT:2015/BTNMT		Permissible parameters applied to Formosa	Number of times greater than the permissible parameters according to QCVN 10- MT:2015/BTNMT			
		Aquaculture and marine protection are	Beach water sports	Others	according to license no 3215/GP- BTNMT	Aquaculture and marine protection are	Beach water sports	Others
pН		6.5 – 8.5	6.5 – 8.5	6.5 – 8.5	5.5 - 9			
Total Suspended Solid (TSS)	mg/l	50	50	-	117	2.34	2.34	
Cyanide(Cn)	mg/l	0.01	0.01	0.01	0.585	58.5	58.5	58.5
Cadmium (Cd)	mg/l	0.005	0.005	0.01	0.117	23.4	23.4	11.7
Chrome VI (Cr6+)	mg/l	0.02	0.05	0.05	0.585	29.25	11.7	11.7
Mercury (Hg)	mg/l	0.001	0.002	0.005	0.0117	11.7	5.85	2.34
Total Phenol	mg/l	0.03	0.03	0.03	0.585	19.5	19.5	19.5
Total Mineral Oil	mg/l	0.5	0.5	0.5	11.7	23.4	23.4	23.4

Thus, according to calculations, Formosa is allowed to discharge into Son Duong gulf a cyanide content 58.5 times the maximum permissible level for seawater regulated by QCVN 10-MT:2015/BTNMT. In adition, the Cadmium, Chromium 6+ contents are allowed to go 11.7 times, Mercury 2.34 times, total phenol 19.5 times, total mineral oil 23.4 times the levels permitted by the same regulation.

And this is in entire accordance to the National Technical Regulation on industrial wastewater in steel production: QCVN 52: 2013/BTNMT.

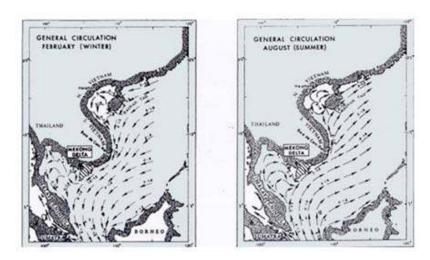
But, with this permissible content, if Formosa discharges in compliance to regulations, its discharge can still kill aqua lives in and around the wastewater flow (after being treated and meet the standards regulated by the above regulation). Because the flow rate of 10-40,000 m<sup>3</sup>/24h is large, continuous and concentrated, sea water is not given enough time to dissolve pollutions.

In all their responses to the press, Formosa confirms that they comply with all Vietnamese standards and regulations. And it seems they are right, as is "comrade" Chou Chun Phan, but the majority of Vietnamese do not accept this. Normally people think waste water that has been treated according to specific standards and regulations cannot cause the death of marine life. But, to follow QCVN 52: 2013/BTNMT in wastewater calculation, it's still possible for fish to die. If there's any doubt, please, scientists have my invitation to verify.

According to the Tuoi Tre, after receiving their waste discharge license, in the first quarter of 2016, Formosa discharged 931,830 cubic meters of wastewater (after being treated) to the sea, in average 10,000m3/24h, only O of the maximum permissible capacity (45.000m3/24h), and that was only for pipeline initiation and cleansing.

If Formosa goes in to their production phase and discharges water to permissible capacity containing the contents allowed by the license, it is predictable that this environmental disaster will spread to Nha Trang, Phan Thiet, Vung Tau and even Ca Mau, even if they comply with Vietnamese standards and regulations in full.

If the Southeast Asian Sea's current switches its direction in summer, the Tonkin Gulf can also be affected. If dead fish turn up all along the 3,000km of the coast, it will be a dreadful disaster..



Winter and summer sea currents in the Southeast Asia Sea.

The arrow points to the direction of the average flow,
the figures show the average flow speed measured by kn (1kn ~ 0.51 m/s)
(Source: U.S. Naval Oceanographic Office, 1957)

At present, Formosa still insists they do not violate any of Vietnam's regulations. They invested USD \$10 billion (of which \$9.8 billion was disbursed), and the total tax they paid to Ha Tinh came to more than 10,000 billion VND (appro. USD \$450 million), while not even one ton of commercial steel has been produced. Before investing such a ten-billion-US dollar amount, they must have calibrated factors such as location, sea port, environmental conditions, requirements as well as tax preferential treatments by local governments, various assessments, risk factors that

could affect the project, even under-the-table dealings when met with barriers. They are not so foolish as to deviate from minor regulations, which would lead to the closing down of the complex and loss of that colossal investment

It has to be said that Formosa has changed the face of life of Ha Tinh people. They created nearly 40,000 jobs. According to published statistics from the Ministry of Finance, in 2014, the total revenue of Ha Tinh's governmental budget was close to 5,000 billion VND and the projected figure for 2016 was 10,615 billion VND.

Of this total revenue, 50% came from Formosa. In the near future when this complex goes into production, Ha Tinh will not need any more budget support from the central government, and can contribute to the central government's budget as does Ho Chi Minh City, Ha Noi, Hai Phong or Binh Duong... These are the gains on the side of Vietnam.

To say this is not to side with Formosa, but to make it clear that everything has to rest on Vietnam's law, balancing the pros and cons to come to a solution, not just posting a picture that claims "We choose the sea, not the factory" and call for boycotts in order to chase out or close down a foreign invested factory that is still obeying Vietnam's laws and regulations. This will badly influence the investment attractiveness of Vietnam.

### WHAT SOLUTION THERE IS FOR VIETNAM AND FORMOSA?

The MONRE should reconsider QCVN 52: 2013/BTNMT and Formosa's wastewater discharge license, as well as go over existing environmental standards and regulations that are being applied to

industries. A man-made standard cannot be considered justified if it destroys human habitat. Unless scientific considerations dictate that we have to follow such standard and we have to choose one or the other as Mr. Phan stated.

The central and local governments should reconsider industrial development strategies as well as policies generated in order to attract FDI projects. Vietnam needs an economy that develops in a sustainable way and technologies that are environmentally friendly instead of running headlong towards high growth indicators that come with a hefty price for land, environmental and coastal resources. We must say no to outdated technologies that seriously threaten the environment. We have to be transparent in granting licenses, monitoring investment projects in order to eliminate clandestine agreements, profiteering, and interest groups. (This is rather difficult, some will ask if there's any other way.)

Fish that had sustained fishermen had died. The government has yet to find the cause, but they have to assess damages and provide emergency relief to the people so they can restore production. The government needs to carry out environmental monitoring and inform the people as to when they can pick up production again. In the event that fish died because of Formosa's wastewater discharges that have met Vietnam's laws and regulations, the fault lies with the government. This is inarguable. Let me confirm: no more argument. If it's Formosa's fault, it needs no further argument, either.

Concerning Formosa, even though the relevant authorities are still "struggling" to find the cause of fish death, and the MONRE has apologized and assumed responsibility, to be honest, we all know that you - Formosa - are clear about whether fish dying along the coast of central Vietnam had to do with red tide or blue tide or not.

One simple example can clearly show the cause. Formosa just needs to open the discharge valve as usual, complying with what is stipulated by the license granted to them by the MONRE, and we will watch and see if fish keep on dying again and the news getting feverish again.

Now, peace is returning, the sea may be more pure and blue, fish are dying less, but the waves that rage inside our people are not subsiding.

Although Vietnam's existing regulations are still being observed, Formosa needs to sit down with Ha Tinh and the MONRE to work out a win-win solution, so that FHS steel complex can carry out productive operations and Vietnam' sea is not forsaken. If Vietnam's sea is forced to perish, Formosa's complex will sooner or later be gone with it. That much is certain

The added cost that is needed to treat wastewater more thoroughly before being discharged into the sea will be borne by both sides, or by Formosa alone, depending on negotiations.

To respected journalists, real and fake alike: we need true, honest, unbiased and scientific information, not the kind of sensational, attention grabbing, or manipulating information shepherding us like cows and bulls.

Vietnamese people should try to access the news from many angles, improve our ability to judge the merits of news, instead of acting like being in a trance and turning into puppets under the manipulation of the news.

Vietnam is still a poor corner of the world and still needs investment projects that create jobs and create changes in the country, raise income, living standards and social security.

The Formosa incident needs to be dealt with on the basis of law, not a vague blame game. The 2014 protesting and vandalizing of factories that displayed Chinese language banners (when China moved and placed their oil rig in the Southeast Asia Sea) have made Vietnamese look barbaric in the eyes of foreigners. Everywhere they asked, "Why have you vandalized Singaporean and Taiwanese factories? They are not Chinese."

I have both Taiwanese and Chinese colleagues. To be honest, they are vastly different. My Taiwanese colleagues are moderate and professional; they do not see themselves as Chinese. Instead, they claim to be Taiwanese, not Chinese.

If we damage our investment prospects, we are damaging Vietnam and ourselves.

# CHAPTER IV: THE QUEST FOR TRUTH ROLES GOVERNMENT SHOULD HAVE PLAYED AND THEIR FAILURES

This chapter focuses on reviewing and evaluating the reactions and activities taken by the central and local authorities in Vietnam during the environmental disaster. The authors are convinced that the fish death crisis is the worst-ever environmental disaster in contemporary Vietnam, therefore a paucity of experience in crisis management and poor quality policies seem understandable.

The disaster, however, reveals serious problems in public policy and governance that may question the government's capacity and even legitimacy:

- 1. Slow responses, even irresponsiveness;
- 2. Conflicting policies with government agencies acting

inconsistently and contradictorily; and

 Lack of transparency and accountability, with signs of criminal covers-up, impeding the investigation process, blocking efforts to resolve the crisis, and, most seriously, suppression of citizens' rights.

### SLOW RESPONSES

Shortly after the first news about the mass fish deaths was published on April 6, 2016, many may have realized a serious public problem. There were a great many articles, commentaries and analyses whose authors came from different groups in the society, including elite intellectuals, experts, students, professionals and laymen. They kept writing, sharing, and waiting for an official statement from the authorities. Days passed by, though, with more bad news about the disaster but not any public feedback from the government.

All what the anxious public received was an absolute silence. Anxiety began to be added up with anger and there began to be sporadic calls for peaceful protests, a form of public expression against which the police always keep vigilant.

On April 15, the General Department of Environment sent an inspection team to Vung Ang, Ky Anh, Ha Tinh province to do what they

called "studying FHS's production facilities." Because it was just a "study" conducted by a low-rank government office, few expected that the Department would be able to do anything to a corporation who reportedly claimed self-rule.

At the same time, the coastline from Vung Ang to Dong Hoi kept seeing dead fish in abundance. There had never been such an awful disaster in Vietnam, and it looked like the authorities at all levels, with poor capacity, were helpless. Two weeks passed and none of them said anything..

On April 20, a report by the Agriculture Department of Thua Thien-Hue said that the content of phosphate (PO4) and the measurement of pH in the waters had increased unexpectedly, which could have caused fish to shock and die massively. This report may have possibly been the first one on the disaster. On that same day, the evening newscast by the state-owned Vietnam Television (VTV) reported that the process of collecting dead fish samples had been initiated along Ha Tinh and Quang Binh coastline.

On April 21, an inspection delegation by the MNRE and MARD arrived in Quang Binh to collect samples.

Perhaps that was too late. Until April 21, two weeks had passed since the first mass fish deaths on April 6. The elapsed time was more than enough for the vast waters of Central Vietnam to adulterate poisonous waste: A delay in sample collecting must definitely have affected and distorted the possible results.

### ALL SUSPICIOUS EYES ON FORMOSA

During and after the urgent meeting on April 21 morning MONRE leader Tran Hong Ha repeatedly ordered accelerating the investigation of the mass fish deaths.

He was quoted by the Vietnam News Agency as saying "the damages caused by fish deaths are high," but he declined to give detailed comments. He guided the relevant authorities to investigate using the so-called "oil-slick technique", meaning to delineate specific areas for investigation and then work out solutions

Also, police major general Nguyen Xuan Ly, head of the police department in charge of fighting environmental criminals (C49, of the MPS), told the press that his department had sent a working group to Central Vietnam to inspect the fish deaths, and even more police were being deployed on April 21 evening. <sup>61</sup> However, since then, nothing more had been heard regarding the department's investigation.

<sup>&</sup>lt;sup>61</sup> Cao Nguyen, "MPS comes in to enquire the mass fish deaths in central Vietnam", Lao Dong, 22/4/2016: <a href="http://laodong.com.vn/thoi-su-xa-hoi/bo-cong-an-vao-cuoc-vu-ca-chet-hang-loat-ven-bien-mien-trung-543733.bld">http://laodong.com.vn/thoi-su-xa-hoi/bo-cong-an-vao-cuoc-vu-ca-chet-hang-loat-ven-bien-mien-trung-543733.bld</a>

According to Luong Duy Hanh, head of the division supervising environmental protection activities (a body under the General Department of Environment), local people in Vung Ang (Ha Tinh) had previously said that fish might have been killed by the toxic wastes discharged by Vung Ang-based Formosa Corp.

In such an area, Formosa could hardly avoid being the primary suspect. Local fishermen firmly believed toxic wastes from the company's industrial zone, discharged through its huge underwater pipelines, killed the fish. Suspicion rose when the company refused to let the inspection delegation come in for a search, and the suspicion was justified by the fact that the ocean current in spring was flowing southward in the same direction as the floating dead fish.

All this meant that it was local people who were the first to identify and accuse Formosa of perpetrating against the fish. As mentioned in Chapter II, some Vung Ang divers found the company's underwater pipelines back from 2012 and they did report that to the local environmental police body. Nonetheless, there had been not any further development since then. Ky Anh was also the first place where dead fish were found

At the same time when all suspicious eyes fell on Formosa, there were voices in social media obviously aimed at "shaping public opinion" in favour of Formosa by distracting suspicion from the corporation and calling on people to "keep calm, stay rational, and keep the heart of the investor."

On April 22, Minister of Industry and Trade Tran Tuan Anh signed a "most urgent notification" to the FHS, notifying them of a plan to "irregularly review" the company's environmental protection activities. Ironically this "most urgent notification" was signed sixteen days after the disaster broke out, and it was to let Formosa know beforehand about such a "sudden" search.

MOIT then sent a working group led by the head of the Department of Safety Technologies and Industrial Environment, with members consisting of leaders of the General Department of Energy, Department of Heavy Industry, and Ha Tinh's Department of Industry and Trade.

In the morning of April 26, four days after the notification, the working group began its search in Formosa's area of production and waste processing.

In another development, at 10.15 am on April 23, a working group from MONRE held a conference with the Ha Tinh People's Committee. Many journalists, in following up with the topical dead fish crisis, went to the venue seeking information. However, when they meant to enter the meeting room on the fifth floor of the Committee's building, they were told

that this would be "a closed meeting", and asked to give sympathy and leave

No one knew what was being discussed in that close-door meeting. The Committee's working agenda did not even mention it.

On April 24, Deputy PM Trinh Dinh Dung went to Ky Anh, Ha Tinh in a trip which looked like an attempt by the government to buy time, persuading the people that the central government still paid attention to the incidence, and hiding the flaws in public policies. During the trip, Dung was quoted saying that if Vietnam failed to uncover the reasons for fish deaths, the chance would be open for foreign experts.

He also instructed MONRE to lead and work with MARD and the people's committees in four affected provinces to investigate the incidence and come up with solutions.

On April 27, Deputy Minister of MONRE Vo Tuan Nhan said, "Toxic chemicals discharged from human activities, and the phenomenon of "algal bloom" or "red tide", are two causes of the mass fish deaths. His statement won a huge media coverage. Major newspapers across the country reported the story and supplemented it with doubtful opinions from many experts. There was only the Nhan Dan (People) Daily, the VCP's primary mouthpiece, who reported with high confidence that "red tide" was the main cause of the disaster, and they published the photo of a red sea

surface. Netizens almost immediately pointed out that the photo had previously been edited, thus a fake one.



Only MONRE leader, Mr. Tran Hong Ha, admitted his "peccadilloes" after confirming that the massive fish deaths in Central Vietnam was a large scale environmental disaster and describing the reactions as "slow".

### CONFLICTING STATEMENTS AND POLICY RESPONSES

Amidst the dead fish crisis, on April 22, VCP's General Secretary Nguyen Phu Trong, the most powerful political leader in Vietnam, made a visit to Ha Tinh, particularly Vung Ang industrial zone. All eyes turned to him in the hope for a statement or decision.

Surprisingly, the state media just reported that Trong dropped by Thach Ha in the morning and visited a "vegetable production area" here. He later proceeded to Vung Ang industrial zone and was reported to "appreciate and encourage the growth of vegetables". The official media also described him as "highly satisfied with the projects" and "raising up the economic achievements that the industrial zone had made."

There was not a word of "fish" in his statement. The party boss' visit thus sent a totally out-of-place, politically incorrect message which did not at all match the attitudes and positions of other related public offices.

Social media were filled with anger and criticism against Trong.

The inconsistency, even conflict, between statements given and activities and policies implemented by state offices in the fish deaths disaster would be repeated persistently. For example, on April 26, the Quang Binh People's Committee declared a ban on sea bathing. At the same time, Ha Tinh newspaper, the mouthpiece of the local communist party cell, published an article titled, "Sea has been cleaned up, no more environmental pollution", in a clear attempt to coax fishers into "staying with the sea."

On April 30, Nguyen Dieu, director of the Da Nang department of natural resources and environmental, went with dozens of the citýs public officials to Pham Van Dong beach in Son Tra district for sea bathing.

The next day, Truong Minh Tuan, head of MIC, led a delegation of most famous bloggers, including scriptwriter Nguyen Quang Vinh and investigative journalist Nguyen Duc Hien (managing editor for the Phap luat TP.HCM/ HCMC Legal Daily), to have lunch with Vung Ang sea food. Hien wrote proudly later on his newspaper and facebook page about this lunch, "At noon of May Day, the Minister, on his way from Quang Binh to Ha Tinh on business, had dropped by Thanh Nhan restaurant in Vung Ang and took lunch with fresh cuttlefish. I enjoyed five ones."



Journalist Nguyen Duc Hien (a.k.a. Bo Cu Hung) wrote on his page that he enjoyed a sea food lunch with Minister Truong Minh Tuan.

In the morning that same day, many local government officials, including Nguyen Xuan Anh (leader of the Da Nang party cell), Vo Cong Tri (deputy leader of the party cell), Huynh Duc Tho (chairman of the Da Nang people's committee), Phan Viet Cuong (standing secretary of the Quang Nam party cell), went for sea bathing in Bac My An, the beach located in Ngu Hanh Son district of Da Nang. In its series of activities to encourage the public to "return to the sea after the Vung Ang fish death incidence", on April 30 and May 1, Da Nang mobilized more than 1,000 officials to massively swim in the sea in an attempt to demonstrate that the waters had been cleaned up and got safe enough to use."



However, on May 10, Dr. Nguyen Tac An, deputy chair of the Vietnam Maritime Sciences and Technologies, former director of the Nha

Trang Aquarium, told the Dan Tri (People's Knowledge), "This is not just an environmental disaster. It is a disaster for the whole national economy. It may take at least 60 or 70 years for the ecology to possibly recover." <sup>62</sup>

On May 29, the VietNamNet posted an article, "Tourism is revived in Quang Binh," in which local government officials and restaurant owners were quoted saying about the fascination of tourism in Quang Binh. The author even published a photo depicting young volunteers (members of the Communist Youth Union) playing in the water. <sup>63</sup>



<sup>&</sup>lt;sup>62</sup> Viet Hao, "Fish death incident in the Central region may take 60-70 years to possibly recover", Dan Tri, 10/5/2016: <a href="http://dantri.com.vn/xa-hoi/vu-ca-bien-chet-o-mien-trung-mat-60-70-nam-chua-chac-da-phuc-hoi-20160510072948409.htm">http://dantri.com.vn/xa-hoi/vu-ca-bien-chet-o-mien-trung-mat-60-70-nam-chua-chac-da-phuc-hoi-20160510072948409.htm</a>

<sup>63</sup> Hai Sam, "Tourism is revived in Quang Binh", VietNamNet: http://vietnamnet.vn/vn/thoi-su/chinh-tri/307344/du-lich-bien-quang-binh-vui-tro-lai.html

Then came the press conference of June 30, where the government officially confirmed that the sea had been poisoned by Taiwan's Formosa Corp.

There was a widespread public outrage in social media networks. Facebookers questioned the responsibilities of government officials such as Truong Minh Tuan, Vo Tuan Nhan, Nguyen Xuan Anh, etc., who said before that the sea had been cleaned up and called on the people to take sea swimming and consume sea food. Was that a fraud? Did they mean to cheat people?

On August 22, in a conference to assess the situation of the maritime environment in the whole area from Ha Tinh to Thua Thien-Hue, Minister of MONRE Tran Hong Ha said with much confidence, "Almost all of the waters in the four affected provinces are now safe, where we now can swim and raise maritime products." At noon, he and local government officials took a sea bath and had sea food for lunch.

But, on the same day, the National Institute for Food Control (NIFC) reported to the Department of Safe Food that out of the 9 samples of fish and snow crabs obtained from Ha Tinh for tests, 5 were poisoned with

cyanide, 3 with phenol and 1 had its content of cadmium higher than allowed 64

The contradiction in official information itself, or information allegedly "official" as being supplied by mainstream media, is one of the main reasons why the people are made uncertain and they lose their confidence in the state's capacity to govern and deal with crises.

#### LACK OF ACCOUNTABILITY

Until these lines are being written (as of August 25, 2016), still none of the government officials or state bodies has been held liable for the most awful environmental disaster in Vietnam

Officials must have blamed each other to a large extent. What was leaked to the media in a regular press conference of July 5 at MOST's headquarters was only one among many of such cases.

"Regarding Formosa's use of technologies when they made investments, Do Hoai Nam, head of the Department for Evaluating, Testing and Examining Technologies under MOST, said that when

<sup>&</sup>lt;sup>64</sup> Hong Hai, "Fish, snow crab found to be poisoned with phenol and cyanide, again", Dan Tri, 25/8/2016: <a href="http://dantri.com.vn/suc-khoe/lai-phat-hien-mau-ca-ghe-tai-ha-tinh-nhiem-phenol-xyanua-20160824204757721.htm">http://dantri.com.vn/suc-khoe/lai-phat-hien-mau-ca-ghe-tai-ha-tinh-nhiem-phenol-xyanua-20160824204757721.htm</a>

Formosa embarked on their investment, the state agency in charge of reviewing and approving the project was the Ha Tinh People's Committee. Under the government's regulations, Ha Tinh in 2008 sent to MOST a prefeasibility study report and a request for instruction. The pre-feasibility study report was just a preliminary one which did not elaborate on the investment items, so MOST could only comment that the traditional high furnace technology is widely used by steel manufacturers in the world and it is not a new tech."

"However, from that point onward till the end of the process, especially during the phase of construction designing for the Vung Angbased Formosa's factory, it was MIT, not MOST, who took over the role of evaluation and examination. So the responsibilities should have fallen on MIT, who even had to be liable for any change in the technologies that Formosa was using."

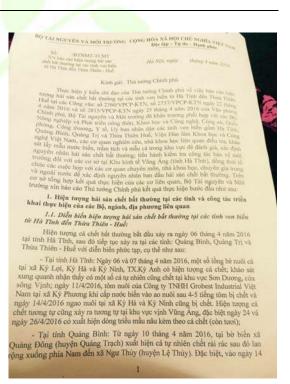
Meanwhile Vo Kim Cu, former political leader of Ha Tinh province who was in 2008 in charge of evaluating and approving the investment proposal packages, is still one of the National Assembly's 500 deputies, 95% of whom are members of the ruling communist party. He keeps staying in the legislative without being subject to any sanction or even questioning. Public outrage and even the petition from Green Trees urging his removal from office failed to receive any feedback from the National Assembly or any other state body.

The Ha Tinh People's Committee said they had urged the local Department of Natural Resources and Environment, Environmental Policy Agency, local Department of Industry and Commerce, and the Management Board of local industrial zones, to make self-criticism and submit it in written form to the Committee by August 15. Nonetheless, even until August 22 there was only the agency in charge with natural resources and environment issues who convened a meeting for "self-criticism". The results were even more frustrating: In the morning of August 22, four months after the break-out of the disaster, only one person admitted rebukes and he was Dang Ba Luc, head of the Division of Environmental Protection under Ha Tinh's Department of Natural Resources and Environment. All other officials just said they would "broaden experience" after the incidence.

#### NEWS BLACKOUT AND RESTRICTION OF FREE PRESS

The first press conference on the fish death crisis was scheduled to take place in Hanoi at 16.00 April 27, where the causes of the crisis were expected to be announced. However, the meeting was cancelled in the last minute despite the presence of hundreds of journalists who kept waiting tensely outside the room.

The journalists were also denied a document from MONRE to the Prime Minister. which contained no date or administrative code It was a report on "the sudden deaths of fish in coastal provinces from Ha Tinh to Thua Thien-Hue." This report was said to be "confidential", so the were press not allowed to access it.



Finally, at 20.00 that day, a press conference was held and led by Vice Minister of MONRE Vo Tuan Nhan. Apart from giving wrongful comments on the causes of the disaster, Nhan even said, "There was no evidence to confirm the link between Formosa's factories and the fish death problem." He interrupted a journalist, saying, "Don't ask that question. That question damages our country."

On May 5, the Prime Minister office released a "nine-point instruction" on how to deal with the fish death disaster. The instruction was clearly written, showing a strong political will in such lines as:

"The ministries of natural resources, agriculture and rural development, shall work closely with ministries of science and technologies, public security, national defense, industry and commerce, and health, and the Vietnam Academy of Science and Technologies to rapidly uncover the reasons for fish deaths within the shortest time possible."

"However, as this is a highly technical and multidisciplinary problem, the Prime Minister requests the Minister of Science and Technology, in collaboration with the Chair of the Vietnam Academy of Science and Technology and other related authorities, to mobilize scientists, including foreign ones, to rapidly investigate the causes of fish deaths and make sure that the investigation result is objective, scientific and independent."

Despite the apparent good will, the instruction demonstrated the mindset and strategies of restricting free expression and social discussion when it stipulated:

"The Ministry of Public Security shall work closely with local government bodies to investigate environmental wrongdoings in the centre of Vietnam, to maintain social order and safety, and to identify those who disseminate misleading information and take advantage of the incidence to disrupt peace, incite public disorder against the Party and the state. Any law violation shall be strictly punished."

"The Ministry of Information and Communication shall order the press to publish truthful, precise, objective and well-founded information in line with the Party's guidance, and to counter misleading information so as to stabilize the society and not to cause fear among the public. The Ministry shall also encourage the people to do off-shore fisheries and work with relevant authorities to propagandize people of safe sea food and clean maritime environment, and promote production, business and tourism in coastal provinces of central Vietnam."

This mindset and policy position paved the way for the MPS and related state bodies to control and suppress any form of free expression, no matter how peaceful it is. All the protest rallies were labelled as "inciting public disorder" and were stamped on from the first place. Hundreds of protesters in Ha Noi and Ho Chi Minh City were shortly arrested, dozens being beaten and arbitrarily detained in police stations and "social camps" for the homeless.

The suppression was so bad that the United Nations Office of High Commissioner for Human Rights on May 13 released a statement of concern. The Vietnamese government, in its typical and tradition way of behaviour, simply denied it.

Another worrying problem in public governance was criminal coverup. Since the break-out of the disaster on April 4, none of Formosa's watchdogs had their liabilities questioned. Contrary to their strong will in restricting the rights to free expression and peaceful assembly, the Vietnamese authorities at all levels proved to be so hesitant and undetermined in the way they treated the investor, Formosa.

First, they admitted the failure to enter Formosa "without the consent from the industrial zone's management board," as said by Pham Khanh Ly, vice chair of the Sea Product Department under MARD.

Second, they were reportedly irresponsible. The Thanh Nien (Young) Daily of August 16, 2016, reported that an inspection delegation from the General Department of Environment had in 2015 made a search in Formosa for half a day and released a hasty report.

"A very noteworthy detail of the story is that Formosa had made two successive oil spills in April and May of 2015, but this was mentioned briefly in both the inspection minutes of June 24, 2015 by Luong Duy

Hanh's delegation and the inspection conclusion of June 9, 2015 by the General Department of Environment." <sup>65</sup>

Non-transparency and a systematic news blackout can also be seen in many other cases. In its survey of August 2016, Green Trees were told by the divers who previously worked in the waters of Formosa project (including Son Duong deep-water port) that 21 of the divers working for Nibelc Jsc. (International Manpower and Construction JSC, the supplier of labourers for Formosa Ha Tinh) were diagnosed with sea water poisoning after they dived in Vung Ang area. When they went to hospital for health examination, however, the Central Hospital of Hue declined to give them their medical reports without stating any reason. They suspected that the hospital did so under some request from the central government. Some were even threatened that they might have their working contract cut off if they spoke up.

#### NON-TRANSPARENCY IN NEGOTIATION AND SETTLEMENT

The negotiation process between the Vietnamese government and the Taiwanese Formosa Corporation took place in an absolutely secret manner and violated basic legal principles before it ended with an agreed amount of USD \$500 million for compensation.

On the perspective of procedural law, a principle was established universally that a legal remedy, as it is with this case of fish deaths, is

<sup>65</sup> Le Quan, "Searching Formosa for just half a day", Thanh Nien, August 16, 2016: http://thanhnien.vn/thoi-su/thanh-tra-formosa-chi-trong-nua-ngay-734389.html

usually in the exercise of civil law jurisdiction and that the first thing the concerned parties must do is to assess the damages before they may get engaged in negotiation on an adequate remedy. The Vietnamese government and Taiwan's Formosa Corporation had reversed the process, though, by fixing the compensation without prior quantification the damages.

On the perspective of substantive law, the secret deal between the Vietnamese government and the Taiwanese corporation is a fundamental violation of law. The victims, or the people affected by the disaster, had not ever officially trusted the government and its bodies, especially the MPS, to negotiate with Formosa on their behalf. In principle, any commitment where the victim fails to be present shall lack legal basis, thus be invalide.

Shortly after the press conference of June 30 where the compensation for damages was announced, many people voiced their anger over both the amount of USD \$500 million and the opaque and unlawful negotiation. The MPS fought back and suppression escalated. Dozens of websites, blogs and pages set up by police and propagandists attacked those who exposed the wrongdoings made by the Vietnamese government, among them lawyer Le Cong Dinh was a big target. The police-backed propagandists published an article using a threatening tone, titled, "We can't wait to punish Le Cong Dinh."

Previously, in June, lawyers and legal activists who went to the poisonous sea to seek information or provide legal assistance to fishers were all subjected to police intimidation and surveillance. Such a legal team from Hanoi narrowly escaped being beaten up by a group of plainclothes police, who were chasing them by motorbikes, carrying iron bars, and following them closely until they reluctantly left the place.

A big question to raise now is whether the compensatory damages are sufficient. As instructed by Prime Minister Nguyen Xuan Phuc on July 1, the amount would be used for three purposes: 1. to compensate for the loss; 2. to help the affected people change their jobs, and; 3. to recover the damaged environment.

First, the PM instructed that the livelihood of fishers should be secured in the long terms with a focus on the national program of off-shore fisheries to guarantee effectiveness and sustainability. "Let us use this amount to reduce lending interest rates to 1-1.5% for those who invest in off-shore fisheries," he suggested.

Second, the PM asked to allocate part of the amount to a fund for environmental assistance to help recover the damaged maritime environment.

Additionally, the PM instructed that a part of the sum should be reserved as direct support to the victims of the disaster. <sup>66</sup>

<sup>&</sup>lt;sup>66</sup> Ph. Nhung, "How the 500-million-dollar compensation will be used", Nguoi Lao Dong, July 1, 2016<a href="http://nld.com.vn/thoi-su-trong-nuoc/500-trieu-usd-den-bu-cua-formosa-su-dung-the-nao-20160701094022206.htm">http://nld.com.vn/thoi-su-trong-nuoc/500-trieu-usd-den-bu-cua-formosa-su-dung-the-nao-20160701094022206.htm</a>

Ironically, the survey by Green Trees in Ky Loi, Ky Anh district, Ha Tinh province disclosed a frustrating estimation: Just after 1,000 local households gauged their losses and claimed for redress, the compensatory damages were estimated at over 1,000 trillion VND, accounting for 8 percent (less than one tenth) of the 11.5 trillion VND that Formosa promised to pay. And the respondents were just 1,000 households in a small hamlet in Ky Anh district, not yet all the 3.8-million population of the four affected coastal provinces.

That amount of 11.5 trillion VND or USD \$500 million shall be insufficient for direct support for the affected people only, not to mention for investment in off-shore fisheries or recovery of the sea.

Still it was not to mention that the Formosa disaster had affected almost all industries in the four provinces, as Green Tree' survey team observed: construction material manufacturers and businesses, convenient stores, food suppliers, restaurants, cafes, hotels, transportation businesses, mechanic service providers, ship building and repairs, etc.

USD \$500 million is too low a compensation. The following calculations and comparison can help illustrate how low it is:

US\$500 million - appro. 11,5 trillion VND	
Under contract, Formosa enjoys a 70-year land lease worth 96 billion VND.	11.5 trillion VND is equivalent to a land lease whose lifespan reaches 8,385 years for Formosa in Vietnam.
In 2015, traffic police caught nearly 4.5 million offences, levying fines of 2,873 billion VND.	11.5 trillion VND is equivalent to the sum of traffic offence fines across the country in 4 years.
Hanoi's budget revenues in 2015 reached US\$6.5 billion while Ho Chi Minh City's was up to US\$12.5 billion.	11.5 trillion VND is equivalent to Hanoi's budget revenues in 4 weeks, and that of Ho Chi Minh City in 2 weeks.
The four affected provinces in central Vietnam have a total population of 3.8 million.	A compensation of 11.5 trillion VND means each affected individual shall be awarded 131 USD (approximately 2.9 million VND).
Formosa exaggerated their losses in the Vung Ang riot of May 14, 2014 to 5,533 billion VND, which was 75 times higher than the provable damages measured by the insurance body and Ha Tinh's authorities.	The amount of US\$ 500 million, or 11.5 trillion VND, is to compensate for a century-scale environmental disaster in Vietnam, but it is worth only twice as much as the exaggerated damages claimed by Formosa in 2014.
In April and May 2016, the Ha Tinh tax office made a tax refund of 13.4 trillion VND for Formosa, as said in the document coded 3475/TCT-KK issued by the office on August	
4, 2016.	THE PROPERTY

# Who is qualified for the compensation from Formosa?

At 17.00 June 30, the government conducted a press conference where they disclosed the investigation results and identified Formosa as the perpetrator of the mass fish deaths in central Vietnam seas. Formosa Ha Tinh admitted responsibilities and promised to pay the victims for their economic losses and to recover the maritime environment with 11.5 trillion VND, or US\$ 500 million.

My question is that who specifically shall receive the compensatory damages paid by Formosa Ha Tinh? Will the small businesses and restaurant owners in the area affected by the mass fish deaths be awarded?

Take me as an example. I am a fish seller in Lang Co beach (Phu Loc district, Thua Thien-Hue province). The mass fish deaths have reduced my incomes and economic provision for the whole family. So, will I be able to receive any of the compensatory damages? <sup>67</sup>

# THE ESSENCE OF THE COMPENSATION 68

Prime Minister Nguyen Xuan Phuc said, "We have negotiated from step to step, with firmly-grounded arguments and sufficient and persuasive evidence before we make this achievement. Now we need to work out as

<sup>&</sup>lt;sup>67</sup> A reader's request for consultancy, published by the VnExpress on July 1, 2016. The question remains unanswered. Available at. (<a href="http://vnexpress.net/tin-tuc/cong-dong/y-kien-cua-toi/formosa-boi-thuong-500-trieu-usd-nhung-ai-duoc-nhan-tien-3428779.html">http://vnexpress.net/tin-tuc/cong-dong/y-kien-cua-toi/formosa-boi-thuong-500-trieu-usd-nhung-ai-duoc-nhan-tien-3428779.html</a>)

<sup>&</sup>lt;sup>68</sup> This article, published by lawyer Le Cong Dinh on his facebook page on July 2, 2016, gained more than 7,100 likes and 1,494 shares as of August 25, 2016.

how to use the amount of 11,500 billion dongs compensated by Formosa in the best and most effective way."

On a legal perspective, compensation shall belong to the victim who suffers from mental, physical and financial damages caused by the perpetrator's act of law or duty breach; there is a cause and effect relationship between the victim's damages and the perpetrator's violation.

I find in the statement by Prime Minister Nguyen Xuan Phuc some problems that may raise questions and I would like you to make them clear.

- 1. You said, "We have negotiated from step to step, with firmly-grounded arguments and sufficient and persuasive evidence before we make this achievement." So, what are those arguments and evidence? Are they based on life loss and property damages of the fishermen, divers, food poison victims, and maritime businesses, and other environmental damages that need remedy in the coming decades?
- 2. Apart from the environmental damages that the country has been suffering from, the above-mentioned victims also suffer from physical and economic losses and emotional distress as a result of Formosa's law violations. Therefore, the compensation must definitely be the award to be paid to the victims and they are in full possession of it. Only the victims, not your government, are entitled to use that amount of money. How can

you intend to take the compensation from the victims and use it to "support" them, even reduce lending interest rates to encourage the victims to lend money?

- 3. When did those victims authorize your government to negotiate for compensation and use the award so that you now hastily come up with a plan to use the amount, which is now just a lip service from Formosa, as something in your government's possession? Was there any written mutual consent to such an authorization? Are you considering the award to be yours?
- 4. You said, "Formosa promises to compensate Vietnam." On a legal perspective, in this civil relationship, particularly the relationship between the perpetrator and the victim, Vietnam is NOT a competent juridical person as it is in the jurisdiction of international law. So, who will Formosa pay the US\$ 500 million? Do you mean your government, as a result of the "step-to-step" negotiation process you mentioned?
- 5. Now I understand the essence of the 500-million-USD amount, Sir. Basically it comes as a result of a negotiation process which was ostensibly "a fight" between Formosa and the Vietnamese government but only aimed to settle the environmental disaster in a way that could maintain the presence of the steel corporation, notorious for its environmental polluting records, and abate the public anger which may lead to unexpected chaos.

Yes, my conclusion is that the compensation from Formosa, in its essence, is nothing more than a 500-million-USD bribery."

# **CHAPTER V**

# THE ROLE OF CIVIL SOCIETY

The mass fish deaths have caused major environmental issues, severely disrupting the lives of fishermen in Vietnam's central provinces at present and in the future. The participation of civil society therefore could not be neglected in the society's quest for truth and demand for transparency and democracy. Despite being controlled and suppressed as well as its weaknesses, the independent civil society in Vietnam has seen much progress and should be recognized to some extent as a policy actor in contemporary Vietnam.

# GREEN TREES, VOICE, VIETNAM PATH MOVEMENT, & OTHER NON-REGISTERED CIVIL SOCIETY ORGANIZATIONS

#### 1. GREEN TREES

Its facebook group, with more than 11,000 members, has witnessed a great number of heated discussions over causes, culprits and how the government handled the disaster right after they received the news about the mass fish die-off on the country's central coastal region.

Its Facebook fan page at <a href="www.facebook.com/greentreesvn">www.facebook.com/greentreesvn</a> is constantly updated with news about all aspects of the disaster: harmful effects, safety instructions, news on the press both domestic and international, information from scientists and lawyers, or standpoints of those living in the affected areas, etc.

The group's activities can be categorized in three areas.

# Legal activities

On 28 April, 22 days after the disaster without any official statement revealing the culprit, the group signed a petition to the National Assembly, the government and the state president with seven requirements listed as follows:

- 1. To recognize immediately the incident as an environmental disaster which may lead to countless consequences for the economy, public health and lives of the people. A national committee/ task force should be established to deal with the consequences in the short and long term.
- 2. To keep the investigation process transparent, make sure the people and the press could implement their right to access information in the fastest and most effective manner.
- 3. To instantly support those struggling with difficulties and being affected the most heavily by the disaster.
- 4. To instruct the people how to cope with the incident, ensure health and safety for the community, and protect the environment.
- 5. To allow civil society ("individuals and organizations with capacities") to carry out independent investigations. Law enforcement

bodies should support and have not to cause any difficulties for those people.

- 6. To strictly implement checking, monitoring and publicizing information regarding Formosa' steel factories and other waste sources in Ha Tinh
- 7. To strengthen checking and monitoring of food hygiene, not to allow any maritime product related to dead fish to be leaked out to the market, which shall cause health problems to the people.

However, no response has been received so far.



On July 25, a few weeks after the government's confirmation that FHS was the perpetrator of the disaster, the group sent a request to the National

Assembly, urging the dismissal from office of its deputy Vo Kim Cu, former chairman of Ha Tinh province, due to a series of his wrongdoings regarding to investment certificate issuance and project management for Formosa. The group has never received any response from the National Assembly, though.

### Walkout

The group's members took part in three peaceful demonstrations in Hanoi for clean environment, on 1st, 8th and 15th of May, where they demanded the government to publish the causes of the disaster. Dozens of its members were beaten and detained in police stations in Long Bien district and some other areas.



Protest on 5/1 at Ly Thai To garden, Hanoi

Green Trees then officially called for a rally for environment protection on June 5, 2016.





Protest on 6/5 at Grand Church, Hanoi

# **Direct investigation**

Some members of the group went to Ha Tinh, Quang Binh, Quang Tri, and Thua Thien - Hue to make survey and examine about the happenings.

The group has conducted data collection to compile dossiers on the disaster

## 2. VOICE Vietnam 69

From April 2016, VOICE was present at the two provinces of Ha Tinh and Quang Binh to support those living in the most heavily affected areas of the disaster. Within three months, VOICE held calls for participation from the community and directly supported 20 tons of rice for fishermen in Ky Anh, Ha Tinh. In adition, VOICE also raised a fund of 38 million VND (appro. USD \$1,700) for 155 local children, who could not go to school due to site clearance and land disputes between their families and the local authorities regarding development projects in Vung Ang industrial zone. The children were prevented from attending a near-by school and had to move to another school, which is located 30 km away.

Some divers working for Formosa before the disaster were fired and faced unpredictable health risks. VOICE assisted each diver with 1 million VND, and donated 10 million VND to the family of Le Van Ngay, who died mysteriously after diving in the water near the Formosa project. Plus,

<sup>&</sup>lt;sup>69</sup> VOICE (Vietnamese Overseas Initiative for Conscience Empowerment) was formally registered as a 501(c)(3) organization in California, USA in 2007. Currently its main office is located in the USA, branches in the Philippines, Vietnam, and sister organizations included VOICE Australia, VOICE Canada and VOICE Europe.

a VOICEs donation of 20 million VND was offered to an infirmary in Dong Yen Parish, Ky Anh to help improve their service and healthcare qualities.



VOICE's donation to the people in KyAnh

Furthermore, they also raised a scholarship fund to help children in the affected areas to access school.

Despite police surveillance and intimidation, Nguyen Anh Tuan, a member of VOICE Vietnam, went to Ha Tinh - Quang Binh to help local people with communication and legal procedures. VOICE's support is arguably vital to those with limited legal knowledge under the

circumstances that the state-controlled press is not allowed to publish information freely and efforts to participate from independent civil society are blocked.



VOICE donating money to local residents in KyAnh



VOICE supporting students

# 3. VIETNAM PATH MOVEMENT 70

VPM is an unregistered CSO which gets actively involved in protecting human rights in the context of the environmental disaster.

To Established in 2012, VPM (in Vietnamese: Con Duong Viet Nam) is a civil society organization with the vision to "make human rights respected and protected above all and equally in Vietnam, so that people can confidently exercise their full legal rights, thereby mastering the country and their own lives."

Many of its members were present in the affected area to survey and support local people, or simply raised their voice on social networks to keep people updated on the disaster and raise public awareness, as did activist Hoang Dung.

Another outstanding example could be Truong Minh Tam, who was arbitrarily detained by the Ha Tinh police in six days without any legal reason. After released, Truong Minh Tam denounced that he had been under torture both mentally and physically.

Citizen journalist Chu Manh Son was arrested beside Truong Minh Tam while he was filming a protest in Quang Binh. Both men and the VPM were smeared heavily by VTV, the national television broadcast of Vietnam. After Tam's and Son's release, VTV would never publish any apology or explanation later, although the VPM directly phoned and questioned VTV General Director Tran Binh Minh on the libel his broadcast committed.

#### 4. OTHER UNREGISTERED CSOs

A wide range of independent civil society organizations have requested the Vietnamese government and Formosa to consider and implement their policy recommendation to solve the environmental disaster caused by Formosa.

On April 29, twenty independent CSOs issued a declaration on coping with the disaster with the following requirements:

1. Formosa must end operations which destroy the environment; implement all measures to make the environment clean, safe, and healthy

to guarantee ecological balance for humans and other creatures in the affected waters; pay environment-related damages to the people living in the affected areas.

- 2. The government must adopt strict inspection measures. They must not be indulgent toward Formosa out of partisan interest. They must not allow Formosa to, rather than hastily spill chronically toxic wastes into the environment as it has just done, now slowly discharge wastes, because such a slow discharge will kill fish, human beings and the sea gradually. They must be prepared to cancel the Formosa project, in case the potential risks cannot be prevented. They must punish central and local government officials who were irresponsible and possibly corrupt in approving of the Formosa project and handling its poisoning of the sea. In the short time to come, the Vietnamese government should declare a state of environmental emergency and quickly identify the causes and culprit, carry on criminal prosecution of this serious case, measure and publish specific losses caused by the catastrophe, invite international organizations with experience in investigation of pollution incidents to take part in the process to ensure independent assessment.
- 3. Vietnamese people living nationwide and worldwide, independent social and political organizations, religious communities, independent journalists should participate to express our uncompromising opinions towards activities which affect the living environment at the moment and in the future (including the Tay Nguyen bauxite mining, the nuclear electricity power plant and many hydroelectric dam building projects). Let us participate peacefully but positively in all ways: write an article, raise our voice, discuss, take pictures with slogans, and especially join the protest held on May 1st.

#### Green Trees



Declaration of 20 Civil Society Organizations

On July 4, some other social and political organizations also issued a declaration on the sea disaster in the Central region:

"We call for a celebration of **One month for Vietnamese Environment**, from 6th July to 6th August, 2016. In this month, we will together perform the following activities:

- wear white shirts with the symbols of dead fish when going out;
- protest alone or with a group of people in demanding for Formosa to close down;
- arrange visits to support fishers, especially legal help in suing Formosa;
- and other necessary ideas."

Vietnamese Bloggers' Network, an independent CSO fighting for the right to free expression, also urged people to perform activities to protect the environment and required the government to take the blame for the disaster.

# **Independent CSOs' efforts**

On April 26, one person, naming him/herself as T.N., created a petition on We the People, a White House's website designed to receive recommendations from the people, about the massive fish deaths in the central coastal region of Vietnam.

In the petition with the subject "Help Vietnamese People Avoid The Environmental Disaster in Ha Tinh, Central Vietnam", the writer said: "province is home to an economic zone which covers numerous

industrial plants, including a multi-billion dollar steel plant run by Formosa conglomerate."

"Tonnes of fish, including rare species which live far offshore and in the deep, have been discovered on beaches along the country's central coastal provinces of Ha Tinh, Quang Tri, Quang Binh and Hue. People suspect that the sewage with harmful chemicals released from the steel plants contaminates the coastline causing massive fish deaths along the country's central coast in recent days."

The petitioner wrote, "We the People ask the Federal Government help the people of Vietnam by providing independent Environmental Impact Assessment of the Steel Plant and President Obama to raise the issue with Vietnamese Government in May 2016 visit."

By 22:30 Hanoi, on April 28, the petition had received 118,000 signatures and it seems like a record for online petitions since 2009. (In 2009, the petition against the bauxite project in Tay Nguyen received 4,000 signatures of intellectuals nationwide and worldwide, which was also the first petition of Vietnam's democracy movement that drew attention of thousands of people.

Two months later, on June 9, a source of the US-based Viet Tan Party revealed that the United States Embassy in Vietnam proposed to help the government find the fish death cause, but his suggestion was turned

down

#### REGISTERED NGOs

Vietnam In so far, there have been many CSOs licensed to work in the field of environment environmental NGOs. However, these registered NGOs generally choose to be a bystander as result of their habit to avoid trouble with the authorities.

Some
individuals
working for these
NGOs, though,
tried to perform
some specific
actions in the fish
death disaster. Vo



Xuan Quyen, who works for **Live&Learn**, launched a campaign calling for voluntary participation in searching and translating into Vietnamese documents related to environmental problems worldwide. As a result, the group has compiled an instruction guiding people how to cope with the disaster, "Six things to do when dealing with dead fish."

## LAWYERS AND LEGAL ACTIVITSTS

## 1. Justice Partnership

This group, including Tran Vu Hai, Le Van Luan, Nguyen Ha Luan, Truong Chi Cong, etc., was directly present in the affected areas and demanded to provide legal support for fishers who are victims of Formosa's toxic waste discharges.

On June 24, the group helped 36 fishers in Ky Anh, Ha Tinh to compose and send a request to the MONRE regarding licensing procedures of waste water discharge. In this request, the lawyers and fishers required that the license be temporarily suspended and then withdrawn as it was issued illegally.

On July 7 and August 25, the lawyers, together with the fishers, went to the MONRE and requested to meet directly with their officials. They, however, cited every reason they could find to avoid meeting the team



Lawyers at MONRE to submit complaint

The lawyers said they are determined to follow the complaint procedures as well as other legal ones in order to protect the victims of the disaster caused by Formosa.

# 2. Some legal activists

On July 5, Hanoi-based lawyer Ha Huy Son sent his denouncement to the Investigation Security Body under the MPS, requesting them to initiate criminal proceedings against the FHS for "crimes against humanity" under Article 342 of the Vietnam Penal Code. He has not received any response.

Legal activist Pham Le Vuong Cac (Working Group on UPR) hid himself in Ha Tinh and Quang Binh provinces for a long time to support the local people with legal procedures to civil sue Formosa and have it compensate people who live in the affected areas.

Activist Nguyen Anh Tuan (VOICE Vietnam) also went to Ky Anh, Ha Tinh many times to support fishermen in their livelihood as well as provide them with media skills and legal knowledge related to the incident.

## **VOICES OF RESPONSIBLE CITIZENS**

Freedom of expression is one of the most important human rights. In Vietnam, it remains a problem as the Vietnamese authorities are always finding ways to restrict these rights, especially the right to protest.



Protest on 5/1 at Grand Theatre, Hanoi

On May 1, thousands took to the street in big cities demanding the government to be accountable and actively involved in coping with the environmental disaster. While the protests in Hanoi appeared to take place smoothly, dozens of people in HCMC were beaten and arbitrarily detained.



Protest in HoChiMinh City on 5/1

On May 8, the police crack down hard on the second demonstration, with more than 100 Hanoi protesters being detained illegally in police stations and a greater number, around 500, in HCMC, being taken by bus to a stadium and confined there until the end of the day. Police even used tear gas and brutally assaulted women with children.



Protester arrested in HoChiMinh City

On May 15, ongoing intensified crackdown of the police on protests caused difficulties for participants, many of whom were detained in police stations right when they showed up near the gathering place. Despite the trouble, a group of 15 youngsters managed to hold a 5-minute demonstration around Hoan Kiem lake in Hanoi before being arrested.



Mrs Hoang My Uyen and her daughter were beaten

On June 5, Green Trees organized a march for the environment. It lasted only around 10 minutes and 50 people were arrested that day.

During these protests, dozens of participants in HCMC were beaten and tortured by electrocution in police stations or 'social centers'. Many were detained illegally for more than three days in a rehabilitation center at No 463, No Trang Long street, Binh Thanh district.



Green Trees protest on 6/5

On May 13, Father Nguyen Thai Hop, the bishop of Vinh diocese <sup>71</sup> – wrote an open letter regarding the marine disaster Central Vietnam, demanding the community to help solve the crisis and feel free to express their opinions. He also urged the people and the government to find the causes and solutions to the incident. Nonetheless, VTV and a huge force of du luan vien (government-sponsored online commentators) immediately

<sup>&</sup>lt;sup>71</sup> The diocese of Vinh (Diocesis Vinhensis in Latin) is a Roma Catholic diocese in central Vietnam, in proportion to three provinces of NgheAn, Ha Tinh and QuangBinh. The diocese covers an area of 30,599 km² with 523,046, making up for 10% of the local population.

ignited the anti-Catholic fight by criticizing the bishop heavily, saying he just plotted to provoke the people to oppose the government of Vietnam.

In response to the call of Bishop Nguyen Thai Hop, numerous parishes of Vinh diocese such as Yen Hoa, Xuan Hoa, and Con Se held several marches in June, July and August, asking the government to prosecute Formosa as well as to actively get involved in dealing with the environmental disaster.

In addition to this, other individuals and groups simply exercised their right to expression in diverse ways. Take Lau Nhat Phong and Mac Vi Luc as an example. These two young men constantly conducted sits-in on Nguyen Hue walking street, HCMC, in three nights, despite being beaten and detained. Veteran journalist Huynh Ngoc Chenh also protested alone on the same street in one afternoon. His sit-in only lasted one or two minutes before the security members came and arrested him.

In Da Nang, poet Le Thanh Truong stood out by walking alone in the sun, holding aloft a placard saying "The ocean is dissolving toxins into our future race."

A group of artists in Hue performed an art show called "Funeral for Dead Fish."



Artists took to the street in Hue

The final destination for all these people was police stations. However, many people, with their citizens' responsibilities, were still trying to speak out in the strictly limited and controlled civil space left for them in Vietnam.

# CHAPTER VI WHAT DO INTERNATIONAL MEDIA SAY?

In this chapter, we will list a few articles posted in Western media about the environmental disaster in Vietnam.

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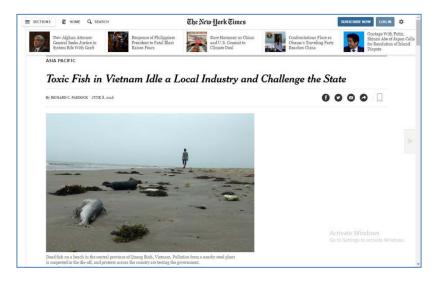
## OXIC FISH IN VIETNAM IDLE A LOCAL INDUSTRY AND CHALLENGE THE STATE 72

NHAN TRACH, Vietnam - Since a devastating fish kill blighted the waters along 120 miles of coastline in central Vietnam, hundreds of people are believed to have fallen ill from eating poisoned fish.

Here in the fishing village of Nhan Trach, the squid that sustain the local economy have virtually disappeared. And a fishing ban has left hundreds of traps sitting unused on the beach and dozens of small fishing boats idle.

<sup>&</sup>lt;sup>72</sup> Richard C. Paddock/ New York Times, 8/6/2016; http://www.nytimes.com/2016/06/09/world/asia/vietnam-fish-kill.html?smid=fb-share& r=1

"We are so angry," said Pham Thi Phi, 65, who operates a fishing boat in Nhan Trach with her husband and three grown sons. "If we knew who put the poison in the ocean, we would like to kill them. We really need to have an answer from the government on whether the ocean is totally clean and the fish are safe to eat."



New York Times viewed this disaster as a challenge for the government

While the immediate cause appears to have been toxic waste from a nearby steel mill, fury over the episode has exploded into a national issue, posing the biggest challenge to the authoritarian government since a spate of anti-Chinese riots in 2014. Protesters demanding government action have marched in major cities and coastal communities over the past six weeks, escalating what had been a regional environmental dispute into a test of government accountability.

But two months after the fish started washing up on beaches here, the government has yet to announce the cause of the disaster or identify the toxin that killed marine life and poisoned coastal residents.

The government's failure to respond and its previous support for the Taiwan-owned steel plant at the heart of the crisis have fueled widespread suspicion of corruption and the hiden influence of foreign interests at the expense of Vietnamese livelihoods, a potent mix that challenges the legitimacy of Communist Party rule.

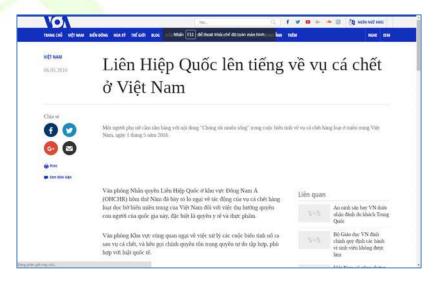
"Quite simply, in Vietnam, human life is less important than the political life of the government and government institutions," said Nguyen Thi Bich Nga, an activist in Ho Chi Minh City. "In this way, we can explain all that is unusual in this country."

The government has said little about the marine die-off while cracking down on the protests, which have been called every Sunday since May 1, when thousands of people took to the streets of Hanoi, Ho Chi Minh City and other cities. More than 500 people have been arrested, and demonstrators have been beaten by the police.

"The response by the government has been one of ineptitude," said Carlyle Thayer, a Vietnam analyst at the Australian Defense Force Academy. He said the fish kill was the most serious environmental issue to confront the government in several years and reflected poorly on the government of Prime Minister Nguyen Xuan Phuc, who took office in April.

Last month, the Office of the United Nations High Commissioner for Human Rights urged the government to avoid excessive use of force, citing "increasing levels of violence" against the protesters.

But the protests have continued.



UN High Commissionersspoke up about the fish-kill incident

On Sunday, more than 1,000 people turned out in a coastal district of Nghe An Province, north of the steel plant, to demonstrate. Many wore T-shirts bearing a fish skeleton. Some carried signs reading, "Fish need clean water, citizens need transparency."

"It seems the government tries to cover up for the culprit," the Rev. Anthony Nam, a Catholic priest and protest leader in Nghe An, said by telephone. "We will protest until the government says what caused the spill."

In Nhan Trach, about 40 miles south of the steel factory, the dead and dying fish first appeared in early April, floating in the surf and washing up

on the beach. Initially, it seemed like a windfall, and many people here ate and sold them. The fish kept coming, tons of them, day after day for more than a month, residents said.

"Some of the fish were dead; some were dying," said Ho Huu Sia, 67, who buys and dries fish for a living. "We ate the fish that were still alive. We ate the fish for two weeks."

His daughter, Ho Thi Dao, 32, said she became ill, experiencing vomiting, diarrhea and dizziness. She went to the local clinic and received intravenous fluids. She said she met others there who also suffered poisoning.

Belatedly, the government announced that aquatic life had been poisoned along the coastline of four provinces. The authorities warned people not to eat fish and ordered a halt to fishing.

As compensation, officials distributed bags of rice and gave fishermen 50,000 dong, or about \$2.20.

"We are just sitting with tears running down our cheeks looking out at the ocean," said Ms. Phi, who has been fishing from Nhan Trach all her life. "What can we do with 50,000 dong?"

Coastal residents and journalists quickly accused the Formosa Ha Tinh Steel plant, which opened in December, of being the culprit.

According to news reports, the fish kill happened after the factory washed unspecified cleaning chemicals through its wastewater pipeline. A company representative seemed to confirm the suspicions in April when he said it would not be surprising if the factory's wastewater harmed marine life.

"You have to decide whether to catch fish and shrimp or to build a modern steel industry," he told reporters. "Even if you are the prime minister, you cannot choose both."

His comments incited a flurry of criticism on social media and spawned a popular hashtag on social media, #ichoosefish.

The company later argued that it met Vietnam's environmental standards and said that the spokesman had been fired.

Company officials did not respond to requests for comment.

The government has been just as reticent.

At first, it suggested a toxic algae bloom was responsible. In midMay, Pham Cong Tac, deputy science and technology minister, told Vietnamese news outlets that the ministry had a "convincing scientific basis" to explain the fish deaths, but he did not disclose what it was.

Last week, Mai Tien Dung, minister and head of the government office, said that the authorities had identified the cause but indicated that they could not tell the public because an investigation was continuing.

The lack of information has only fueled the protesters' anger.

Villagers say the authorities collected water samples immediately after the episode, and foreign experts say test results should have been known within days.

Nguyen Hoang Anh, a university professor in Hanoi, said the government should have immediately revealed the toxin, especially to the poisoning victims and their doctors.

"It's not fair," she said. "It's not ethical. It's a crime."

She said the cover-up had the potential to make the fish kill Vietnam's Chernobyl, the 1986 nuclear disaster that contributed to the unraveling of the Soviet Union.

That is what the government most fears, analysts say, and it is why it acts quickly and at times brutally to suppress protests before they ignite a popular uprising.

But critics say the government has another motive. The government has supported the steel plant, giving the company a sweetheart deal, including tax incentives and a bargain price for the property, to build on the coast.

Two years ago, while the factory was under construction, it became a prime target of the riots over China's placement of an oil rig in waters off Vietnam in the Southeast Asia Sea. More than 200 factories owned by Chinese and other foreign companies were looted and set ablaze around the country.

But the worst rioting occurred at Formosa, where four people were killed. The company is based in Taiwan, but thousands of laborers from mainland China were building the factory. Protesters stopped buses, pulled off Chinese passengers and beat them.

The authorities have been more careful not to let the current protests get out of hand. But even if they can be quelled, the economic costs have continued to mount

On a recent morning, more than a dozen fish traders gathered at a drink shop across from the beach here. A few played board games. There was nothing to do but kill time, one said.

Around the corner, Phan Dinh Son, 49, sat in his all-too-quiet open-air shop. He used to sell hundreds of blocks of ice a day. Now he sells about 20, he said. A separate business buying and trading shellfish has been suspended because no one wants to eat local fish.

"The fish market is empty," he said. "I would hope the government and the party would come up with a solution and give a clear answer so we can do our business."

## MASS FISH DEATHS IN VIETNAM HIGHTLIGHT THE COUNTRY'S PRESS FREEDOM PROBLEM<sup>73</sup>,

MELBOURNE, Australia - The stink from Vietnam's fish kill scandal - which left some 70 tons of dead fish scattered across the beaches of four of the country's provinces and fishermen out of work - is symptomatic of something greater than worries about food security and the environment: access to information and the ability to distribute it.

On June 30, almost three months since the mass fish deaths began, Vietnam's newspapers all began printing the same story: Formosa Ha Tinh Steel Corp., a subsidiary of Taiwan's Formosa Plastics Group, blamed by many for the incident, had accepted responsibility for the industrial pollution that had caused the environmental fiasco and would pay \$500

<sup>&</sup>lt;sup>73</sup> Helen Clark/ Huffington Post, 2/7/2016: <a href="http://www.huffingtonpost.com/helen\_clark/fish-deaths-vietnam-press-freedom">http://www.huffingtonpost.com/helen\_clark/fish-deaths-vietnam-press-freedom</a> b 10744496.html

million in compensation. The government of Vietnam, which had been silent for much of this, also noted the company was responsible due to a toxic spill. Earlier in the month there was progress towards a verdict but no confirmation, as Tuoi Tre newspaper wrote:

On June 2, the government held a press meeting to announce that the cause behind the deaths had been identified, but it was being challenged by experts in order to ensure it was based on scientific, legal, and objective grounds before a final conclusion was confirmed.



The World Post wrote about the fish-kill incident

While the public waited for answers and the tourism industry suffered, the press was also curtailed. As the New York Times mentioned in its reporting of the incident: "Officials said that it had been necessary to restrict news coverage of the disaster while the investigation was underway." This wasn't entirely unusual for the country whose journalists

often face obstacles while doing their jobs, but it did highlight a situation that doesn't appear to be getting better anytime soon. Vietnam has consistently been ranked poorly for press freedom, and the fish death debacle shows recent changes in the Vietnamese press: environmental journalism is now more tightly watched as the public becomes more aware of problems - and more likely to organize. In the wake of this scandal, the freedom to report thoroughly on environmental issues might be abating, just as it gains traction in the public commons in Vietnam.

In fact the reaction Thursday to the scandal served as a coup, of sorts, and a rarity in governmental response to similar offenses in the past. Going forward, the level of follow up reporting will determine more about how much press freedom will be allowed in these large-scale environmental cases with their mix of government oversight, foreign money and public anger at pollution. But for right now this new government line, and fine of half a billion in compensation, is encouraging in comparison to the wrist-slap fines of the past.

Up to now environmental and food safety issues have been allowable investigative stalwarts of the press for a while, likely because theyre much safer topics than tales of actual, detailed official corruption or government mismanagement. But once somewhat controversial issues get enough public attention, coverage often lessens or is at least more carefully managed. Such was the case with our fish kill story, which made international headlines as well as people took to the streets in protest for the lack of accountability and information for this disaster.

But this is nothing new. In fact, those critical of the government can be locked up under three different sections of the criminal code: 88, 79 and 258. Vietnam's press is state-owned, but each news outlet is owned by different government organizations, rather than by the Communist Party

directly. Instead, directives are issued and there is also a good measure of self-censorship; editors and journalists tend to know when a story or topic is incendiary. This 2008 paper, written as social media was just taking off, covers how Vietnam's press operates quite well.

When Vietnam's fish kill protests began over two months ago, people were angry at the lack of government action, the cavalier response from a spokesman for Taiwanese company Formosa assumed responsible for the pollution and worried for both food security and the livelihoods of those affected. By early May, protesters in Ho Chi Minh City numbered in the many hundreds or more, and were not simply activists but ordinary people, too.

Before the news of the chemical spill and the fine broke this week, Formosa built a 10.6 billion dollar steel mill in Ha Tinh, a small, poor province south of Hanoi where a large amount of the fish washed up. The building of the plant was a coup for the provincial government that had lobbied hard.

Back then it was said that the piles of fish washed ashore were apparently the result of a one-time accidental dump of pollution in the sea via an underwater pipeline several miles offshore, according to initial press reports. Formosa spokesman's initial statement at a press conference stating that Vietnam would have to "choose" between a steel plant and catching fish and seafood set off a social media storm of people "choosing" fish.

Throughout the ordeal, the government blocked much reporting on the issue, citing its "sensitive nature" and so people turned to other avenues to express their frustration and share information. As Vietnam Right Now wrote on June 11, "With demonstrations banned, and the media firmly under state control, frustration at the government's handling of the mass

fish deaths in central provinces has increasingly been restricted to social media."

In May, about a month after the fish stink began, I wrote on US. President Barack Obama's first visit to Vietnam for The WorldPost and Australia's Lowy Institute, a Sydney-based foreign policy think tank. The American leader received a rapturous welcome and the public rancor over the fish saga evaporated at a time when things could have been uncomfortable for the government - and gave the country a boost in positive press. President Obama's dinnertime trip to eat bun cha, a pork dish with noodles, was the headline of the day. "They've taken a break from choosing fish, but even a president can't be a distraction forever," I wrote in Lowy's Interpreter blog,

Sure enough, on June 5, protests and arrests began again. Pham Doan Trang, a longtime journalist-turnedactivist, chronicled the events in a group email to journalists and academics. Trang was one of the activists slated to meet Obama during his Vietnam trip, but was prevented from doing so after the car she was covertly traveling in from Ho Chi Minh City to Hanoi was stopped by police. She wrote that post-Obama protests were more sparsely attended, to the point that in HCMC police outnumbered protesters. She also noted that many protesters were dragged away, beaten and interrogated by police and security forces, who used methods she likened to old Soviet techniques.

Environmental sagas have made for compelling reporting in Vietnam over the past years, but as discourse moves into the civil society and social media realm, and interest in environmental issues increases, the government attitude towards them is changing and what, for journalists, was largely apolitical investigative work now has a stronger political

background thanks to a growing number of young activists and a more general unease over both pollution and food security in the population.

Luong Nguyen An Dien, a Vietnamese journalist who recently returned after a stint at Columbia University's school of journalism, told me, "Now social media has boomed in Vietnam, and the authorities are increasingly wary of public sentiment there. To them, any environmental issue could be politicized. The fish kill is just an example."

Despite the crackdown from the government, reporters still usually report on sensitive issues until the subject gets too hot via social media. This social media aspect of journalism can have the effect of distortion: untruths can be propagated in a blogosphere unrestricted by editorial standards. Even so, the reporting feels more honest than the official line printed in the papers, which often go through screening and censorship by Ministry of Information and Communications.

Online environmental organization started to gain traction in Vietnam in 2009, when disparate groups came together to criticize the government's plans for bauxite mines in the ecologically delicate Central Highlands region. That they were Chinese-run only made people angrier. Citizens organized a campaign via Facebook that took the government by surprise and the site was intermittently blocked (though never officially "banned") for some time after. The same year, The Committee to Protect Journalists named Vietnam in the top "10 Worst Countries to Be a Blogger," following the detention of a blogger for her coverage of territorial issues between China and Vietnam.

In the past few years young activists are doing more than talking but actually criticizing the government. When Hanoi's city government announced a tremendous cull of the city's beautiful old trees - all made

from valuable wood - young people organized online, and protested. Some protests quickly turned violent.

Dien, the Vietnamese journalist, remembers the last Taiwanese environmental scandal, when in 2008, MSG producer Vedan left a 10 kilometer section of the Thi Vai River in Dong Nai province ecologically "dead." There was anger - and the story was heavily reported by Vietnamese press - but apart from those affected, there were few protests and not much online organizing.

"At the time, the purpose of covering the Vedan case was to sneak through a bigger story - why the Taiwanese MSG maker could get away with such blatant violations for such a long time. The final outcome fell short of that expectation: Instead it was all about how Vedan finally agreed to compensate Vietnamese farmers out of fear they would face a massive boycott," he said.

Dien has reported on environmental issues in the country as well. Writing for Vietnam Express he questioned why Monsanto, the company responsible for Agent Orange, is receiving such a welcome back into Vietnam after the chemical deforested so much land and led to birth defects in subsequent generations of the Vietnamese population.

This topic has not yet reached the proportions of the fish kill scandal, partly as there are no direct effects: no tons of dead fish. Whether people begin to organize around less immediate threats remains to be seen, but as food safety in general becomes a strong preoccupation, the environmental movement is going to pick up steam. And the freedom to report on it might be waning - for now at least.

## CHAPTER VII: IMPACTS AND CONSEQUENCES

As mentioned in **Chapter IV**, statistic work and quantification of loss should have been the first jobs to be done by the concerned parties (Formosa and the affected people) so the negotiation on compensation could be conducted. In fact, unfortunately the Vietnam government together with Formosa reversed exactly the process. So far there are no official and credible statistics on the loss or assessment of the consequence of the disaster

Within its limited conditions, Green Trees could only have several general assessments, based on experts' opinions published by the press and the survey result of the group in Ky Anh district, Ha Tinh province..

#### LOSS OF HUMAN LIFE AND HEALTH

Vietnam is a country with a fragile economy, weak and fully sensitive. Environmental problems spread far and wide, such as deforestation, air pollution, lack of clean water, continuous floods... enough to make any environmental protection organization suffer from headache. The people live with all kinds of cancers, diseases... Now they are hit extremely hard by the disaster.

Only with the announcements publicized by scientists on the stateowned newspapers, not to mention rather sensitive ones which are rarely posted on the newspapers, it was enough to make anyone shiver.

Le Van Ngay (b.1970), a diver while doing his job in Son Duong Port, Formosa (Ky Anh, Ha Tinh) to build a breakwater for this project, felt a tightness across his chest and difficult to breath and died on April 24. Of the 15 divers taken by NIBELC (a construction and labor supply joint stock company), one of Formosa's contractors, to the Central Hospital of Hue for health check, three had to stay in hospital for monitoring, one had copper element in blood twice as much as the normal index.

21 divers of NIBELC exhibited the symptoms of toxic contamination of seawater in Vung Ang area.

## DEPLETION OF SEAFOOD RESOURCES, SERIOUS ECONOMIC EFFECTS

A total of 115 tons of dead fish washed ashore along the coastline. Dead aquatic products amounted to 140 tons of fish and 67 tons of oysters. 40 to 60% of corals were destroyed out of 450 hectares, and dead seaweed layered on the seabed.

The first people who suffered the disaster were none other than fishermen. It would be quite minor to talk about their changes in living, work, and production. Quite frankly, they had lost everything. Following were the coastal aquaculture households, fish in the cages was all dead and it was impossible to guess when they can resume raising aquaculture. In Quang Binh only, 18 communes do marine work with more than 14,000 households and over 24,000 workers.

At the seminar "Industrial waste: Limits in management and recommendations on policies" held by People and Nature Reconciliation (Pan Nature) on May 10, Prof. Dang Hung Vo, former Deputy Minister of Natural Resources and Environment, said there must be some problem in industrial waste management. The consequence was "... Fish died, sea diving showed that the coral reef died, marine ecosystem was severely affected, foreign specialists said it took 50 years (for the sea) to recover if the pollution source discontinued." There was a gloomier prediction: not 50 years but 100 years.

According to the estimates of scientists, 50 years was for the marine ecosystem to recover completely in normal conditions. Normal condition means Formosa or any other plant in the area stops causing any new disaster, at the same time processes the toxins accumulating at the bottom of the sea.

Unfortunately provinces which are seriously affected with pollution were the ones having special strength in tourism. Right after the second province, Quang Tri, saw mass fish deaths washed ashore, all the beaches were completely deserted, a series of travel tours were canceled. Travel and transportation companies, hotels, and restaurants with tens of thousands of workers were directly affected.

The Vietnam government reckoned that the waste which Formosa Ha Tinh admitted to have discharged into the sea affected the life of over 200,000 people, including 41,000 fishermen. In fact, there must be about 5

million people severely affected in living; one million people lost their traditional livelihood.

"Offshore and inshore fishing boats in recent time almost completely stopped working, purchasers and seafood businesspeople and fishing logistics service providers could not work. Not only fishermen but hotels, restaurants, travel agencies, and coastal trading points were at a complete standstill, causing great economic losses. The number of tourists to Quang Tri reduced by one tenths compared with the same period of 2015". 74

#### UNEMPOYMENT AND NO JOB OPPORTUNITIES

No one dare to eat seafood and go swimming in the sea in the central Vietnam any more. Many were even so provident that they store fish sauce and salt. Seafood as the main source of food has been toxic contaminated, and rice would become scarce followed by increase of prices of other essential commodities.

The Vietnam government promised to support fishermen in the Central region to shift to other occupations, e.g. expatriate labor. That means that fishermen will have to leave the sea, and a strip of seas in the central region may be given up to Chinese fishermen, leaving maritime sovereignty unable to control. Not only seafood industry and sea tourism of Vietnam were paralyzed but security and national sovereignty were also threatened

<sup>&</sup>lt;sup>74</sup> Vice Chair of People's Committe in Quang Tri, Representative Ha Si Dong, addressing Congress on 7/29/2016

Lawyer Tran Quoc Thuan, former Deputy Chair of the National Assembly's Office, told the VietTimes, "I don't think the proposal of fishermen shifting to other occupations such as expatriate labor due to damaged marine environment is a good idea. It is very important to improve and restore it as before for them to live with the sea. Why hurrying into changing jobs? Leave the sea, then?"

All the fishermen living in the parishes Dong Yen and Quy Hoa answered Green Trees' questionnaire asserted that they did not want to shift to other occupations, especially a number of them have been living with sea fishing or diving since the early 1990s, when they were still young or children aged 11-12.

It can be predicted that unemployment would be a big risk to the central provinces suffering the fish death disaster. Naturally marine work is a job that is labor intensive, so birth rate is high in the sea area, each family has an average of 7 or 8 children. These labors shall face unemployment when they cannot do marine work.

Careers end, loss of taxation, unemployment, poverty, illiteracy... Is it true that central Vietnam becomes a dead area little by little?

#### RISK OF ILLEGAL EMIGRATION

Nguyen Truong Son, aged 25, a human rights activist, member of Green Trees, presently works in Thailand, found that the number of Vietnamese people leaving their country to work in Laos, Cambodia and Thailand has been increasing rapidly after the environmental disaster.

He said that his friends who had been living in Thailand for 20 years uttered an exclamation, "(I) have never seen such many Vietnamese workers in Thailand. Even in the provinces and cities far from Bangkok there are Vietnamese people working."

He commented: "Our state would rather withhold a foreign plant and push tens of thousands to live in foreign countries than let it go out accompanied by a bulk of information about bribery, corruption, contravention to be uncovered."

Lawyer Hoang Ngoc Giao, PhD., Director of Institute for Policy Research, Development Law (an organization affiliated Union of Science and Technology of Vietnam), even made a noticeable remark that the matter of national security and defense could be affected if the emigration happens: "If, for example, every fisherman were a landmark to protect sovereignty, the fact that fishermen could not do marine work because of environmental disaster, then how would national security and defense, sea and island sovereignty be affected in this situation?"

Although unexpected, the environmental disaster with consequences before our eyes and long-time corollary appear. It is difficult to measure how much we lose. So much. Besides loss, however, does the Vietnam government find out what is reserved for it? The gaining is the bitter lesson named Formosa.

### CHAPTER VIII: CONCLUSIONS & RECOMMENDATIONS

The marine environmental disaster in the central area brought by Formosa Ha Tinh is a burning matter, causing a feeling of anger in public opinion, both national and international. It exposed the weakness, inflexibility of Vietnam's state management in overcoming, lessening losses from the disaster. It erodes public confidence in the State, is a wake-up call for the government to cope with, as well as to reassess the environmental management and economic development priorities for a long time.

It was time for the Vietnam government to take urgent measures to restore environment and return livelihoods to the people in the short term, and avoid similar risks that may occur in the long term. Green Trees puts forward a number of preliminary recommendations as follows:

#### URGENT ACTIONS

The most important work that needs solving in the coming days is to step up solutions to improve the affected marine environment and ecosystem. If there is no way to restore the environment, the coastline from Ha Tinh to Thua Thien - Hue will remain a dead area.

#### The state should:

- ensure full transparency and information access, and make official reports on the process of investigation and assessment of damages in the past three months.
- have Formosa create a remedy fund with a clear time schedule.
- together with these activities, carry out a comprehensive and precise assessment of the impacts and damages of the environment disaster, both at present and in the future. The compensation of USD \$500 million is certainly insufficient.
- speed up progress and monitor closely the process of cleaning up the environment and compensating the people.
- impose punishments upon any individual or organization that take a rake-off from the compensation.
- re-examine the environmental impact assessment, environmental commitments, guarantees and conditions and the license granted to Formosa as well. This process should be done again and, in the meantime, Formosa must temporarily cease construction activities.
- immediately modify legal frameworks and raise environmental standards of Vietnam to ensure that a similar incident shall not occur.
- carry out investigation into the responsibilities of individuals and organizations involved in the process of evaluation, licensing and monitoring the discharge. Appropriate punishments should be imposed on individuals and/or organizations contravening laws or creating gaps for someone to poison the environment.

- ensure food security for at least six months and free education for people in the disaster areas. Not only instant jobs but long-term ones also are needed, in areas such as offshore fishing, coastal tourism development, environmental clean-up, etc.
- stop controlling civil societies and restricting basic human rights such as the right of expression, the right to peaceful assembly. Environmental protection should be attached closely to the protection and promotion of human rights..

#### LONG TERM ACTIVITIES

Because priority is given to economic development and partly because awareness is limited, the attachment of economic development to environmental protection for sustainable development has not been given proper care, leading to the fact that environmental pollution takes place in a faster and more regular basis. Until now in Vietnam there have been 299 industrial parks, 15 marine economic zones, 12 coal-based thermal power plants in operation, added with the ongoing bauxite mining project in Tay Nguyen. Nuclear power plants in Ninh Thuan shall soon come into operation.

But, as might be expected, the authorities at all levels fail to adapt to new requirements. Agricultural and living waste sources are left uncontrolled. Most of the wastes are discharged into the sea in numerous different ways. Therefore, environmental disaster risks like the current one may frequently recur. To effectively prevent and remedy environmental pollutions, a number of comprehensive solutions should be done synchronously:

- 1. The legal system regulating environmental protection should be improved completely, in which the sanctions (administrative coercion and criminal proceedings) must be actually strong enough to deter violators. Moreover, a comprehensive system of environmental management in factories, industrial parks should be built in accordance with international standards and, at the same time, monitoring activities should be implemented closely to move forward to a better and friendlier environment
- 2. Control of environmental quality, inspection, checking, and monitoring on a regular, periodical, or unannounced basis should be intensified. There should be close collaboration among professional organizations, especially between environmental inspectors with environmental police at all levels to detect, prevent and handle immediately any activity of individuals and organizations that may be harmful to the environment. At the same time, professional skills and capacity of forces in charge of environmental issues should be increased; modern equipment should be provided for these forces so they can work more effectively.
- 3. Attention should be paid to the development planning of industrial zones, trade villages, cities and towns, based on the thorough and comprehensive calculation of development trends; hence appropriate policies should be made rather than the rampant, inconsistent and overlapping plans developed so far in many provinces, which caused a great many difficulties to policy implementation in general and environmental management in particular.

For industrial zones, regulations should be adopted to make sure that infrastructure developers build up complete sewage and waste treatment systems before they are put into operation, at the same time periodical reports on waste treatment work should be made. Environmental management in industrial zones, coastal economic zones and thermal power plants should be reevaluated. Projects with sea pollution risk must be cancelled, because they would have been the origin of environmental disasters had they not been closely and regularly monitored in the first place.

- 4. Special attention should be paid to the implementation of the evaluation and environmental impact assessment for investment projects, based on which professional organizations shall give proper advice to competent authorities for consideration of licensing. Decision on investment projects should be thoroughly examined with consideration of both short-term benefits and their impacts on the environment in the future. Transparency and accountability should be guaranteed; development plans and investment projects should be put under public scrutiny. The government should create favorable conditions for citizens and civil society to participate in monitoring and discussing the environmental impact of such plans and projects.
- 5. Environmental education should be reinforced in order to make changes and enhance public awareness of law observance and enforcement in environmental protection, as well as to promote social responsibility of the businesses in preserving and protecting the environment. It should aim to make people aware of their role in environmental protection and the relationship among nature, man, and society.

Today's disaster of the sea in the Central region gives us lots of bitter but valuable lessons. It makes direct threats against sustainable economic development, the existence and development of present and future generations. It will take a very long time for us to overcome the disaster,

and at a huge price. Therefore, the determination and patience of both the government and people are of vital importance.

#### REFERENCES

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- 2. IPCC special report 2013;
- 3. Sources from the Organization for Economic Co-operation and Development (OECD) and United Nations Environment Programme (UNEP);
- 4. The 1982 UN Convention on Law of the Sea (UNCLOS);
- 5. Luat Khoa Tap Chi, Tuoi Tre, Thanh Nien, Tien Phong, BBC Vietnamese, VnExpress, VietNamNet, Dan Tri, Lao Dong, Nguoi Lao Dong, Mot The Gioi, Petro Times, Nguoi Dua Tin, Cong an Nhan dan, Ha Tinh dien tu, Giaoduc.net, Giao Thung, VietTimes, VTV, VTC News, Doi song Phap luat, VnMedia, Zing.
- 6. The Constitution of the Socialist Republic of Vietnam (amended 2013).
- 7. The Vietnamese Penal Code (amended 2015)
- 8. The 2014 Law on Investment

#### **GLOSSARY**

In order to equip the Vietnamese readers with some technical words in the area of environment protection and disaster risk reduction, we are providing the below glossary of most used terms.

The terms are placed in alphabetical order and can be attributed to:

- 1. 2009 UNISDR Terminology on Disaster Risk Reduction;
- 2. IPCC special report 2013;
- 3. Sources from the Organization for Economic Co-operation and Development (OECD) and United Nations Environment Programme (UNEP);
- 4. The 1982 UN Convention on Law of the Sea (UNCLOS);.

#### **Accountability**

A government has an obligation to explain their decisions and rule that affect to the citizens. An official have an obligation to explain their action and behavior. Accountability is obtained when the government and its officials fulfill such obligations. Accountability is achieved through the use of a variety of mechanisms -- political, legal, and administrative -- designed to prevent corruption and alienation.

#### **Anthropogenic emissions**

Emissions of greenhouse gases, greenhouse gas precursors, and aerosols associated with human activities. These activities include the burning of fossil fuels, deforestation, land use changes, livestock, fertilization, etc., that result in a net increase in emissions.

#### Capacity

The combination of all the strengths, attributes and resources available within a community, society or organization that can be used to achieve agreed goals.

#### Civil society

An array of social life organized, voluntary, self-replicating, (almost) self-financing, independent of government, and bound together by a legal order or an integer common rule. Civil society is a space where people know how to take care of their self, self-organized to promote the innovative capacity, the realization of ideas and to interact with the state in order to reach a national governance which is transparent, effective and accountable.

#### Climate change

A change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods.

#### Coping capacity

The ability of people, organizations and systems, using available skills and resources, to face and manage adverse conditions, emergencies or disasters.

#### Disaster

A serious disruption of the functioning of a community or a society involving widespread human, material, economic or environmental losses and impacts, which exceeds the ability of the affected community or society to cope using its own resources.

#### Disaster management

Disaster management refers to social processes for designing, implementing, and evaluating strategies, policies, and measures that promote and improve disaster preparedness, response, and recovery practices at different organizational and societal levels.

#### Disaster preparedness

Disaster preparedness measures, including early warning and the development of contingency or emergency plans, may be considered a component of, and a bridge between, disaster risk reduction and disaster management.

#### Disaster risk

The potential disaster losses, in lives, health status, livelihoods, assets and services, which could occur to a particular community or a society over some specified future time period.

#### Disaster management cycle

The disaster management cycle depicts the sequences and components of so-called disaster management. In addition to considering preparedness, emergency response, rehabilitation, and reconstruction, it also included disaster prevention and mitigation as stated components of disaster management and utilized the temporal notions of before, during, and after disaster to classify the different types of action.

#### Disaster risk management - DRM

The processes for designing, implementing, and evaluating strategies, policies, and measures to improve the understanding of disaster risk, foster disaster risk reduction and transfer, and promote continuous improvement in disaster preparedness, response, and recovery practices, with the explicit purpose of increasing human security, well-being, quality of life, and sustainable development.

#### Disaster risk prevention

Disaster risk prevention and disaster prevention refer, in a strict sense, to the elimination or avoidance of the underlying causes and conditions that lead to disaster, thus precluding the possibility of either disaster risk or disaster materializing.

#### Disaster risk reduction

The concept and practice of reducing disaster risks through systematic efforts to analyze and manage the causal factors of disasters, including through reduced exposure to hazards, lessened vulnerability of people and property, wise management of land and the environment, and improved preparedness for adverse events.

#### Environmental disaster

Environmental disasters are defined as man-made damages to the natural environment that result in disease and death of living beings; including, plants, animals and human beings. Environmental disasters can result from technical accidents, human, technological or mechanical failure or carelessness, they can be the consequence of long-term environmental pollution, such as, the greenhouse effect or the destruction of the ozone layer.

#### Social disaster

Extreme impacts on social systems but may or may not impact on the physical and ecological systems.

#### Early warning system

The set of capacities needed to generate and disseminate timely and meaningful warning information to enable individuals, communities and organizations threatened by a hazard to prepare and to act appropriately and in sufficient time to reduce the possibility of harm or loss.

#### Governance

Multi-level interactions (i.e., local, national, international/global) among, but not limited to, three main actors, i.e., state, market, and civil society, which interact with one another, whether in formal and informal ways; in formulating and implementing policies in response to environment-related demands and inputs from the society; bound by rules, procedures, processes, and widely accepted behavior; possessing characteristics of "good governance"; for the purpose of attaining environmentally-sustainable development.

#### Hazard

A dangerous phenomenon, substance, human activity or condition that may cause loss of life, injury or other health impacts, property damage, loss of livelihoods and services, social and economic disruption, or environmental damage.

#### **Human security**

Human security can be said to have two main aspects. It means, first, safety from such chronic threats as hunger, disease, and repression. And second, it means protection from sudden and hurtful disruptions in the patterns of daily life - whether in homes, in jobs, or in communities. Such threats can exist at all levels of national income and development.

#### **Impact**

Effects on natural and human systems. In this report, the term 'impacts' is used to refer to the effects on natural and human systems of physical events, of disasters, and of climate change.

#### **Environmental impact assessment**

Process by which the environmental consequences of a proposed project or progamme are evaluated, undertaken as an integral part of planning and decision-making processes with a view to limiting or reducing the adverse impacts of the project or programme.

#### **Local disaster risk management** - LDRM

The process in which local actors (citizens, communities, government, non-profit organizations, institutions, and businesses) engage in and have

ownership of the identification, analysis, evaluation, monitoring, and treatment of disaster risk and disasters, through measures that reduce or anticipate hazard, exposure, or vulnerability; transfer risk; improve disaster response and recovery; and promote an overall increase in capacities. LDRM normally requires coordination with and support from external actors at the regional, national, or international levels. Community-based disaster risk management is a subset of LDRM where community members and organizations are in the center on decision making.

#### Official media

It is communication system of the state, responsible for publicoriented, stable people's thoughts. This system consists of various forms such as:

- Communication via the mass media: newspapers (in), TV, radio, billboards, posters, leaflets, films, etc.
- Communication to the individual through contact at home, at work, phone calls, mail, etc.
- Communication to groups through workshops, training, coaching, group meetings, visiting and surveying, etc.
- Communication via mobile performances, participate in the forum, the campaign, participating in festivals and celebrations.

#### Pollution of marine environment

The introduction by man, directly or indirectly, of substances or energy into the marine environment, including estuaries, which results or is likely to result in such deleterious effects as harm to living resources and marine life, hazards to human health, hindrance to marine activities,

including fishing and other legitimate uses of the sea, impairment of quality for use of sea water and reduction of amenities.

#### Social media

The term used to describe a variety of communication channels on the Internet, base on Web platforms, applications and technologies that enable people to interact in society, share ideas, information, images together easily, such as Facebook, Twitter, YouTube, blogs and other sites based on the involvement of users and content by the users create.

#### Scenario

A plausible and often simplified description of how the future may develop based on a coherent and internally consistent set of assumptions about driving forces and key relationships. Scenarios may be derived from projections, but are often based on additional information from other sources, sometimes combined with a narrative storyline.

#### Sustainable development

Development that meets the needs of the present generation while sustaining the ability of the future generations to meet their needs.

#### **Transparency**

Transparency refers to an environment in which the objectives of policy, its legal, institutional, and economic framework, policy decisions and their rationale, data and information related to monetary and financial policies, and the terms of agencies' accountability, are provided to the public in a comprehensible, accessible, and timely manner.

#### Vulnerability

The characteristics and circumstances of a community, system or asset that make it susceptible to the damaging effects of a hazard.

#### **INDEX**

- **Compensation**, compensation of USD \$ 500 million: pg. 10, 36-37, 42, 52, 107-115, 145, 149-150, 155, 162.
- **Contractor**: pg. 23, 63-64, 65, 68, 156.
- **Demonstration**(s), **protest**(s): pg. 2-4, , 27, 28-36, 43-44, 47, 56, 66, 86, 88, 105, 120-121, 126-127, 134-139, 142-147, 150-154.
- **Formosa**: pg. 3-7, 15, 18, 21-27, 35-67, 70-75, 79-85, 90-93, 101, 106-115, 120, 122, 126-133, 139, 145, 148, 151, 155-157, 160-163.
- **FHS**, Formosa Ha Tinh: 22, 26, 36, 41, 50, 54, 58, 63-70, 73, 85, 89, 92, 119, 133.
- Ministry of Information and Communications:
- **MONRE**, Ministry of Natural Resources and Environment: pg. 22, 26, 37, 42-43, 76-77, 83-85, 90, 93-94, 99, 103, 132, 133.
- MPI, Ministry of Planning and Investment: pg. 50.
- **MPS**, Ministry of Public Security: pg. 41, 90, 105, 108, 133.
- **MOST**, Ministry of Science and Technology: pg. 42, 104, 100-101.
- National Technical Regulation: pg. 24, 76-78, 81.
- **Nguyen Phu Trong**, General Secretary of the VCP: pg. 22, 94.
- **Nguyen Thi Kim Ngan**, Chairwoman of the National Assembly: pg. 39, 41.
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- **Tran Hong Ha**, Minister of Natural Resources and Environment: pg. 26, 36-37, 42, 58, 90, 94, 99,.
- **Truong Minh Tuan**, Minister of Information and Communications: pg. 28, 96, 99.
- Vietnam Path Movement: pg. 13, 27.

#### Green Trees

- Vo Kim Cu, former secretary of Ha Tinh communist party cell, former chairman of Ha Tinh People's Committee: pg. 39-40, 51-52, 101, 120,
- **Vo Tuan Nhan**, Deputy Minister of Natural Resources and Environment: pg. 26, 93, 99, 103.
- **VOICE** Vietnam: pg. 122-126, 134.