



United Nations

**CENTRAL
EMERGENCY
RESPONSE FUND**



A SOUND HUMANITARIAN INVESTMENT

**RESIDENT/HUMANITARIAN COORDINATOR
REPORT ON THE USE OF THE CERF FUNDS
LAO PEOPLE'S DEMOCRATIC REPUBLIC
RAPID RESPONSE
DENGUE**

RESIDENT/HUMANITARIAN COORDINATOR

Mr. Minh Pham

REPORTING PROCESS AND CONSULTATION SUMMARY

- a. Please indicate when the After Action Review (AAR) was conducted and who participated.

An evaluation meeting took place during the month of December 2013 in the National Dengue Response Workshop. The participants included the Deputy Prime Minister, Health Minister, Deputy-governors in five most affected provinces, other senior government staff and WHO staff and some other development partners, such as the Asian Development Bank and International NGOs. The objectives of the meeting were to evaluate the response activities and identify lesson learned for the future response.

- b. Please confirm that the Resident Coordinator and/or Humanitarian Coordinator (RC/HC) Report was discussed in the Humanitarian and/or UN Country Team and by cluster/sector coordinators as outlined in the guidelines.

YES NO

- c. Was the final version of the RC/HC Report shared for review with in-country stakeholders as recommended in the guidelines (i.e. the CERF recipient agencies and their implementing partners, cluster/sector coordinators and members and relevant government counterparts)?

YES NO

The report was shared with the Government, health cluster agencies and NGOs involved in the response activities

I. HUMANITARIAN CONTEXT

TABLE 1: EMERGENCY ALLOCATION OVERVIEW (US\$)		
Total amount required for the humanitarian response: US\$ 3,051,120		
Breakdown of total response funding received by source	Source	Amount
	CERF	US\$753,504
	COMMON HUMANITARIAN FUND/ EMERGENCY RESPONSE FUND (if applicable)	0
	OTHER (bilateral/multilateral)	US\$1,802,500
	TOTAL	2,556,004

TABLE 2: CERF EMERGENCY FUNDING BY ALLOCATION AND PROJECT (US\$)			
Allocation 1 – date of official submission: 07-Aug-2013			
Agency	Project code	Cluster/Sector	Amount
WHO	13-RR-WHO-044	Health	753,504
TOTAL			753,504

TABLE 3: BREAKDOWN OF CERF FUNDS BY TYPE OF IMPLEMENTATION MODALITY (US\$)	
Type of implementation modality	Amount
Direct UN agencies/IOM implementation	US\$369,449
Funds forwarded to NGOs for implementation	0
Funds forwarded to government partners	US\$384,055
TOTAL	USD 753,504

HUMANITARIAN NEEDS

Lao PDR encountered the worst dengue epidemic in its history in 2013. As of 5 August 2013, the Government of Lao (GOL) reported 36,000 cumulative cases of dengue in the country, which included 77 deaths. Relative to the size of the small population of Lao PDR, the number of affected people was alarming. Dengue cases were reported in all 17 provinces of the country with 15 out of 17 provinces reporting dengue at epidemic levels. Overall, case fatality stood at 0.21 per cent. Dengue affected both males and females equally in all age groups, but the majority of cases, around seventy per cent of the deaths, involved children and adolescents under the age of 15. The figures represented approximately four times the number of cases reported for the same period in 2010 and eleven times the number of cases recorded in the same period in 2012.

National sentinel surveillance on dengue indicated that dengue serotype 3 was the dominant dengue virus which first became prevalent at the end of 2012. Clinicians reported that a more severe clinical picture among patients in 2013 which might be attributed to the dominating dengue virus serotype 3. The likely reason for the unprecedented epidemic could have been rainfall earlier than normal, compared to previous years and a new dominant serotype dengue virus circulating in the country.

Historically, dengue peaks in September each year. According to a projection done by the World Health Organization, Lao PDR could have had in the range of 61,000-120,000 dengue cases with an estimated 100-500 numbers of deaths in 2013 if no immediate and more effective intervention measures had been introduced right away to fight the dengue epidemic.

It was projected that there would be serious economic and social consequences for Lao PDR, considering factors like the large numbers of deaths, an overwhelmed central, provincial and district health care system, and a debilitated labour force due to illness. In addition, the strong tourism industry in Lao PDR would also suffer if travellers did not visit the country for fear of contacting dengue.

II. FOCUS AREAS AND PRIORITIZATION

To respond to the dengue epidemic, the Ministry of Health (MoH) activated the Emergency Operations Centre (EOC) at the end of May 2013. Staff working in the EOC carried out daily emergency activities to assess the country's dengue situation and provided information which allowed the MoH to coordinate a country-wide response and joint decision making with other related sectors.

At the provincial levels, all provinces activated their communicable diseases committees, which were chaired by their respective governors. This ensured a close monitoring the situation to enable a more effectively coordinated response led by the GoL at the central level. The MoH conducted training on dengue clinical management among physicians in the provinces and they further provided surge capacity of medical students to high case load provinces and organized top physicians from central hospitals in Vientiane Capital to provide support to high fatality provinces since the beginning of July 2013.

On 28 June 2013, MoH published the dengue epidemic response strategy plan which was focused on community-based mosquito control, surge capacity for clinical management, risk communication, continued surveillance, coordination and leadership by government authorities. The strategy, including costing gaps, was presented at the stakeholder meetings which involved development partners and embassies in order to mobilize funds for this dengue outbreak response on 5 July 2013. On 12 July 2013, the Prime Minister's Office issued a decree to urge all provincial governors to take decisive action for dengue prevention and control. The Prime Minister and Deputy Prime Minister also visited various hospitals for advocacy of dengue epidemic response in Vientiane Capital and in some provinces.

This CERF grant was prioritized to support continuous deployment of the surge capacity for both clinical management and community vector control in the five provinces with the highest incidence of dengue, namely Salavanh, Bokeo, Xayabuly, Bolikhamxay and Sekong and five central hospitals in Vientiane capital city for one and a half months.

The CERF grant also focused on providing life-saving equipment for the dengue response. This equipment was used in the eleven provinces with the highest incidence of dengue, namely Vientiane Capital, Vientiane Province, Champassack, Salavanh, Savanakheth, Khammouane, Bolikhamxay, Bokeo, Xayabuly, Sekong, and Attapeu. Furthermore, the epidemic was further expanded into four more provinces in the north of Lao PDR, namely Oudomxay, Luang Prabang, Huaphanh and Luang Namtha from late August. Life -saving equipment was also provided to these four provinces. Four of the central hospitals namely Mahosot, Setthathirath, Mittapharb and Hospital 103 also received the life-saving equipment as they were providing almost one-third of clinical management services for dengue in the capital.

The requested funds from CERF for supporting clinical management and community vector control complemented the activities of the GOL, provincial offices and that of WHO and development partners' activities.

III. CERF PROCESS

The UN Country Team (UNCT) in Lao PDR pursued an inclusive strategy in the development of the CERF grant request. WHO assumed the lead in this respect, providing information and updates to be shared with the UNCT through emails and meetings with the UNCT members. On 4 July 2013, the WHO Representative of the Lao Country Office made a formal presentation to the UNCT members to discuss the dengue epidemic and the response being made. At that time, the other UN agencies confirmed that they had no response initiatives running nor did they anticipate any in the near future. They were also unable to commit any immediate funding to support the work being done by WHO.

Under the leadership of the Resident Coordinator, communication with the UNCT continued through the month of July with regards to the dengue epidemic, particularly on the decision to pursue funding from OCHA under its Emergency Cash Grant. Once it was determined that a funding gap still existed for the dengue response, and the application for a CERF grant could address this, a meeting of the Humanitarian Country Team (HCT) was called to discuss and prioritize the CERF application and the initiatives pursued by HCT members.. This meeting was held on 2 August, and included members of the UNCT and NGOs such as Care, Oxfam, Save the Children

and Health Poverty Action. The senior government officers were also invited to attend the HCT meeting. At this meeting, the HCT members confirmed their support for submitting the CERF application. The discussion led to the decision that this CERF application would be made in support of the WHO activities.

The GOL was highly involved in implementing the activities and in planning the distribution of the relief items. It was not feasible to engage the NGOs community in this process, as the NGO sector in Lao PDR did not have the capacity to scale up quickly and respond efficiently in a timely manner to this emergency.

IV. CERF RESULTS AND ADDED VALUE

TABLE 4: AFFECTED INDIVIDUALS AND REACHED DIRECT BENEFICIARIES BY SECTOR				
Total number of individuals affected by the crisis: 5,926,362				
The estimated total number of individuals directly supported through CERF funding by cluster/sector	Cluster/Sector	Female	Male	Total
	Health	3,022,445	2,903,917	5,926,362

BENEFICIARY ESTIMATION

The approach used in estimating the beneficiaries was based on extrapolating the beneficiary population out of the total population covered by the project. Therefore, all of the population in 14 provinces and the Vientiane Capital had directly benefitted from the CERF grant. An estimated 14.8 per cent of the population was aged less than five years and hence the programme target was set based on this estimate. An estimated population figure of 5,926,362 was based on the 2010 Lao census data published by the Lao Ministry of Planning and Investment.

TABLE 5: PLANNED AND REACHED DIRECT BENEFICIARIES THROUGH CERF FUNDING		
	Planned	Estimated Reached
Female	2,344,252	3,022,445
Male	2,330,063	2,903,917
Total individuals (Female and male)	4,674,315	5,926,362
Of total, children <u>under</u> age 5	683,429	877,102

CERF RESULTS

The CERF grant was used to support two interventions: (1) continuous deployment of the surge capacity to carried out in community based vector control as well as hospital medical care in the five provinces with the highest incidence of dengue, namely Salavanh, Bokeo, Xayabouly, Bolikhamxay, Sekong and the Vientiane Capital and five of the central hospitals in Vientiane for one and a half months; (2) providing life-saving equipment to the eleven provinces with the highest incidence of dengue, namely, Vientiane Capital City, Vientiane Province, Champassack, Salavanh, Savanakheth, Khammouane, Bolikhamxay, Bokeo, Xayabuly, Sekong, and Attapeu.

Following consultation with the CERF Secretariat, provincial hospitals in Oudomxay, Luang Prabang, Huaphanh and Luang Namtha were also provided the life-saving equipment, to respond to the epidemic that had further expanded into the four provinces in late August. In addition, the equipment was also provided to the four central hospitals, namely Mahosot, Setthathirath, Mittapharb and Hospital 103 as they provided about one-third of the clinical management services for the dengue response.

CERF funds enabled the country to reduce morbidity and mortality that could have resulted from the dengue infection and to mitigate the socio-economic impacts of the epidemic. The following key results were achieved:

- Supported the contracting and deployment of 464 medical students as surge capacity for clinical management in 5 provincial hospitals (Salavanh, Bokeo, Xayabouly, Bolikhamxay and Sekong) and 5 central hospitals in Vientiane Capital in Lao PDR for 45 days.
- Deployed 351 medical students to support community vector control in 5 severely affected epidemic provinces (Salavanh, Bokeo, Xayabouly, Bolikhamxay and Sekong) for 45 days.
- Purchased and distributed life-saving medical equipment to 15 provinces (Vientiane Capital, Vientiane Province, Champassack, Salavanh, Savanakhet, Khammouane, Bolikhamxay, Bokeo, Xayabuly, Sekong, Attapeu, Oudomxay, Luang Prabang, Huaphanh and Luang Namtha) with the most severely affected population.
- Monthly dengue case fatality was reduced from 0.34 per cent from January to June 2013 to less than 0.15 per cent from August to December 2013.
- The increasing trend of the dengue epidemic was reversed in the middle of July and further decreased since the end of August 2013.
- Laboratory capacity was strengthened for case identification and severe case monitoring.

CERF's ADDED VALUE

a) Did CERF funds lead to a fast delivery of assistance to beneficiaries?

YES PARTIALLY NO

Rapid mobilization of CERF funding enabled continued surge support provided by medical students for community action for vector control, risk communication and distribution of dengue-related campaign information and materials to refer the patients to hospitals for treatment. The CERF fund provided for students to enhance the surge capacity in the central, provincial and district hospitals where they provided clinical management for dengue, monitoring of patients and assistance to senior health professionals in the less life-threatening cases.

b) Did CERF funds help respond to time critical needs¹?

YES PARTIALLY NO

Dengue is a mosquito-borne disease for which there is no treatment. Dengue normally peaks in September each year. The main strategies for dengue epidemic control are community-based mosquito control and enhanced clinical management. The timely CERF grant made it possible to speed up the mitigation of dengue incidence in August and reduce case fatality. Hence, the CERF funds timely response supported the critical needs of the country to fight the dengue epidemic.

c) Did CERF funds help improve resource mobilization from other sources?

YES PARTIALLY NO

The CERF funding led to the European Commission Directorate General for Humanitarian Aid and Civil Protection (ECHO) commitment to provide a sum of US\$332,500 to support the community action for vector control in the southern provinces in Lao PDR which was coordinated through the International NGO, Health Poverty Action. The GoL further pledged a further sum of US\$259,000 for vector control in community, focusing on adult mosquito control in the affected communities' areas.

d) Did CERF improve coordination amongst the humanitarian community?

YES PARTIALLY NO

CERF funding improved coordination in the humanitarian community. An initial assessment was conducted by a consensus in Humanitarian Country team (HTC). The Health Cluster agencies and NGOs contributed to the implementation of the campaign and to the evaluation.

e) If applicable, please highlight other ways in which CERF has added value to the humanitarian response

N/A

¹ Time-critical response refers to necessary, rapid and time-limited actions and resources required to minimize additional loss of lives and damage to social and economic assets (e.g. emergency vaccination campaigns, locust control, etc.).

V. LESSONS LEARNED

TABLE 6: OBSERVATIONS FOR THE <u>CERF SECRETARIAT</u>		
Lessons learned	Suggestion for follow-up/improvement	Responsible entity

TABLE 7: OBSERVATIONS FOR <u>COUNTRY TEAMS</u>		
Lessons learned	Suggestion for follow-up/improvement	Responsible entity
The scale and scope of infectious disease might change during the epidemic.	Adjusting life-saving interventions to reflect the changing scope and scale of the epidemics during the implementation	HCT partners in collaboration with Government,
Whole-government approach and community mobilization are critical for dengue epidemic response	For advocacy, more information-education-communication materials shall be developed, printed and distributed during the response campaigns	Government and UN agencies
HCT is a good coordination mechanism and offers a forum for discussion, information sharing, interventions and provitized resources	Continue strengthening the coordination platform	HCT clusters, government sectors
Lao PDR will face recurrence of dengue outbreak in coming years	Government and partners should have adequate preparedness plans and they need to continue to strengthen the surveillance system to identify the outbreak earlier so that it will reduce the impact of future dengue epidemics	Government, UN agencies and other development partners

VI. PROJECT RESULTS

TABLE 8: PROJECT RESULTS			
CERF project information			
1. Agency:	WHO	5. CERF grant period:	23 Aug 2013 – 22 Feb 2014
2. CERF project code:	13-RR-WHO-044	6. Status of CERF grant:	<input type="checkbox"/> Ongoing
3. Cluster/Sector:	Health		<input checked="" type="checkbox"/> Concluded
4. Project title:	Support for surge capacity for clinical management and vector control for the dengue epidemic response in Lao PDR		
7. Funding	a. Total project budget:	US\$ 3,051,120	d. CERF funds forwarded to implementing partners:
	b. Total funding received for the project:	US\$ 2,556,004	▪ <i>NGO partners and Red Cross/Crescent:</i> US\$ 0
	c. Amount received from CERF:	US\$ 753,504	▪ <i>Government Partners:</i> US\$ 384,055
Results			
8. Total number of <u>direct beneficiaries</u> planned and reached through CERF funding (provide a breakdown by sex and age).			
<i>Direct Beneficiaries</i>	<i>Planned</i>	<i>Reached</i>	<i>In case of significant discrepancy between planned and reached beneficiaries, please describe reasons:</i>
a. Female	2,344,252	3,022,445	The CERF grant was used to support the purchase of life-saving equipment. The equipment was used in eleven provinces with the highest incidence of dengue, namely, Vientiane Capital, Vientiane Province, Champassack, Salavanh, Savanakhet, Khammouane, Bolikhamxay, Bokeo, Xayabuly, Sekong and Attapeu. The scale of project implementation was further expanded as the epidemic had further expanded into four more provinces in the northern part of Lao PDR, namely Oudomxay, Luangprabang, Huaphanh and Luang Namtha. The life –saving equipment was provided to these four affected northern provinces. In addition, the equipment were also provided to four central hospitals namely Mahosot, Setthathirath, Mittapharb and Hospital 103, which were providing almost one-third of clinical management services for dengue. The expansion of the scale of the intervention was approved by CERF and used the balance available from the grant.
b. Male	2,330,063	2,903,917	
c. Total individuals (female + male):	4,674,315	5,926,362	
d. Of total, children <u>under</u> age 5	683,429	877,102	
9. Original project objective from approved CERF proposal			
To reduce morbidity and mortality of dengue infection and mitigate socio-economic impacts of the epidemic.			
10. Original expected outcomes from approved CERF proposal			
<ul style="list-style-type: none"> Monthly dengue case fatality is reduced from 0.31 per cent in June to less than 0.2 per cent by the end of August 2013. 			

- The increasing trend of the dengue epidemic is reversed by the end of August 2013.
- 815 medical students have performed clinical management and community vector control in the field as of 16 August 2013.
- Laboratory capacity was strengthened for case identification and severe case monitoring.

11. Actual outcomes achieved with CERF funds

- Monthly dengue case fatality was reduced from 0.34 per cent before June 2013 to 0.15 per cent from August to December 2013.

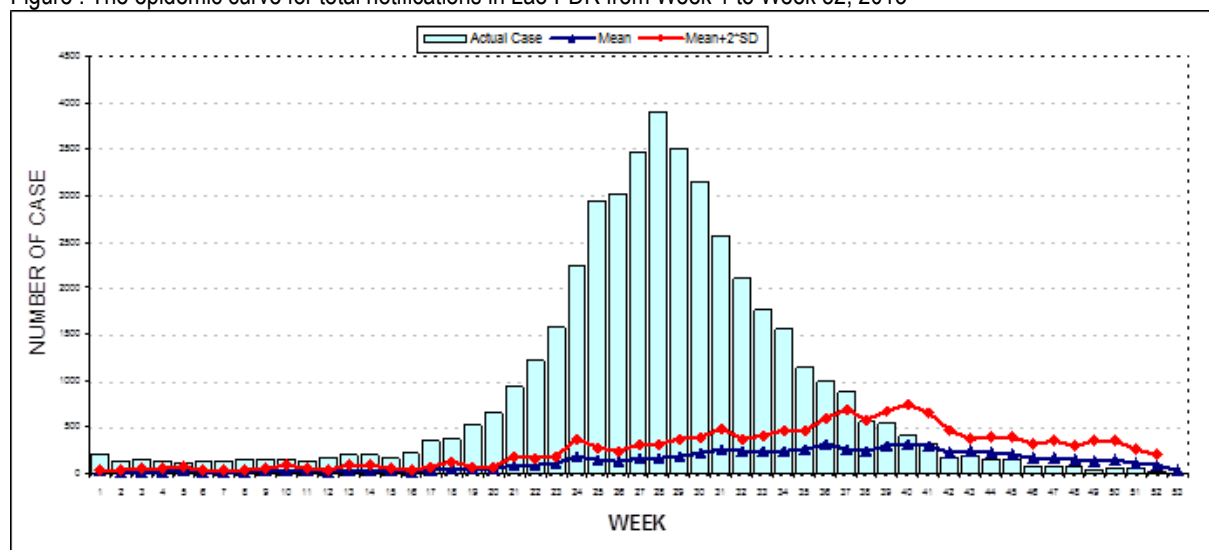
Monthly case fatality in Lao PDR from January to December 2013*

	No. of Cases	No. of Death	CASE FATALITY RATE (Per Cent)
January	717	0	0.00
February	564	2	0.35
March	864	5	0.58
April	1,056	5	0.47
May	3,338	14	0.42
June	13,294	41	0.31
July	13,069	11	0.08
August	6,507	12	0.18
September	3,378	5	0.15
October	842	0	0.00
November	370	0	0.00
December	172	0	0.00
Total	44,171	95	0.22

Source: Epidemiology Section, National Center for Laboratory and Epidemiology, Ministry of Health. This is hospital-based data

- The increasing trend of the dengue epidemic was reversed in the middle of July and a decrease was accelerated since August 2013.

Figure : The epidemic curve for total notifications in Lao PDR from Week 1 to Week 52, 2013



Source: Epidemiology Section, National Center for Laboratory and Epidemiology, Ministry of Health. This is hospital-based data

- 815 medical students have performed clinical management and community vector control in the field as of 16 August 2013

- 233 year 6 medical students were assigned to central, provincial and district hospitals where they provide clinical management for dengue, monitoring of patients and assistance to senior health professionals.
- 351 year 5 medical students work at the community level in the capital and 5 provinces on vector control and risk communication, including larvae surveys, community clean-up activities, and distribution of dengue related educational material.
- 198 nurses were assigned to central, provincial and district hospitals where they monitored patients and assisted clinicians.
- 33 laboratory students were assigned to central hospitals to process patients' specimens.
- Laboratory capacity was strengthened for case identification and severe case monitoring
 - 123 units of haematocrit centrifuges and small oxymetres were provided to 123 district hospitals to ensure full geographic coverage.
 - An additional 4 small oxymetres were distributed to each of the 5 central, 2 military and 16 provincial hospitals.
 - Haematology analysers distributed to 15 provincial hospitals and 4 central hospitals.

12. In case of significant discrepancy between planned and actual outcomes, please describe reasons:

At the end of September 2013, the CERF fund had the remaining balance of USD\$71,402, 9.5 per cent (71 402/753 504) of overall CERF grant. The savings was due to the local procurement of hematology analysers which was much cheaper than those sold on the international market. After having consulted with CERF, the balance was used to procure 8 additional haematology analysers for 4 central hospitals and 4 additional provincial hospitals.

The dengue epidemic was most active in 11 out of 17 provinces in Lao PDR before July 2013, namely Vientiane Capital, Vientiane Province, Champassack, Salavanh, Savanakhet, Khammouane, Bolikhamxay, Bokeo, Xayabuly, Sekong and Attapeu. Therefore, the grant was used to procure 11 haematology analysers for the 11 provinces. Haematology Analysers were also procured for Oudomxay, Luang Prabang, Huaphanh and Luang Namtha provinces and 4 central hospitals as the epidemic further expanded into the provinces in the northern parts of Lao PDR. Four central hospitals, namely Mahosot, Setthathirath, Mittapharb and Hospital 103 were providing almost one-third of the clinical management services for dengue in the country, particularly for severe dengue cases.

The additional items were within the same category stated in the original proposal. They did not alter the scope of interventions but expanded the scale of the interventions; hence it maximized the impact of the intervention to achieve the original objectives.

13. Are the CERF funded activities part of a CAP project that applied an IASC Gender Marker code?

YES NO

During the mass campaign for community-based vector control, people were protected regardless of their gender, religion and culture. The campaign was done through students, local authorities and Lao Women Union which led to a massive turnout of community members.

14. M&E: Has this project been evaluated?

YES NO

No formal evaluation for this project was conducted; however, there was an evaluation meeting which took place during the month of December 2013 during the National Dengue Response Workshop. The participants included the Deputy Prime Minister, Health Minister, Vice Governors of the five most affected provinces, other senior government staff and WHO staff and some other development partners such as Asian Development Bank and International NGOs. The objectives of the meeting were to evaluate the response activities and identify lessons learned for the future response. In addition, the Health cluster also conducted lessons learned sessions to assess and reflect the implementation of the emergency response in order to improve future humanitarian preparedness and response efforts.

ANNEX 1: CERF FUNDS DISBURSED TO IMPLEMENTING PARTNERS

CERF Project Code	Cluster/Sector	Agency	Implementing Partner Name	Partner Type	Total CERF Funds Transferred to Partner US\$	Date First Instalment Transferred	Start Date of CERF Funded Activities By Partner	Comments/Remarks
13-RR-WHO-044	Health	WHO	MoH	GOV	384,055	3-Sep-13	26-Aug-13	<ul style="list-style-type: none"> o 233 year 6 medical students are assigned to central, provincial and district hospitals where they provide clinical management for dengue, monitor patients and assist senior health professionals. o 351 year 5 medical students work at the community level in the capital and 5 provinces on vector control and risk communication, including larvae surveys, community clean-up activities, and distribution of dengue related educational material. o 198 nurses are assigned to central, provincial and district hospitals where they monitor patients and assist clinicians. o 33 laboratory students are assigned to central hospitals to process patients' specimens

ANNEX 2: ACRONYMS AND ABBREVIATIONS (Alphabetical)

AAR	After Action Review (AAR)
CERF	Central Emergency Response Fund
GoL	Government of Lao PDR
HCT	Humanitarian Country Team
Lao PDR	Lao People's Democratic Republic
NGO	Non Governmental Organization
OCHA	United Nations Office for the Coordination of Humanitarian Affairs
RC/HC	Resident Coordinator and/or Humanitarian Coordinator
UNCT	United Nations Country Team
WHO	World Health Organization