**REPORT ON TRAINING PROGRAM AT CHAU KHE VILLAGE**

1. **Overview**

The training program is organized in two days, one focusing on local authorities, officials, and teachers, and the other focusing on equiping the locals villagers with better practices, raise their awareness on measures to control environmental health risks from metal cycling activities in the craft village. Half of the training program has been implemented according to the tentative plan, with major successes, and recieved great satisfaction and praises by both parties. The responses of the participants can be used as advices for future references when doing similar initiatives, and brought a clearer insights on the effects of heavy metal pollution on daily lives.

The training program for local authorities, officials, and teachers hasn’t been organized due to the recent Covid-19 situation, but will be finalized in the near future.

The training program is organized and co-chair by Bac Ninh DONRE and CECOD, with financial support from USAID through Pure Earth. Pure Earth also took part in assisting the job of design, supervise, and assure the quality of the training programs. CECOD is Pure Earth partners by being the organization’s technical consulting unit.

1. **Timeframe:**

* Training program for villagers in Chau Khe: **8:00 to 16:30 on January 28, 2021 (Chau Khe Training 1)**

1. **Location:**

* Hall of the People's Committee of Chau Khe ward, Tu Xa commune, Bac Ninh province

1. **Participants**

**Chau Khe Training (January 28, 2021)**

* Members of the Women's Union and the Veterans Association of Chau Khe ward.
* Members of the environmental protection group of the Veterans Association of Song Thap and Trinh Nguyen quarters.
* Households in Chau Khe ward.

The list of participant is as followed:

| **Name** | **Organization** | **Phone/Email** |
| --- | --- | --- |
| Tran Son Trung | Da Van Quarter | 0983990323 |
| Le Thi Huong | Da Van Quarter | 0979327510 |
| Nguyen Thi Thu Hang | Trinh Nguyen Quarter | 0983761193 |
| Nguyen Thi Thuc | Trinh Nguyen Quarter | 0936887646 |
| Nguyen Thanh Tuan | Chairman of the People's Committee of Chau Khe ward | 0912276726 |
| Tran Dinh Hoang | BT Youth Union at ward | 0353536855 |
| Ngo The Thien | People's Union of Da Van quarter | 0398319763 |
| Ngo Thi Bang | Member of PN Song Thap | 0762294366 |
| Pham Thi Binh | Branch staff of Women's Union | 0904984925 |
| Tran Thi Binh | Branch staff of Women's Union | 0395979766 |
| Luu Thi Chinh | Branch staff of Women's Union | 0904570298 |
| Tran Thi Dao | Branch staff of Women's Union | 0913515974 |
| Tran Thi En | Branch staff of Women's Union | 0836522068 |
| Nguyen Thi Ha | Associate staff of PN Trinh Nguyen | 0358930889 |
| Pham Thi Huong | Associate staff of PN Trinh Nguyen | 0778254123 |
| Nguyen Thi Lieu | Branch staff of PN Trinh Xa Association | 0947657588 |
| Tran Duc Cuong | Ward PCHT staff | 0916595388 |
| Nguyen Huy Thu | Ward QS | 0382931803 |
| Truong Thi Hong Khanh | Ward Veterinary Officer - HVPN | 0854485787 |
| Nguyen Thi Quy | Ward extension staff - HVPN | 0378567360 |
| nguyen Thi Thom | Women's Union of Chau Khe Ward Women's Union | 0914925419 |
| Nguyen Van Tinh | HVPN Trinh Xa | 0983963182 |
| Duong Thi Hien | Son Thap enterprise headquarters | 0989091807 |
| Tran Thi Hoa | Staff of Da Van women | 0964241459 |
| Nguyen Thi Thu Thuy | UV BCH for ward women | 0387570104 |
| Le Van Do | People's Committee of the ward | 0915037133 |
| Do Thi Duyen | HVPN Trinh Xa | 0399050365 |
| Giap Thi Du | CB PN Trinh Nguyen | 0962419929 |
| Ngo Van Can | TKD Da Van Design | 0877235366 |
| Ngo Thi Hoa | Da Van Quarter | 0339889737 |
| Tran Thi Hong | Da Van Quarter | 0372642692 |
| Ngo Thi Huyen | Da Van Quarter | 0376021990 |
| Tran Thi Lien | Da Van Quarter | 0762378454 |
| Ngo Thi Dung | Da Van Quarter | 0982438646 |
| Ngo Thi Minh Tien | Da Van Quarter | 0975260495 |
| Ngo Thi Quyet | Da Van Quarter | 0936583582 |
| Luu Thi Ngoc | Da Van Quarter | 0913513928 |
| Duong Thi Ha | Da Van Quarter | 0855571971 |
| Nguyen Thi Thu Giang | Da Van Quarter | 0983265088 |
| Tran Thi Duyen | Staff member Trinh Xa student | 0354781831 |
| Nguyen Thi Hang | Trinh Xa graduate student | 0980832183 |
| Nguyen Thi Nhung | Staff member Trinh Xa student | 0336597183 |
| Tràn Thi Xiem | Staff member Trinh Xa student | 0983512975 |
| Nguyen Thi Anh | Staff member Trinh Xa student | 0972023648 |
| Le Thi Hong | Trinh Xa graduate student | 0988454156 |
| Nguyen Thi Hoa | Trinh Xa graduate student | 0984387176 |

1. **Lecturers information**

* Mr. Ha Minh Ho Chi Minh - Environmental Specialist - Bac Ninh Environmental Association.
* Mr. Dao Nhat Dinh - Environmental Specialist - Center for Environment and Community Development.
* Mrs. Ta Thuy Lan - Environmental Specialist - Master of Environmental Science
* Mrs. Duong Thi To – Environmental Specialist – Director of CECOD

1. **Training Program**

Each training programs across two venues and three different days took around eight hours to complete, starting with the opening remarks at 8:30 AM and end with the closing remarks at around 16:30 AM.

The following is the format and timetable of a typical training program:

|  |  |  |  |
| --- | --- | --- | --- |
| **Time** | **Programs** | **Main Contents** | **Lecturer** |
| 8h30’ – 8h40’ | Opening remarks |  | Mrs Duong Thi To and Officials of the village or Province |
| 8h40’ – 10h00’ | An introduction to the current environmental status of Bac Ninh province and the environment of the craft villages. | - An overview of the environment in Bac Ninh province  - Overview of production activities and environmental pollution of the craft village. | Mr. Dao Nhat Dinh |
| 10h00’ – 10h15’ | Tea break |  |  |
| 10h15’ – 11h15’ | The Effects of Heavy Metals on Human Health | -Impacts of heavy metal exposure on human health  - Symptoms when exposed to heavy metals | Mr. Ha Minh Hoa |
| 11h15’-11h30’ | Discussion | Question 1: Please raise pressing environmental issues in the area where your family is living  Question 2: In your opinion, how would the mentioned above environmental problems affect your health and your family's health? | Mrs. Pham Thi Huyen and Mrs. Duong Thi To |
| 11h30’ – 13h30’ | Lunch break |  |  |
| 13h30’ – 14h30’ | Proposing solutions to treat environmental pollution in craft villages | - Proposing solutions to treat environmental pollution of soil, water, air, solid waste in craft villages | Mrs. Ta Thuy Lan |
| 14h30’ – 15h30’ | Control heavy metal pollution with health implications | - Recommend the measures to prevent and control metal contamination problems for human health | Mr. Ha Minh Hoa |
| 15h30’-15h45’ | Tea break |  |  |
| 15h45’-16h25’ | Discussion | Question 1: Please state the pollution treatment solutions that are being applied in the craft village.  Question 2: Please describe the current measures your family is taking to protect your health from metal pollution. | Mrs. Pham Thi Huyen and Mrs. Duong Thi To |
| 16h25’-16h30’ | Closing remarks |  | Mrs. Duong Thi To - Director of CECOD |

1. **Notable discussion and comments from participants**
2. **Chau Khe training program for villagers (January 28, 2021)**

At the training session, the participants have raised pressing environmental issues in their home areas, the environmental and health protection measures taken by the households as well as proposed useful recommendations.

The sources of pollution identified by the participants include:

* Steel foundries and rolling furnaces generate high metal dense smog and dust.
* A very large amount of the slag from the foundries is used to backfill low-lying areas, causing high risk of water polluting.
* Wastewater from plating households in Ma Ong area is discharged into the street and graveyard area, causing flooding and heavy pollution.
* The area already has a centralized wastewater treatment plant, but at present, the wastewater from the craft village has not been joint to be treated.

Measures recommended by participants to protect the environment and health include:

* Use labor protection (masks, protective clothing, boots).
* Use clean water to replace surface water, groundwater in daily life
* Request the Commune People's Committee and superior agencies to:
* Check and fine households in the area of ​​Ma Ong industrial cluster that discharge wastewater causing serious environmental pollution. Requiring to close rubber burning households causes environmental pollution.
* Proposing to take measures to require manufacturing households to install chimneys to treat furnace gas.
* Joint the wastewater of Chau Khe ward to the centralized wastewater treatment system of the town.

**VI. Locals’ perspective and opinions toward the training programs**

1. **Local’s perspective on current situations of their village**

Almost all participants partcipated in the programs have negative feeling and opinion towards the current situation of their villages. Many expressed dismay concerns for their health and family, as although they acknowledged the gravity of their situations, the government lack the probable solution or how to developed one. This is a notable repsone of a trainee who participate in the training programs.

*“The people here are greatly affected by the toxic fumes from production activities. Especially in children and the elderly, one majority and common symtoms are sore throats, breathing difficulty, and lung disease. And the death rate here from cancer accounts for about 70%. Of course, people passed away for various reasons, but this high coincidents should not be lightly considered. Moreover, it is also worth to mention that the problem of Chau Khe has been mentioned by the government and Bac Ninh DONRE, with money invested to fix the current situation. But still, with such money invested, the task is not yet thoroughly. Today through the training here, people of Chau Khe kindly ask the researchers to help and advise all levels of the government on planning a long successful program, not just a meager program in a day or two to reduce environmental pollution. If needed, even consult with international programs that can help.”*

Mr. Duong Quang Sac (A representative of Chau Khe Ward)

Across the repsonses of the participants, it is also clear that the pollution situation not only create health related implications, but spiritual and economical issues. The practices of this craft villages interfere with the means of living for agriculture household, polluting the source of watering for nearby rice fields. The local cemetary is heavily polluted, and sometimes flooded with harmful chemicals, hampering the spirituality practices of local citizens.

*“My name is Nguyen Binh Quyet, a retired Army Officer for 31 years now. Honestly listening to the experts has brought me a feeling of disconsolate for my hometown. In fact, I am actually one of the participants who asked the Bac Ninh DONRE and Bac Ninh government official to thoroughly manage this metal pollution problem since 2011. Yet, only 3 years ago, the Long Buong Dam still area had 6 very polluted foundries, and these 6 foundries had not been treated according to the regulations on environment protection, specifically they lack the dust treatment layer and system. Therefore, the life of the people in our town is extremely miserable. The rice can not survive the harsh conditions, and our graveyard nearby is also affected, our ancestors and sister cannot rest in peace.”*

Mr. Nguyen Binh Quyet (Representative of Song Thap Veterans Association, Chau Khe Ward)

1. **Overall comments on the locals opinion toward the training program**

The participants were very interested in the information about metal pollution in Chau Khe craft village presented by Mr. Dao Nhat Dinh in Mr. Ha Minh Hoa’s report about the investigation and the measures to control heavy metal pollution with health. The participants have expressed their opinions focusing on local pollution frustrations; desired quick solutions to this situation and suggested that the project continue to open more training courses to provide information for the people of the trade village.

At the closing remarks, all participants express their gratitude towards the training program, as they felt that not only this initiative improve their understanding, it signals a change in their village since more highly recognized international institutions started to care about their seemingly mundane but important problems. However, some express the need of more intensive training programs, with a wider scope to furthur raise awareness and find a balance sustainable plan.

**VII. Media coverage**

* Articles on Bac Ninh Department of Natural Resources and Environment web portal:

<http://stnmt.bacninh.gov.vn/news/-/details/57412/tap-huan-nang-cao-nhan-thuc-va-tang-cuong-nang-luc-kiem-soat-rui-ro-suc-khoe-moi-truong-tu-hoat-ong-tai-che-kim-loai-tai-lang-nghe-chau-khe>

* Article on Bac Ninh Newspaper

(Waiting for the Editorial Board to approve the article)

* News on TV Bac Ninh province

(Waiting for more information on class videos to complete the news)