



# THE SUSTAINABLE DEVELOPMENT OUTCOMES OF MINE ACTION IN CAMBODIA

Cover: Cassava farmer in Banteay Meanchey province. © Courtesy of The HALO Trust

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**THE SUSTAINABLE  
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## CONTRIBUTORS

### GENEVA INTERNATIONAL CENTRE FOR HUMANITARIAN DEMINING (GICHD)

The Geneva International Centre for Humanitarian Demining (GICHD) works towards reducing risk to communities caused by explosive ordnance, with a focus on landmines, cluster munitions and ammunition stockpiles.

The Centre helps develop and professionalise the sector for the benefits of its partners: national and local authorities, donors, the United Nations, other international and regional organisations, non-governmental organisations, commercial companies and academia. It does so by combining four lines of service: field support focused on advice and training, multilateral work focused on norms and standards, research and development focused on cutting-edge solutions, and facilitating dialogue and cooperation.

### CAMBODIAN MINE ACTION AND VICTIM ASSISTANCE AUTHORITY (CMAA)

The CMAA is Cambodia's national mine action authority. Established under Royal Decree No. 160 on 4 September 2000, the CMAA is mandated to regulate, monitor and coordinate the mine action sector in Cambodia. The CMAA is under the direct leadership of the Cambodian prime minister and the CMAA's two vice presidents while the CMAA secretary general manages daily operations related to its mandate. The CMAA is also responsible for formulating national strategic and work performance plans necessary to achieve the priorities stipulated in the National Strategic Development Plan and the Rectangular Strategy of the Royal Government of Cambodia.

In addition, the CMAA facilitates the integration of development projects into mine action activities by enhancing partnerships between government ministries and institutions, development partners, local authorities, community development organisations and other development entities. To improve aid coordination and partnership between development partners and the government, the CMAA coordinates the Technical Working Group on Mine Action which is under the leadership of the CMAA first vice president.



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# CONTENTS

LIST OF FIGURES	9
LIST OF ACRONYMS AND ABBREVIATIONS	10
KEY FINDINGS	11
PURPOSE AND METHODOLOGY OF THE STUDY	27
INTRODUCTION: MINE ACTION IN CAMBODIA	31
EXPLOSIVE ORDNANCE CONTAMINATION AND DEVELOPMENT IN CAMBODIA	37
THE CONTRIBUTION OF MINE ACTION TO THE SDGs IN CAMBODIA	45
1. LAND RELEASE	47
2. VICTIM ASSISTANCE	69
3. EXPLOSIVE ORDNANCE RISK EDUCATION	85
4. GENDER MAINSTREAMING	95
5. PARTNERSHIPS AND COOPERATION	103
CONCLUSIONS	113
ENDNOTES	117



# LIST OF FIGURES

- FIGURE 1** Contribution of mine action to the SDGs in Cambodia
- FIGURE 2** Contribution of mine action to the SDGs by activity in Cambodia
- FIGURE 3** Contamination and EO accident points in Cambodia as of November 2021
- FIGURE 4** Key milestones in mine action in Cambodia
- FIGURE 5** Cambodian SDG 18 Mine / ERW free by 2030
- FIGURE 6** Contribution of land release to the SDG targets in Cambodia
- FIGURE 7** Land use after clearance in Cambodia (1992–October 2021)
- FIGURE 8** UNHCR-UNBRO camps on the Thai-Cambodian border (1980s–1990s)
- FIGURE 9** Satellite images of two land released areas in Khla Ngoab village
- FIGURE 10** Satellite images of Khla Ngoab village
- FIGURE 11** Satellite images of two land released areas in Khla Ngoab village
- FIGURE 12** Contribution of victim assistance to the SDG targets in Cambodia
- FIGURE 13** Map of mine / ERW accident locations in Cambodia, 1979–October 2021
- FIGURE 14** Mine / ERW casualties from 1979 to October 2021
- FIGURE 15** Contribution of EORE to the SDG targets in Cambodia
- FIGURE 16** Number of men, women, boys and girls who received EORE between 2018 and 2020
- FIGURE 17** Contribution of gender mainstreaming to the SDG targets in Cambodia
- FIGURE 18** Contribution of partnerships and cooperation to the SDG targets in Cambodia

# LIST OF ACRONYMS AND ABBREVIATIONS

<b>3i</b>	Investing in Infrastructure	<b>EO</b>	Explosive ordnance
<b>APM</b>	Anti-personnel mine	<b>EORE</b>	Explosive ordnance risk education
<b>APMBC</b>	Anti-Personnel Mine Ban Convention	<b>ERW</b>	Explosive remnants of war
<b>ARMAC</b>	ASEAN Regional Mine Action Center	<b>GDP</b>	Gross domestic product
<b>ASEAN</b>	Association of Southeast Asian Nations	<b>IMAS</b>	International Mine Action Standards
<b>CCW</b>	Convention on Certain Conventional Weapons	<b>MAG</b>	Mines Advisory Group
<b>CFR</b>	Clearing for Results	<b>MOSVY</b>	Ministry of Social Affairs, Veterans and Youth Rehabilitation
<b>CMAA</b>	Cambodian Mine Action and Victim Assistance Authority	<b>MRE</b>	Mine risk education
<b>CMAC</b>	Cambodian Mine Action Centre	<b>PWD</b>	Persons with disabilities
<b>CMAS</b>	Cambodian Mine Action Standard	<b>SDG</b>	Sustainable Development Goal
<b>CRPD</b>	Convention on the Rights of Persons with Disabilities	<b>UNDP</b>	United Nations Development Programme
<b>DAC</b>	Disability Action Council	<b>UNHCR</b>	United Nations High Commissioner for Refugees
<b>DCPS</b>	Development Cooperation and Partnership Strategy	<b>UXO</b>	Unexploded ordnance
		<b>VA</b>	Victim assistance

## KEY FINDINGS

This study comprehensively maps the sustainable development outcomes of mine action activities in Cambodia.

The study analyses the impact of land release, victim assistance, explosive ordnance risk education (EORE), and existing efforts related to gender mainstreaming, and partnerships and cooperation, in the medium and long term.

The study presents evidence of the multidimensional and transformative role of mine action by identifying its direct contribution to **13 Sustainable Development Goals (SDGs)** and to at least **48 of their targets in Cambodia**. Hence, the mine action sector has clearly contributed to the five dimensions of the 2030 Agenda for Sustainable Development: partnership, peace, people, planet and prosperity.

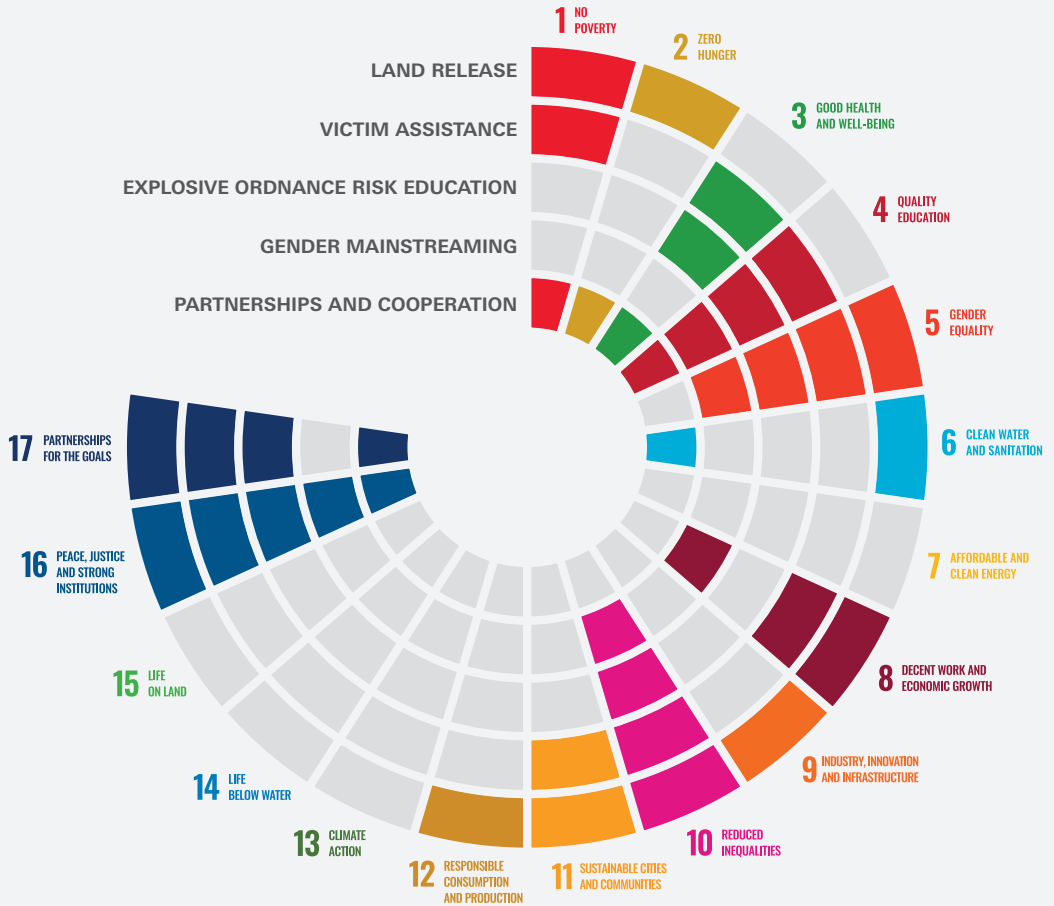
FIGURE 1 CONTRIBUTION OF MINE ACTION TO THE SDGs IN CAMBODIA





FIGURE 2

## CONTRIBUTION OF MINE ACTION TO THE SDGs BY ACTIVITY IN CAMBODIA



# LAND RELEASE



Explosive ordnance contamination in Cambodia is spread throughout the whole country, with the north-west border regions mostly affected by anti-personnel mines, and the eastern regions mainly by cluster munition remnants and other explosive remnants of war, scattered also throughout the whole country. 2,287 km<sup>2</sup> of land has been cleared in the country over the course of the last three decades.

Considering the extent of contamination and highest rate of clearance in Cambodia's north-west area, the study examines the impact of land release in three north-western provinces – Battambang, Banteay Meanchey, and Pailin – all bordering with Thailand.

Besides the immediate contribution to SDG 16 and its target 16.1 on the reduction of all forms of violence, the study identified the direct contribution of land release to 11 SDGs and 22 of their associated targets.

## FACILITATING SAFE MOBILITY

By facilitating safe mobility of Cambodian refugees and displaced persons, mine action has contributed to **SDG 10** on reducing inequalities and particularly to its **target 10.7** on facilitating safe migration and mobility of people. In addition, the close coordination between the UN High Commissioner for Refugees and mine action operators is indicative of mine action's support to **SDG 17** on partnerships and its **target 17.16** on enhancing the global partnership for sustainable development, and **target 17.17** on enhancing public, public-private and civil society partnerships.

## AGRICULTURE AND PRODUCTIVE USE OF LAND

By expanding access to arable fields and facilitating safe agricultural activities, land release has directly contributed to **SDG 2**, which focuses on ending hunger, achieving food security and improving nutrition and sustainable agriculture. Specifically, it has contributed to **target 2.1** on ending hunger and ensuring access to safe and sufficient food, **target 2.3** on agricultural productivity and incomes of small-scale food producers, family farmers and herders, as well as secure access to land. In line with this contribution, it has positively impacted **target 2.4** on sustainable food production systems that increase productivity.

Through the development of new agricultural projects, also at the family level, and supporting small-scale farmers, land release has promoted **SDG 8** on economic growth and productive work, particularly **target 8.2** on economic productivity through technological upgrading and diversification and **target 8.5** on productive employment. Regarding the efficient use of natural resources, land release is linked to **SDG 12** on sustainable production patterns and its **target 12.2** on sustainable management of natural resources, especially through the development of irrigation ponds, and to **SDG 6** on sustainable management of water and its **target 6.4** on increased water-use efficiency.

Considering its role as an enabler of major local productive activities, land release has also contributed to **SDG 1** on ending poverty in all its forms, especially towards targets **1.1** and **1.4** that address extreme poverty and access to resources, including land.

Furthermore, the increased productivity of land has meant that the majority of farmers have hired additional labour force, resulting in more employment opportunities, also for women. In combination with additional findings related to the positive impact of land release on households headed by women in Cambodia, land release has supported **SDG 5** on gender equality and its **target 5.1** on ending all forms of discrimination against women and girls, and **target 5.a** on undertaking reforms to give women equal rights to economic and other resources, and has further contributed to **SDG 10** on reducing inequalities and particularly to its **target 10.2** aimed at empowering and promoting inclusion for all, and **target 10.3** on ensuring equal opportunities and reducing outcome inequalities.

## RESIDENTIAL INFRASTRUCTURE

Land release has facilitated the expansion of housing, residential areas, and furthered urbanisation. In this context, there are linkages between mine action and **SDG 9** dedicated to promoting inclusive and sustainable industrialisation, particularly its **target 9.1** on developing infrastructure, to support economic development and human well-being, and **target 9.2** on promoting inclusive and sustainable industrialisation and raising the industrial share of employment and gross domestic product (GDP). Moreover, there is a contribution to **SDG 11** on safe and sustainable cities and its **target 11.1** on ensuring access to adequate and safe housing, and **target 11.3** on enhancing sustainable urbanisation.

## TRANSPORT INFRASTRUCTURE

Lastly, land release in Cambodia has greatly facilitated the construction, upgrading, expansion, and safe use of roads, including secondary ones.

By unblocking access, land release has contributed to **SDG 1** and its target **1.4** on ensuring access to natural resources, including land. There are also linkages to **SDG 9** dedicated to resilient infrastructure, particularly its **target 9.1** on developing infrastructure, to support economic development and human well-being, and **target 9.2** on promoting inclusive and sustainable industrialisation and raising the industrial share of employment and GDP.

By facilitating the safe and active use of roads, land release has further contributed to **SDG 8** on economic growth and productive work, particularly **target 8.2** on economic productivity through diversification and technological upgrading, and **target 8.5** on productive employment, as well as to **SDG 11** with its target **11.2** on providing access to safe and sustainable transport systems for all and improving road safety.

# VICTIM ASSISTANCE



Between January 1979 and July 2021, Cambodia documented 64,950 explosive ordnance casualties, of which 36,077 (56 percent) were injured, 19,806 (30 percent) killed, and 9,067 (14 percent) required amputations.

The study identified the direct contribution of victim assistance to 9 SDGs and 25 of their associated targets.

Although challenges remain regarding full socio-economic reintegration, victim assistance efforts to meet the needs of persons with disabilities (PWD) have directly contributed to **SDG 3** on good health and well-being, its **target 3.4** on reduction of premature mortality from non-communicable diseases through prevention and treatment, **target 3.8** on universal health coverage and quality healthcare services, and **target 3.c** on increasing the financing, training and recruitment of the health workforce.

By adhering to various international instruments related to victim assistance, disability, and inclusiveness as well as by promoting social and economic inclusion and adopting national legislative and policy frameworks, victim assistance has contributed to the achievement of **SDG 10** on reducing inequalities. It particularly links to its **target 10.2** aimed at empowering and promoting inclusion for all irrespective of, inter alia, disability, **target**

**10.3** on ensuring equal opportunities and reducing outcome inequalities, including by promoting appropriate legislation, policies and action in this regard, and **target 10.4** on adopting policies to achieve greater equality. There is also a direct contribution to **SDG 16, target 16.b** on promoting non-discriminatory laws and policies.

There are several examples of institutional partnerships that have contributed to **SDG 17** on partnerships for the Goals and its **target 17.6** on triangular, regional and international cooperation to enhance knowledge sharing, including through improved coordination, **target 17.9** on enhanced international support for implementing effective and targeted capacity building, **target 17.16** on knowledge sharing and expertise through multi-stakeholder partnerships, and **target 17.17** on enhancing public, public-private and civil society partnerships.

Through the provision of vocational training and other income-generating activities, victim assistance has further contributed to **SDG 4** on inclusive education, particularly in terms of **target 4.3** on ensuring equal access to vocational and other education, **target 4.4** on increasing the number of adults who have skills for employment and decent jobs, **target 4.5** on ensuring equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, and **target 4.a** on providing safe, non-violent, inclusive, and effective learning environments for all. In addition, by facilitating the accessibility to public spaces, victim assistance has contributed to **SDG 11** on sustainable cities and communities and its **target 11.7** on access to safe, inclusive and accessible public spaces for persons with disabilities.

By promoting the access of victims to economic resources and financial services, victim assistance has directly contributed to **SDG 1** on ending poverty and its **target 1.3** on implementing nationally appropriate social protection systems and measures for all, **target 1.4** on ensuring that the poor and the vulnerable have equal rights to economic resources and financial services, **target 1.5** on building resilience of the poor and those vulnerable to shocks, and **target 1.b** on creating frameworks based on pro-poor and gender-sensitive development strategies.

In addition, by facilitating the access of PWD to employment, victim assistance has contributed to **SDG 8** on decent work and economic growth and its **target 8.5** on achieving employment and decent work for all, including persons with disabilities.

Through the advancement of universal access to healthcare services, including access for women, girls, boys and men to physical and psycho-social rehabilitation, as well as social and economic reintegration, there is also a link with **SDG 5** on gender equality and its **target 5.1** on ending all forms of discrimination. Also, by raising awareness about services available for PWD, victim assistance efforts have contributed to **SDG 16** and its **target 16.10** on ensuring public access to information and protecting fundamental freedoms.

By providing a space for survivors and other persons with disabilities to share their concerns, and enabling their active engagement in priority setting, victim assistance also contributes to **SDG 16**, **target 16.6** on developing effective and accountable institutions, and **target 16.7** on ensuring responsive, inclusive and representative decision-making at all levels.



# EXPLOSIVE ORDNANCE RISK EDUCATION



EORE was initiated in Cambodia in 1993, and the Cambodian Mine Action and Victim Assistance Authority currently holds the mandate to coordinate EORE activities. From 2018 to 2020, 2,840,702 people, including 967,441 women and 365,556 girls, received EORE sessions in Cambodia from national and international operators.

The study identified the direct contribution of explosive ordnance risk education to 6 SDGs and 10 of their associated targets.

The drastic reduction in the yearly number of casualties (from 4,320 in 1996 to 65 in 2020) in Cambodia is a testament to the EORE programme's contribution to promoting a reduction of at-risk behaviour in a sustainable manner and increasing the security situation and the perception of safety in contaminated areas, linked to **SDG 16** and its **target 16.1** on significantly reducing all forms of violence and related deaths.

Through the promotion of safe behaviour and thus reduction in the number of accidents, the EORE programme in Cambodia has also contributed to **SDG 10** on reducing inequalities and its **target 10.7** on facilitating safe mobility of people.

By targeting women, girls, boys and men in accordance with their different vulnerabilities, roles and needs in promotion of safer behaviours, EORE has contributed to **SDG 4** on quality education, its **target 4.5** on eliminating

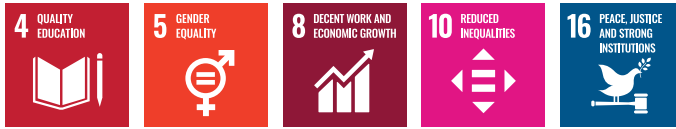
gender disparities in education at all levels for the vulnerable, and **target 4.a** on providing safe, non-violent, inclusive and effective learning environments for all.

Moreover, EORE is also linked with **SDG 5** on gender equality and its **target 5.1** on ending all forms of discrimination against women and girls.

By establishing several partnerships and integrating mine action and developmental efforts, the EORE programme has supported **SDG 17** on partnerships for the Goals and its **target 17.6** on South-South and triangular regional and international cooperation to enhance knowledge sharing, including through improved coordination, **target 17.9** on enhanced international support for implementing effective and targeted capacity building, **target 17.16** on knowledge sharing and expertise through multi-stakeholder partnerships, and **target 17.17** on enhancing public, public-private and civil society partnerships.

Additionally, these developments have promoted **SDG 3** on good health and well-being and its **target 3.d** on strengthening the capacity for early warning, risk education and management of health risks.

# GENDER MAINSTREAMING



The study identified the direct contribution of gender mainstreaming in mine action to 5 SDGs and 12 of their associated targets.

In Cambodia's case, gender mainstreaming in mine action has helped increase female representation and participation, contributing to **SDG 5** on gender equality and its **target 5.1** on ending all forms of discrimination against women and girls, **target 5.5** on ensuring women's full and effective participation and equal opportunities for leadership at all levels, **target 5.a** on undertaking reforms to give women equal rights to economic and other resources, **target 5.c** on adopting policies for the promotion of gender equality, as well as to **SDG 16** on peace, justice and strong institutions and its **target 16.7** on ensuring inclusive decision-making at all levels.

By promoting equal employment opportunities and encouraging the recruitment of women, gender mainstreaming has also contributed to **SDG 8** on employment and decent work and **target 8.5** on achieving full and productive employment and decent work for all.

These efforts have also contributed to **SDG 10** on reducing inequalities and particularly to its **target 10.2** aimed at empowering and promoting inclusion for all, **target 10.3** on ensuring equal opportunities and reducing outcome inequalities, and **target 10.4** on adopting policies to achieve greater equality. Gender mainstreaming has also contributed to **SDG 16** on peace, justice and strong institutions and its **target 16.b** on non-discriminatory laws and policies.

In addition to this, mine action organisations' efforts to provide skills and training opportunities to their female employees has further contributed to **SDG 4** on ensuring inclusive and equitable education, and its **target 4.4** on increasing the number of adults who have skills for employment and decent jobs, and **target 4.5** on eliminating gender disparities in education.

# PARTNERSHIPS AND COOPERATION



The study identified the direct contribution of partnerships and cooperation in mine action to 7 SDGs and 18 of their associated targets.

Through multi-stakeholder engagement and partnerships at different levels, mine action has supported **SDG 17** on partnerships, specifically its **target 17.3** on mobilising financial resources for developing countries, **target 17.6** on enhancing all types of cooperation and knowledge sharing on mutually agreed terms, **target 17.9** on enhancing international support to implement all the Sustainable Development Goals, **target 17.14** on enhancing policy coherence for sustainable development, **target 17.16** on enhancing the global partnership for sustainable development, and **target 17.17** on enhancing public, public-private and civil society partnerships.

As a result of several institutional partnerships, initiatives and engagements, mine action outcomes have contributed to **SDG 4** on inclusive education, particularly in terms of **target 4.3** on ensuring equal access to vocational and other education, **target 4.4** on increasing the number of adults who have skills for employment and decent jobs, **target 4.5** on ensuring equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, and **target 4.a** on providing safe, non-violent, inclusive, and effective learning environments for all, as well as to **SDG 6** on clean water and sanitation, its **target 6.1** on achieving universal

access to safe and affordable drinking water for all, **target 6.2** on achieving access to adequate and equitable sanitation and hygiene for all, and **target 6.4** on reducing the number of people suffering from water scarcity.

There are also linkages with **SDG 1** on ending poverty in all its forms, especially **targets 1.1** and **1.4** addressing extreme poverty and access to natural resources, including water, **SDG 2** on ending hunger, and its **target 2.1** to end hunger and ensuring access to food, as well as **SDG 3** on good health and well-being by contributing to its **target 3.3** on ending the epidemics of various communicable diseases.

In addition, by participating in international peacekeeping and mine clearance operations, mine action has supported **SDG 16** on peace, justice and strong institutions and its **target 16.1** on reducing all forms of violence and related death rates everywhere.

# **PURPOSE AND METHODOLOGY OF THE STUDY**

The purpose of this study is to map and analyse the impact of mine action on sustainable development in Cambodia. In particular, the study examines the outcomes of **mine action interventions** (land release, victim assistance, explosive ordnance risk education), and **approaches** (gender mainstreaming, partnerships and cooperation) since these are considered as key catalysts to maximise the contribution of mine action towards the achievement of the 2030 Agenda.

Although the findings of this study are not meant to serve as an evaluation of the mine action activities conducted in the country, they are an effective reference to highlight the value of connecting sustainable development, peacebuilding, and humanitarian activities as mutually reinforcing efforts across the full cycle of a mine action programme from planning, to monitoring and evaluation.

Stated otherwise, this study aims to illustrate how mine action can contribute to the triple nexus,<sup>1</sup> by looking at the broader implications of mine action interventions, beyond the number of square metres released or the number of explosive ordnance removed from the ground.

The study uses the Sustainable Development Goals (SDGs) as an analytical framework for assessing and identifying the long-term effects of such interventions.

The SDG targets serve to measure the longer-term consequences of mine action interventions, since they allow the integration and examination of most of the external dimensions that influence the results of mine action, including political, economic, social and cultural factors, and the performance of other related projects.<sup>2</sup>





## **The 2030 Agenda for Sustainable Development**

Building upon the achievements and lessons learnt from the Millennium Development Goals,<sup>3</sup> in 2015 the United Nations Member States adopted the 2030 Agenda for Sustainable Development as a new plan of action for the following 15 years.<sup>4</sup> The 2030 Agenda is universal, transformative and rights-based, under the premise that 'no one will be left behind'.<sup>5</sup> It contains 17 integrated Sustainable Development Goals and 169 associated targets which are based on the three core elements of sustainable development – economic growth, social inclusion, and environmental protection – and calls for peace and partnership.

There are five critical dimensions at the core of the 2030 Agenda, known as 'the 5 Ps': people, prosperity, planet, partnership, and peace.<sup>6</sup>

This research is the fourth of a series on this subject carried out by the GICHD. It builds upon the following previous studies:

- Leaving no one behind: Mine action and the Sustainable Development Goals (2017).<sup>7</sup>
- The Socio-economic Impact of Anti-vehicle Mines in Angola (2019).<sup>8</sup>
- The Sustainable Development Outcomes of Mine Action in Jordan (2021).<sup>9</sup>

## **The Sustainable Development Outcomes of Mine Action in Jordan**

constituted a first-of-its-kind study that comprehensively mapped the sustainable development outcomes of mine action activities in Jordan. The findings and lessons learnt from this pilot publication have served as the

methodological source of inspiration for this study. However, it is important to highlight that the specifics of the methodology here have been defined based on the particularities of the Cambodian context.

The initial research plan was modified due to mobility restrictions stemming from the COVID-19 pandemic which led to the cancellation of planned field visits. The study therefore relied on desk research and remote interviews (both structured and unstructured) with representatives from the Cambodian Mine Action and Victim Assistance Authority (CMAA), Humanity & Inclusion, Mines Advisory Group, Norwegian People's Aid, The HALO Trust, and UN Development Programme.

The primary data collected via remote interviews was mainly cross-referenced with secondary data and grey literature sources.<sup>10</sup> For this reason, the study is based on remote analysis and exchanges with key stakeholders, unlike previous studies where field observation, in-person interviews and focus groups were conducted. The limited access to direct testimonies does present a shortcoming and the study acknowledges that the research would have largely benefitted from direct interaction with key stakeholders and field visits.

While the research examines mine action activities and efforts countrywide, three provinces in Cambodia's north-western region – Battambang, Banteay Meanchey, and Pailin – were selected to assess the impact of land release, considering the extent of contamination, high rate of clearance, as well as increasing developmental activities. The case study areas were additionally determined in close coordination with CMAA focal points for this project and validated throughout the interview process with key stakeholders for mine action in Cambodia.

Additionally, Khla Ngoab – a village located in Banteay Meanchey province – was selected in order to carry out image analysis using imagery from Google Earth covering the years 2009, 2014 and 2020, to illustrate specific land release changes.

# **INTRODUCTION: MINE ACTION IN CAMBODIA**

Anti-personnel mine (APM) contamination is particularly concentrated in the north-western regions along the border with Thailand. Known as the K5 Belt or K5 barrier, it has been historically considered one of the densest mine-contaminated areas and the largest mine belt in the world.<sup>14</sup>

## CONTAMINATION AND EO ACCIDENT POINTS IN CAMBODIA AS OF NOVEMBER 2021



Humanitarian mine action efforts in Cambodia officially started in 1992, when the Cambodian Mine Action Centre (CMAC) was first created and operated under the UN Transitional Authority in Cambodia to implement and coordinate demining efforts.<sup>16</sup> Later, in 2000, the Cambodian Mine Action and Victim Assistance Authority (CMAA) was established by Royal Decree No. 160 with the mandate to regulate, monitor, and coordinate mine action.<sup>17</sup> The CMAA is currently under the direct leadership of the prime minister, who serves as its president. Operations related to the CMAA mandate are managed by the CMAA secretary general.<sup>18</sup> As the country's national mine action authority, the CMAA has established various mine action coordinating mechanisms, including the Technical Working Group on Mine Action,<sup>19</sup> the Mine Action Coordination Committee,<sup>20</sup> and various technical reference groups.<sup>21</sup>

Cambodia has also considerably enhanced its national capacity in mine action with the support of international partners. In 2016, an evaluation of the UN Development Programme's contribution to mine action highlighted Cambodia as a positive example among a few other countries that have developed a high-level national capacity in mine action.<sup>22</sup>


However, considering the extent of contamination, significant efforts and financial resources are still required to complete survey and clearance, estimated by the country at around 333.25 million USD to achieve completion by 2025.<sup>23</sup> Indeed, in 2019 Cambodia was granted a second extension of its deadline for completing the clearance of APM areas, in accordance with Article 5 of the Anti-Personnel Mine Action Convention (APMBC), to 2025.<sup>24</sup> In order to accelerate clearance, the Cambodian government announced that it would be providing an additional 10 percent to match any new funds provided for mine action operations, in cash and in-kind.<sup>25</sup>

The main national operators in Cambodia are CMAC<sup>26</sup> and the National Centre for Peacekeeping Forces, Mines and ERW Clearance. There are also international and commercial operators as well as several NGOs active in Cambodia. Among accredited international operators are APOPO, Mine Advisory Group, Norwegian People's Aid, and The HALO Trust.<sup>27</sup> Cambodia is a State Party to the APMBC, to the Convention on Certain Conventional Weapons (CCW) and its Protocols I, the Amended Protocol II, III, and IV, as well as to the Convention on the Rights of Persons with Disabilities. Cambodia has not yet joined the Convention on Cluster Munitions, nor the CCW Protocol V on Explosive Remnants of War.

FIGURE 4

## KEY MILESTONES IN MINE ACTION IN CAMBODIA

- 
- 1991** ● Conclusion of the Comprehensive Cambodian Peace Agreement.
  - 1992** ● Beginning of humanitarian mine action efforts in Cambodia.
  - 1992** ● Establishment of the Cambodian Mine Action Centre (CMAC).
  - 1993** ● Establishment of the Cambodian humanitarian mine action programme.
  - 1997** ● Cambodia becomes a State Party to the Convention on Certain Conventional Weapons (CCW) and its Protocols I, Amended Protocol II, III, and IV.
  - 1998** ● Last Khmer Rouge forces defect to the Cambodian government, bringing a final cessation of hostilities and thus marking the arrival of complete peace to the country.
  - 2000** ● Cambodia becomes a State Party to the Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on Their Destruction (APMBC).
  - 2000** ● Establishment of the Cambodian Mine Action and Victim Assistance Authority (CMAA).
  - 2002** ● Completion of National Level One Survey.

- 
- 2003** ● The CMAA prepares the National Mine Action Strategy and the Five-Year Mine Action Plan 2003–2007.
  - 2008** ● In its [2007 transparency report submitted](#) in 2008 to the APMBC, Cambodia declares the completion of the destruction of all stockpiled anti-personnel mines – a total of 203,671 mines.
  - 2009** ● Submission of Cambodia’s first request for an extension of the deadline for completing the destruction of anti-personnel mines in mined areas in accordance with Article 5 of the APMBC.
  - 2010** ● Adoption of a new 2010–2019 National Mine Action Strategy.
  - 2012** ● Cambodia ratifies the Convention on the Rights of Persons with Disabilities (CRPD).
  - 2017** ● The Royal Government of Cambodia approves the new National Mine Action Strategy 2018–2025.
  - 2019** ● Cambodia submits its second request for an extension of the deadline for completing the destruction of anti-personnel mines in mined areas in accordance with Article 5 of the APMBC.
  - 2020** ● Completion of a national baseline survey to establish the extent of remaining EO contamination.





# **EXPLOSIVE ORDNANCE CONTAMINATION AND DEVELOPMENT IN CAMBODIA**

Cambodia has integrated mine action in its major national development plans and policies, establishing it as a national priority in recognition of the ‘huge negative humanitarian, social and economic impact’ that the country’s widespread explosive ordnance (EO) contamination inflicts on the population.<sup>28</sup> The current Rectangular Strategy Phase IV and the National Strategic Development Plan 2019–2023 are clear proof of this, both containing references to EO contamination.

Moreover, in 2003 Cambodia nationalised all eight global Millennium Development Goals and established an additional Cambodian Millennium Development Goal (CMDG9 – De-mining, UXO and Victim Assistance) specifically focusing on mine action.<sup>29</sup> This allowed Cambodia to enhance the linkages of its mine action efforts with broader development initiatives while further prioritising and increasing efforts to address EO contamination.

FIGURE 5

## CAMBODIAN SDG 18 MINE / ERW FREE BY 2030



After the adoption of the Sustainable Development Goals (SDGs) at the UN General Assembly in 2015, Cambodia adapted and adopted all of the 17 SDGs and added an additional, 18<sup>th</sup> Goal.<sup>30</sup> The Cambodian SDG 18, titled ‘End the negative impact of mines/ ERW and promote victim assistance’, has three targets:<sup>31</sup>

- 18.1 To completely clear the identified mine and explosive remnants of war (ERW) areas by the year 2030.
- 18.2 To reduce the number of mine / ERW casualties to less than 10 persons / year by 2030.
- 18.3 To promote the rights and improve the quality of life of persons with disabilities due to landmines / ERW.

Source: CMAA

The UN Development Programme (UNDP) has also reported that mine action is an enabling factor in poverty reduction in rural Cambodia through its support to the agricultural sector. Given this context, Cambodia has been working on the integration of socio-economic dimensions in its planning system for land release over the past years, particularly at the provincial level. In 2004, Cambodia set up provincial mine action committees and mine action planning units (MAPUs) as part of the country's mine action programme. These bodies ensure that local and provincial development plans are taken into consideration in the mine action prioritisation process, whilst closely working with rural development committees.<sup>32</sup>

MAPUs also perform post-clearance monitoring functions under the coordination of the Cambodian Mine Action and Victim Assistance Authority with the aim of ensuring that all cleared lands are used for their intended purposes as defined in the planning and prioritisation process.<sup>33</sup> The GICHD's 2016 review of Cambodia's mine action sector indeed concluded that Cambodia had developed one of the most sophisticated mine action planning mechanisms in the world.<sup>34</sup>



Goats on a minefield in Banteay Meanchey province. © Courtesy of The HALO Trust

As documented in both the Rectangular Strategy Phase IV and the National Strategic Development Plan 2019–2023, the EO contamination in Cambodia is primarily linked to the agricultural sector. While Cambodia’s three primary industries – agriculture, garments, and tourism – have all been critical to the country’s economic growth, agriculture continues to be the main pillar of Cambodia’s economy.<sup>35</sup> Indeed, in 2020, the share of agriculture<sup>36</sup> in Cambodia’s gross domestic product was 22.84 percent,<sup>37</sup> with the sector employing 33 percent of working men and 38 percent of working women.<sup>38</sup>

Consequently, efforts related to agriculture, environment, and rural development constitute an integral part of Cambodia’s national development strategies and plans. Despite recent rapid urbanisation,<sup>39</sup> the majority of the population still lives in rural areas – 60.6 percent as of 2019.<sup>40</sup> Examples of the negative impact of mine contamination reported in Cambodia include blocked access to agricultural land, pastureland, and forests; restrictions in safe access to drinking water; constrained agriculture production and, more generally, land made unproductive; and blocked physical access to infrastructures, services and markets.<sup>41</sup>

## THE IMPACT OF EO ON AGRICULTURE

EO clearance continues to be a key priority for the promotion of the agricultural sector and rural development in Cambodia’s national development plans. The impact of EO on the agricultural sector has been longstanding. In the 1990s, a study – consisting of interviews with more than six thousand households in Cambodia – found that a 135 percent increase in agricultural production could have been expected without the presence of mines (66 km<sup>2</sup> of land could have been cultivated in addition to the 49 km<sup>2</sup> cultivated).<sup>42</sup>

In 2002, the national Landmine Level One Survey showed that landmines and ERW affected almost half of the villages in Cambodia (46 percent), limiting access to people’s livelihoods and largely affecting agricultural land.<sup>43</sup> The study highlighted that ‘adverse’ socio-economic impact, preventing access to housing, agriculture, pasture, water and forest resources’ were reported by 20 percent of Cambodian villages.<sup>44</sup>

## THE LINKAGES BETWEEN EO AND POVERTY

In this context, it is important to highlight that despite Cambodia's significant efforts in poverty reduction<sup>45</sup> and consequent shift from low-income country to lower middle-income country in 2015, the vast majority of poor communities still live in the countryside where EO contamination levels are relatively high.<sup>46</sup> This critically **links EO risk exposure with socio-economic status**, as people with no or low income often have no choice but to use contaminated land despite the safety risk.

83 percent of the beneficiaries from Cambodia's Clearing for Results II project (2011–2015) reported having cultivated contaminated land before it was cleared,<sup>47</sup> confirming that low- or no-income populations therefore face a greater risk of injury and disability caused by EO. This, in turn, exacerbates their state of poverty and presents a vicious cycle or poverty trap.

A correlation between poverty and EO contamination in Cambodia was also acknowledged in a needs assessment conducted by AustCare in 2005, which found that landmine presence was a key contributor to insufficient livelihoods among poor populations living in mine-contaminated rural areas. This was particularly prominent in communities bordering Thailand, specifically in the provinces of Battambang, Banteay Meanchey, and Pailin.<sup>48</sup> According to the most recent data available, poor households now represent 23% in Battambang, 11% in Banteay Meanchey, and 20% in Pailin.<sup>49</sup>



Beneficiary farmers in Battambang province. © Courtesy of The HALO Trust

## INTEGRATED APPROACHES IN MINE ACTION

Considering mine action's enabling role in broader development efforts, development actors have been integrating mine action in their activities and enhancing cooperation with mine action actors.<sup>50</sup> For instance, both CARE and AustCare<sup>51</sup> adopted an integrated mine action and development programming approach.

CARE's activities in Cambodia integrated mine action through the implementation of an integrated demining and development project between 1999 and 2005, acknowledging that contaminated land hindered the safe return and resettlement of internally displaced persons and refugees.<sup>52</sup> The evaluation of the programme showed that such an integrated approach contributed to improved livelihoods in beneficiary communities.<sup>53</sup>

Such examples clearly illustrate how proper integration and alignment between mine action and other development initiatives are key to achieving broader outcomes and ensuring the relevance of mine action interventions in the longer term.

Furthermore, the final evaluation of Phase II (2011–2016) of Cambodia's Clearing for Results (CFR) project, supported by UNDP, revealed an interesting finding on beneficiaries' perspectives when it is a matter of the wrongly perceived dichotomy between development and humanitarian purposes in mine action. Indeed, the impact of contamination and land release were perceived to be equally relevant for 'human security and well-being' as well as for 'livelihoods and development'. The final evaluation also highlighted that it 'would make absolutely no sense to anyone in the 12 CFRII villages surveyed' to talk about mine action for development as if it was different from humanitarian mine action.

These findings were also in line with results of a household impact study and the UNDP Independent Evaluation Office 2015 study on the impact of UNDP-supported mine action globally.<sup>54</sup> Such findings are a testament to the existing strong linkages between land release and development, confirming that mine action contributes to both humanitarian and development agendas.



Construction of a laterite road on land released in 2020 in Banan district, Battambang province. © Courtesy of the CMAA





# **THE CONTRIBUTION OF MINE ACTION TO THE SDGs IN CAMBODIA**





Cassava farm in Battambang province. © Courtesy of The HALO Trust

# 1. LAND RELEASE

FIGURE 6

## CONTRIBUTION OF LAND RELEASE TO THE SDG TARGETS IN CAMBODIA





- 
- 10.2** Social, economic, political inclusion of all
  - 10.3** Equal opportunities, reduction of inequalities
  - 10.7** Safe migration and mobility



- 
- 11.1** Access to adequate, safe and affordable housing
  - 11.2** Access to safe and sustainable transport systems
  - 11.3** Inclusive and sustainable urbanisation



- 
- 12.2** Sustainable management and efficient use of natural resources



- 
- 16.1** Reduction of all forms of violence



- 
- 17.16** Enhanced global partnership for sustainable development
  - 17.17** Effective public, public-private and civil society partnerships

The wording of the SDG targets listed above has been simplified; the full list of targets and their official names can be found on the United Nations website: <https://www.un.org/sustainabledevelopment/>

**Land release** refers to the process of applying ‘all reasonable effort’<sup>55</sup> to identify, define, and remove all presence and suspicion of explosive ordnance (EO)<sup>56</sup> through non-technical survey, technical survey and/or clearance.<sup>57</sup>

Land release aims to reduce casualties caused by EO and it is therefore intrinsically linked to **SDG 16** and its **target 16.1** which aims to ‘Significantly reduce all forms of violence and related death rates everywhere.’

Land release also removes physical blockages, making the land ‘free’ and able to be used for different purposes. For instance, Cambodia reported that between 1992 and 2008 a considerable amount of land was released for use, including for the safe resettlement of thousands of refugees and internally displaced persons.<sup>58</sup>

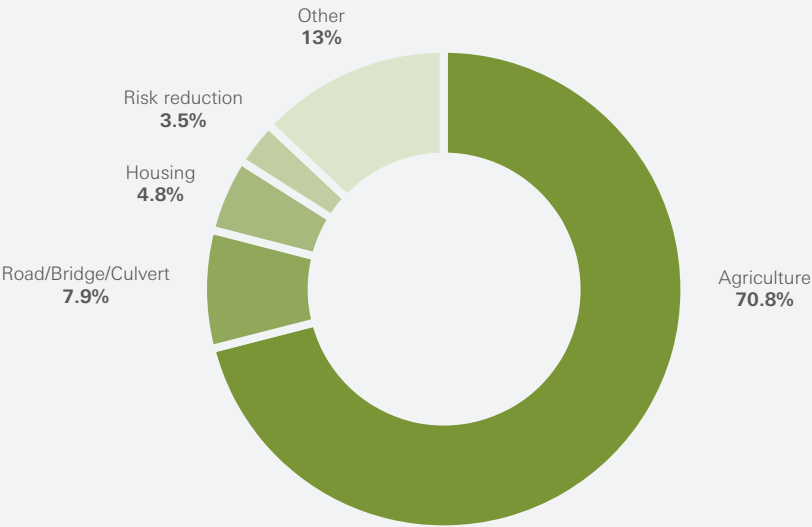
Given its enabling capacities, land release can play a crucial role in supporting countries’ socio-economic development in various ways, as this section will showcase.

Land release can enable mobility, provide safe access to critical resources, and allow the use of land for cultivation as well as for other social and physical infrastructure reconstruction and development. Considering that one of the primary implications of land mine contamination in Cambodia was decreased mobility,<sup>59</sup> land release constitutes a necessary enabling factor for numerous socio-economic and development activities.

2,287 km<sup>2</sup> of land has been cleared in the country over the course of the last three decades. Land use data analyses show that in the majority of cases (70.8 percent), the land has been used only for agricultural purposes.<sup>60</sup> The International Labour Organization (ILO) also reported that intensive commercial farming is one of the directions that the country is rapidly evolving in.<sup>61</sup>

Land release has therefore facilitated substantial expansion in agriculture in Cambodia, with many depending on it for their livelihoods.

**FIGURE 7** LAND USE AFTER CLEARANCE IN CAMBODIA  
(1992–OCTOBER 2021)



Source: CMAA

The positive impact of land release on households is particularly well-known, with strong evidence to support this. For instance, the Cambodian Mine Action and Victim Assistance Authority's (CMAA's) post-monitoring reports of recent years indicate that more than 4,000 sites cleared between 2009 and 2013 both directly and indirectly benefitted over 230,000 households consisting of more than 1 million individuals.<sup>62</sup>

Land release can also positively impact households headed by women. For instance, The HALO Trust found that in some projects, post-cleared land use in Cambodia resulted in a greater income for female-led households (57 percent increase) than for male-led households (43 percent increase).<sup>63</sup> While these findings are limited to the measurements in change of income after land release with respect to households headed by men – and do not account for greater systemic inequalities that present daily barriers to gender equality – they point to the positive impact of land release with respect to the financial empowerment of women, contributing to **SDG 5** on gender equality and especially its **target 5.1** on ending all forms of discrimination against women and girls.



A family that intends to grow mangoes on a minefield recently cleared by HALO teams. © Courtesy of The HALO Trust



The contribution of clearance to Cambodia's economy is further demonstrated by changes in gross domestic product (GDP). A 2004 UN Development Programme (UNDP)-PRIO study found a correlation between annual GDP and the extent of arable land in Cambodia. For instance, the percentage of arable land in Cambodia dropped in the late 1960s, due to the Vietnam War. When agriculture recovered and the amount of arable land increased by the end of the 1980s, annual GDP increased in parallel.<sup>64</sup> Moreover, a 2005 cost-benefit analysis study on mine clearance showed that even though land release requires extensive resources, its benefits were 38 percent higher than the cost.<sup>65</sup>



Mango, soybean, and corn plantation on land released by the Cambodian Mine Action Centre (CMAC) in 2019 in Pailin province. © Courtesy of the CMAA

## **NORTH-WESTERN PROVINCES: BATTAMBANG, BANTEAY MEANCHEY AND PAILIN**

Considering the extent of contamination and the highest rate of clearance being in Cambodia's north-west area,<sup>66</sup> this research examines in further detail the consequences of land release in three north-western provinces – Battambang, Banteay Meanchey, and Pailin – all bordering Thailand. Mines were densely laid along the entire Thai-Cambodian border up to Lao PDR – an area known as the K5 Belt or K5 barrier – to prevent armed opposition groups from entering Cambodia.<sup>67</sup> The K5 Belt, which extends for hundreds of kilometres,<sup>68</sup> is considered one of the densest mine-contaminated areas and the largest mine belt in the world.<sup>69</sup>

Cambodia's north-western provinces are also among the country's highly populated and poorest regions. Currently, 11 percent of households in Banteay Meanchey, 23 percent in Battambang, and 20 percent in Pailin are classified as 'IDPoor'.<sup>70</sup> Furthermore, among the north-western provinces, 49 percent of the land in Pailin province is devoted to agriculture, followed by 32 percent in Battambang, and 35 percent in Banteay Meanchey. Communities in this region often have no choice but to cultivate at-risk land or encroach EO-contaminated forest areas, which puts them at high risk of EO casualty.<sup>71</sup>

# FACILITATING SAFE MOBILITY

Despite its high level of contamination, the Thai-Cambodian border has frequently been used and traversed, resulting in many casualties. Indeed, during hostilities in the 1980s and 1990s, more than 300,000 Cambodian refugees had to cross contaminated land in order to reach refugee camps on the Thai-Cambodian border.<sup>72</sup>

**FIGURE 8** UNHCR-UNBRO CAMPS ON THE THAI-CAMBODIAN BORDER (1980s–1990s)



Source: UNHCR

In 1991, to ensure safe repatriation of these refugees, the UN High Commissioner for Refugees (UNHCR) contracted The HALO Trust to conduct a survey which could provide a better understanding of the extent of EO contamination. The survey included 700 km<sup>2</sup> of land in the Battambang province, as numerous refugees sought resettlement in Battambang and other north-western provinces.<sup>73</sup> CMAC, Mines Advisory Group, and The HALO Trust were consulted to provide assistance in UNHCR-identified priority locations.<sup>74</sup>

Thanks to the UNHCR repatriation programme, 46,675 Cambodian refugees returned from Thailand between 1997 and 1999. The UNHCR reported that no mine accidents occurred during the process of repatriation although refugees 'were returning to some of the most heavily mined areas in the world'.<sup>75</sup>

As acknowledged in United Nations Security Council resolution 728 of 8 January 1992, minefields in Cambodia posed 'a serious hazard to the safety of people in Cambodia, as well as an obstacle to the smooth and timely implementation of the agreements [on a comprehensive political settlement of the Cambodia conflict signed in Paris on 23 October 1991], including the early return of Cambodian refugees and displaced persons'.<sup>76</sup>

By facilitating safe mobility, mine action has contributed to **SDG 10** on reducing inequalities and particularly to its **target 10.7** on facilitating orderly, safe, regular and responsible migration and mobility of people. In addition to this, the UNHCR's coordination with mine action operators is indicative of mine action's support to **SDG 17** on partnerships and its **target 17.16** on enhancing the global partnership for sustainable development, and **target 17.17** on enhancing public, public-private and civil society partnerships.

It is important to highlight that the Thai-Cambodian border is not yet fully demarcated. In 2019, Cambodia cited un-demarcated border areas as one of the challenges preventing the country from reaching completion under Article 5 of the Anti-Personnel Mine Convention (APMBC).<sup>77</sup> Clearance along border areas is planned with support from the Royal Cambodian Armed Forces, as outlined in Section 6 of the General Border Commission and Circular 02 of March 2017.<sup>78</sup> In 2019, CMAC and the Thailand Mine Action Centre (TMAC) concluded an agreement regarding these areas 'to cooperate in clearing mines and UXO along the border to contribute to both nations' development interests'. Clearance has been carried out in the Banteay Meanchey province (Cambodia) and Sa Kaeo (Thailand) province by CMAC and TMAC units respectively, under directives made by the Thai-Cambodian General Border Commission created by the two governments.<sup>79</sup>

Once successfully concluded, these efforts will not only allow for Cambodia's obligations under the APMBC to be completed but will also contribute to broader peace and security agendas, directly contributing to **SDG 16** on peace, justice and strong institutions.

## AGRICULTURE AND PRODUCTIVE USE OF LAND

After the integration of the last Khmer Rouge units and final cessation of hostilities in 1998, which marked the arrival of complete peace in Cambodia, the north-western provinces experienced significant inward immigration. These border areas experienced quick repopulation due to the presence of fertile land, as well as border trade, tourism, and employment opportunities. As a result, many farmers decided to utilise the land and establish their farms in these forested regions, even though they were considered to be suspected hazardous areas.<sup>80</sup> A 2015 UNDP evaluation reported that where there were frontier battlefields with thick forests full of mines and explosive remnants of war in the north-western provinces 15 years ago, there were now productive agricultural areas, with cassava as the predominant crop.<sup>81</sup> This reinforces the connection between the impact of land release on rural poverty reduction for local populations, given that the land is mainly used for agriculture.



Planting cassava (left) and corn (right) on land released by CMAA since 2019 in Banan district, Battambang province. © Courtesy of the CMAA

Land release conducted in these three provinces within the framework of Phase II<sup>82</sup> of the Clearing for Results (CFR) project resulted in the release of 145.26 km<sup>2</sup> of land for agricultural and livelihood development (82 percent) as well as safe access to community resources and infrastructures<sup>83</sup> benefitting almost 400,000 people.<sup>84</sup>

Major benefits at the household level were related to safety – in particular safe land for farming, which was reported by 85.2 percent of beneficiaries.<sup>85</sup> At the community level, the confidence in investing in land, and in being able to raise more animals, were also reported as major benefits.<sup>86</sup> In addition to the benefits of increased farming capacity, an overall improvement in psychological well-being was reported.



A stream used for household consumption and to irrigate crops alongside a two-lane road for local use were built on the land released by CMAC in 2020 in the Banan district, Battambang province. © Courtesy of the CMAA

The CFRIL impact assessment found a significant increase in the use of land and diversification of **types of crops** being cultivated after land release in most households. In nearly 100 percent of responses, released land was used to grow crops, especially rice, for household consumption as well as for the production of other crops destined for sale, such as cassava, maize, and fruit.<sup>87</sup>

Findings of the UNDP evaluation also showed that the **increased productivity** of land resulting from land release meant that the majority of farmers hired additional labour, resulting in more **employment opportunities**, also for women, with 91.7 percent of farmers in all three provinces reporting hiring women for farming work.<sup>88</sup> By benefitting women, land release has supported **SDG 5** on gender equality and its **target 5.1** on ending all forms of discrimination against women and girls, and **target 5.a** on undertaking reforms to give women equal rights to economic and other resources. It has further contributed to **SDG 10** on reducing inequalities and particularly to its **target 10.2** aimed at empowering and promoting inclusion for all, and **target 10.3** on ensuring equal opportunities and reducing outcome inequalities.



Moreover, a CMAA report found that mine clearance in 121 tasks located in Banteay Meanchey<sup>89</sup> not only resulted in an increase of **land value** by 694 percent (1,397 USD per ha before vs 9,701 USD per ha after clearance), but also allowed a total income generation of 327,112 USD from farming on the cleared land after just one season – without including the amount of rice that was kept aside for own-consumption. This benefitted 80,574 households consisting of 354,986 people.<sup>90</sup>



Pineapple plantation on land released by CMAC in 2020 in Battambang province. © Courtesy of the CMAA

To illustrate the impact on agriculture and the productive use of land after land release, the study focuses on Khla Ngoab village, located in the Malai district of Banteay Meanchey province. The satellite image analysis presented in this study, covering the years 2009, 2014 and 2020, provides direct evidence of the evolution and changes occurring at different stages of the clearance / land release process.

As shown in **figure 9.a**, minimal signs of agricultural activities were present in Khla Ngoab before mine clearance started in 2009. Agricultural activities appeared to occur in close proximity to residential areas and along the main roads, not extending into the larger areas surrounding contamination. In addition, agriculture appeared to occur over small swaths of land. Areas



surrounding contaminated land were largely overgrown by vegetation with large sections of forest. Irrigation ponds were present but limited, and located adjacent to residential areas along the main roads. No irrigation ponds were present in the larger area surrounding contaminated locations. Minimal secondary roads were present with, however, traces of former secondary roads also visible, showing clear signs of disuse.

A large increase in agricultural activity occurred between 2014 and 2020, after land was released. As shown in **figures 9.b and 9.c**, agricultural activities are extended to the area surrounding the released land, with large swaths of land cleared of vegetation and forest and converted to agricultural use. Hence, agriculture now occurs over large areas of land, with an increased number of cassava orchards and other agricultural activity taking place. Also, the number of irrigation ponds has significantly increased, and they are no longer concentrated along the main roads, extending largely within the wider agricultural areas.

FIGURE 9

#### SATELLITE IMAGES OF TWO LAND RELEASED AREAS IN KHLA NGOAB VILLAGE

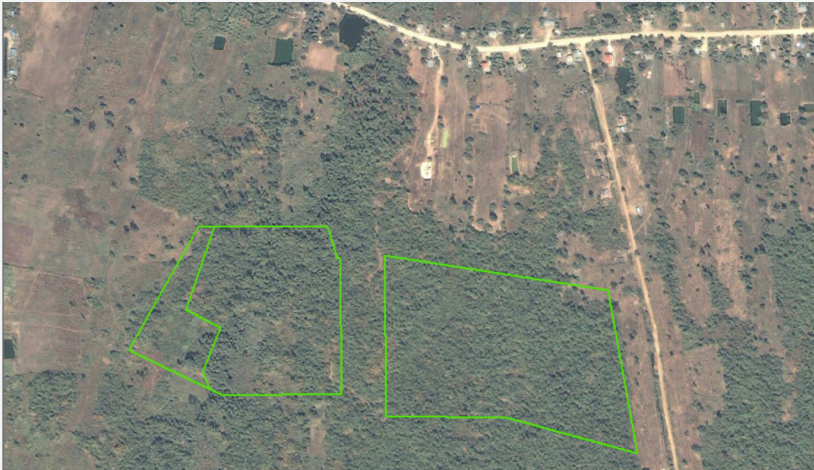


Figure 9.a: 2009 – pre land release, area of contamination is primarily forest with no signs of land use. Source: Google Earth



Figure 9.b: 2014 – post land release, area of contamination remains mainly forest with increased land use in surrounding area. Few secondary roads are present but show signs of use. The primary road is sealed, with the village principally built along the road, showing some expansion. Agricultural activities are present and have expanded slightly. Additional irrigation ponds are present. Source: Google Earth



Figure 9.c: 2020 – post land release, majority of forest areas have been repurposed for agriculture with significantly increased land use in the surrounding area. A few secondary roads have increased in number. Agricultural activities are present and have expanded significantly with much of the surrounding land now used for multiple types of agriculture. A large increase in irrigation ponds is present. Source: Google Earth

As shown above, land release has been a direct contributor to **SDG 2**, which focuses on ending hunger, achieving food security and improving nutrition and sustainable agriculture. Specifically, it has contributed to **target 2.1** on ending hunger and ensuring access to safe, nutritious and sufficient food, **target 2.3** on agricultural productivity and incomes of small-scale food producers, family farmers and herders, as well as securing access to land. In line with this contribution, land release has positively impacted **target 2.4** on sustainable food production systems that increase productivity.

The development of new agricultural projects, also at the family level and supporting small-scale farmers, has promoted **SDG 8** on economic growth and productive work, particularly **target 8.2** on economic productivity through technological upgrading and diversification and **target 8.5** on productive employment. Regarding the efficient use of natural resources, land release is linked to **SDG 12** on sustainable production patterns and its **target 12.2** on sustainable management of natural resources, as well as to **SDG 6** on sustainable management of water, and its **target 6.4** on increased water-use efficiency, particularly through the development of irrigation ponds.

Considering its role as an enabler of major local productive activities, land release has also contributed to **SDG 1** on ending poverty in all its forms, especially towards targets **1.1** and **1.4** that address extreme poverty and access to resources, including land.

## RESIDENTIAL INFRASTRUCTURE

Analyses of Khla Ngoab village also showcase the expansion of residential infrastructure and population increase which occurred after land release. As illustrated in **figure 10.a**, before land release in 2009 structures appeared to be primarily residential and located along the primary road, not extending into the area surrounding contaminated locations.

In 2014, the number of structures along the main roads had increased, expanding away from the main roads and into the larger areas of land released. A further expansion occurred between 2014 and 2020. The majority of structures appear to be residential, with neighbourhoods

increasing in size. There are also parcels of land which appear to be dedicated to buyer facilities for the community to sell their cassava, which were not present pre land release. In addition, there are signs of ongoing construction development occurring in the land release area (see **figures 10.b** and **10.c**).

Land release has thus facilitated the **expansion of housing, residential areas**, and has furthered urbanisation. In this context, there are linkages between mine action and **SDG 9** dedicated to promoting inclusive and sustainable industrialisation particularly its **target 9.1** on developing infrastructure, to support economic development and human well-being, and **target 9.2** on promoting inclusive and sustainable industrialisation and raising the industrial share of employment and GDP, as well as between mine action and **SDG 11** on safe and sustainable cities and its **target 11.1** on ensuring access to adequate and safe housing, and **target 11.3** on enhancing sustainable urbanisation.

FIGURE 10

## SATELLITE IMAGES OF KHLA NGOAB VILLAGE



Figure 10.a: 2009 – pre land release, the village is primarily segmented along the main road. Minimal agricultural activity is present, with only a small number of irrigation ponds. Source: Google Earth



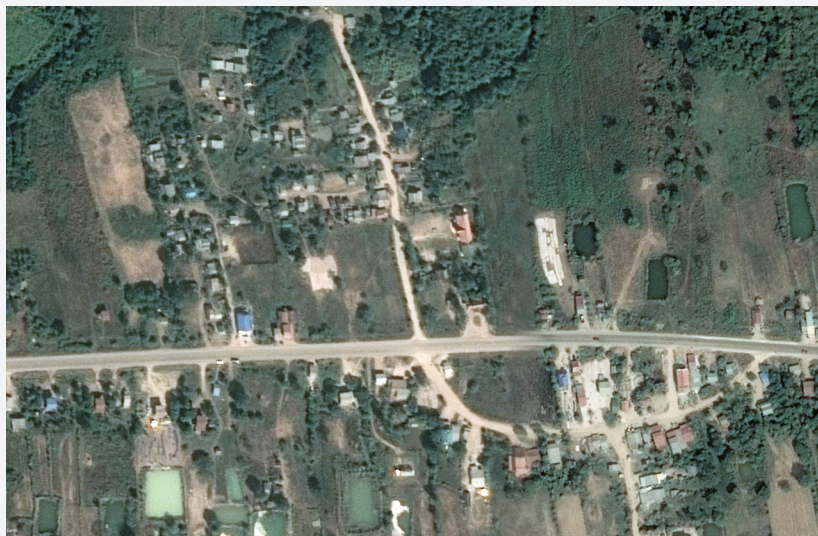


Figure 10.b: 2014 – post land release, the village shows slight expansion of residential structures along the main road. Agricultural activity has increased as well as the number of irrigation ponds. The main road is now sealed. Source: Google Earth



Figure 10.c: 2020 – post land release, the village shows increased expansion of residential structures along the main road. Some indications of possible industry are present. Agricultural activity has continued to increase as well as the number of irrigation ponds. Source: Google Earth

## EXPANSION OF ROADS

Land release in Cambodia has greatly facilitated road construction. Indeed, land use data analyses in Cambodia show that 7 percent of land released in the past 30 years has been used for roads.<sup>91</sup>

Expansion and the active use of roads resulting from land release can also be observed in Khla Ngoab village. For instance, **figure 11.a** illustrates that, in 2009, only two primary roads were located in the centre of the village and were unsealed. Minimal secondary roads were also present surrounding the village, the majority of which, however, showed signs of disuse. Many of the secondary roads were within the area surrounding the contamination.

As shown in **figure 11.b**, in 2014 the primary roads had been sealed. Between 2014 and 2020 multiple new, actively used, secondary roads were developed throughout the larger areas surrounding released land (see **figure 11.c**). The appearance of the new roads coincided with the expansion of agricultural activities.

By unblocking access, land release has contributed to **SDG 1** and its target **1.4** on ensuring access to natural resources including land. There are also linkages to **SDG 9** dedicated to resilient infrastructure, particularly its **target 9.1** on developing infrastructure, to support economic development and human well-being, and **target 9.2** on promoting inclusive and sustainable industrialisation and raising the industrial share of employment and GDP.

By facilitating the active use of roads, land release has further contributed to **SDG 8** on economic growth and productive work, particularly **target 8.2** on economic productivity through diversification and technological upgrading, and **target 8.5** on productive employment, as well as to **SDG 11** with its target **11.2** on providing access to safe and sustainable transport systems for all and improving road safety.

FIGURE 11

## SATELLITE IMAGES OF TWO LAND RELEASE AREAS IN KHLA NGOAB VILLAGE

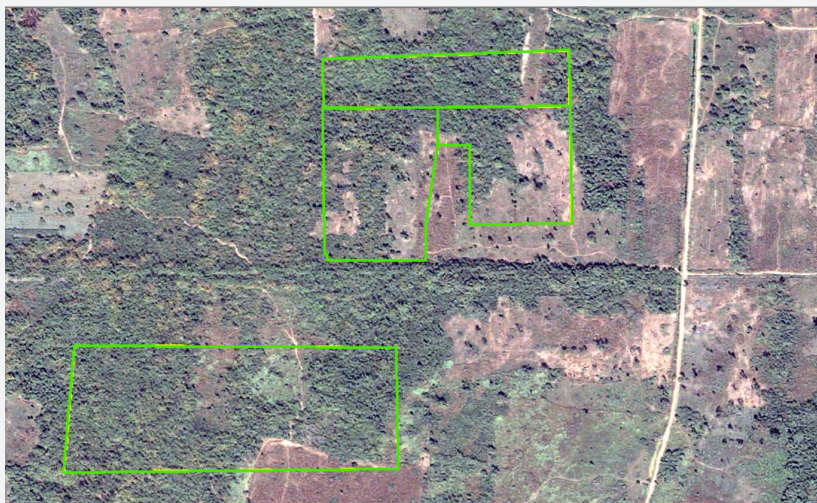


Figure 11.a: 2009 – pre land release, area primarily forested with no apparent land use. Secondary roads present but showing signs of disuse. Source: Google Earth

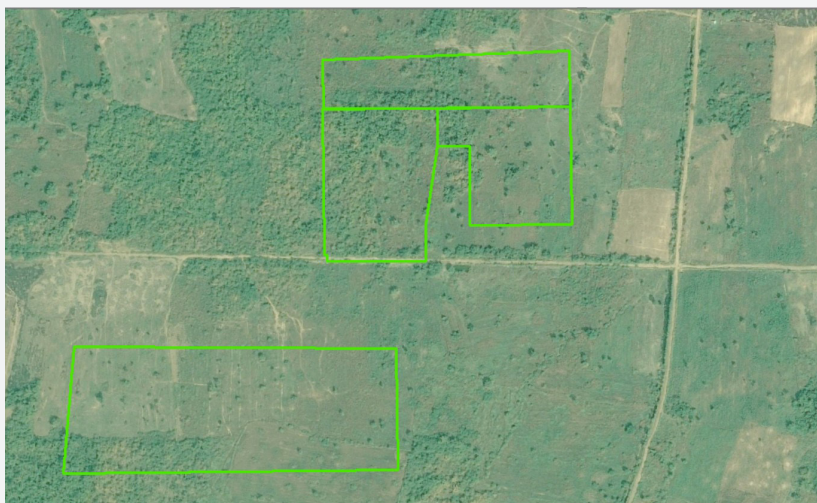


Figure 11.b: 2014 – post land release, area remains primarily forested with minimal apparent land use. Majority of forested area in southern polygon has been cleared. Secondary roads present but showing minimal signs of use. Source: Google Earth



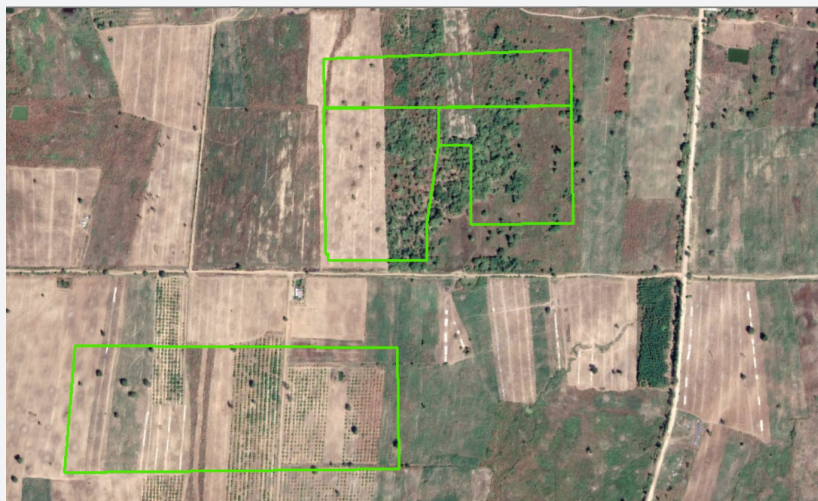


Figure 11.c: 2020 – post land release, forested areas have been repurposed for agriculture and cassava orchards. The whole area shows significant land use change with heavy agricultural activities. Multiple new primary roads are present and show signs of active use. Source: Google Earth





A landmine survivor receives a prosthetic leg one week before going back home from the physical rehabilitation centre in Cambodia's Takeo province, February 2021. © Courtesy of the CMAA

## 2. VICTIM ASSISTANCE

FIGURE 12

## CONTRIBUTION OF VICTIM ASSISTANCE TO THE SDG TARGETS IN CAMBODIA



- 1.3** Implementation of social protection systems and measures
- 1.4** Equal rights to economic resources and access to basic services
- 1.5** Improved resilience, reduced vulnerability
- 1.b** Creation of pro-poor policy frameworks



- 3.4** Reduction of premature mortality through prevention and treatment
- 3.8** Access to essential healthcare services
- 3.c** Increased health financing and health workforce



- 4.3** Equal access to technical, vocational and tertiary education
- 4.4** Increased number of skilled youth and adults
- 4.5** Equal access to all levels of education
- 4.a** Building safe and inclusive learning environments



- 5.1** End of all forms of discrimination against all women and girls



- 8.5** Full and productive employment and decent work



- 
- 10.2** Social, economic and political inclusion of all
  - 10.3** Equal opportunities, reduction of inequalities
  - 10.4** Adoption of social protection policies



- 
- 11.7** Universal access to public spaces



- 
- 16.6** Development of accountable institutions
  - 16.7** Inclusive, participatory, representative decision-making
  - 16.10** Access to information and protection of fundamental freedoms
  - 16.b** Non-discriminatory laws and policies



- 
- 17.6** Access to resources through North-South, South-South and triangular cooperation
  - 17.9** Enhanced international support for capacity-building in developing countries
  - 17.16** Enhanced global partnership for sustainable development
  - 17.17** Effective public, public-private and civil society partnerships

The wording of the SDG targets listed above has been simplified; the full list of targets and their official names can be found on the United Nations website: <https://www.un.org/sustainabledevelopment/>

Victim assistance (VA) refers to a set of activities addressing the needs and rights of explosive ordnance (EO) victims, and comprises emergency and ongoing medical care, rehabilitation, psychological and psycho-social support, socio-economic inclusion, as well as data collection and laws and policies.<sup>92</sup>

Victims include persons either individually or collectively who have suffered physical, emotional and psychological injury, economic loss or substantial impairment of their fundamental rights through acts or omissions related to the use of EO. Victims include directly impacted individuals (direct victims) as well as their families, and communities affected by EO (indirect victims).<sup>93</sup>

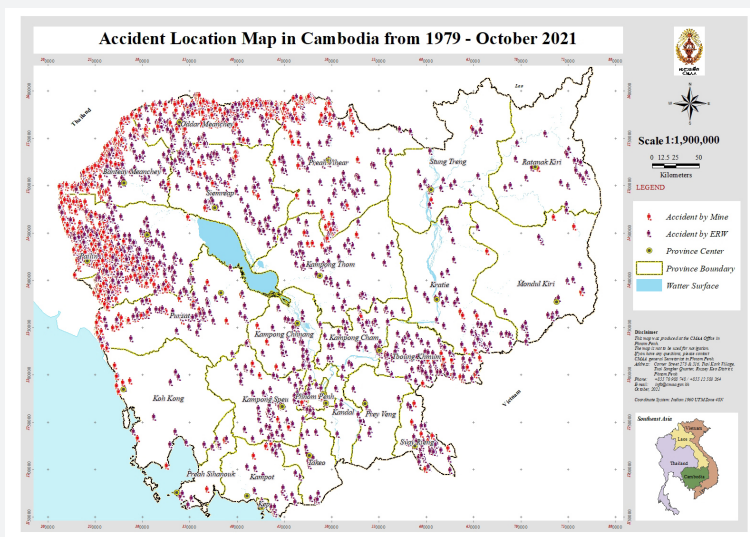
Survivors refer to men, women or children who have been injured and possibly impaired as a result of an accident with EO.<sup>94</sup>

Persons with disabilities include those who have long-term physical, mental, intellectual or sensory impairments which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others.<sup>95</sup>

In the period from January 1979 to July 2021, Cambodia documented 64,950 EO casualties,<sup>96</sup> of which 36,077 (56 percent) were injured, 19,806 (30 percent) were killed, and 9,067 (14 percent) had amputations.<sup>97</sup> Although almost 80 percent of casualties resulted from landmines, between 2001 and 2010 the number of victims of explosive remnants of war (ERW) surpassed the number of landmine victims. This underlines the fact that, besides the impact of landmine contamination, ERW still represent a threat to the Cambodian population.<sup>98</sup>

FIGURE 13

## MAP OF MINE / ERW ACCIDENT LOCATIONS IN CAMBODIA, 1979–OCTOBER 2021



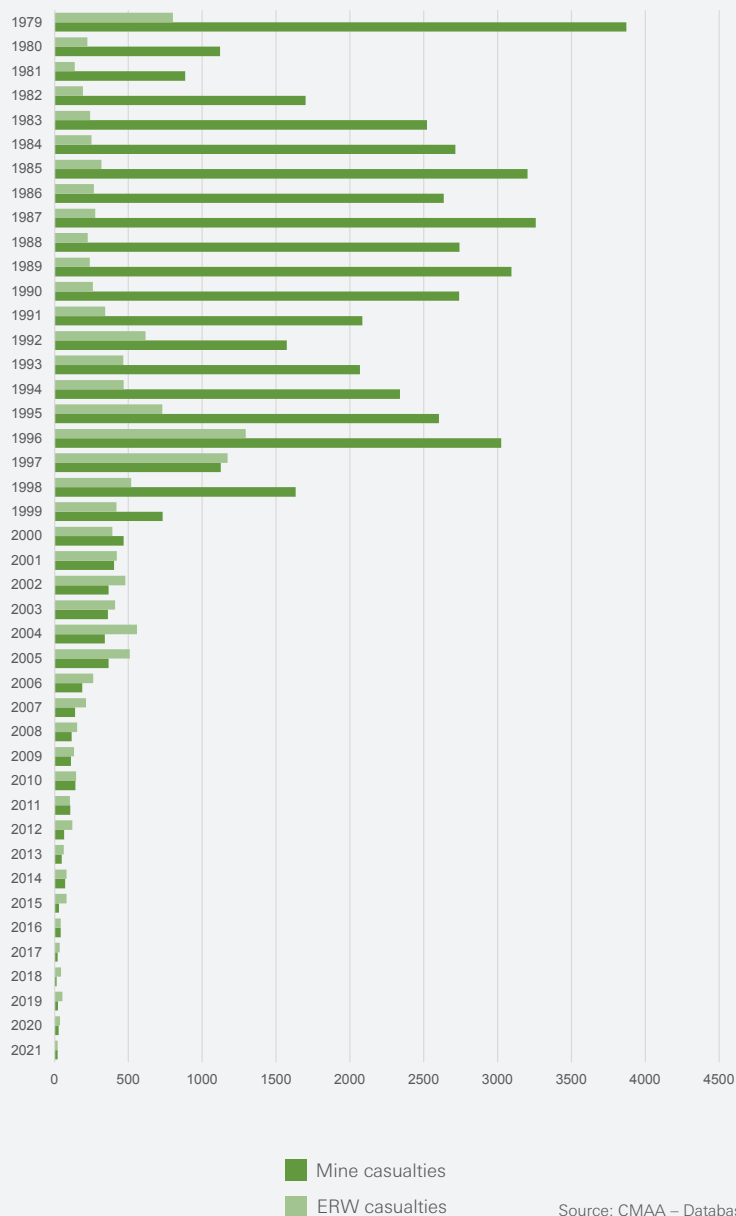
Source: CMAA – Database Unit

In the past three decades overall, however, the number of EO casualties has significantly dropped in Cambodia. For instance, a total of 1,400 casualties were registered between 2010 and 2020, which shows a positive trend considering that during the 1980s and 1990s at least 2,000 casualties were recorded each year.<sup>99</sup>

As acknowledged in the 2018 report of the UN Secretary General, 'Comprehensive approach to mine action,'<sup>100</sup> 2017 was the first year to witness a full month without any recorded new casualties in the country from landmines or unexploded ordnance, more than two decades after the ceasefire.

FIGURE 14

## MINE / ERW CASUALTIES FROM 1979 TO OCTOBER 2021



By its nature, VA requires a multi-sector approach as it is closely linked to broader national policies and frameworks including health, human rights, poverty reduction, social protection, and education, amongst others. In the context of the Anti-Personnel Mine Ban Convention (APMBC), victim assistance is regarded as comprising the following six elements: i) data collection; ii) emergency and ongoing medical care; iii) rehabilitation; iv) psychological and psycho-social support; v) socio-economic inclusion; vi) laws and public policies.<sup>101</sup>

In Cambodia, victim assistance is integrated into the country's broader disability and health sector and, due to its cross-cutting nature, is managed by several governmental institutions. VA has been delegated to the Ministry of Social Affairs, Veterans and Youth Rehabilitation (MoSVY) to ensure the provision of physical rehabilitation and social reintegration services to all persons with disabilities (PWD).<sup>102</sup> Other governmental entities involved in supporting and coordinating VA efforts are the Disability Action Council (DAC)<sup>103</sup> and the Persons with Disabilities Foundation (PWDF).<sup>104</sup> In addition, there are several accredited demining operators, NGOs, and other actors who have been providing victim assistance in the country.<sup>105</sup>

The Cambodian Mine Action and Victim Assistance Authority (CMAA) has a primary responsibility to collect and analyse data on civilian and military casualties of landmines and other EO, which is implemented through the Cambodia Mine / UXO Victim Information System (CMVIS).<sup>106</sup> Since 2009, CMVIS has been fully managed by the CMAA. It collects data disaggregated by sex and age on casualties and accidents, which is available to service providers and policymakers as well as linked to the Information Management System for Mine Action, and CMAA databases.<sup>107</sup>

The CMAA has been actively engaged in broader processes in order to ensure that the rights and needs of EO survivors are adequately protected and their needs addressed, for instance through participation in national disability coordination mechanisms with the Ministry of Health, the MoSVY, DAC, PWDF, the physical rehabilitation centre, and other relevant institutions and organisations.<sup>108</sup> To improve monitoring and reporting processes, the CMAA conducted a series of consultations with the MoSVY and other stakeholders, encouraging their use of a specific CMAA-developed form for reporting.<sup>109</sup>

In order to further streamline efforts, the technical reference group on victim assistance was established in 2019 to monitor and evaluate reports received from various stakeholders and ministries,<sup>110</sup> national / international organisations and the 11 physical rehabilitation centres.<sup>111</sup>

Together with the MoSVY and DAC, the CMAA has also been periodically organising national victim assistance workshops, bringing together different national and international actors. The aim is to assess the progress made and identify the remaining challenges to be addressed through a collaborative effort. Among the most recent was a workshop held on 30 September–1 October 2021 in Cambodia’s Kompong Cham province.<sup>112</sup>



National victim assistance workshop organised by the CMAA on 30 September – 1 October 2021 in Cambodia’s Kompong Cham province. © Courtesy of the CMAA



Besides the APMBC, Cambodia has adhered to various international instruments related to victim assistance, disability, and inclusiveness:

- **Convention on the Rights of Persons with Disabilities (CRPD)**,<sup>113</sup> which requires Member States to ensure that all PWD enjoy full equality under the law and have the same rights and access to social, medical and rehabilitation services as the rest of the population.<sup>114</sup>
- **World Health Organization (WHO) global disability action plan 2014–2021** endorsed by WHO Member States in 2014 which contains a set of actions to promote the health, well-being and human rights of PWD.<sup>115</sup>
- **UN Convention on the Rights of the Child** as well as the **UN Convention on the Elimination of All Forms of Discrimination against Women**.<sup>116</sup> Both Conventions contain provisions on the protection of the rights of PWD in relation to fair treatment, appropriate care, and full participation in society.

In response to its international commitments, Cambodia has established national legislative and policy frameworks to ensure that the rights and needs of all PWD are guaranteed and no one is left behind. These include, amongst others:

- **The Law on the Protection and the Promotion of the Rights of Persons with Disabilities** (2009), aiming to ‘protect and promote the rights of persons with disabilities’<sup>117</sup> in Cambodia by requiring employers to hire PWD without discrimination and in accordance with a set quota,<sup>118</sup> as established by the 2010 sub-decree. The sub-decree also stipulates yearly reporting obligations to monitor compliance with the quotas and sets fines in case of non-compliance.<sup>119</sup>
- **The National Disability Strategic Plan 2019–2023**<sup>120</sup> (2018), setting out the country’s key strategic objectives for the disability sector.<sup>121</sup>

- **The National Plan of Action for Persons with Disabilities** (2008–2011), addressing the rights and needs of persons with disabilities, including EO survivors, their families, and affected communities.<sup>122</sup>
- **The Disability Rights Initiative Cambodia:** a five-year programme (2014–2018) jointly developed by the Australian government, United Nations Development Programme, WHO, and the United Nations Children’s Fund. The programme aimed at improving the quality of life of persons with disabilities.<sup>123</sup>

To further prioritise VA, Cambodia’s SDG 18 addresses not only clearance but also encompasses victim assistance by including a specific target on promoting the rights and improving the quality of life of persons who have acquired impairments due to EO accidents (CSDG 18.3).<sup>124</sup>

These efforts, designed to protect the rights and address the special needs of PWD including EO victims, have contributed to the achievement of **SDG 10** on reducing inequalities. They particularly link to its **target 10.2** aimed at empowering and promoting inclusion for all irrespective of, inter alia, disability, **target 10.3** on ensuring equal opportunities and reducing outcome inequalities, including by promoting appropriate legislation, policies and action in this regard, and **target 10.4** on adopting policies to achieve greater equality. There is also a direct contribution to **SDG 16**, **target 16.b** on promoting non-discriminatory laws and policies.

By facilitating the access of PWD to employment, victim assistance has contributed to **SDG 8** on decent work and economic growth and its **target 8.5** on achieving employment and decent work for all, including persons with disabilities.

At the regional level, significant efforts were also made by Cambodia to enhance cooperation related to PWD by adopting the Incheon Strategy to ‘Make the Right Real’ for PWD in Asia and the Pacific in 2012. The Incheon Strategy sets a course of action with disability-specific development goals for the period 2013–2022 to promote the livelihoods and the rights of around 690 million affected persons in the region.<sup>125</sup> In addition, in the framework of the Association of Southeast Asian Nations (ASEAN) Regional Mine Action

Center (ARMAC), Cambodia participates in an ongoing project (2021–2024) to enhance the victim assistance programme in the ASEAN Member States. The project is aimed at developing a victim assistance network as a regional platform among various stakeholders. The organisation of a training of trainers programme is also planned to build capacity for psychological and psychiatric interventions for EO survivors.<sup>126</sup>

Various institutional partnerships have been established by the CMAA at the national level as well. One of the primary examples is the CMAA's close collaboration with the Sir Bobby Charlton Foundation.<sup>127</sup> Under the Australian-funded ACCESS programme, the Foundation supports the refinement of the political framework to support PWD in Cambodia, including through the amendment of Cambodia's Law on the Protection and the Promotion of the Rights of Persons with Disabilities.<sup>128</sup>



CMAA team visiting the Sir Bobby Charlton vocational training centre in Cambodia's Pursat province to learn about the centre's services and to provide additional support to PWD, February 2021. © Courtesy of the CMAA

The Sir Bobby Charlton Foundation has also provided scholarships to Asian students for studying in Cambodia to increase their knowledge and skills in prosthetics.<sup>129</sup> Moreover, it has opened a new centre for vocational training in the Pursat province, to support persons with all types of disabilities including EO survivors, managed by the local NGO Disability Development Services Program.<sup>130</sup> The CMAA has also submitted a grant application for opening another vocational training centre in the Svay Rieng province,<sup>131</sup> with the aim of supporting PWD including EO victims. The centre is expected to provide rehabilitation and social services, as well as different vocational training courses for EO survivors and other PWD, such as hairdressing, sewing, make-up, cooking, agriculture, and others.<sup>132</sup>

The establishment of these partnerships promotes **SDG 17** on partnerships for the Goals and its **target 17.6** on triangular regional and international cooperation to enhance knowledge sharing, including through improved coordination, **target 17.9** on enhanced international support for implementing effective and targeted capacity building, **target 17.16** on knowledge sharing and expertise through multi-stakeholder partnerships, and **target 17.17** on enhancing public, public-private and civil society partnerships.

Through the provision of vocational training and other income-generating activities, victim assistance has further contributed to **SDG 4** on inclusive education, particularly in terms of **target 4.3** on ensuring equal access to vocational and other education, **target 4.4** on increasing the number of adults who have skills for employment and decent jobs, **target 4.5** on ensuring equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, and **target 4.a** on providing safe, non-violent, inclusive, and effective learning environments for all. In addition, by improving the accessibility of public spaces,<sup>133</sup> victim assistance has contributed to **SDG 11** on sustainable cities and communities and its **target 11.7** on access to safe, inclusive and accessible public spaces for persons with disabilities.

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VA is of utmost importance to ensure the socio-economic development of affected communities. The death or impairment of an individual affects the entire household's livelihood, mental health, social status and aspirations, especially if the affected person is the breadwinner.

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For instance, Andersson et al concluded that 61 percent of landmine victims went into debt to be able to cover their medical expenses after being admitted to hospital, and that 63 percent of victims reported reduced productivity as the main social consequence of their accident.<sup>134</sup> Regarding hospitalisation costs, another study on the rehabilitation of landmine victims found that hospital admissions for mine victims required twice the amount of resources (in terms of blood units, hospitalisation days, and surgical interventions) compared to bullet-wound patients.<sup>135</sup>

Moreover, establishing emergency medical care facilities and increasing local capacities for first aid or surgical treatment for EO victims is an essential measure to prevent death. It is especially critical in remote or rural areas where reaching medical care can be challenging.<sup>136</sup> In this context, a large network of volunteers trained by the Cambodian Red Cross<sup>137</sup> has been made available in remote communities to provide first aid for trauma victims including from EO accidents.<sup>138</sup>

The CMAA reported providing both immediate and ongoing medical support including financial support to EO survivors, as well as working with 11 physical rehabilitation centres active in Cambodia which provide age-specific and gender-sensitive rehabilitation, physiotherapy, prosthetic and other services.<sup>139</sup> For instance in 2016, out of all the beneficiaries attending the centres, 36 percent were EO survivors.<sup>140</sup>

By facilitating universal access to healthcare services, physical and psycho-social rehabilitation, as well as social and economic reintegration of women, girls, boys and men with consideration of their needs, VA also contributes to **SDG 5** on gender equality and its **target 5.1** on ending all forms of discrimination.

The MoSVY also grants a package of emergency relief to vulnerable people and ‘victims of disasters’ (including EO accidents), and their family members.<sup>141</sup> In addition, persons with disabilities, including EO victims, are eligible to receive free healthcare services.<sup>142</sup> To further ensure that PWD have equal access to opportunities and benefits, in 2019 the Cambodian government started issuing disability identification cards for all PWD.<sup>143</sup>

By promoting the access of victims to economic resources and financial services, victim assistance has directly contributed to **SDG 1** on ending poverty and its **target 1.3** on implementing nationally appropriate social protection systems and measures for all, **target 1.4** on ensuring that the poor and the vulnerable have equal rights to economic resources and financial services, **target 1.5** on building resilience of the poor and vulnerable to shocks, and **target 1.b** on creating frameworks based on pro-poor and gender-sensitive development strategies.



CMAA and ARMAC teams conduct interviews with landmine survivors about the COVID-19 impact on PWD and available services for them. Physical rehabilitation centre in Cambodia's Kampong Chhnang province (2020). © Courtesy of the CMAA

Various other endeavours by the CMAA have also been in motion to properly address the needs of EO survivors in Cambodia. For the 11<sup>th</sup> Meeting of the States Parties (MSP) to the APMBC in Phnom Penh in 2011, the CMAA along with other relevant stakeholders of the Cambodian Campaign to Ban Landmines developed a services booklet for people with disabilities. The booklet illustrated data on EO contamination and accidents as well as locations of hospitals, health centres, and schools in every Cambodian province. The booklet also listed specific services available for PWD in each province.<sup>144</sup>

The CMAA has recently been developing a system for mapping services directed at PWD including EO survivors.<sup>145</sup> The CMAA victim assistance team has been conducting interviews with PWD at the provincial level and liaising with relevant NGOs, institutes, service providers and other actors to integrate their services into a centralised system. This system aims to serve as an open database with information on all service providers, their contact information, and details on the services they provide to PWD in each province.<sup>146</sup>

To ensure effective assistance, the CMAA continues to conduct situational and needs assessments of EO victims, including the Quality of Life survey<sup>147</sup> of mine survivors and other PWD. As part of this survey, the CMAA selected 25 volunteers from the CMAA's survivor network<sup>148</sup> from 25 districts located in three provinces – Battambang, Banteay Meanchey and Pailin – to provide peer-to-peer counselling to EO survivors.<sup>149</sup> By conducting such needs-based assessments, including the Quality of Life survey, and by ensuring that the voices of affected individuals are heard (for instance through the CMAA's disability forum),<sup>150</sup> victim assistance also contributes to SDG 16, target 16.6 on developing effective and accountable institutions, and target 16.7 on ensuring responsive, inclusive and representative decision-making at all levels.

Although challenges remain regarding full socio-economic reintegration, victim assistance efforts to meet PWD needs have contributed to **SDG 3** on good health and well-being, its **target 3.4** on reduction of premature mortality from non-communicable diseases through prevention and treatment, **target 3.8** on universal health coverage and quality healthcare services, and **target 3.c** on increasing the financing, training and recruitment of the health workforce. In addition, by raising awareness about services available for PWD including EO survivors, victim assistance efforts have also contributed to **SDG 16, target 16.10** on ensuring public access to information and protecting fundamental freedoms.





EORE activities conducted by The HALO Trust in Ochrap village, Battambang province, in 2021. © Courtesy of the CMAA

## 3. EXPLOSIVE ORDNANCE RISK EDUCATION

FIGURE 15

## CONTRIBUTION OF EORE TO THE SDG TARGETS IN CAMBODIA



**3.d** Strengthened capacity for risk reduction



**16.1** Reduction of all forms of violence



**4.5** Equal access to all levels of education  
**4.a** Building safe and inclusive learning environments



**17.6** Access to resources through North-South, South-South and triangular cooperation  
**17.9** Enhanced international support for capacity-building  
**17.16** Enhanced global partnership for sustainable development  
**17.17** Effective public, public-private and civil society partnerships



**5.1** End of all forms of discrimination against all women and girls



**10.7** Safe migration and mobility

The wording of the SDG targets listed above has been simplified; the full list of targets and their official names can be found on the United Nations website: <https://www.un.org/sustainabledevelopment/>

Explosive ordnance risk education (EORE) ‘refers to activities which seek to reduce the risk of injury from EO by raising awareness of women, girls, boys and men in accordance with their different vulnerabilities, roles and needs, and promoting behavioural change. Core activities include public information dissemination, education and training. [...] The objective is to reduce the risk to a level where people can live safely, thus contributing to an environment where economic and social development can occur free from the constraints imposed by EO contamination’.<sup>151</sup>

The International Mine Action Standard (IMAS) 12.10 Explosive Ordnance Risk Education (EORE)<sup>152</sup> represents the most substantial update of this standard since 2009, which also marks the shift in terminology from mine risk education (MRE) to EORE.

In this context, the updated IMAS 12.10 on EORE establishes principles and provides guidance for the effective assessment, planning, implementation, management, monitoring and evaluation of EORE interventions.

By raising awareness, risk education aims to help communities adopt safer behaviour in their daily lives especially when their activities take place on explosive ordnance (EO)-contaminated land, thus allowing the continuation of social and economic development.

As one of the humanitarian mine action pillars, EORE has been implemented in Cambodia since 1993. EORE is currently guided by the Cambodian Mine Action Standard (CMAS) Chapter 21 on EORE which was adopted in May 2021. Based on IMAS 12.10, the Anti-Personnel Mine Ban Convention Oslo Action Plan 2020–2024, and the ASEAN Regional Mine Action Center’s (ARMAC’s) Integrated Approaches to Explosive Ordnance Risk Education in ASEAN Member States study, the CMAS Chapter 21 replaces and supersedes the previous Cambodian Mine Risk Education Standard (2012) and serves as a national framework for all EORE operators in Cambodia.<sup>153</sup>

There are numerous methods for delivering EORE, but the following are the most commonly used in Cambodia: school-based (mainly focused on children), community-based (largely focused on adults), and mass-media based (TV, radio, billboards, social media).<sup>154</sup> Additionally, the CMAS on EORE refers to three main components in EORE activities: i) public information dissemination, ii) education and training, and iii) community liaison and community-based approaches.<sup>155</sup>

Cambodia's long-term strategy for EORE is to gradually transfer relevant skills and knowledge to the local communities.<sup>156</sup> Cambodia's current National Mine Action Strategy 2018–2025 sets an objective to 'provide effective mine/ERW risk education to people in current and emerging high-risk areas, appropriate for gender and age and strengthen local initiative network' (Goal 4, Objective 1)<sup>157</sup> through five concrete actions:

1. Strengthen the operator capacity to provide effective mine / ERW risk education.
2. Coordinate the provision of MRE<sup>158</sup> to emerging high-risk areas.
3. Ensure MRE is mainstreamed in the school curriculum.
4. Assess and reinforce community-based risk education.
5. Strengthen the mine / ERW risk education aspect of the village / commune safety policy.

Key documents have been developed over the past decade to further improve the design of effective EORE interventions and strengthen EORE coordination. These include the CMAS on explosive ordnance risk education – Chapter 21 – adopted in May 2021, including the EORE lesson plan, EORE quality assurance form, and EORE knowledge retention assessment form, as well as a three-year MRE action plan (2017–2019) specifying targets to be achieved by operators.

The Cambodian Mine Action and Victim Assistance Authority (CMAA) currently holds the mandate to coordinate EORE activities. The Ministry of Education, Youth and Sports, the Cambodian Red Cross, the National Police, and various other institutions and accredited operators provide EORE in the country.<sup>159</sup>

## PROMOTING SAFE BEHAVIOUR AND REDUCING ACCIDENTS

After the final cessation of hostilities in 1998 many Cambodians started returning or moving to areas that had been rendered unsafe because of EO contamination. This situation was particularly prevalent for the poor populations who decided to move to unsafe areas in search of better opportunities despite the risk. The north-western provinces, especially those bordering or closer to the border with Thailand, were highly affected. As a result, Cambodia implemented mine risk education and marking programmes which helped to decrease the number of EO casualties in these areas.<sup>160</sup>

With all the efforts and financial resources put in place,<sup>161</sup> EORE has certainly contributed to Cambodia's achievement to significantly decrease the number of EO casualties in the past 25 years (from 4,320 in 1996 to 65 in 2020).<sup>162</sup>

This drastic reduction in the yearly number of casualties in Cambodia is a testament to mine action's efforts in the country and in particular the EORE programme's contribution to **SDG 16** and its **target 16.1** on significantly reducing all forms of violence and related deaths, by promoting a reduction of at-risk behaviour in a sustainable manner and increasing the security situation and the perception of safety in contaminated areas.

The GICHD's 2016 review of Cambodia's mine action sector found that Cambodia's people had become very 'mine aware' due to extensive EORE programmes and campaigns, and recommending further expansion of EORE for children.<sup>163</sup> By promoting safe behaviour and thus reducing the number of accidents, the EORE programme in Cambodia has also contributed to **SDG 10** on reducing inequalities and its **target 10.7** on facilitating safe mobility of people.

It is however important to note that despite these extensive efforts, the EORE sector in Cambodia still faces some challenges and limitations. The Cambodian population, especially farmers in poor rural areas, continue to engage in risky behaviour despite awareness-raising efforts, hence the importance of carrying out a thorough needs assessment and coordinating

between sectors to reduce risk.<sup>164</sup> In 2019 Cambodia reported that many farmers were often engaging in risky behaviours by accessing their land before the clearance was completed, or even before it was started. In addition to this, Cambodia reported that from 2010 to 2018 EO accidents had mainly been caused by handling mines, while farming and collecting wood.<sup>165</sup>

Moreover, the 2015 UN Development Programme Clearing for Results Phase II final evaluation in Battambang, Banteay Meanchey and Pailin provinces highlighted that it was 'highly unlikely' that those who remained vulnerable to EO hazards would change their risk-taking behaviour on the basis of information received, considering the existing needs. However, the evaluation recommended continuing EORE activities targeting children.<sup>166</sup>



EORE activities conducted by The HALO Trust with people living in Ochrap village, Samlot commune, Samlot district, Battambang province, in 2021. © Courtesy of the CMAA

In Cambodia, EORE is first delivered in priority villages, as defined by the CMAA and EORE operators on a yearly basis. The prioritisation is based on the following criteria: poverty level, population number, contaminated areas as per the baseline survey, and casualty data.<sup>167</sup>

The Cambodian SDG 18 has a specific indicator (18.2.2) on EORE delivery in villages to reduce the number of EO casualties to less than 10 persons per year by 2030 (target 18.2).<sup>168</sup> The 2019 Cambodian voluntary national review (VNR)<sup>169</sup> indicated that the progress on this target was on track.<sup>170</sup> Moreover, the CMAA reported having reached the 2020 target of 382 villages – the highest yearly target – despite the difficulties stemming from the COVID-19 epidemiological situation.<sup>171</sup>

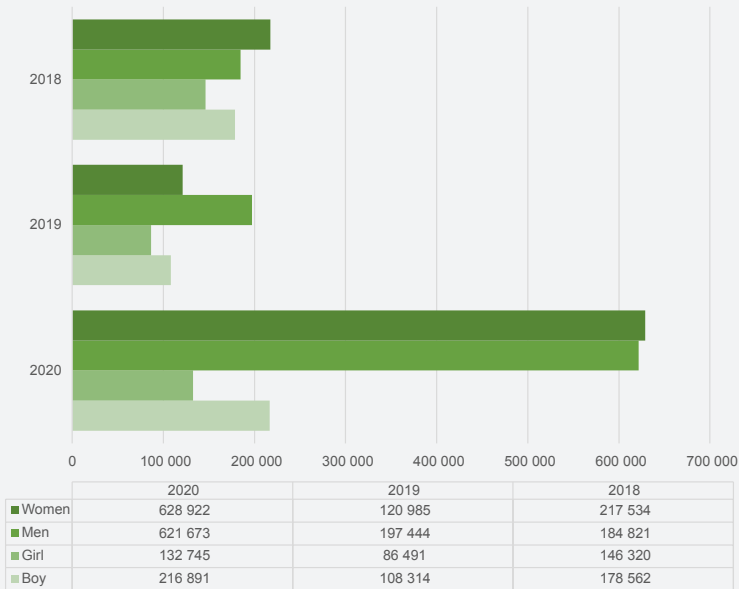
By following the training of trainers (ToT) approach, the CMAA aims to reach as many beneficiaries as possible. This includes ToT for schoolteachers, who then provide training to members of the peer-to-peer EORE clubs. These clubs are meant to target the most affected and high-risk areas through organising various EORE activities.<sup>172</sup>

The CMAA and other organisations have developed many different educational materials such as books, posters, and t-shirts to enhance the effective dissemination of risk education principles. The CMAA has also been organising both an annual National Mine Awareness Day on 24 February and International Day of Mine Action on 4 April.<sup>173</sup>

From 2018 to 2020, 2,840,702 people received EORE sessions in Cambodia from national and international operators.<sup>174</sup> Figure 16 presents the number of men, women, boys and girls reached between 2018 and 2020, disaggregated by age and gender.

FIGURE 16

## NUMBER OF MEN, WOMEN, BOYS AND GIRLS WHO RECEIVED EORE BETWEEN 2018 AND 2020



Source: CMAA

When it comes to gender and diversity considerations, the CMAA has been ensuring gender balance in EORE teams, allowing them to more effectively target women and girls. The CMAA has also had wider positive results by encouraging the participation of women as beneficiaries. As women are often primarily responsible for children's education and development as well as managing the household,<sup>175</sup> they are able to transfer the acquired knowledge to their children, husbands and other family members. In addition, CMAA teams ensure that EORE sessions are conducted in disability-accessible areas, resulting in the inclusion of persons with disabilities.<sup>176</sup>



By targeting women, girls, boys and men in accordance with their different vulnerabilities, roles and needs and by promoting safer behaviours, EORE efforts have contributed to **SDG 4** on quality education, its **target 4.5** on eliminating gender disparities in education at all levels for the vulnerable, and **target 4.a** on providing safe, non-violent, inclusive and effective learning environments for all. In addition, EORE has also contributed to progress towards **SDG 5** on gender equality and its **target 5.1** on ending all forms of discrimination against women and girls.

These developments have promoted **SDG 3** on good health and well-being and its **target 3.d** on strengthening the capacity for early warning, risk education and management of health risks.

To strengthen national cooperation, the CMAA convenes the risk education technical reference group (RE-TRG) on a quarterly basis. The TRG serves as a coordination mechanism bringing together the national authority, operators, and representatives of all mine action organisations operating in Cambodia.<sup>177</sup>

Moreover, the CMAA works closely with ARMAC to enhance partnerships and to strengthen risk education across ASEAN Member States.<sup>178</sup> In fact, Cambodia has been actively engaging in various regional programmes in the framework of the ARMAC initiatives, in addition to participating in a number of regional webinars and workshops on EORE.<sup>179</sup> Cambodia was part of the initiative to develop a 'comprehensive and integrated regional approach' to EORE<sup>180</sup> aimed at sharing good practices and lessons learnt among ASEAN Member States.<sup>181</sup>

To contribute to the reduction of casualties, especially among children, various non-traditional mine action actors have also engaged in risk education. For instance, the Union of European Football Associations' (UEFA) Foundation for Children's 2020 project, implemented by the Spirit of Soccer non-profit organisation, uses football to enhance EORE by training coaches and teachers as EO risk educators. The project aims to deliver EORE to approximately 12,000 Cambodian children through football / EORE clinics and EORE tournaments, and to further support 24,000 Cambodian children through a multimedia campaign involving the distribution of posters and school notebooks.<sup>182</sup>

In addition to this, The HALO Trust has recently partnered with Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) to combine and maximise their efforts towards beneficiaries. By coordinating their activities, the organisations provide joint lessons to beneficiaries combining, for instance, EORE training delivered by The HALO Trust with lectures on cassava planting and management delivered by GIZ.<sup>183</sup>

The establishment of such partnerships and joining of mine action and developmental efforts have supported **SDG 17** on partnerships for the Goals and its **target 17.6** on South-South and triangular regional and international cooperation to enhance knowledge sharing, including through improved coordination, **target 17.9** on enhanced international support for implementing effective and targeted capacity building, **target 17.16** on knowledge sharing and expertise through multi-stakeholder partnerships, and **target 17.17** on enhancing public, public-private and civil society partnerships.



CMAA gender team meeting with Norwegian People's Aid (NPA) female deminers in Ratanakiri province, October 2020. © Courtesy of the CMAA

## 4. GENDER MAINSTREAMING

FIGURE 17

## CONTRIBUTION OF GENDER MAINSTREAMING TO THE SDG TARGETS IN CAMBODIA



- 4.4** Increased number of skilled youth and adults
- 4.5** Equal access to all levels of education



- 5.1** End of all forms of discrimination against all women and girls
- 5.5** Women's full and effective participation at all levels of decision-making
- 5.a** Women's equal rights to economic resources
- 5.c** Strengthened policies and legislation for gender equality



- 8.5** Full and productive employment and decent work



- 10.2** Social, economic and political inclusion of all
- 10.3** Equal opportunities and reduction of inequalities
- 10.4** Adoption of social protection policies



- 16.7** Inclusive, participatory, representative decision-making
- 16.b** Non-discriminatory laws and policies

The wording of the SDG targets listed above has been simplified; the full list of targets and their official names can be found on the United Nations website: <https://www.un.org/sustainabledevelopment/>

As emphasised by UN Security Council resolution 1325 on women, peace and security, there is a need for all parties to ensure that mine clearance and mine awareness programmes consider the special needs of women and girls.<sup>184</sup> Consequently, mine action works to improve the impact of interventions on affected women, girls, boys and men from diverse groups.<sup>185</sup>

This section focuses on the direct contributions of gender mainstreaming to the Sustainable Development Goals (SDGs). However, it should be noted that, in order to ensure that the overarching principle of leaving no one behind is upheld, gender mainstreaming needs to be implemented and monitored as a cross-cutting approach in all mine action programmes, projects, and activities.

The Cambodian Constitution states that every citizen ‘shall be equal before the law, enjoying the same rights, freedom and fulfilling the same obligations regardless of race, colour, sex, language, religious belief, political tendency, birth origin, social status, wealth or other status.’<sup>186</sup> Its Article 45 further affirms the equality between women and men in all fields and states that ‘all forms of discrimination against women shall be abolished’.<sup>187</sup>

Cambodia ratified the Convention on the Elimination of All Forms of Discrimination against Women<sup>188</sup> in 1992 and its Optional Protocol in 2010.

The Global Gender Gap Report 2021 ranked Cambodia as 103 out of 156 countries, based on a gender gap index that looks at benchmarks for gender-based gaps along the following four key dimensions: i) economic participation and opportunity, ii) educational attainment, iii) health and survival, and iv) political empowerment.<sup>189</sup>

Cambodia has one of the highest employment-to-population ratios in the world (79.1 percent as per 2020 figures), together with a relatively high labour force participation rate for women. For instance, in the past few years, more than 70 percent of the female population (aged 15+) have been engaged in the labour force.<sup>190</sup>

The Cambodian Mine Action and Victim Assistance Authority (CMAA) has been actively making efforts to ensure gender mainstreaming in the mine action sector. As one of the objectives under its current National Mine Action Strategy (NMAS) 2018–2025 (Goal 8, Objective 3), the Gender Mainstreaming in Mine Action Plan (GMAP 2018–2022) was successfully approved in 2018, and the next Plan for the period 2021–2025 is now being finalised. The NMAS objective also includes developing gender mainstreaming guidelines and enhancing national capacities to implement them, as well as promoting women’s participation in mine action processes, services, and activities.<sup>191</sup> Also, a new Cambodian Mine Action Standard on gender and diversity mainstreaming is in preparation.<sup>192</sup>

The gender mainstreaming guidelines were developed by the CMAA and approved in 2019, serving as a policy document for operators and other stakeholders to ensure gender mainstreaming in their activities. In addition, sex and age disaggregated data has been integrated in all reporting forms.<sup>193</sup>

Furthermore, following a gender and diversity baseline assessment of the CMAA conducted by the GICHD in 2019, the GICHD and the CMAA have developed an action plan to enhance gender and diversity mainstreaming efforts.

The CMAA has established a Gender Mainstreaming Team (GMT). The GMT aims to coordinate its work with the technical reference group on gender, which consists of representatives from the UN Development Programme, the Ministry of Women’s Affairs, Ministry of Social Affairs, Veterans and Youth Rehabilitation, mine action planning units, mine action operators, and international and national organisations active in victim assistance and mine risk education.<sup>194</sup>



Training on gender mainstreaming at the CMAA, 24–25 November 2020. © Courtesy of the CMAA

Some good practices in gender and diversity mainstreaming were reported by the CMAA. These include having inclusive and **mixed gender survey and community liaison teams**, as well as giving priority to women in recruitment processes or consulting women and children during community meetings and activities.<sup>195</sup> In addition, the current guidelines on gender mainstreaming in mine action in Cambodia set an objective to ensure that ‘men, women, PWD, and other vulnerable or marginalised village members’ contribute to the **prioritisation process** and that ‘at least 30% of the meeting participants are female and persons with disabilities are invited as well’.<sup>196</sup>

Cambodia has a long history of **employing female deminers**. In fact, female deminers were involved in one of the early clearance efforts in Cambodia. One of the female deminers was even recognised as a national heroine.<sup>197</sup>

In 2020, 23 percent of CMAA employees were female; however, when it comes to managerial or supervisory roles only 5 percent were held by women. Since 2020, 25 percent of overall staff in the mine action sector in Cambodia have been female, which presents an increase from 2015 (15 percent).<sup>198</sup>



Operators in Cambodia have also been making efforts to ensure gender and diversity mainstreaming in their work and providing equal employment opportunities to both women and men. For instance, 50 percent of more than 800 deminers at The HALO Trust in Cambodia are female. The HALO Trust encourages local women's recruitment from within the provinces they work in.<sup>199</sup> In Mines Advisory Group (MAG), 42 percent of survey and clearance teams and 24 percent of managerial / supervisory roles are held by women. When it comes to the national operator, the Cambodian Mine Action Centre, 12.5 percent of its staff and two of its six directors were women in 2020.<sup>200</sup>



Demining team with female deminers in Pailin province. © Courtesy of The HALO Trust

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Based on the experience reported by the CMAA and several operators, employing women has positively increased their level of confidence and self-reliance, resulting in higher participation in family and community decision-making.<sup>201</sup>

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Similarly, encompassing gender and diversity considerations, MAG has been employing female deminers from ethnic minority groups. As of 2021, the MAG office in Ratanakiri province is represented by the following ethnic groups: Tampuan (43 members out of which 9 are women), Kreung (106 / 27), Laos (13 / 4), Khmer (Cambodian) (105 / 26), Brao (14 / 3), Jarai (15 / 3).<sup>202</sup> In fact, ethnic minority groups in the Ratanakiri province make up 75 percent of the total population.<sup>203</sup>

In addition to this, women have been benefitting from various trainings and skills development sessions upon joining mine action organisations. For instance, NPA provided driving lessons for its female employees<sup>204</sup> and The HALO Trust conducted training of trainer courses for internal staff members on sexual health and on women's reproductive rights, for beneficiaries.<sup>205</sup>



CMAA gender team meeting with local authorities and beneficiaries in Ratanakiri province, October 2020. © Courtesy of the CMAA

The 2030 Agenda recognises the importance of gender equality and empowerment of women and girls and its ‘crucial contribution’ to progress across all the Sustainable Development Goals and related targets.<sup>206</sup> In Cambodia’s case, gender mainstreaming in mine action has helped increase female representation and participation contributing to **SDG 5** on gender equality and its **target 5.1** on ending all forms of discrimination against women and girls, **target 5.5** on ensuring women’s full and effective participation and equal opportunities for leadership at all levels, **target 5.a** on undertaking reforms to give women equal rights to economic and other resources, **target 5.c** on adopting policies for the promotion of gender equality, as well as to **SDG 16** on peace, justice and strong institutions and its **target 16.7** on ensuring inclusive decision-making at all levels.

By promoting equal employment opportunities and encouraging the recruitment of women, gender mainstreaming has also contributed to **SDG 8** on employment and decent work and **target 8.5** on achieving full and productive employment and decent work for all. These efforts have also contributed to **SDG 10** on reducing inequalities, particularly to its **target 10.2** aimed at empowering and promoting inclusion for all, **target 10.3** on ensuring equal opportunities and reducing outcome inequalities, and **target 10.4** on adopting policies to achieve greater equality. Gender mainstreaming has also contributed to **SDG 16** on peace, justice and strong institutions and its **target 16.b** on non-discriminatory laws and policies.

In addition, mine action organisations’ efforts to provide skills and training opportunities to their female employees have further contributed to **SDG 4** on ensuring inclusive and equitable education and its **target 4.4** on increasing the number of adults who have skills for employment and decent jobs and **target 4.5** on eliminating gender disparities in education.



Official launch of Cambodia's first Safe Ground  
© Courtesy of UNDP Cambodia

## 5. PARTNERSHIPS AND COOPERATION

FIGURE 18

## CONTRIBUTION OF PARTNERSHIPS AND COOPERATION TO THE SDG TARGETS IN CAMBODIA



The wording of the SDG targets listed above has been simplified; the full list of targets and their official names can be found on the United Nations website: <https://www.un.org/sustainabledevelopment/>

As recognised by UN Security Council resolution 2365, partnerships and cooperation are central to the success of mine action, particularly among national authorities, the United Nations, regional organisations, civil society, and the private sector.<sup>207</sup>

Partnerships are voluntary and collaborative relationships in which all participants agree to work together to achieve a common purpose or undertake a specific task, as mutually agreed.<sup>208</sup>

Cambodia has put in place a number of mechanisms and structures to ensure policy coordination with development actors and donors. In 2007, Cambodia organised its first Cambodia Development Cooperation Forum (CDCF) which took place in Phnom Penh. The CDCF is the highest policy dialogue platform and takes place every 18 months. Other coordination mechanisms include the Government–Development Partner Coordinating Committee which meets two to three times per year.<sup>209</sup> Cambodia has also developed the Development Cooperation and Partnership Strategy (DCPS) 2014–2018 as well as the current DCPS for the period 2019–2023, serving as a framework for promoting partnerships in development. The DCPS was formulated through a participatory and inclusive process with inputs from various development stakeholders.<sup>210</sup>

As mentioned above, the Royal Government of Cambodia established a technical working group on mine action in 2004, which meets bi-annually and serves as a policy dialogue platform and consultative mechanism among various partners including all relevant ministries and development stakeholders. In addition, to facilitate coordination among mine action stakeholders, the Cambodian Mine Action and Victim Assistance Authority (CMAA) has established the Mine Action Coordination Committee at a strategic level, and six technical reference groups at the technical level for different mine action areas such as victim assistance, explosive ordnance risk education, information management, survey and clearance, gender and capacity building.<sup>211</sup>

In 2011, Cambodia signed Partnership Principles with seven development partners (Australia, Canada, Germany, Ireland, Norway, the United Kingdom, and the United Nations) which outlined common principles for the implementation of the National Mine Action Strategy 2010–2019 to ‘make mine action a driver of growth and poverty reduction, and for improving the effectiveness of mine action programmes and projects’.<sup>212</sup>

At regional and global levels, one of the primary examples of a partnership in the mine action sector is represented by the ASEAN Regional Mine Action Center (ARMAC) which was established in 2016 and is based in Phnom Penh. ARMAC serves as a centre of excellence under the ASEAN Security Cooperation to ensure, inter alia, technical cooperation, experience and information exchange, and capacity building with a view to addressing explosive ordnance among interested ASEAN Member States.<sup>213</sup>

Cambodia has also been actively engaged in international peacekeeping and mine clearance operations under the auspices of the UN and the South-South capacity-building initiative.<sup>214</sup> Moreover, from 2006–2018 Cambodia contributed forces to UN peacekeeping missions in the following countries:<sup>215</sup> Central African Republic, Chad, Cyprus, Lebanon, Mali, South Sudan,<sup>216</sup> Sudan,<sup>217</sup> and Syria.<sup>218</sup>

**South-South cooperation** refers to the process whereby two or more developing countries pursue their individual and / or shared national capacity development objectives through exchanges of knowledge, skills, resources and technical know-how, and through regional and interregional collective actions, including partnerships involving governments, regional organisations, civil society, academia and the private sector, for their individual and / or mutual benefit within and across regions. South-South cooperation is not a substitute for, but rather a complement to, traditional North-South cooperation.<sup>219</sup>

**Triangular cooperation** is the collaboration in which traditional donor countries and multilateral organisations facilitate South-South initiatives through the provision of funding, training, management and technological systems as well as other forms of support.<sup>220</sup>

The CMAA has been working closely with the UN Development Programme (UNDP) to enhance mine action and development linkages. As part of the Clearance for Results project, UNDP and the CMAA initiated the Safe Ground initiative,<sup>221</sup> a five-year (2019–2023) global campaign launched by the United Nations Secretary-General António Guterres on the 2019 International Day for Mine Awareness and Assistance in Mine Action. The campaign aims to raise awareness and resources for the victims of armed conflict by turning minefields into playing fields through partnerships among states, donors, the private sector and other stakeholders.<sup>222</sup>

Cambodia's first Safe Ground initiative was jointly launched in 2021 by the CMAA, UNDP's assistant secretary general and director of the crisis bureau, the UN resident coordinator for Cambodia, the UN Children's Fund's Cambodia resident representative, donor partners and other representatives of the international community. It was launched at the Stoeng Toch Krom primary school in the Battambang province whose Safe Ground playing field was established on land cleared and released by the Cambodia Mine Action Centre (CMAC) with the support of the CMAA and UNDP.<sup>223</sup>





Official launch of Cambodia's first Safe Ground, with actor Daniel Craig by video link. © Courtesy of UNDP Cambodia

Furthermore, the CMAA and UNDP have been working on maximising land use after clearance by putting in place skills development programmes for beneficiaries, especially farmers. One of the current initiatives within this framework includes hiring personnel tasked to liaise with local communities in Battambang, Banteay Meanchey and Pailin provinces to understand their needs for land use and to involve relevant NGOs and other actors to provide technical and other skills training for beneficiaries.<sup>224</sup> Such efforts further contribute to **SDG 4** on inclusive education, particularly in terms of **target 4.3** on ensuring equal access to vocational and other education, **target 4.4** on increasing the number of adults who have skills for employment and decent jobs, **target 4.5** on ensuring equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, and **target 4.a** on providing safe, non-violent, inclusive, and effective learning environments for all.

When it comes to partnerships between development and mine action sectors in Cambodia, one of the recent examples is the Investing in Infrastructure (3i) programme<sup>225</sup> managed by the Palladium Group on behalf of the Australian Department of Foreign Affairs and Trade to provide clean, piped, and treated water to rural communities.



The high level of explosive ordnance contamination throughout Cambodia made it nearly impossible to ensure the safe installation of underground water pipes in contaminated areas such as the Tuol Preah Khleang commune in Kampong Cham province. The 3i programme partnered with The HALO Trust to survey and clear the targeted areas before the instalment of pipes, to allow for their subsequent safe installation. This, in turn, allowed for the development project to be implemented in an efficient and effective manner and to provide communities with clean, fresh and treated water supplies – particularly important amidst the COVID-19 pandemic when hand washing and other hygiene standards are key to preventing the spread of the virus.

Moreover, the installation of piped water connections prevented households from spending significant resources on more costly alternatives, such as trucked water or having to get water pumps and tanks.

The 3i programme implementers reported that between 2015 and 2021 the collaboration with The HALO Trust resulted in the detection of more than 100 anti-personnel mines, 249 explosive remnants of war such as grenades, mortars, and fuses (including 25 cluster munitions) and 2,127 rounds of small arms ammunition while clearing and releasing over 84,000 m<sup>2</sup> of land back to the communities.<sup>226</sup>

These efforts, achieved through a partnership, not only supported **SDG 17** and its **target 17.17** on enhancing public, public-private and civil society partnerships, but also contributed to **SDG 6** on clean water and sanitation, its **target 6.1** on achieving universal access to safe and affordable drinking water for all, **target 6.2** on achieving access to adequate and equitable sanitation and hygiene for all, **target 6.4** on reducing the number of people suffering from water scarcity, as well as to **SDG 1** on ending poverty in all its forms, especially **targets 1.1** and **1.4** addressing extreme poverty and access to natural resources, including water.

The COVID-19 epidemiological situation further emphasised the importance and benefits of partnerships which can be illustrated, for instance, by the recent collaboration concluded between the CMAA, The HALO Trust and the Sir Bobby Charlton Foundation (SBCF). In April 2020 the three organisations signed an agreement to leverage 'skills, resources and

funding to provide a swift and effective response to the emerging crisis in the region' by delivering food and hygiene kits to vulnerable communities and disseminating information on the coronavirus and related preventative measures, as well as to conduct explosive ordnance risk education (EORE) sessions.<sup>227</sup>

With funding provided by the SBCF, The HALO Trust delivered hygiene kits (soap, face masks, hand sanitisers) and health messaging on COVID-19 to 1,395 households<sup>228</sup> benefitting 6,359 people,<sup>229</sup> as well as EORE to 1,841 people,<sup>230</sup> through posters provided by the CMAA.<sup>231</sup>

This initiative further contributed to **SDG 6** and its **target 6.2** on achieving access to adequate and equitable sanitation and hygiene for all, as well as to **SDG 2** on ending hunger, achieving food security and improved nutrition, specifically to its **target 2.1** to end hunger and ensuring access to food. In addition to this, it has promoted **SDG 3** on good health and well-being by contributing to its **target 3.3** on ending the epidemics of various communicable diseases.



One of the 6,359 people who, as a result of the CMAA, The HALO Trust and the Sir Bobby Charlton Foundation partnership, received EORE sessions as well as soap, face masks, and hand sanitisers that they would not have been able to afford otherwise. © Courtesy of The HALO Trust

The examples of partnerships and cooperation at different levels illustrated in this section, as well as the ones identified throughout the entirety of this study, provide strong indications of mine action's support to **SDG 17** on partnerships, specifically its **target 17.3** on mobilising financial resources for developing countries, **target 17.6** on enhancing all types of cooperation and knowledge sharing on mutually agreed terms, **target 17.9** on enhancing international support to implement all the Sustainable Development Goals, **target 17.14** on enhancing policy coherence for sustainable development, **target 17.16** on enhancing the global partnership for sustainable development, and **target 17.17** on enhancing public, public-private and civil society partnerships.

In addition, participation in international peacekeeping and mine clearance operations further supported **SDG 16** on peace, justice and strong institutions and its **target 16.1** on reducing all forms of violence and related death rates everywhere.



# CONCLUSIONS

The Cambodia case study provides clear evidence of the impact that mine action has on sustainable development at different levels, by reducing the risks faced by local communities affected by the presence of explosive ordnance (EO).

Considering the prominent role that agriculture still has on the Cambodian economy, particularly in rural areas, the presence of EO constitutes not only a threat to the lives of the affected communities, but also an important obstacle to development. Explosive ordnance physically blocks access to, expansion of, and the efficient development of agricultural activities, affecting livelihoods and food security. Land release has, however, brought many other positive results. For instance, linkages are found with more efficient resource management and the enhancement and development of infrastructure, which are crucial to promote sustainable economic growth and inclusion.

The Sustainable Development Goal (SDG) framework enabled the identification of mine action's direct contribution to 13 SDGs and to at least 48 of their targets in Cambodia, benefitting the five critical dimensions of the 2030 Agenda: partnership, peace, people, planet, and prosperity.

In this case study, relevant milestones can be attributed to the articulated approaches and joint efforts from relevant stakeholders. Mine action is integrated in Cambodia's national development plans and policies, establishing it as a national priority and acknowledging the multiple obstacles that EO contamination poses to the country's sustainable development aspirations. The systematic inclusion of mine action in broader national strategic and policy processes also contributes to the implementation and operationalisation of more comprehensive and holistic mine action efforts.

Concretely, the study provides evidence on how the design and implementation of integrated mine action and development programmes have the potential to better reach both humanitarian and development outcomes, and therefore for mine action to be more impactful than when undertaken in a silo, ensuring the relevance of mine action interventions, in the medium and long term.

Through the SDG framework, the international community and key stakeholders can increase cross-cutting policy coherence, evidence-based planning, reporting, and data collection to help integrate mine action activities into national SDG efforts and enhance their visibility and funding opportunities.

The continuous refinement of methodical analyses of humanitarian and development outcomes derived from mine action will help to strengthen evidence of the sector's role in fostering the triple nexus by contributing to broader humanitarian, development, and peace initiatives, in support of the Sustainable Development Goals.





# ENDNOTES

- 1 The notion of triple nexus intends to capture the interlinkages between the humanitarian, development and peace sectors.
- 2 In line with the definition of impact evaluation in IMAS 14.10, First Edition (Amendment 3, June 2013), Guide for the evaluation of mine action interventions.
- 3 In September 2000, the United Nations Member States adopted the United Nations Millennium Declaration to reduce extreme poverty, hunger, and child mortality as well as to promote gender equality, and all this through a global partnership. The Declaration set out eight measurable goals, known as the Millennium Development Goals, to be reached by 2015.
- 4 United Nations resolution (2015). *Transforming our world: the 2030 Agenda for Sustainable Development*. UN Doc. A/RES/70/1.
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- 6 Ibid.
- 7 GICHD and UNDP (2017). [Leaving no one behind: Mine action and the Sustainable Development Goals](#).
- 8 GICHD, SIPRI and Kings College London (2019). [The Socio-economic Impact of Anti-vehicle Mines in Angola](#).
- 9 GICHD (2021). [The Sustainable Development Outcomes of Mine Action in Jordan](#).
- 10 Materials and research produced by organisations outside of the traditional commercial or academic publishing and distribution channels.
- 11 Commonly known as the Paris Agreements, the Comprehensive Cambodian Peace Agreements were signed on 23 October 1991.
- 12 According to IMAS 04.10, explosive ordnance is interpreted as encompassing mine action's response to the following munitions: mines, cluster munitions, unexploded ordnance, abandoned ordnance, booby traps, other devices (as defined by the Convention on Certain Conventional Weapons, Amended Protocol II), and improvised explosive devices.
- 13 Kristian Berg Harpviken & Jan Isaksen, 'Reclaiming the Fields of War: Mainstreaming Mine Action in Development' (New York: UNDP and PRIO, 2004), 8, <https://www.prio.org/Publications/Publication/?x=485>; CMAA. National Mine Action Strategy 2018–2025.
- 14 Wade C. Roberts, *Landmines in Cambodia. Past, Present, and Future*, (New York: Cambria Press, 2011); Mine Action Review, 'Clearing the Mines 2021' (Mine Action Review, 2021), 65.
- 15 Mine Action Review, 'Clearing Cluster Munition Remnants 2021' (Mine Action Review, 2021), 138–139, <https://www.mineactionreview.org/documents-and-reports/clearing-cluster-munition-remnants-2021>.
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- 17 "Brief of CMAA [Legal Framework and mandate]," Cambodian Mine Action and Victim Assistance Authority, accessed February 2021, <https://cmaa.gov.kh/background>.
- 18 Ibid.

- 19 The TWG-MA was established in 2004 and is the consultative mechanism between the government of Cambodia, NGOs and development partners to discuss policy issues with the aim of improving overall coordination, and promoting alignment and harmonisation of aid for the mine action sector.
- 20 The MACC brings together mine action stakeholders to discuss operational matters, share information on the development of the sector and helps the CMAA to coordinate the sector more effectively.
- 21 Technical reference groups are convened by the CMAA at the technical level to facilitate coordination and address technical issues; Government of Cambodia. Request for an extension of the deadline for completing the destruction of anti-personnel mines in mined areas in accordance with Article 5 of the APMBC. Submitted on 27 March 2019, <https://new.apminebanconvention.org/en/states-parties/cambodia/extension-request-process/>.
- 22 UNDP, *Evaluation of the UNDP Contribution to Mine Action* (Independent Evaluation Office, 2016), 29.
- 23 Communication from the CMAA received on 23 November 2021; APMBC. Cambodia. Extension Request Process, <https://new.apminebanconvention.org/en/states-parties/cambodia/extension-request-process/>.
- 24 Mine Action Review, 'Clearing the Mines 2020' (Mine Action Review, 2020), 55, <https://www.mineactionreview.org/documents-and-reports/clearing-the-mines-2020>.
- 25 Eighteenth Meeting of the States Parties to the Anti-Personnel Mine Ban Convention, Statement of Cambodia on enhancement of cooperation and assistance, 16–20 November 2020, <https://www.apminebanconvention.org/fileadmin/APMBC/MSP/18MSP/statements/9c-Cambodia.pdf>.
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- 27 Communication from the CMAA received on 23 November 2021; Government of Cambodia. Request for an extension of the deadline for completing the destruction of anti-personnel mines in mined areas in accordance with Article 5 of the APMBC. Submitted on 27 March 2019, <https://new.apminebanconvention.org/en/states-parties/cambodia/extension-request-process/>.
- 28 Government of Cambodia. Request for an extension of the deadline for completing the destruction of anti-personnel mines in mined areas in accordance with Article 5 of the APMBC. Submitted on 24 August 2009, <https://new.apminebanconvention.org/en/states-parties/cambodia/extension-request-process/>.
- 29 Government of Cambodia, 'Progress in Achieving Cambodia Millennium Development Goals: Challenges and Opportunities,' 2007, [https://www.un.org/en/ecosoc/docs/pdfs/cambodia\\_national\\_rpt.pdf](https://www.un.org/en/ecosoc/docs/pdfs/cambodia_national_rpt.pdf).
- 30 Government of Cambodia, 'Cambodian sustainable development goals framework (2016–2030)', Open Development Cambodia, <https://data.opendatacambodia.net/dataset/cambodian-sustainable-development-goals-framework-2016-2030>.
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- 32 Kristian Berg Harpviken & Jan Isaksen, 'Reclaiming the Fields of War: Mainstreaming Mine Action in Development' (New York: UNDP and PRIO, 2004), 3, <https://www.prio.org/Publications/Publication/?x=485>; Mine Action Review, 'Clearing the Mines 2020' (Mine Action Review, 2020), 58, <https://www.mineactionreview.org/documents-and-reports/clearing-the-mines-2020>.
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- 36 This comprises agriculture, forestry and fishing activities.
- 37 According to World Bank national accounts data and OECD national accounts data files, accessed on 1 October 2021.
- 38 Government of Cambodia, 'Report of Cambodia Socio-Economic Survey 2019/20,' National Institute of Statistics, Ministry of Planning, December 2020, [https://www.nis.gov.kh/nis/CSSES/Final%20Report%20of%20Cambodia%20Socio-Economic%20Survey%202019-20\\_EN.pdf](https://www.nis.gov.kh/nis/CSSES/Final%20Report%20of%20Cambodia%20Socio-Economic%20Survey%202019-20_EN.pdf)
- 39 In recent years, Cambodia's population living in rural areas has decreased from 77.5% in 2014 to 60.6% in 2019 (Cambodia's National Institute of Statistics, Ministry of Planning, 2020 data).
- 40 Government of Cambodia, 'Report of Cambodia Socio-Economic Survey 2019/20,' National Institute of Statistics, Ministry of Planning, December 2020, [https://www.nis.gov.kh/nis/CSSES/Final%20Report%20of%20Cambodia%20Socio-Economic%20Survey%202019-20\\_EN.pdf](https://www.nis.gov.kh/nis/CSSES/Final%20Report%20of%20Cambodia%20Socio-Economic%20Survey%202019-20_EN.pdf).
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- 50 GICHD, *Linking Mine Action and Development. Guidelines for Policy and Programme Development: Humanitarian and Development NGOs*, (Geneva: GICHD, November 2008).
- 51 More information on AustCare's experience and lessons learnt from their integrated approach can be found in: Sally Campbell Thorpe, "Integrated Mine Action: Lessons and Recommendations from Austcare's Program in Cambodia" (2007). Global CWD Repository, <https://commons.lib.jmu.edu/cisr-globalcwd/139>.
- 52 GICHD, *Linking Mine Action and Development. Guidelines for Policy and Programme Development: Humanitarian and Development NGOs*, (Geneva: GICHD, November 2008), 15–16.
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- 55 The criteria for 'all reasonable effort' shall be defined by the national mine action authority.
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- 58 Government of Cambodia. Request for an extension of the deadline for completing the destruction of anti-personnel mines in mined areas in accordance with Article 5 of the APMBC. Submitted on 24 August 2009. p.5, <https://new.apminebanconvention.org/en/states-parties/cambodia/extension-request-process/>.
- 59 Neil Andersson, Cesar Palha Da Sousa & Sergio Paredes, "Social Cost of Landmines in Four Countries: Afghanistan, Bosnia, Cambodia and Mozambique," *British Medical Journal* 311 (1995): 718–721.
- 60 Based on figures provided by the CMAA for the period 1992–2021, dated 9 August 2021.
- 61 ILO (2014), Cambodia Common Country Assessment-CCA. UNDAF 2016–2018, May 2014.
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