

THE STANDING BOARD OF THE NATIONAL STEERING COMMITTEE
ON OVERCOMING POST-WAR CONSEQUENCES OF UNEXPLODED
ORDNANCES AND TOXIC CHEMICALS IN VIETNAM

OFFICE 701



VIETNAM'S EFFORTS IN OVERCOMING
POST-WAR CONSEQUENCES OF UNEXPLODED
ORDNANCES, TOXIC CHEMICALS

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Head of Office 701

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POST-WAR UNEXPLODED ORDNANCES, TOXIC CHEMICALS CONTAMINATION IN VIETNAM

1. HISTORY, ORIGIN

During Vietnam War

More than 16 million tons of bombs
was dropped on Vietnam

80 million liters of herbicides was
sprayed



Bombs were dropped



Agent Orange containers
used in Vietnam



Spraying herbicides on
the South of Vietnam

2. UNEXPLODED ORDNANCES

63/63 provinces (9,116 communes)
contaminated by bombs/mines
at different levels

Accounting for **81,87%** of total
communes over the nation

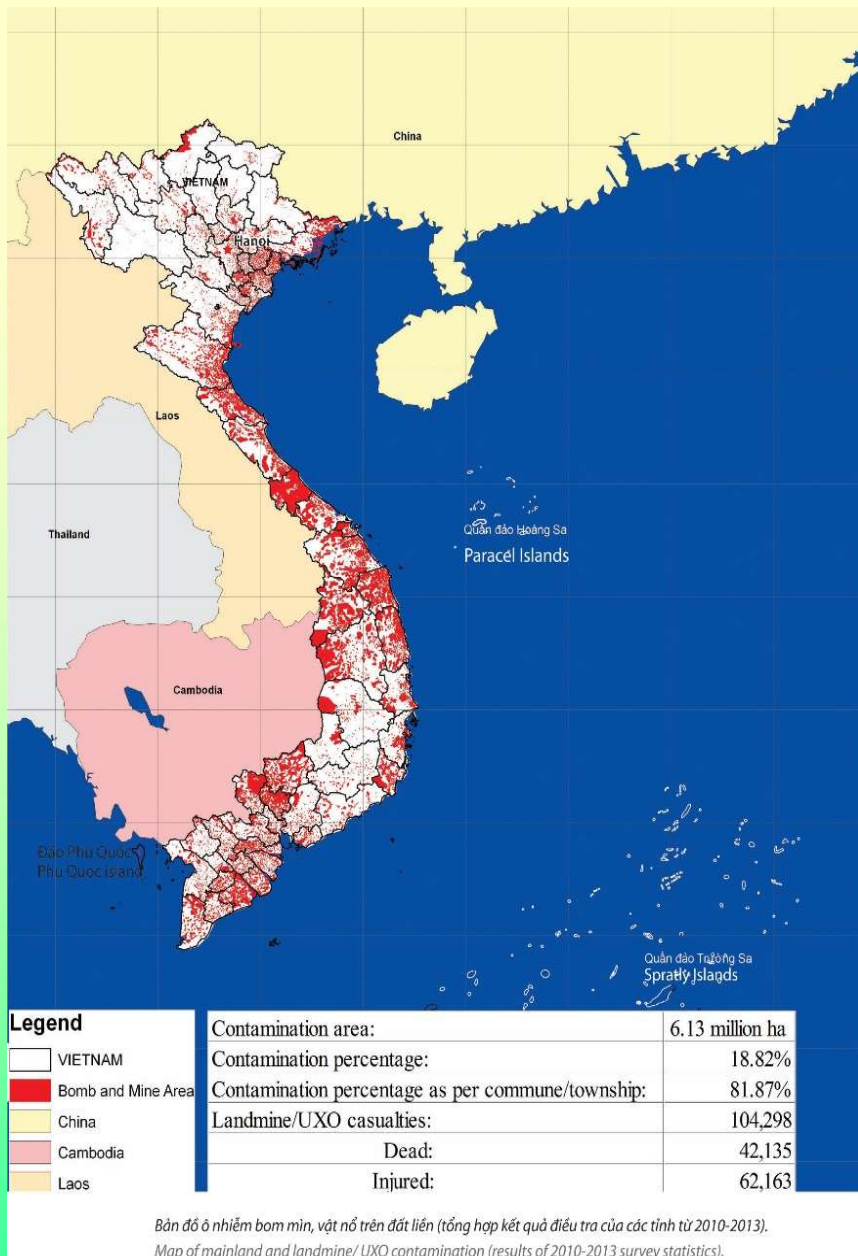
Updated in 12/2017:

Bombs/mines is still covering up to:

6,1 million hectares
(18.71% of the country's
land area)

Extent of bombs/ mines contamination:

- The highest: Center and High lands in Viet Nam
- The lowest: Midland Region and Northern Mountainous Area



Map of bombs/mines contamination
(VNMAC, 2018)

3. BOMBS/MINES VICTIMS

Bombs/mines victims

Data

104,298 victims
(1975-2002)

Injured: **62,163**
people



Died: **42,135** people
(30% are children)

1,800 cases
(in the last 5 years)

Died: **50%**



Direct reasons

Scrap finding (31%)



Playing (27%)

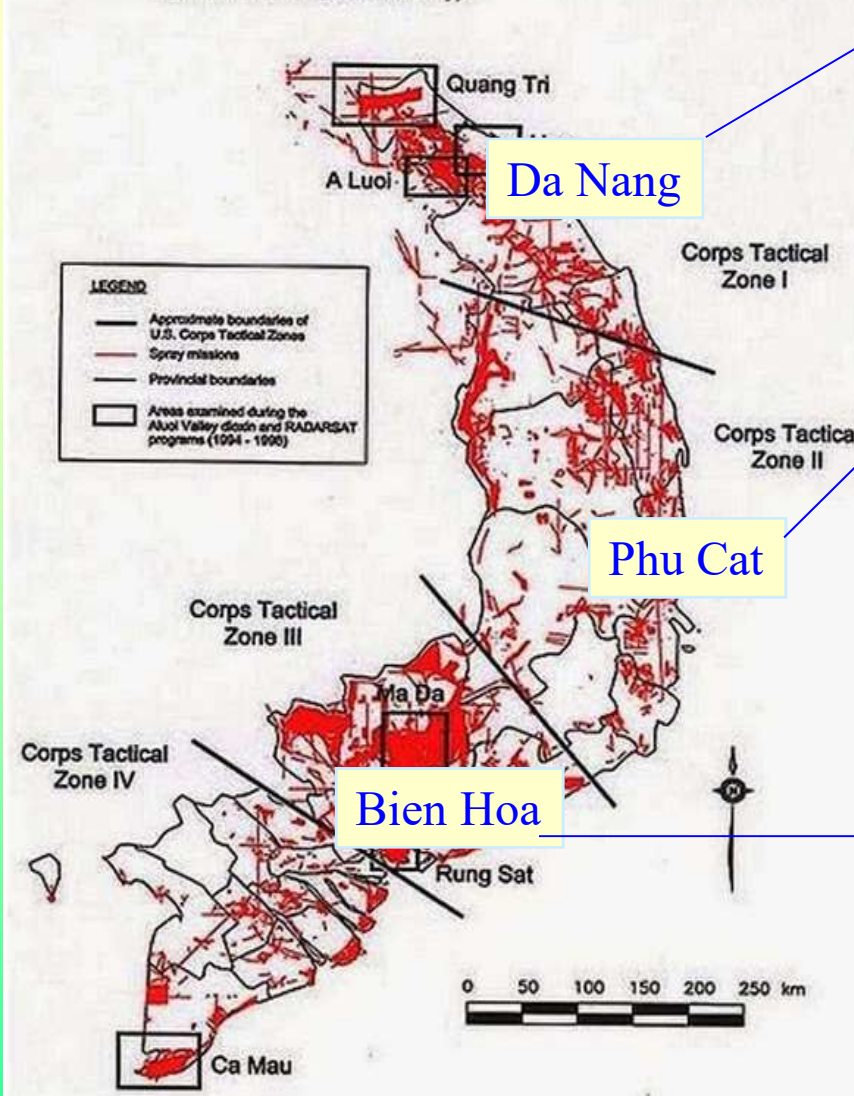


Husbandry activities (20%)



4. TOXIC CHEMICALS/DIOXIN CONTAMINATION

Aerial herbicide spray missions in southern Viet Nam, 1965 to 1971
(Source: U.S. Dept. of the Army).



DA NANG AIRPORT

Volume of contaminated material:

150,000 m³

The highest dioxin level:

365,000 ppt

PHU CAT AIRBASE

Volume of contaminated material:

7,500 m³

The highest dioxin level:

238,000 ppt

BIEN HOA AIRBASE

Volume of contaminated material

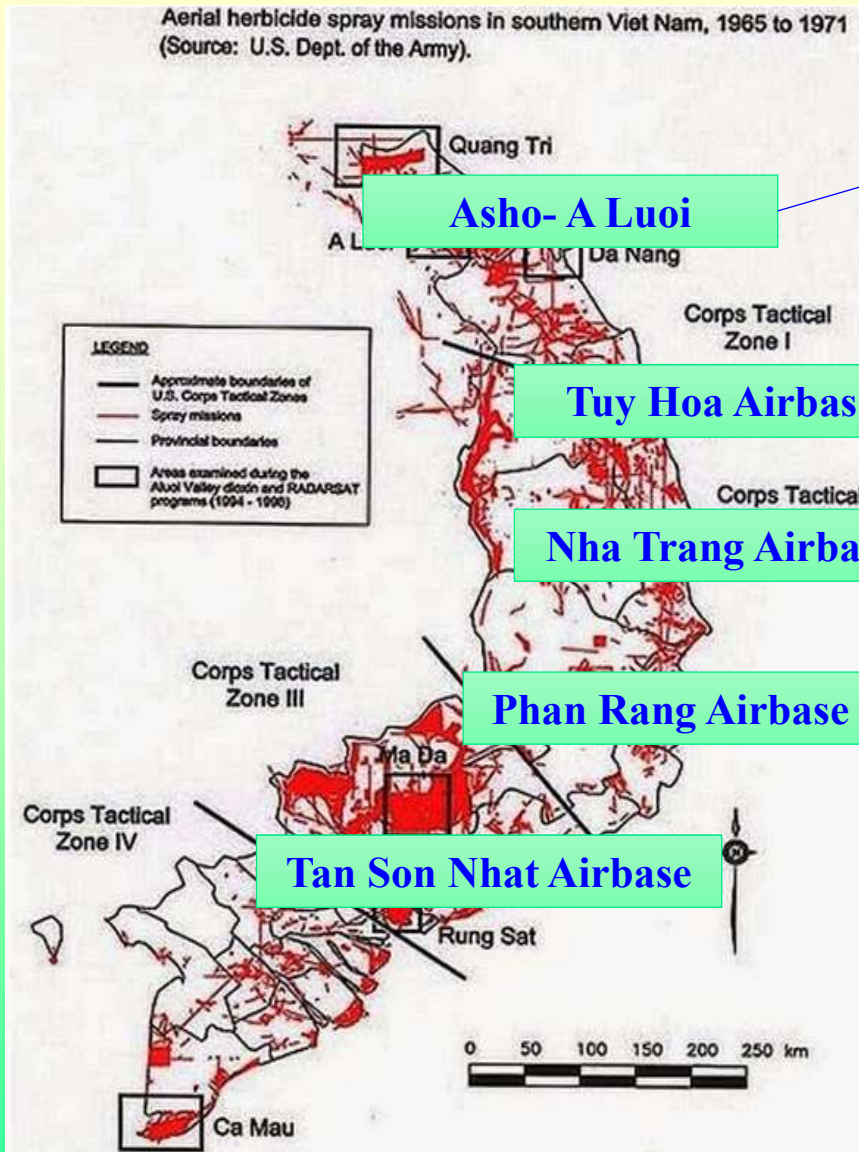
515,000 m³

The highest dioxin level:

962,560 ppt

The map of aerial herbicide spray mission,
provided by the U.S Army

4. TOXIC CHEMICALS/DIOXIN CONTAMINATION



Scope and Level of dioxin contamination is not high

Air-fields have not been assessed specifically:

- Phu Bai (Thua Thien Hue)
- Can Tho (Can Tho)
- Phuong Hoang (Kon Tum)
- Vam Cong (An Giang)
- Sac Ly (Kon Tum)

Locations of aerial herbicide spray in Vietnam between 1965 and 1971 (source: U.S.Dept. of the Army)

5. AGENT ORANGE/DIOXIN VICTIMS

About 4.8 million
Vietnamese people were
exposed to agent
orange/dioxin

3 million AO/dioxin
victims were recorded



(Source of data: Vietnam Association of Victims of Agent Orange)

ACHIEVEMENTS

1. Direction and organization of implementation

1980

- **National Committee for investigation of post-war consequences of toxic chemicals used by U.S in Viet Nam (10-80 Committee)**

1999

- **National Steering Committee on overcoming consequences of toxic chemicals used by U.S during the war in Vietnam (National Steering Committee 33)**

2010

- **The State Steering Committee on National Mine Action Programme (National Steering Committee 504)**

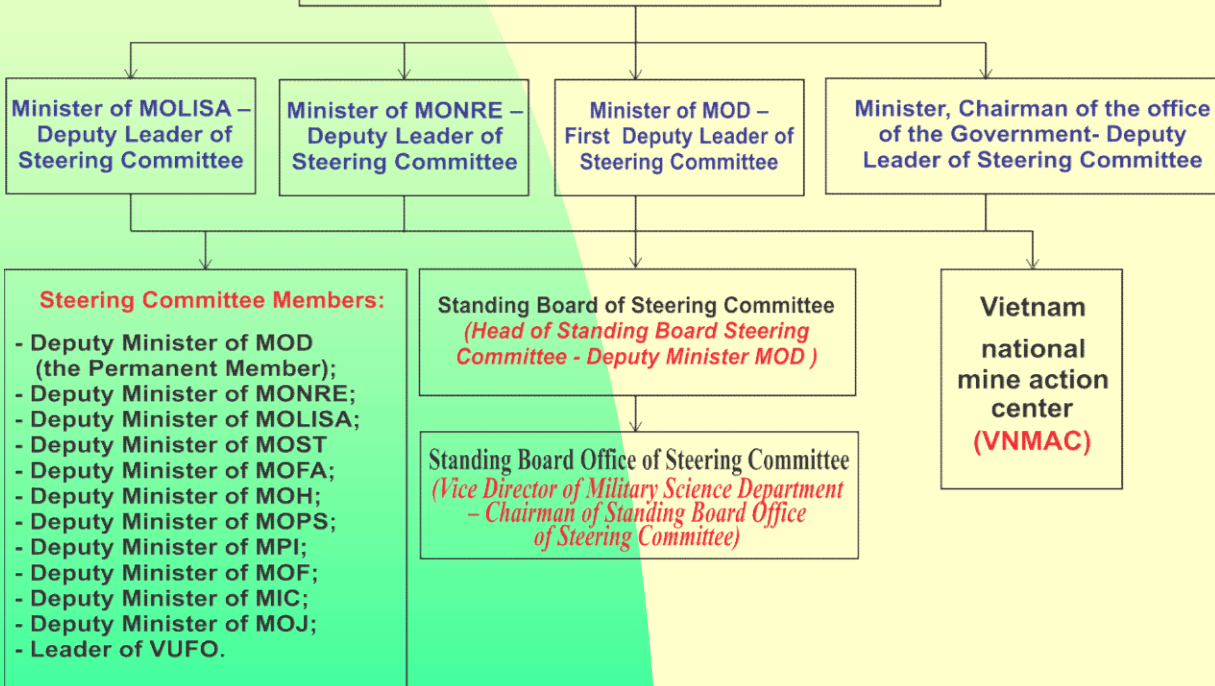
2017

- **The National Steering Committee on overcoming post-war consequences of unexploded ordnances and toxic chemicals in Vietnam (National Steering Committee 701)**

The National Steering Committee on overcoming post-war consequences of unexploded ordnances and toxic chemicals in Vietnam (701)



Leader of Steering Committee – Prime Minister



Prime Minister hosted a meeting of the National Steering Committee 701 in August, 2018

Developing policies, national action programs for overcoming consequences of bombs/mines and toxic chemicals

**STANDING COMMITTEE OF
NATIONAL ASSEMBLY XIII**

ORDINANCE
Amending some articles of the
Ordinance No. 26/2005/PL-
UBTVQH11 dated 19/6/2005 on
privilege for people with special

PRIME MINISTER

ACTION PLAN

in the period of 2004-2010 for
overcoming consequences of
toxic chemicals used by the

PRIME MINISTER

**NATIONAL ACTION
PROGRAM**
For overcoming post-war
consequences of bombs and
mines in the period of 2010-
2025
(Decision No. 504/QĐ-TTg dated
21/4/2010)

Hanoi, 2010

PRIME MINISTER

NATIONAL ACTION PLAN
On overcoming toxic
chemicals used by the U.S
during war in Vietnam to 2015
and orienting to 2020
(Decision No. 651/QĐ-TTg dated
01/6/2012)

Hanoi, 2012

**NATIONAL STEERING
COMMITTEE 701**

WORK PROGRAM
of The National Steering
Committee on overcoming post-
war consequences of unexploded
ordnances and toxic chemicals in
Vietnam period 2018-2020
(Decision No. 406/QĐ-
BCĐKPBMHH date 09/10/2018)

Hanoi, 2018

2. Vietnam's efforts in clearing bombs/mines

2016-2018

- Nearly 3,000 projects on bombs/mines clearance was carried out
- Cleared area is more than 90 thousand hectares
- Total cost: 2,840 billion VND



The Prime Minister Nguyen Xuan Phuc- Head of the National Steering Committee 701 and representatives in an event celebrating the International Mine Awareness Day (Hanoi, 04/2018)



Engineer Command was clearing bombs/mines

3. Vietnam's efforts in remediating Toxic chemicals/dioxin contamination

Investigating, assessing dioxin levels and isolating contaminated areas



Interim measure for preventing dioxin immigration from Pacer Ivy area into surrounding environment in Bien Hoa Airbase



Chemical force isolated about 150.000 m³ of dioxin-contaminated soil at area Z1 in Bien Hoa airbase (chemical force, 2018)



The U.S Agency for International Development and the Institute of Military Science and Technology were collecting samples for environmental assessment in Bien Hoa Airbase (USAID, 2015)

Strengthening capacity of laboratories on analyzing dioxin levels in soil and human



Analyzing dioxin and its congeners by a gas chromatography/high resolution mass spectrometry

Providing health care supports for Agent Orange/dioxin victims



Health checking for Agent Orange/dioxin victims

Treated CS residues:

- Investigated at **293** districts, towns and cities of 34 provinces in Viet Nam
- Treated **259,9462 tons** of toxic CS; **182,424 tons CS** bullets; **15 tons** of toxic chemicals of all kinds; disinfected **6,150 m²** of CS-contaminated soil and treated **443m³** of CS-contaminated soil.



Treated toxic CS



Toxic CS residues after the war

Implementation of policies for victims

Agent Orange/dioxin victims

- **159.000 people** getting benefits from related policies/total **320.000 people** have benefitted from incentives and related policies (currently, **159.000 people**).
- Mobilizing supports from domestic and international organizations to build Centers for raising and detoxing, Charity houses

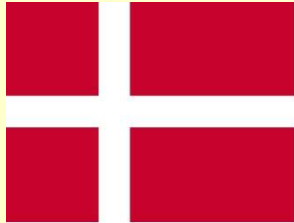
Bombs/mines victims

- More than **5.000 people** were supported by domestic organizations, individuals and enterprises
- Getting benefits from Vietnam Government 's policies for disabilities

INTERNATIONAL COOPERATION IN OVERCOMING CONSEQUENCES OF BOMBS/MINES



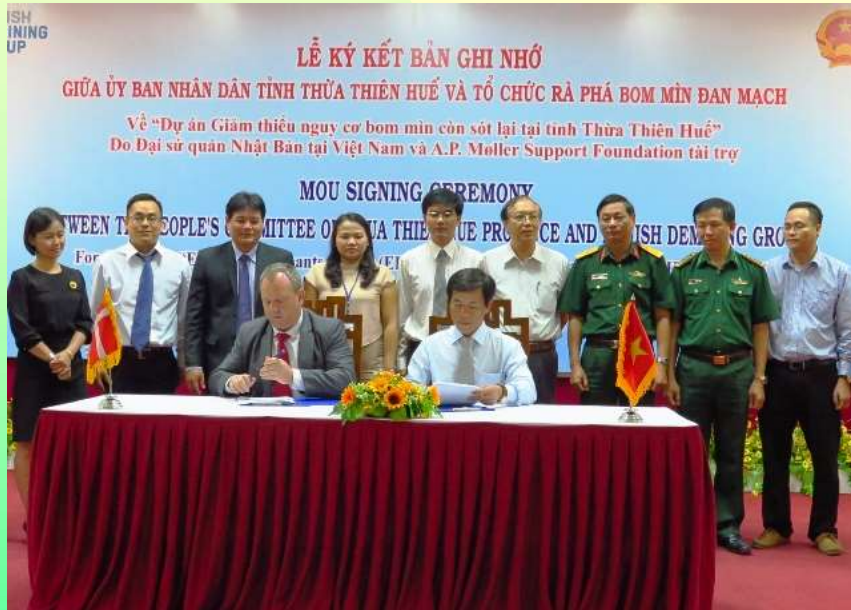
Japan



Denmark



Korea via Koica and UNDP



Supporting the implementation of some bombs/mines clearance projects



Implementing the Vietnam-Korea Project on overcoming post-war consequences of bombs/mines in Quang Binh and Binh Dinh Provinces (03/2018)

INTERNATIONAL COOPERATION IN OVERCOMING CONSEQUENCES OF BOMBS/MINES



Technical support, training, investigating

Signing ceremony of Memorandum of Understanding between National Steering Committee 504 and the U.S. Department of State on overcoming post-war consequences of bombs/mines



Supported bombs/mines victims

INTERNATIONAL COOPERATION IN OVERCOMING CONSEQUENCES OF BOMBS/MINES



unicef
for every child



PeaceTrees
VietNam

- SODI (Germany),
- CRS, RENEW

Involved in communication activities on preventing bombs/mines accidents and supported victims at local areas



UK



Belgium



India

Inviting Vietnam staff to some training courses for improving capacities in managing and operating activities on overcoming bombs/mines consequences

INTERNATIONAL COOPERATION IN OVERCOMING CONSEQUENCES OF DIOXIN



**Hatfield
Consultants
– Canada**

USAID

Studied, investigated scope and levels of dioxin contamination in sprayed areas

Ford Foundation

Concreted 6,900 m³ of dioxin contaminated soil in Da Nang Airport



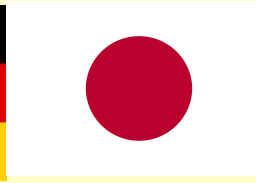
Czech Republic

Established dioxin monitoring systems in Bien Hoa and Phu Cat Airbases

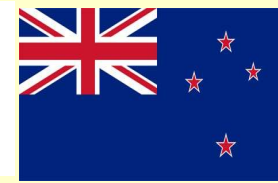
INTERNATIONAL COOPERATION IN OVERCOMING CONSEQUENCES OF DIOXIN



Germany



Japan



Newzealand



Korea

Global Environment Facility's
Support via UNDP



Safely contained dioxin contaminated
soil in Phu Cat Airbase

Piloting technology to treat dioxin
contaminated soil in Bien Hoa
Airbase and Asho/A Luoi



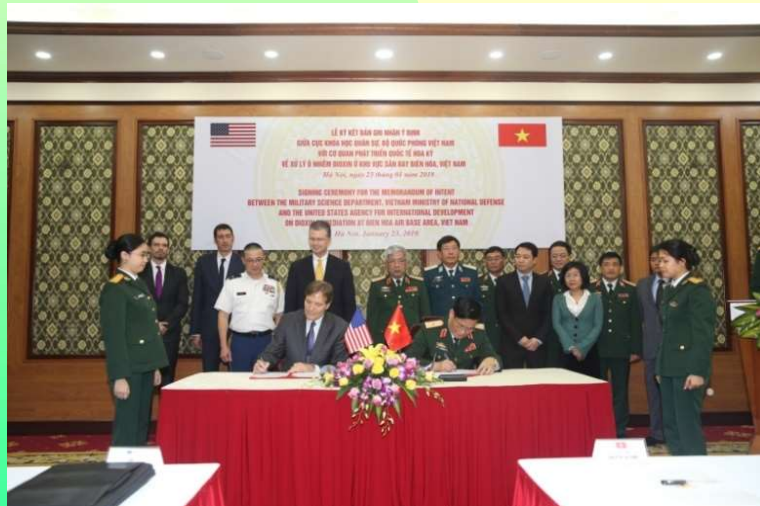
Installing equipment to piloting dioxin remediating
technology by Shimizu Corporation and Center for
Environmental Treatment Technology (CTET, 1/2018)



Treated 150.000 m³ dioxin – contaminated soil at Da Nang airbase (USAID, 11/2018)



USAID visit Day-care Center for Victims of Agent Orange in Dong Nai Province (USAID, 2018)



Department of Military Science/MOD and USAID signed MOI on dioxin remediation in Bien Hoa Airbase area (01/2018)



Air Defence and Air Force Command and USAID signed LSGA on dioxin remediation in Bien Hoa Airbase (5/2018)

**OBSTACLES,
CHALLENGES**

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graph LR; A[OBSTACLES, CHALLENGES] --> B[Area of bombs/mine and toxic chemicals/dioxins contaminated land remains large]; A --> C[Limited sources]; A --> D[Limited facilities, human resources don't meet requirements for treating and caring Agent Orange/dioxin victims]; A --> E[It's difficult to identify Agent Orange/dioxin victims because of lacking scientific basis and significant signs];
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Area of bombs/mine and toxic chemicals/dioxins contaminated land remains large

Limited sources

Limited facilities, human resources don't meet requirements for treating and caring Agent Orange/dioxin victims

It's difficult to identify Agent Orange/dioxin victims because of lacking scientific basis and significant signs

ORIENTATION FOR OVERCOMING CONSEQUENCES OF BOMBS/MINES, TOXIC CHEMICALS IN NEAR FUTURE

1. Reduce rate of bombs/mines contamination over the nation to **15%**, especially in provinces seriously contaminated; completely remediate **35%** of dioxin contaminated soil in Bien Hoa Airbase Area; study measures for completely remediating toxic chemicals/dioxin in Phu Cat, Asho/A Luoi; keep studying sprayed areas.

2. Strengthen capacity in designing, producing equipment, technology for clearing bombs/mines and remediating toxic chemicals; strengthen communication and international cooperation.

3. Screen 100% of people participated in the resistance war and their next generation that are related to toxic chemicals/dioxin exposure, systematically record information, identify victims that are eligible for related policies of the Government. Build a pilot center for testing and supporting medical treatment for Agent Orange/dioxin victims.

4. Consider and propose the establishment of Vietnam – U.S Intergovernmental Committee on overcoming toxic chemicals/dioxin consequences on environment and human.

**THANK YOU
FOR YOUR ATTENTION!**