

THEMATIC SERIES
**The ripple effect: economic impacts
of internal displacement**

This thematic series focuses on measuring the effects of internal displacement on the economic potential of IDPs, host communities and societies as a whole



**UNVEILING THE COST OF
INTERNAL DISPLACEMENT**

FEBRUARY 2019

ACKNOWLEDGEMENTS

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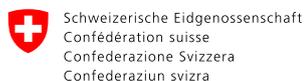
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Cover photo: Internally displaced families receive food and household items at the e-Voucher market in Kanyabayonga, North Kivu, DRC. Credit: NRC/Christian Jepsen, March 2017



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FEBRUARY 2019

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EXECUTIVE SUMMARY

Internal displacement can have devastating effects on the lives of displaced people, their dependents, their hosts and those who are left behind in their community of origin. Its impacts on health, livelihoods, security, housing and access to infrastructure, as well as to education, social life and the environment, can damage wellbeing and affect society as a whole.

Internal displacement limits people's ability to contribute to the economy and generates specific needs that must be paid for by IDPs, their hosts, their government or other aid providers. In 2017, IDMC launched a dedicated research programme to estimate these financial impacts.

This report presents our methodology and initial results. It assesses the costs and losses associated with internal displacement's most direct consequences on health, shelter, education, security and livelihoods. They do not account for longer-term consequences of internal displacement. For instance, they do not include the future reduction of income, consumption and income tax linked with a displaced child's inability to access school.

Using publicly available data, we estimated the financial impact of major displacement crises in eight countries: the Central African Republic, Haiti, Libya, the Philippines, Somalia, South Sudan, Ukraine, and Yemen.

We selected these eight countries for analysis because each has recently been affected by significant internal displacement in the context of conflict, disasters, or a combination of both. They are located in different regions and their economies range from low to upper-middle income. As such, they provide a cross-section of conditions in which major displacement crises can occur.

The average annual economic impact associated with internal displacement in these countries ranges from less than one per cent to 11 per cent of their pre-crisis GDP, mostly depending on the number of IDPs and the severity of the crisis. Box 1 shows an overview of the estimates presented in more detail in the report.

In the Central African Republic for instance, the economic impacts of internal displacement associated with conflict from December 2013 to December 2017 total \$950 million. On average, this is \$230 million per year, the equivalent of 11 percent of the country's pre-crisis GDP.

In all countries, the highest financial burdens come from the impacts of internal displacement on livelihoods, housing and health. The costs and losses associated with security and education are generally secondary to these burdens, but are still significant. Crises that displace the highest number of people for the longest time result in the highest economic impacts.

The average economic impact for each affected person varies from country to country, ranging from \$970 per year in Ukraine to \$357 for flood-related internal displacement in Somalia. Not all IDPs are necessarily affected by every impact of internal displacement. Taking this into account, the economic impacts per IDP are estimated on average at \$310 for one year of displacement. Applied to the total number of IDPs recorded across the world at 31 December 2017, this would mean the total financial impact of internal displacement globally would be nearly \$13 billion a year.

Initial results indicate that the impacts of internal displacement are higher in low-income countries than in lower-middle or upper-middle income countries. This could be because populations in low-income countries were vulnerable before the crisis and therefore less able to minimise its impact.

These estimates must be considered conservative and also partially limited by lack of data and the complexity of the problem. Nevertheless, although incomplete, they reveal a significant fraction of the economic impacts, particularly the direct and immediate costs and losses, associated with displacement. This is borne out by the fact that in several cases the economic impacts already amount to a significant share of the countries' GDP or of government expenditure on services such as health. Even though more research is needed to analyse a greater

number of countries and analyse more impacts, this first assessment already suggests several risks internal displacement represents not only for security and human rights, but also for national development.

IDMC will continue to expand and improve these estimates to raise awareness of the benefits of investing

in the prevention of displacement and responding to existing crises. With additional research, the most effective policies to reduce cost will be identified, as will the means to seize opportunities for development, especially in host areas.

BOX 1: OVERVIEW OF THE ESTIMATES PRESENTED IN THIS REPORT

	Internal displacement associated with	Period considered	Cumulative economic impact \$ = \$100 million	Average annual economic impact associated with internal displacement
Central African Republic	Conflict 	December 2013 to December 2017	 \$950 million	 \$230 million / 11 per cent of the country's pre-crisis GDP
Haiti	Earthquake 	January 2010 to December 2017	 \$1.4 billion	 \$170 million / 2.6 per cent of the country's pre-crisis GDP
Libya	Conflict 	April 2014 to December 2017	 \$300 million	 \$77 million / 0.12 per cent of the country's pre-crisis GDP
Philippines	Hurricane 	November 2013 to April 2014	 \$816 million	 \$816 million / 0.3 per cent of the country's pre-crisis GDP
Somalia	Drought 	January 2017 to August 2018	 \$500 million	 \$315 million / 4.7 per cent of the country's pre-crisis GDP
Somalia	Conflict 	January 2017 to August 2018	 \$110 million	 \$72 million / 1.1 per cent of the country's pre-crisis GDP
Somalia	Floods 	April to August 2018	 \$19 million	 \$19 million / 0.3 per cent of the country's pre-crisis GDP
South Sudan	Conflict 	December 2013 to December 2017	 \$2.6 billion	 \$650 million / 4.3 per cent of the country's pre-crisis GDP
Ukraine	Conflict 	March 2014 to December 2017	 \$1 billion	 \$260 million / 0.14 per cent of the country's pre-crisis GDP
Yemen	Conflict 	March 2015 to December 2017	 \$1.65 billion	 \$570 million / 1.4 per cent of the country's pre-crisis GDP

INTRODUCTION

Research on internal displacement has long demonstrated the devastating consequences it can have for displaced people, but also for their hosts, their dependents and those left behind in the communities of origin.¹ Displacement can affect their health, livelihoods, security, access to housing and education, social life and environment. These impacts can damage their wellbeing but also limit their ability to contribute to the economy and generate specific needs that must be paid for by IDPs, their hosts, their government or other aid providers.

This report presents IDMC's first assessments of the costs and losses associated with internal displacement's most direct consequences on health, shelter, education, security and livelihoods. The financial impact of recent crises in the Central African Republic, Haiti, Libya, the Philippines, Somalia, South Sudan, Ukraine, and Yemen were estimated using an original methodology and publicly available data.

Internal displacement limits people's ability to contribute to the economy and generates specific needs that must be paid for by IDPs, their hosts, their government or other aid providers. In 2017, IDMC launched a dedicated research programme to estimate these financial impacts.

This report presents our methodology and initial results. It assesses the costs and losses associated with internal displacement's most direct consequences on health, shelter, education, security and livelihoods.

Using publicly available data, we estimated the financial impact of major displacement crises in eight countries: the Central African Republic, Haiti, Libya, the Philippines, Somalia, South Sudan, Ukraine, and Yemen.

The figures presented in this report uncover just a part of the hidden cost of internal displacement, but they already amount to a noticeable share of each country's GDP. This analysis highlights the need to determine the

economic impacts of internal displacement and dedicate more resources to addressing the phenomenon and reducing its negative impacts more effectively.

METHODOLOGY AND LIMITATIONS

Internal displacement can affect the economy through direct costs, such as the provision of shelter or emergency healthcare to IDPs. It can also have indirect consequences, including through the disruption of business networks in internally displaced people's communities of origin. In theory, internal displacement can have both negative and positive effects on the economy, creating additional need and losses but also opportunities. In reality however, most economic impacts are financial burdens, as the conditions to seize potential opportunities are rarely found.²

Our estimates focus on direct and immediate costs and losses associated with internal displacement, for which quantitative data is publicly available at the global level. They do not account for longer-term consequences of internal displacement. For instance, they do not include the future reduction of income, consumption and income tax linked with a displaced child's inability to access school. Estimates of the cost of adapting infrastructure and services to cope with the arrival of large numbers of IDPs in host communities are also missing.

Our estimates do include the costs associated with IDPs' housing, health, education and security needs, and their loss of livelihood. Research has shown that internal displacement also impacts host communities and internally displaced people's communities of origin, but the available data now available does not allow us to estimate this. We therefore consider the figures presented in this paper to be under-estimates of the economic impacts of internal displacement, only measuring part of the financial burden it represents.



Internally displaced people collect water in a brooding sandstorm in the town of Abs, Yemen. Water is heavily rationed and is only available during one-hour windows, which normally take place only three times a day. Photo: UNOCHA/Giles Clarke, May 2017

We selected impact metrics that represent the key dimensions through which displacement affects the economy: livelihoods, health, education, housing and security (see Table 1). Although internal displacement’s effects on social life and on the environment can also impact the economy, data are not available to measure these costs.

We use information including the funds needed to provide food to a certain number of IDPs to estimate the cost associated with the nutrition needs resulting from internal displacement for each affected person. We then apply this cost to the affected internally displaced population to assess the economic impact.

Data sources used for these calculations are in United States dollars (USD). They do not take into account differences in the cost of living and inflation across countries. For this reason, we present results using Purchasing Power Parity (PPP) international dollars at the end of this paper in Figure 22. The findings are similar whichever we use.

The cost estimates do not correspond to the total amount spent by humanitarian organisations or governments in response to the crisis, nor do they correspond to the total amount requested by them to meet the needs of IDPs. In each case, the number of targeted recipients (in

blue) was lower than the total number of recorded IDPs (in grey), as some IDPs may be in areas unknown or inaccessible to aid providers (Figure 1). The total number of IDPs (in light grey) is actually unknown, as there are data collection limitations in each country. For this reason, the economic impacts of internal displacement we assessed are likely to be underestimates.

Our figures should be understood as estimates of the total amount that *would have been required to meet the needs of all IDPs* for a specific crisis: a measure of the impacts of internal displacement in a given impact dimension, expressed in monetary terms.

FIGURE 1: Different IDP headcounts in data sources

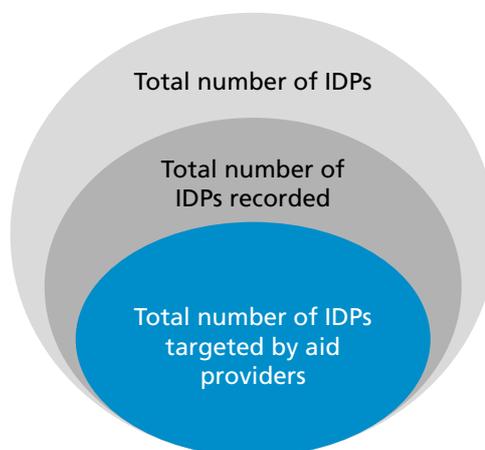


TABLE 1: Data sources and indicators used to assess economic impacts of internal displacement

Dimension	Metric	What is included
Housing Data sources: Humanitarian Response Plan and Humanitarian Needs Overview by OCHA	Cost of shelters or temporary accommodations	<ul style="list-style-type: none"> providing emergency and transitional shelter solutions, including subsidies for rents or repairs delivering needs-based lifesaving non-food items providing water, sanitation and hygiene services coordinating and managing shelters and camps.
Livelihoods Data sources: World Development Indicators and PovcalNET by the World Bank, Displacement Tracking Matrix by IOM	Loss of income	<ul style="list-style-type: none"> loss of income from work.
Education Data sources: Humanitarian Response Plan and Humanitarian Needs Overview by OCHA	Cost of providing temporary education	<ul style="list-style-type: none"> restoring educational activities for children of primary and secondary school age ensuring healthy and secure learning environments, including in some cases psychological support to children.
Health Data sources: Humanitarian Response Plan and Humanitarian Needs Overview by OCHA	Cost of providing food assistance	<ul style="list-style-type: none"> providing life-saving food assistance improving food production preventing and treating malnutrition of children aged under five, and pregnant and lactating women.
	Cost of providing healthcare in emergency situations	<ul style="list-style-type: none"> providing emergency and essential primary/secondary health services preventing and responding to outbreaks and communicable diseases providing immunisation coverage for children aged under five.
Security Data sources: Humanitarian Response Plan and Humanitarian Needs Overview by OCHA	Cost of ensuring security in host areas	<ul style="list-style-type: none"> reinforcing and providing protection to IDPs preventing and responding to human rights violations protecting children and women.

For each metric, we assess the average costs and losses per displaced person over one year of displacement and provide an estimate of the total economic impact of the displacement crisis. The latter is based on the duration of the crisis and number of IDPs. For conflict, the number of IDPs is obtained from IDMC’s Global Internal Displacement Database, using the figure for the end of the year in question. IDMC does not collect primary data on internal displacement, but consolidates and triangulates data produced by institutions including UNHCR, OCHA and IOM, to produce internationally comparable figures.

These are complemented by figures published directly by OCHA and UNHCR for estimates of the evolution during the year.³ For disasters, we used the number of displacements reported in IOM’s Displacement Tracking Matrix for Somalia and Haiti, and by IDMC and OCHA for the Philippines.⁴

The detailed calculations for each dimension are presented in the methodological annex at the end of this paper, which also includes a discussion of the current limitations of our assessment method.

COUNTRY-LEVEL ESTIMATES

The eight countries we selected for this analysis have recently been affected by significant internal displacement in the context of conflict, disasters, or a combination of both. They are located on different continents and range from low to upper-middle income. As such, they provide a cross-section of the conditions under which major displacement crises can occur.

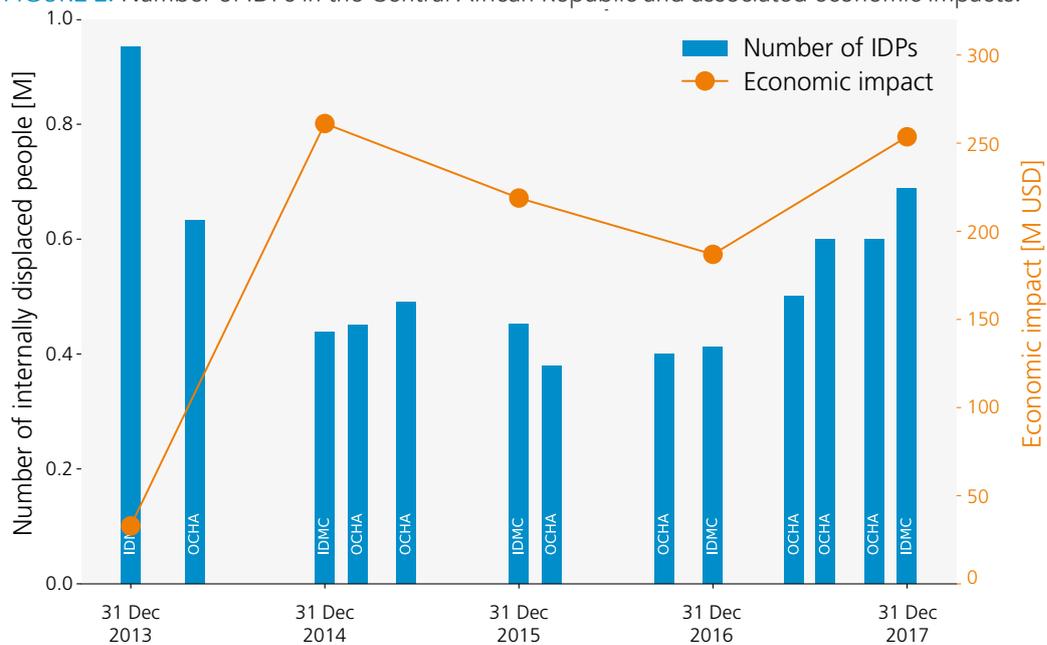
CENTRAL AFRICAN REPUBLIC

The Central African Republic is a low-income country with a population of approximately 4.6 million people. Decades of instability and violence led to several episodes of mass internal displacement. The worst crisis in recent years started in 2013 and displaced nearly 20 percent

of the country's population. In 2017, a new surge in violence led to levels of displacement unseen since 2013 and brought the total number of IDPs to 689,000.⁵

We considered internal displacement caused by conflict from December 2013 to December 2017. Between December 2013 and January 2014, 935,000 people were recorded as displaced. Their number decreased until the end of 2014, stabilised at about 400,000 until the end of 2016 and increased again in 2017 (Figure 2). On average, we estimated the annual costs and losses associated with internal displacement at \$230 million, the equivalent of 10.5 percent of the country's pre-crisis GDP. We estimated the cumulative economic impact from December 2013 to December 2017, to be \$953 million.

FIGURE 2: Number of IDPs in the Central African Republic and associated economic impacts.



Data: IDMC and OCHA.

Table 2 presents, for each year, the percentage of the internally displaced population impacted in each dimension, along with the associated cost or loss per affected person. Multiplying these costs or losses per affected person by the number of impacted IDPs leads to our estimates of economic impacts by dimension, presented in Figure 3.

The greatest financial burden associated with this displacement crisis comes from the nutritional impact on IDPs. Support to ensure food security and nutrition accounts for 39 per cent of the total. As the food crisis worsened over time, the number of people impacted in this specific area rose from 70 per cent of all IDPs in 2013 and 2014, to 100 per cent in the following years.⁶ Combined with the additional costs associated with providing healthcare to IDPs in emergency settings, health accounts for half of the economic impact of the Central African Republic displacement crisis.

Internal displacement's impacts on housing are the next largest, accounting for 20 per cent of the total. This includes the cost of building and managing camps for about 40 per cent of all IDPs, as well as support for 60 per cent of all IDPs living with host families, or on their own in rural areas.⁷ About 75 per cent of all IDPs experience reduced or no access to water, hygiene and sanitation services.

FIGURE 3: Cumulative economic impacts of internal displacement in the Central African Republic per dimension, from December 2013 to December 2017.

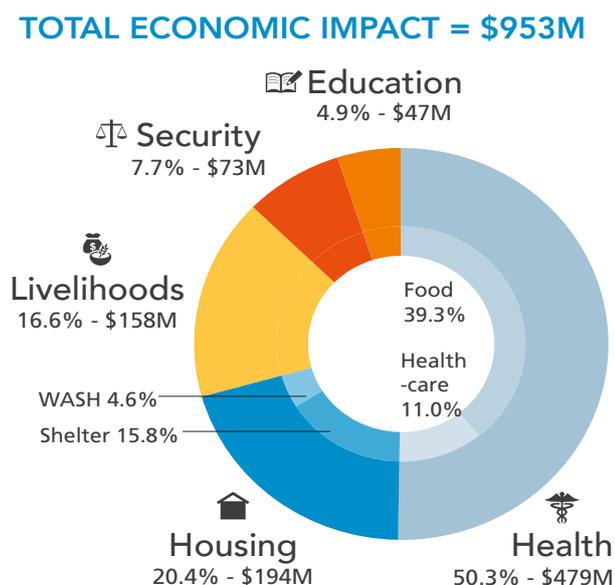


TABLE 2: Percentage of the total internally displaced population impacted in each dimension and corresponding cost or loss per affected person per year for the Central African Republic, 2013-2017.

	Years	Affected IDPs as percentage of the total internally displaced population	Cost/ Loss per affected person
Housing: Shelter + Non-Food Items + Camp Coordination & Camp Management	2013	100%	\$85
	2014		
	2015	100%	\$65
	2016-2017		
Housing: Water, Sanitation and Hygiene	From 2013 to 2017	75%	\$28
Livelihoods	From 2013 to 2017	30% (80% of previously working IDPs)	\$250
Education	2013-2014	28% (all IDPs between ages 5 and 14)	\$60
	2015-2016	28% (all IDPs between ages 5 and 14)	\$90
	2017	28% (all IDPs between ages 5 and 14)	
Health: Food Security	2013-2014	70%	\$200
	2015-2016	100%	\$200
	2017	100%	
Health: Health-care	From 2013 to 2017	100%	\$50
Security	From 2013 to 2017	100%	\$35

The estimated loss of income due to internal displacement, representing impacts on livelihood, is almost as high as those associated with housing, with 17 per cent of the total. Eighty per cent of all IDPs are unable to pursue their habitual income-generating activity during displacement, based on several assessments by IOM and DTM. In displacement sites in Bangui, 80 per cent of IDPs interrupted work after displacement.⁸ Other reports show that more than 90 per cent of interviewed IDPs in host communities and spontaneous sites stopped working after displacement.⁹

The economic impacts of internal displacement in terms of security, including protection to IDPs in general and to women and children in particular, account for 7.7 per cent of our estimated economic impact. For education, representing only the cost of providing temporary education and support to children of primary and secondary school age, the impact is 4.9 per cent of the total.

HAITI

Disasters, forced evictions, chronic food and livelihood insecurity, and economic, political and environmental fragility are the main triggers and drivers of internal displacement in Haiti. The country is among the poorest in the world and is highly exposed and vulnerable to recurrent weather-related, geophysical and biological hazards. These conditions drive high levels of severe and protracted displacement risk, create significant

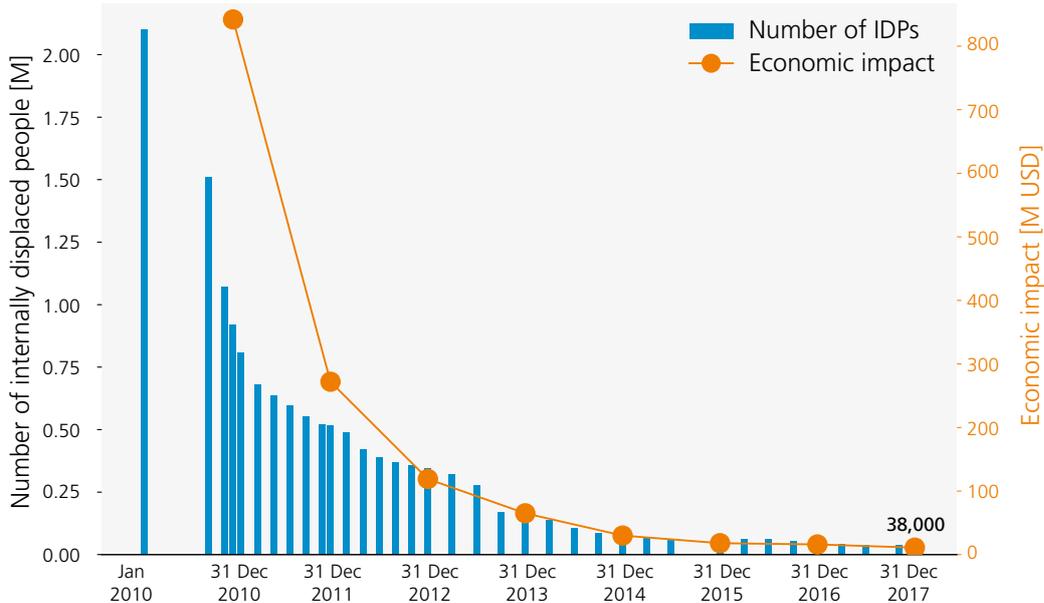
assistance and protection needs among communities and neighbourhoods affected by displacement, and pose major obstacles to durable solutions.¹⁰

In January 2010, around 2.1 million people were displaced in the context of an earthquake, the consequences of which are still being felt today. The number of IDPs decreased to approximately a million at the end of 2010 and steadily decreased to 500,000 in December 2011 and 110,000 in December 2014.¹¹ Seven years after the earthquake, at least 40,000 people are still internally displaced (Figure 4).¹²

We estimated the total economic impact of this crisis to be \$1.4 billion for the period from 2010 to 2017, corresponding to an annual average of 2.6 per cent of Haiti's 2009 GDP. In 2010 alone, the costs and losses were \$840 million, or 13 per cent of the state's 2009 GDP.

More than half of the total cost results from impacts on housing and infrastructure, including the provision of emergency and transitional shelter, water, sanitation and hygiene services to IDPs (Figure 5). This is linked with the massive destruction caused by the earthquake. About 105,000 homes were totally destroyed and more than 208,000 damaged. In 2010, 1.3 million IDPs resided in displacement camps and 600,000 with host families.¹³ Six months after the earthquake, 1,555 displacement sites sheltered 1.5 million IDPs. There were still 350,000 people sheltered in 496 sites at the end of 2012.¹⁴

FIGURE 4: Number of IDPs in Haiti and associated economic impact.



Data: IOM-DTM.

TABLE 3: Percentage of the total internally displaced population impacted in each dimension and corresponding cost or loss per affected person per year for Haiti, 2010-2017.

	Years	Affected IDPs as percentage of the total internally displaced population	Cost/ Loss per affected person
Housing: Shelter + Non-Food Items + Camp Coordination & Camp Management	2010-2011	100%	\$150
	From 2012 to 2017	100%	\$125
Housing: Water, Sanitation and Hygiene	2010-2011	100%	\$100
	From 2012 to 2017	100%	\$25
Livelihoods	From 2010 to 2017	12% (31% of previously working IDPs)	\$300
Education	2010-2011	23% (all IDPS between ages 5 and 14)	\$55
	From 2012 to 2017	23% (all IDPS between ages 5 and 14)	\$10
Health: Food Security	2010	70%	\$170
	2011	40%	\$50
	2012	40%	\$50
	From 2013 to 2017	20%	\$80
Health: Healthcare	2010-2011	100%	\$67
	From 2012 to 2017	100%	\$30
Security	From 2010 to 2017	100%	\$40

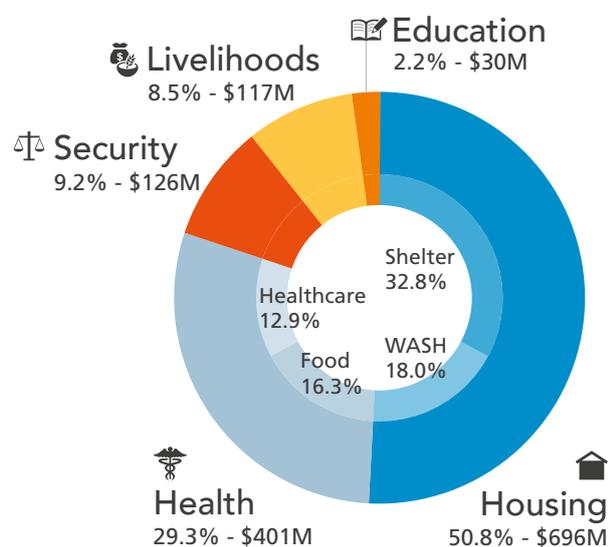
Impacts on health represent almost 30 per cent of our total estimate. They include the provision of emergency and primary health services and facilities to IDPs in settlement sites and the response to the 2010 cholera outbreak. Food insecurity was also critical, affecting 70 per cent of camp inhabitants in the first year, 40 per cent in 2011 and 2012 and 20 per cent from 2013 to 2017.¹⁵

Security concerns associated with internal displacement also resulted in high costs, because large overcrowded camps presented serious protection issues, especially for children and women. The United Nations Stabilisation Mission in Haiti posted peacekeeping forces in six camps on a permanent basis, and established regular patrols in 60 other camps.¹⁶

Internal displacement also led to loss of livelihood for IDPs. About 57 per cent of the working age population in camps was unemployed, compared with 38 per cent at national level.¹⁷ We estimated loss of livelihoods to amount to 8.5 per cent of the total. The impacts of internal displacement on education accounted for 2.2 per cent of the cost.

FIGURE 5: Cumulative economic impacts of internal displacement in Haiti per dimension, 2010-2017.

TOTAL ECONOMIC IMPACT = \$1.37B



LIBYA

In 2014, an escalation of conflict and violence forced about 400,000 Libyans to flee their homes. The number of internally displaced people increased to 500,000 in 2015 and began to decrease in 2016, falling to 200,000 IDPs at the end of 2017 (Figure 6). Our estimate of the costs and losses associated with this crisis is \$300 million for the entire period, an annual average of 0.12 per cent of the country's pre-crisis GDP.

More than 40 per cent of this amount comes from the impacts of internal displacement on health, including the need for food assistance and support for the provision of primary and emergency healthcare (Figure 7). Approximately 175,000 IDPs were in need of food assistance in 2015, 65,000 in 2016 and 60,000 in 2017.¹⁸ Displacement affected the livelihoods of around half of all working-age IDPs and 29 per cent reported that their income had decreased by up to 50 per cent.¹⁹ Loss of income associated with internal displacement accounts for 19.3 per cent of our total estimate.

Impacts on housing account for 22 per cent of the total. Libyan IDPs primarily reside in private accommodation (86 per cent), mainly in rented houses (76 per cent) or with hosts.²¹ As a result, 60 per cent of IDPs

estimated to be in need of assistance received cash and household items.

The impacts of internal displacement on security amount to 14 per cent of the total costs and losses associated with the internal displacement. Impacts on education amount to four per cent.

FIGURE 7: Cumulative economic impacts of internal displacement in Libya per dimension, April 2014 to December 2017.

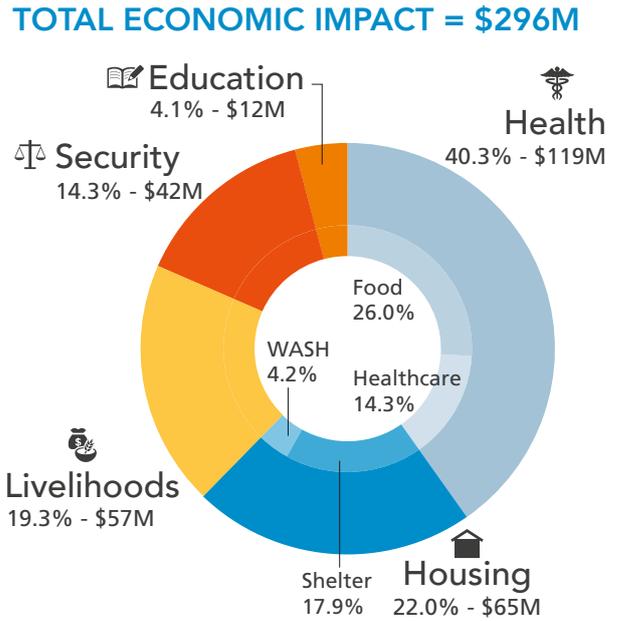
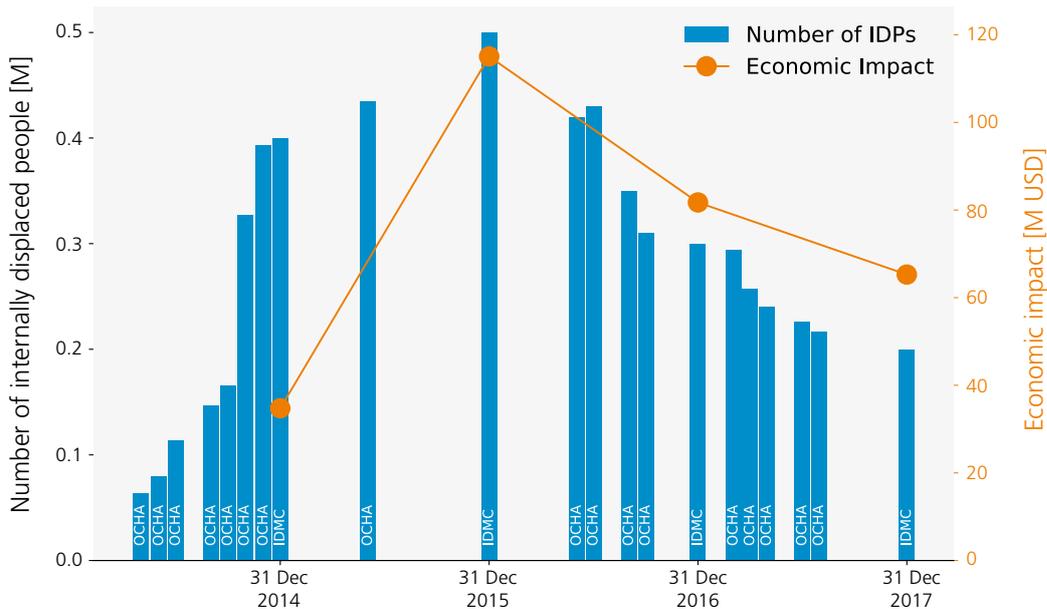


FIGURE 6: Number of IDPs in Libya and associated economic impact.



Data: IDMC and OCHA.

TABLE 4: Percentage of the total internally displaced population impacted in each dimension and corresponding cost or loss per affected person per year for Libya, 2014-2017.

	Years	Affected IDPs as percentage of the total internally displaced population	Cost/ Loss per affected person
Housing: Shelter + Non-Food Items + Camp Coordination & Camp Management	2014	60%	\$50
	2015		
	2016	60%	\$50
	2017	60%	\$167
Housing: Water, Sanitation and Hygiene	From 2014 to 2017	60%	\$17
Livelihoods	From 2014 to 2017	9% (29% of previously working IDPs)	\$550 (half the estimated median income per capita ²⁰)
Education	From 2014 to 2017	20% (all IDPS between ages 5 and 14)	\$50
Health: Food Security	2014	40%	\$225
	2015		
	2016	30%	\$130
	2017	30%	\$130
Health: Health-care	From 2014 to 2017	100%	\$35
Security	From 2014 to 2017	100%	\$35

PHILIPPINES

In 2013, Haiyan, also known as Yolanda, became the deadliest typhoon on record to hit the Philippines. It displaced approximately four million people.²² After three months, the number of IDPs was almost unchanged. After six months, more than two million people were still living without adequate or durable shelter (Figure 8).²³

TABLE 5: Percentage of the total internally displaced population impacted in each dimension and corresponding cost or loss per affected person per year for the Philippines, 2013-2014.

	Years	Affected IDPs as percentage of the total internally displaced population	Cost/ Loss per affected person
Housing: Shelter + Non-Food Items + Camp Coordination & Camp Management	2013	100%	\$74
	2014		
Housing: Water, Sanitation and Hygiene	2013 to 2014	100%	\$27
Livelihoods	2013	40% (100% of previously working IDPs)	\$725
	2014		
Education	2013	21% (all IDPS between ages 5 and 14)	\$90
	2014		
Health: Food Security	2013 to 2014	40%	\$53
Health: Health-care	2013 to 2014	100%	\$11
Security	2013	100%	\$10
	2014		

Our estimate of the economic impact of internal displacement associated with typhoon Haiyan is \$816 million for the first six months after the disaster.

Most of this results from impacts on livelihoods, representing over 60 per cent of the total (Figure 9). We concluded that all IDPs lost their source of income, because loss of work was mainly due to infrastructure damage, lack of market access and enterprises being destroyed or unable to continue their normal activities near the path of the typhoon.²⁴

The hurricane damaged or destroyed 1.1 million homes, leading to massive housing needs for IDPs. Humanitarian organisations addressed immediate shelter needs for 500,000 households, providing tents, tarpaulins, mats, blankets and cooking sets, while the remaining families were assisted directly by the government. In addition, 100,000 households received building tools and materials to repair their damaged homes.²⁵

Health impacts were mostly related to the provision of food, re-establishment of health facilities and prevention of outbreaks that are common in crises such as this typhoon. They amounted to seven per cent of the total. Impacts on education and security accounted for 4.2 and 2.2 per cent of the total, respectively.

FIGURE 9: Cumulative economic impacts of internal displacement in the Philippines per dimension, from November 2013 to April 2014.

TOTAL ECONOMIC IMPACT = \$816M

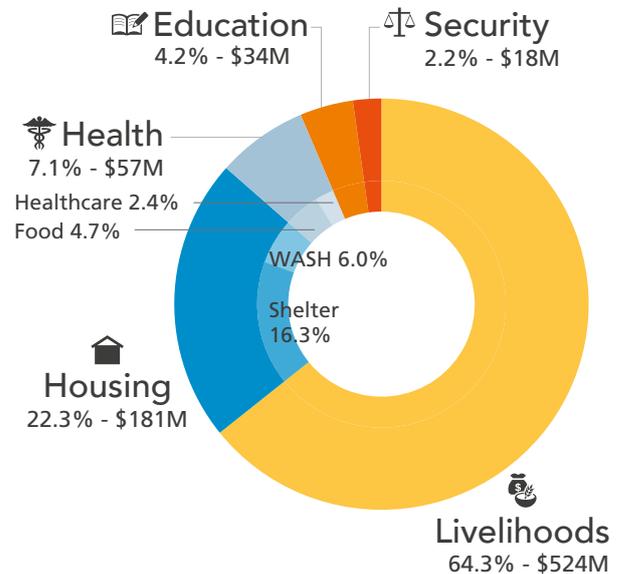
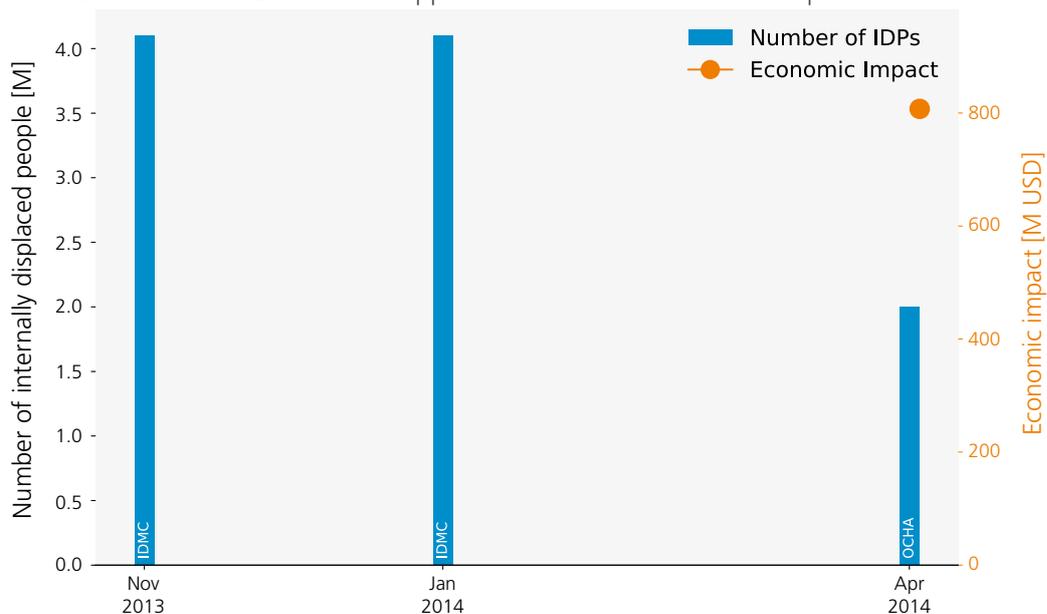


FIGURE 8: Number of IDPs in the Philippines and associated economic impact.



Data: IDMC and OCHA.

SOMALIA

Insecurity, weak governance and extremely low levels of socio-economic development make the population of Somalia highly vulnerable to internal displacement. Conflict and violence, slow and sudden-onset natural and environmental hazards, food and livelihood insecurity and underdevelopment have all played a significant part in past and current displacement in the country.²⁶

Most new displacements in 2017 were associated with disasters, with a country-wide drought leading to 892,000 new displacements that year.²⁷ Drought conditions in most of Somalia were worsened by the very poor rainy season in October-December 2016, forcing hundreds of thousands of people to flee in search of water, food and livelihoods. The peak was in March 2017 with almost 300,000 new displaced people, but displacement continued during all of 2017 and in 2018.²⁸

Other triggers of displacement were protracted conflict, leading to 400,000 more people being displaced from January 2017 to August 2018, and flooding in April 2018 that displaced more than 300,000 people (Figure 10).²⁹

Internal displacement related to drought had an impact of \$500 million in the two years from January 2017 to

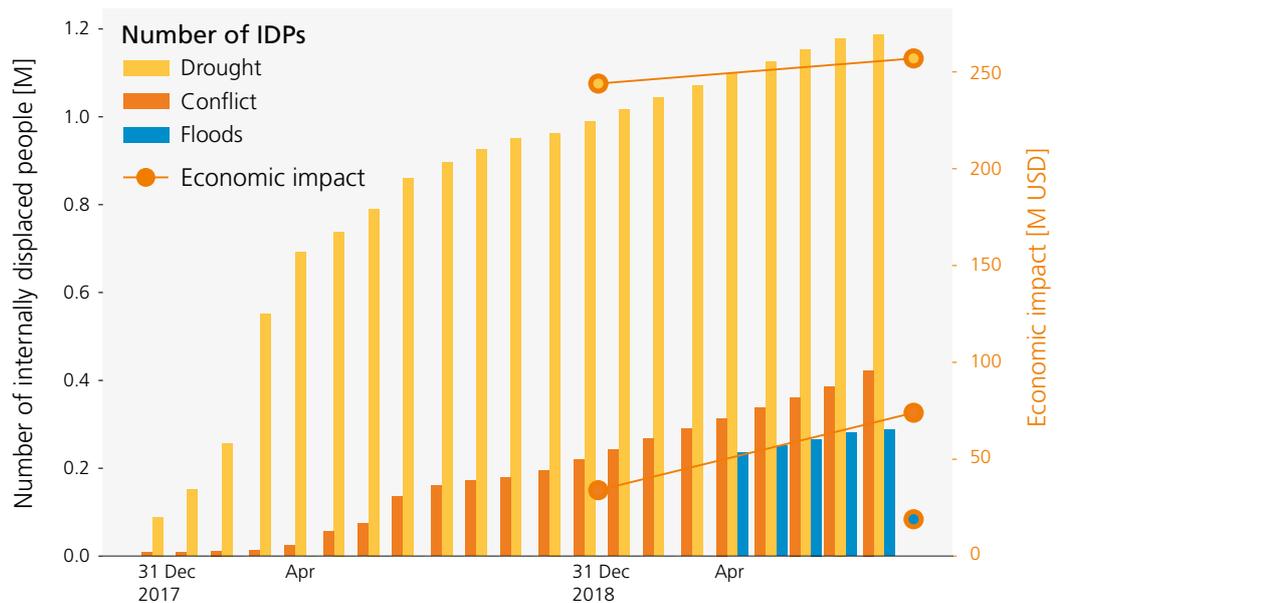
August 2018, equivalent to 7.4 per cent of the country's 2016 GDP. In the same period, displacement associated with conflict impacted the economy by \$108 million or 1.6 per cent of GDP, while the economic impacts of flood-related displacement amounted to \$19 million, or 0.3 per cent of GDP. Floods were highly localised and most occurred between April and August 2018.

The economic impact per affected person of displacement associated with floods are significantly lower than for displacement associated with drought or conflict, particularly when considering housing, food security and healthcare (Tables 6 and 7). The cumulative effects of drought and protracted conflict led to an increase in the impacts of internal displacement on affected people and on the economy, with severe needs arising for most IDPs in all dimensions.

As expected in a drought-related crisis, the highest economic impact, 36 per cent, is associated with providing IDPs with food assistance (Figure 11). The drought caused significant water shortages, livestock losses and poor harvest, leading to severe food insecurity, especially for children.

Impacts on housing and infrastructure amount to nearly a quarter of the total. Displacement from rural to urban and peri-urban areas increased pressure on the already stretched capacity of municipalities to provide

FIGURE 10: Number of IDPs associated with drought, floods or conflict in Somalia and corresponding economic impacts.



Data: IOM-DTM and IDMC.

basic services such as shelter, water, sanitation and hygiene, as well as healthcare and education services.³⁰

Significant costs are associated with the impacts of internal displacement on security, accounting for 14 per cent of the total. More than three out of four IDPs reported gender-based violence in the context of their displacement.³¹

The costs associated with impacts on education are also high, at ten per cent of the total, with the highest cost per affected person for all crises analysed in this paper at \$130. These costs are high because the Somali

education system is weak, with a shortage of adequate learning facilities. The impacts of internal displacement on education in Somalia also include the provision of food and water to schools, financial incentives for teachers and school administrators to return to work and the establishment or rehabilitation of safe and protective learning spaces.³²

Exceptionally, impacts on livelihoods account only for 7 per cent of the total. Only 30 per cent of IDPs showed a loss of income associated with their displacement, but this may be the result of most losses being unrecorded. In Somalia, most people work in the informal sector, but no data is available to measure impacts outside of the formal sector.

TABLE 6: Percentage of the total internally displaced population impacted in each dimension and corresponding cost or loss per affected person per year for Somalia, drought and conflict-related displacement, 2017-2018.

	Years	Affected IDPs as percentage of the total internally displaced population	Cost/ Loss per affected person
Housing: Shelter + Non-Food Items + Camp Coordination & Camp Management	2017 2018	100%	\$60
Housing: Water, Sanitation and Hygiene	2017 2018	67%	\$34
Livelihoods	2017 2018	7% (30% of previously working IDPs)	\$370 ³³
Education	2017 2018	28% (all IDPS between ages 5 and 14)	\$130
Health: Food Security	2017 2018	80%	\$160
Health: Health-care	2017 2018	100%	\$30
Security	2017 2018	100%	\$50

TABLE 7: Percentage of the total internally displaced population impacted in each dimension and corresponding cost or loss per affected person per year for Somalia, flood-related displacement, 2018.

	Years	Affected IDPs as percentage of the total internally displaced population	Cost/ Loss per affected person
Housing: Shelter + Non-Food Items + Camp Coordination & Camp Management	2018	65%	\$35
Housing: Water, Sanitation and Hygiene	2018	77%	\$10
Livelihoods	2018	7% (30% of previously working IDPs)	\$370 ³⁴
Education	2018	28% (all IDPS between ages 5 and 14)	\$130
Health: Food Security	2018	100%	\$62
Health: Health-care	2018	100%	\$8
Security	2018	100%	\$27

FIGURE 11: Cumulative economic impacts of drought and conflict related internal displacement in Somalia per dimension, from January 2017 to August 2018.

TOTAL ECONOMIC IMPACT = \$501M (DROUGHT) + \$107M (CONFLICT)

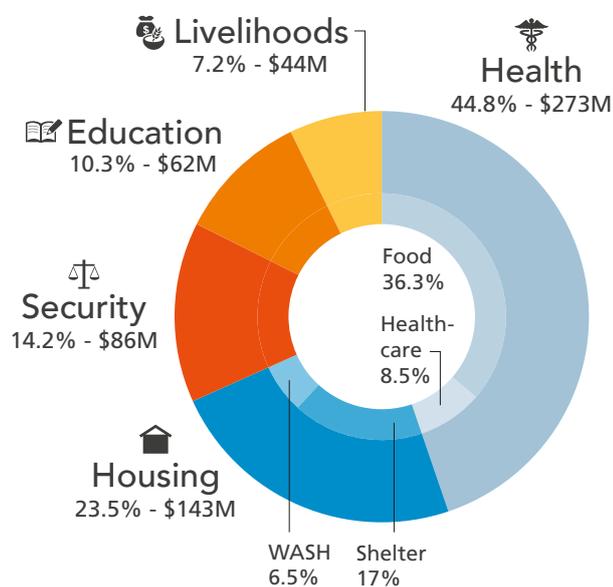
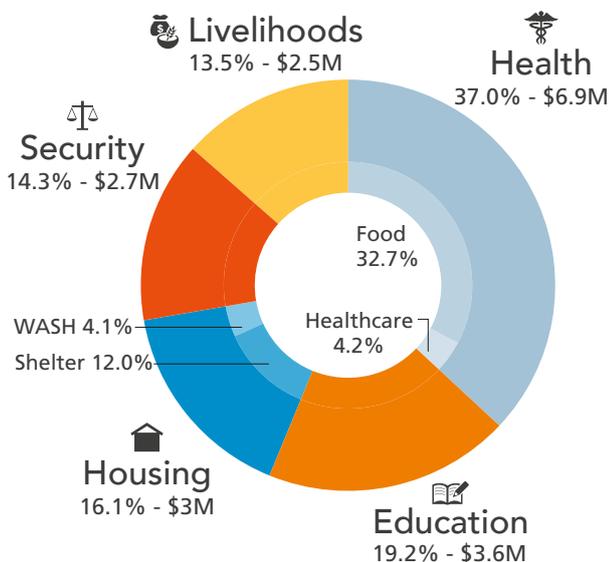


FIGURE 12: Cumulative economic impacts of flood-related internal displacement in Somalia per dimension, from April to August 2018.

TOTAL ECONOMIC IMPACT = \$18.6M (FLOODS)



The economic impacts of flood-related displacement are similar, with significant costs associated with food security, housing, education and security (Figure 12).

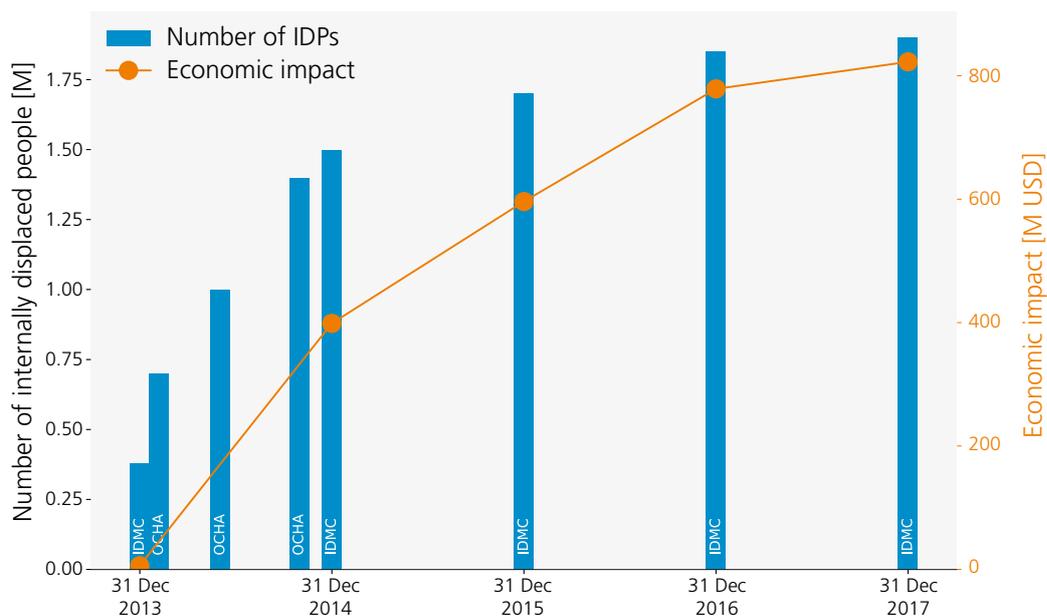
SOUTH SUDAN

South Sudan is the world's youngest country, but has a long history of conflict and underdevelopment which pre-dates its independence in 2011. Conflict, violence,

TABLE 8: Percentage of the total internally displaced population impacted in each dimension and corresponding cost or loss per affected person per year for South Sudan, 2013-2017.

	Years	Affected IDPs as percentage of the total internally displaced population	Cost/ Loss per affected person
Housing: Shelter + Non-Food Items + Camp Coordination & Camp Management	From 2013 to 2015	70%	\$67
	2016 to 2017	80%	\$45
Housing: Water, Sanitation and Hygiene	From 2013 to 2015	80%	\$40
	2016 to 2017	100%	\$50
Livelihoods	From 2013 to 2017	20% (53% of previously working IDPs)	\$410
Education	From 2013 to 2017	26% (all IDPs between ages 5 and 14)	\$85
Health: Food Security	From 2013 to 2015	80%	\$170
	2016 to 2017	100%	\$170
Health: Health-care	From 2013 to 2015	50%	\$50
	2016 to 2017	100%	\$50
Security	From 2013 to 2017	100%	\$30

FIGURE 13: Number of IDPs in South Sudan and associated economic impact.



Data: IDMC and OCHA

recurring floods and droughts, along with a lack of inclusive governance and one of the lowest levels of socio-economic development in the world make a fertile ground for internal displacement. Civil war started in December 2013 and has led more than three million people to flee their homes, 1,899,000 of them remaining in displacement as of December 2017.³⁵

Our estimate considers internal displacement from December 2013 to December 2017. After the first six months of the conflict, about a million people had fled their homes. At the end of 2014, this had increased by 500,000. The number continued to increase in the next years, reaching almost two millions at the end of 2017 (Figure 13). Average annual economic impacts associated with internal displacement totalled \$650 million, corresponding to 4.3 per cent of the country's pre-crisis GDP. The total over the four years of crisis is \$2.6 billion.

In South Sudan, the impact of internal displacement on nutrition and food security represents the highest financial cost, with 38 per cent of the total (Figure 14). Protracted conflict led to severe food insecurity which affected six million people, including 1.1 million malnourished children in 2017.³⁶ IDPs are one of the most vulnerable groups in terms of food security. In response, the international community delivered agricultural support and helped people to access markets.

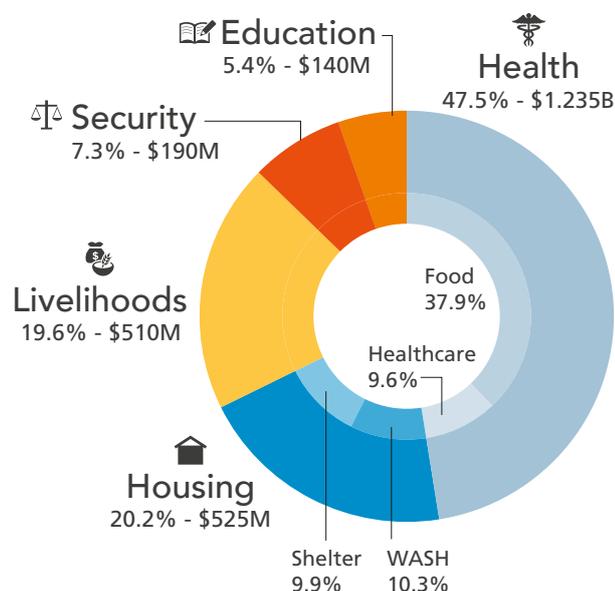
Adding the provision of primary and emergency health-care, the impacts of internal displacement on health altogether account for 47.5 per cent of the total cost.

Internal displacement's impact on livelihood also represents a significant loss, at 20 per cent of the total. Fewer than 30 per cent of all IDPs have a reliable and sustainable source of income.³⁷ According to the World Bank, 64 per cent of the adult population was employed before the crisis, so we assumed an increase of 34 percentage points of unemployment following displacement. This corresponds to 53 per cent of the IDPs who were previously working losing their livelihood after displacement.

Internal displacement's consequences on housing and access to basic infrastructure caused 20 per cent of the total displacement cost. A cholera outbreak in 2016 required additional resources to provide IDPs with water, sanitation and hygiene services for 2016 and 2017. Immediate impacts on security and education respectively account for 7.3 and 5.4 per cent of the total.

FIGURE 14: Cumulative economic impacts of internal displacement in South Sudan per dimension, from December 2013 to December 2017.

TOTAL ECONOMIC IMPACT = \$2.6B



UKRAINE

The current internal displacement crisis in Ukraine arose from armed conflict triggered in March 2014 by Russia's annexation of Crimea, an autonomous republic of Ukraine, and the subsequent proclamations of independence by the Donetsk and Luhansk regions in eastern Ukraine. Since the annexation, Ukraine has been fighting pro-Russia separatists in its eastern provinces. More than two million people have been internally displaced, with approximately 800,000 IDPs living on government-controlled territory at the end of 2017.³⁸

Our estimate takes into account more than 1.5 million internally displaced people in 2014 and 2015, 1.7 million in 2016 and a decreasing number in 2017 (Figure 15). Economic impacts associated with this crisis amounted to approximately \$1 billion for the entire period 2014 to 2017, representing an annual average of 0.14 per cent of the country's pre-crisis GDP.

Half of the total economic impacts associated with internal displacement in Ukraine are related to livelihoods (Figure 16). Loss of income is one of the main concerns for IDPs who heavily rely on government support. Reports show that approximately 20 per cent of IDPs who previously worked became unemployed because

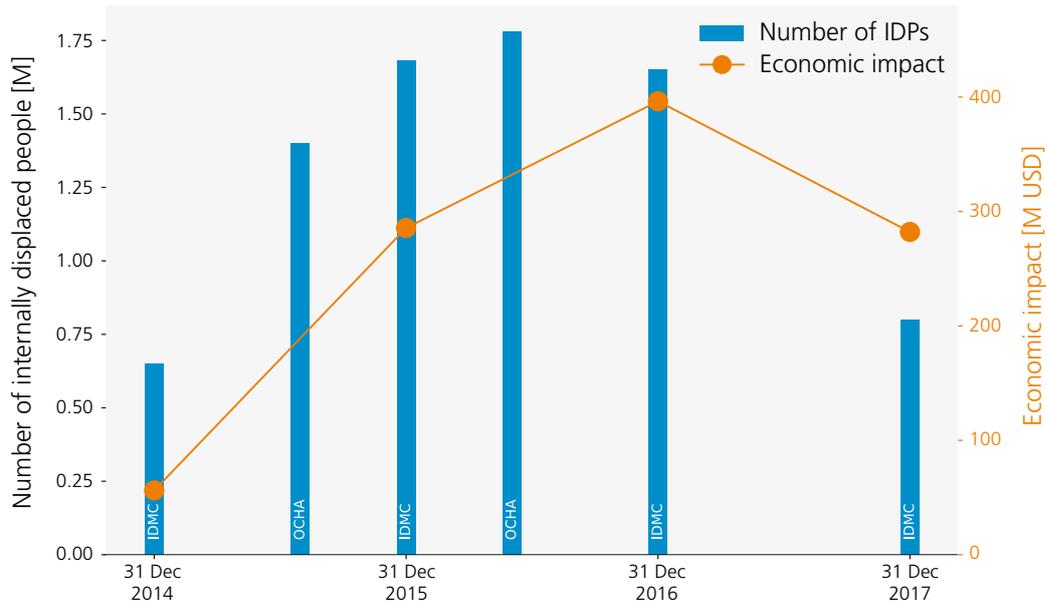
of their displacement.³⁹ In 2017, the employment rate among IDPs was around 40 per cent, compared with 60 per cent at the national level.

TABLE 9: Percentage of the total internally displaced population impacted in each dimension and corresponding cost or loss per affected person per year for Ukraine, 2014-2017.

	Years	Affected IDPs as percentage of the total internally displaced population	Cost/Loss per affected person
Housing: Shelter + Non-Food Items + Camp Coordination & Camp Management	From 2014 to 2017	30%	\$160
Housing: Water, Sanitation and Hygiene	From 2014 to 2017	30%	\$20
Livelihoods	From 2014 to 2017	10% (20% of previously working IDPs)	\$1150
Education	From 2014 to 2017	15% (all IDPS between ages 5 and 14)	\$40
Health: Food Security	From 2014 to 2017	30%	\$130
Health: Health-care	From 2014 to 2017	40%	\$25
Security	From 2014 to 2017	40%	\$10

Loss of income also has a direct impact on access to health services and medication, and increases food insecurity. At least a quarter of Ukrainian IDPs experience difficulties in accessing healthcare, especially in rural areas and close to the line of contact between govern-

FIGURE 15: Number of IDPs in Ukraine and associated economic impact.



Data: IDMC and UNHRC.

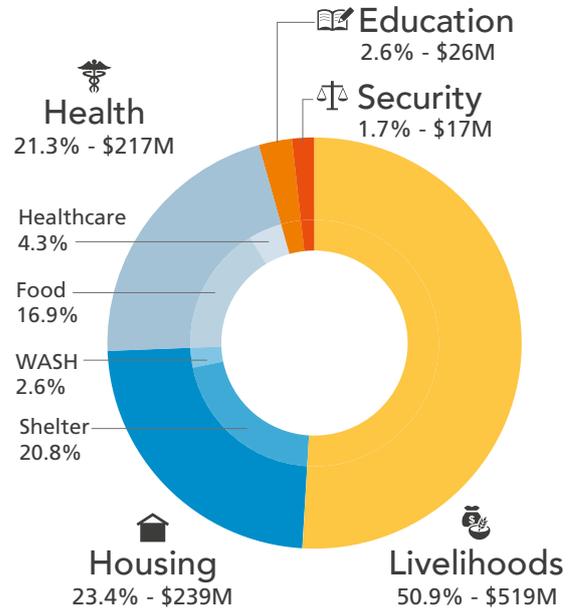
ment-controlled and non-government-controlled areas.⁴⁰ The main barriers are the cost of medicine, out-of-pocket payments for healthcare, overcrowded hospitals, unavailability of medicine and equipment and lack of public transportation. About 200,000 IDPs were estimated in need of emergency and essential health services in 2014-15, and 100,000 in 2016 and 2017.⁴¹ Associated costs stand at four per cent of the total, but costs associated with food assistance amount to 17 per cent. In 2015, food prices increased by 40 per cent because of inflation and high transportation costs.⁴² In the non-government controlled areas, food prices are 70 per cent higher than the national average.⁴³ In 2016-2017, approximately 30 per cent of all IDPs were in need of food assistance in both the government-controlled and non-government-controlled areas.⁴⁴

Internal displacement's impacts on housing represent 23 per cent of the total. Most IDPs live in rented accommodation (70 per cent), 20 per cent with host families and only a few in collective centres.⁴⁵ Our estimate includes monetary support for accommodation, repairs and non-food items for about 30 per cent of all IDPs estimated to be in need of such assistance.

Costs associated with security and education account for 1.7 and 2.6 per cent of the total, respectively.

FIGURE 16: Cumulative economic impacts of internal displacement in Ukraine per dimension, from March 2014 to December 2017.

TOTAL ECONOMIC IMPACT = \$1.02B



YEMEN

In 2015, a deterioration in the political and security situation in Yemen prompted a displacement crisis that is still ongoing today. More than two million people were internally displaced at the end of 2017 and the UN's humanitarian chief has warned that the country could experience the world's worst humanitarian disaster in half a century.⁴⁶

Our analysis considers internal displacement from March 2015 to December 2017 (Figure 17). We estimate the associated cumulative economic impact at approximately \$1.65 billion, corresponding to an annual average of 1.4 per cent of the country's pre-crisis GDP.

Costs associated with the impacts of internal displacement on health represent 41 per cent of the total, with impact on nutrition alone accounting for 31 per cent (Figure 18). The conflict had a huge impact on food security, not least because Yemen imported 90 per cent of its food before the crisis.⁴⁷ IDPs were consequently affected by severe food insecurity caused by import restrictions, price increases and damaged infrastructures. Food access is reported as the first priority need by IDPs.⁴⁸ The cost per affected person associated with food assistance increased from \$110 per year in 2015, to \$150 in 2016 and 2017.⁴⁹ The percentage of IDPs in need of food assistance also increased from 60 per cent in 2015 and 2016, to 80 per cent in 2017. Emergency and primary healthcare for IDPs are also significant impacts on the economy. With only 50 per cent of the country's health facilities functioning at full capacity, most IDPs require dedicated support to treat their most common conditions including malnutrition, diarrheal diseases and malaria, and respond to the outbreaks of dengue and cholera in 2016.⁵⁰

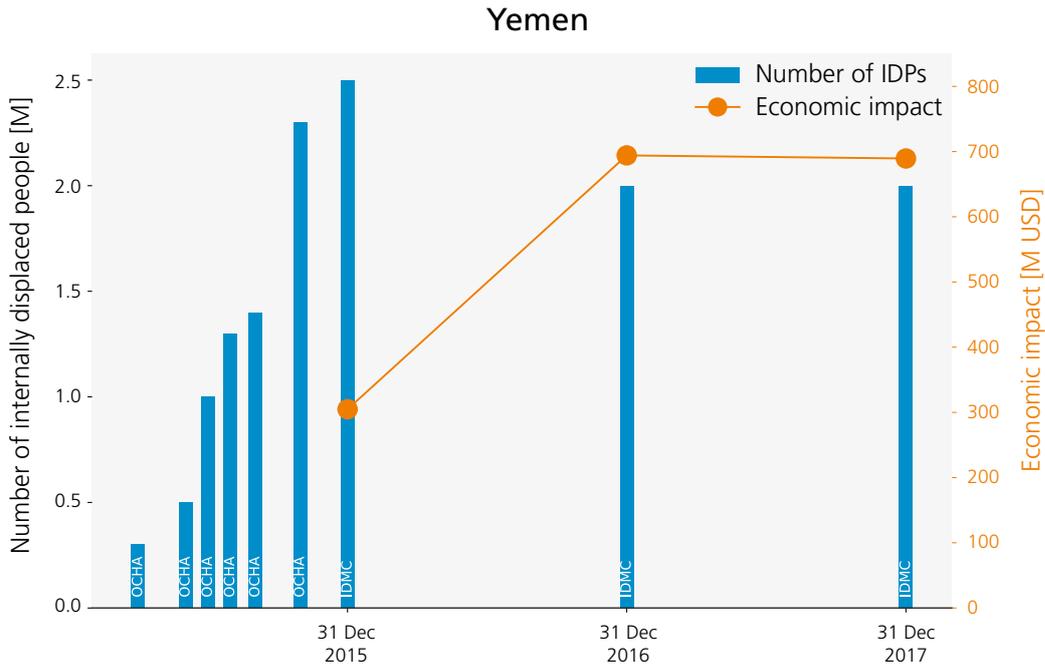
The impacts of internal displacement on housing account for more than a quarter of our estimate and include cash assistance and non-food items for IDPs living in private lodgings (with hosts or rented), collective centres and spontaneous settlements, as well as support for water, sanitation and hygiene services.⁵¹ Access to safe drinking water is a major priority for half of all IDPs. The high concentration of IDPs in certain locations, especially urban areas, placed exceptional pressure on already scarce water sources.

TABLE 10: Percentage of the total internally displaced population impacted in each dimension and corresponding cost or loss per affected person per year for Yemen, 2015-2017.

	Years	Affected IDPs as percentage of the total internally displaced population	Cost/ Loss per affected person
Housing: Shelter + Non-Food Items + Camp Coordination & Camp Management	From 2015 to 2017	100%	\$65
Housing: Water, Sanitation and Hygiene	From 2015 to 2017	50%	\$30
Livelihoods	From 2015 to 2017	15% (75% of previously working IDPs)	\$500
Education	From 2015 to 2017	25% (all IDPs between ages 5 and 14)	\$30
Health: Food Security	2015	60%	\$110
	2016	60%	\$150
	2017	80%	\$150
Health: Health-care	From 2015 to 2017	75%	\$40
Security	From 2015 to 2017	100%	\$30

The costs associated with the impacts of internal displacement on security are as high as those associated with the provision of health services to IDPs, accounting for 9.6 per cent of the total. These high costs reflect the severe protection crisis civilians in Yemen have to face. In 2016, the number of gender-based violence incidents rose by 63 per cent and child deaths and injuries more than doubled compared to before the conflict.⁵²

FIGURE 17: Number of IDPs in Yemen and associated economic impact.



Data: IDMC and OCHA.

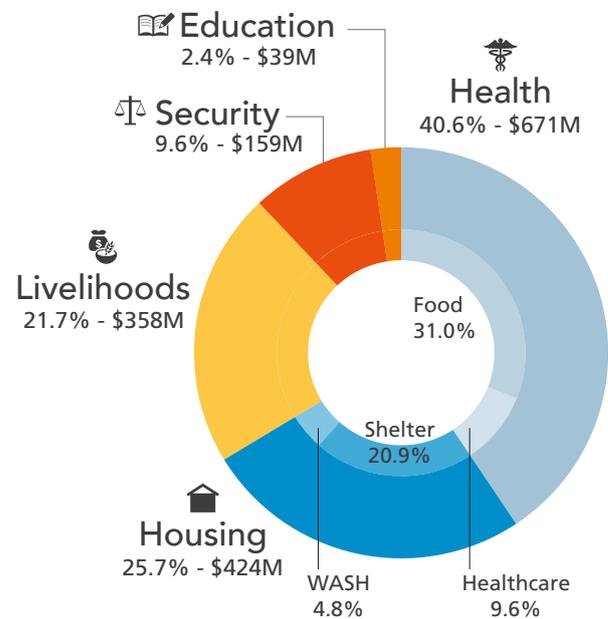
IDPs are one of the most vulnerable populations and require protection services, including psychosocial support, legal assistance, family tracing and financial or material assistance for survivors of violations.

Estimated loss of livelihood accounts for 21.7 per cent of the total. According to UNHRC, eight per cent of displaced men have public or private employment, compared to the national employment rate of 32 per cent.⁵³ Based on these values, we assume that displacement caused 75 per cent of previously working IDPs to lose their income.

The costs associated with education remain low with only 2.4 per cent of the total.

FIGURE 18: Cumulative economic impacts of internal displacement in Yemen per dimension, from March 2015 to December 2017.

TOTAL ECONOMIC IMPACT = \$1.65B



ECONOMIC IMPACTS ACROSS COUNTRIES

These case studies show that the multidimensional impacts of internal displacement can result in a significant financial burden for IDPs and their hosts, and in the case of major crises, for the entire country. Preventing internal displacement and addressing its consequences should therefore be a priority not only in crisis response plans but also in development plans.

The previous section shows examples of conflicts and disasters leading to large scale internal displacement. For each one, an estimate of costs and losses associated with internal displacement is provided, based on a common methodology. In this section, these estimates are scrutinised, to highlight differences between the impacts of the crises and identify what changes their economic impact.



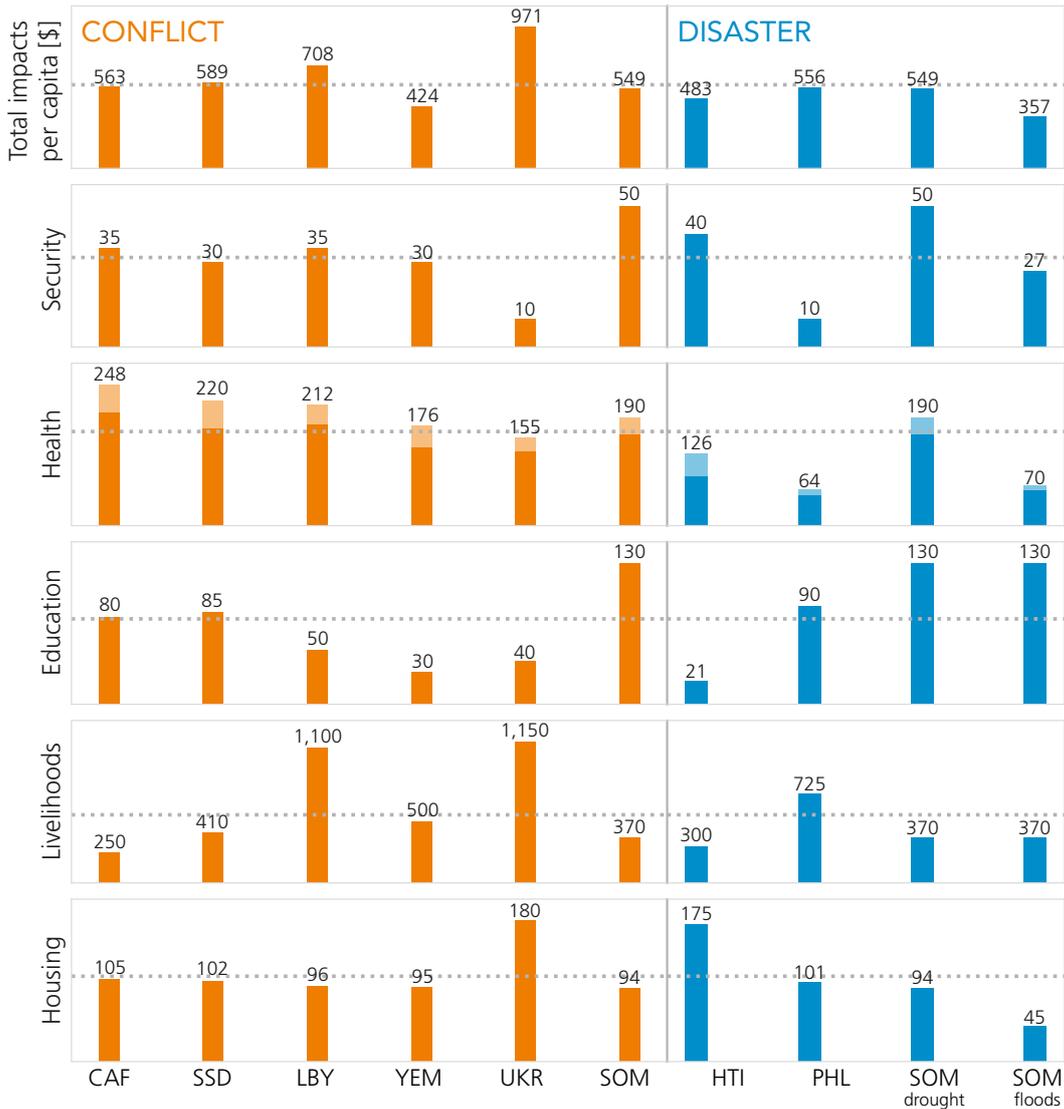
IOM staff distribute solar lamps, blankets and jerry cans in Tacloban, one month after Typhoon Haiyan struck the country.
Photo: IOM/Joe Lowry, December 2013

Figure 19 shows the average economic impact per affected person in USD, for one year of displacement, in each dimension in each of the eight countries analysed. Conflict-related crises are presented in orange and disaster-related crises in blue. The top line shows the aggregated impact per affected person across all dimensions for one year of displacement. Irrespective of the number of IDPs and the duration of displacement, this graph highlights Ukraine as the country where the highest annual impact per affected person (\$971) is found, followed by Libya (\$708). This is mainly due to loss of livelihood, as these are the two countries with by far the highest median income of the eight analysed. The total impact per affected person for all other countries is very similar and ranges from \$424 to \$589 per year of displacement.

The relative uniformity in costs per affected person across these countries could be the result of other similarities: South Sudan, the Central African Republic and Somalia are low-income countries in Sub-saharan Africa that are all affected by protracted conflicts. Yemen and Haiti are also low-income economies with GDP per affected person similar to the African states. Even so, the Philippines has a better socioeconomic situation but the cost per affected person of displacement in the context of typhoon Haiyan is nevertheless similar to other countries (\$556).

Most countries record a housing cost of around \$100 per affected person per year. Two exceptions are Ukraine and Haiti, where costs per affected person are about \$180. In Ukraine, most IDPs reside in rented

FIGURE 19: Average economic impacts per affected person for one year of displacement, in each dimension.



accommodation, and rent represents a significant amount of their monthly expenditure. In Haiti, the provision of shelters, necessitated by the destruction caused by the earthquake, is a significant financial burden. The lowest housing impacts are found in Somalia for displacement in the context of floods (\$45).

Loss of livelihood is the impact most closely connected to a country's economic situation. Income is directly linked with the national economy, with higher wages on average in higher-income countries than in low-income countries. Figure 19 uses the national median income or consumption as a proxy for the loss of livelihood for IDPs who stop or reduce their work after displacement.⁵⁴ Ukraine and Libya have the highest measure per affected person with about \$1,100 per year. All the other countries record between \$250 and \$500 per affected person per year, except the Philippines (\$725).

The annual cost per affected person of education related to internal displacement is very low in all coun-

tries, with an average value of \$80 and a standard deviation of \$40. This is in line with global findings that point to education as a largely under-funded sector in humanitarian crises, since we used humanitarian requirements to calculate this metric. Our figures likely far underestimate the economic impact of internal displacement on education, as they do not include the longer-term impacts of reduced access to education for displaced children, such as their future income, consumption, income taxes etc., nor the costs on children in host communities and communities of origin, and on the educational system in affected areas.

The average annual cost per affected person for health is \$165, with a standard deviation of \$64. Impacts of internal displacement on health are measured using two metrics to assess impacts on nutrition (in darker colour), and impacts on the provision of healthcare (in lighter colour). Nutrition costs range from \$100 to \$200 per affected person per year of displacement caused by conflict. For disaster settings, costs are lower, from \$50

FIGURE 20: Example of calculation for the cost per IDP in two theoretical cases

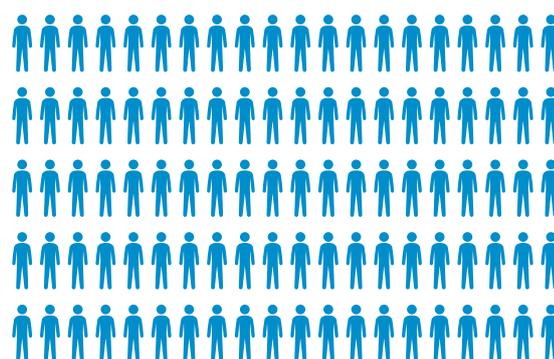
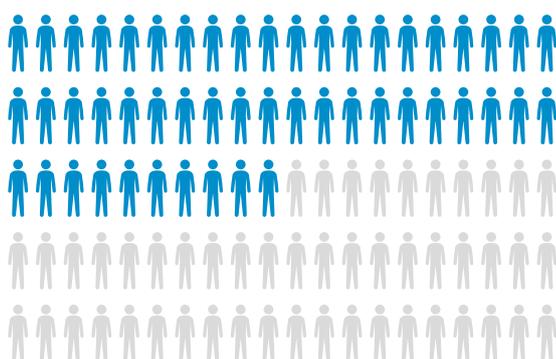
Example: Estimating the cost of internal displacement's impacts on nutrition

Food assistance = \$25 per recipient

Total number of IDPs = 100

Case 1: Half of all IDPs are affected and need food assistance

Case 2: All IDPs are affected and need food assistance



■ Affected IDPs (50) ■ Non-affected IDPs (50)

■ Affected IDPs (100)

$$\begin{aligned}
 & \$25 \times 50 \\
 & \text{affected IDPs in need of} \\
 & \text{food assistance} \\
 & = \mathbf{\$1,250}
 \end{aligned}$$

$$\begin{aligned}
 \text{Cost per IDP} &= 1,250 / 100 \\
 &= \mathbf{\$12.5}
 \end{aligned}$$

$$\begin{aligned}
 & \$25 \times 100 \\
 & \text{affected IDPs in need of} \\
 & \text{food assistance} \\
 & = \mathbf{\$2,500}
 \end{aligned}$$

$$\begin{aligned}
 \text{Cost per IDP} &= 2,500 / 100 \\
 &= \mathbf{\$25}
 \end{aligned}$$

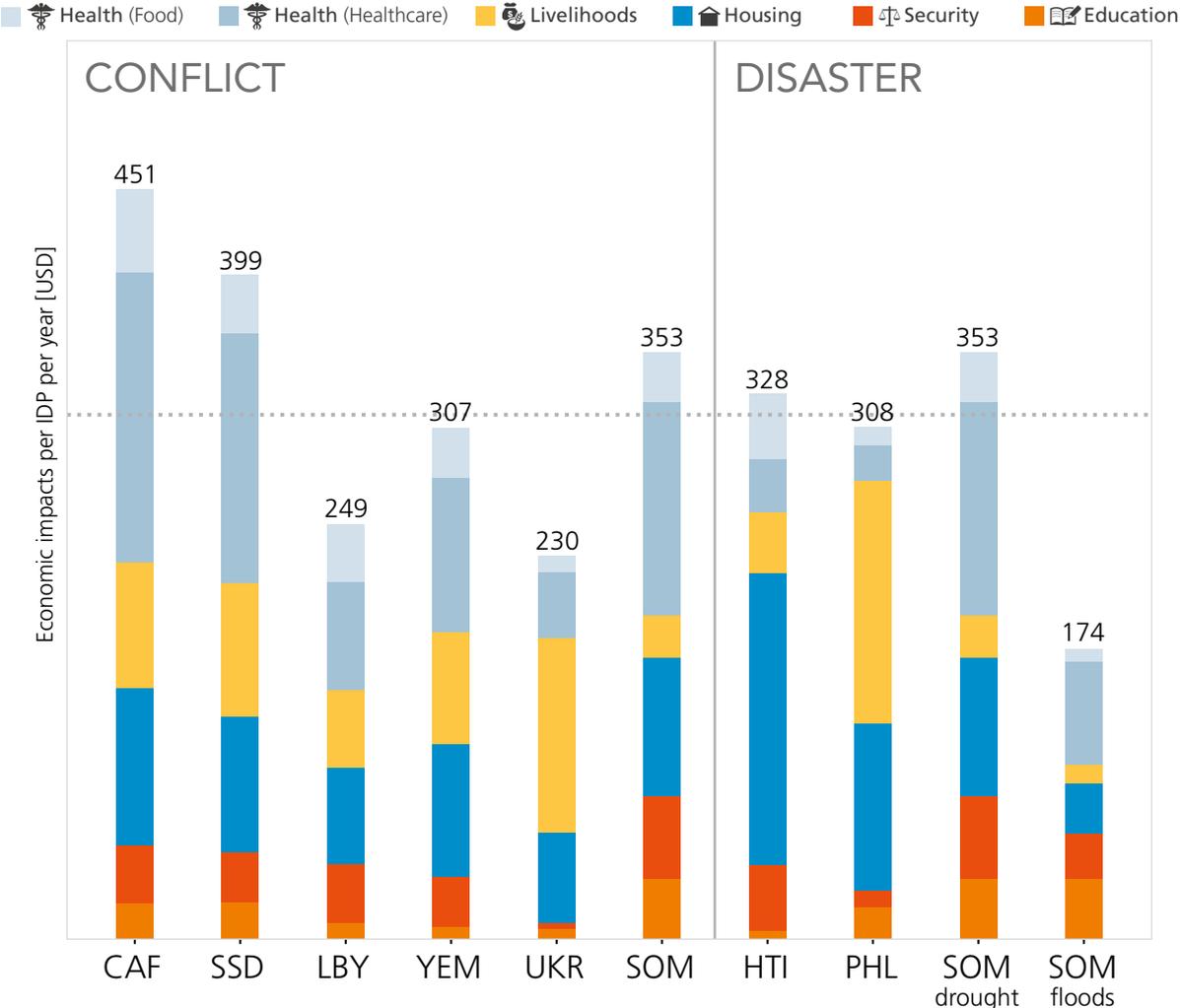
to \$160. Costs related to the provision of health services in emergency settings are consistently low, ranging from \$20 to \$50 per affected person per year of displacement. As in the case of education, this leaves out longer term impacts, such as those on physical and mental health and the costs and losses associated with them.

Costs associated with the security impacts of internal displacement range from \$20 to \$50 per affected person per year of displacement, with an average of \$31. There is no clear distinction between conflict and disaster crises in this metric. Impacts accounted for in this dimension, depending on the country context, include ensuring the safe movement of IDPs, registering them and reconstructing civil documentation, preventing violence against children and women and human rights violations. In the Central African Republic, Yemen and Haiti, specific budgets are dedicated to protection against child and gender violence.

Another layer of information is required to better compare economic impacts between different crises. This takes into account the number of IDPs impacted in each dimension. After typhoon Haiyan in the Philippines for instance, the cost of providing food assistance is estimated at \$53 per affected person. However, only 40 per cent of the IDPs required food assistance. Applied to the entire IDP population, the cost per IDP of providing food assistance therefore equals \$21. This calculation is illustrated in Figure 20.

Figure 21 includes this additional layer of information. It presents the economic impacts per IDP in each dimension. The total impacts per IDP are on average \$310. This is almost half the previous figure, giving a measure of the average fraction of displaced people that are in need of assistance, i.e. about 50 per cent. However, this fraction significantly changes country by country. For example, in Ukraine total impacts per IDP are \$230, compared with

FIGURE 21: Average economic impacts per IDP, per year, for each case study. The impacts of each dimension are stacked. The horizontal line shows the average total value across all case studies.



the estimated \$970 per affected person. This means an average of 24 per cent of IDPs are in need. This percentage is higher than 70 per cent in countries including Central African Republic, Yemen and Philippines.

Internal displacement in the context of conflict in Central African Republic led to the highest economic impacts with \$450 per IDP.

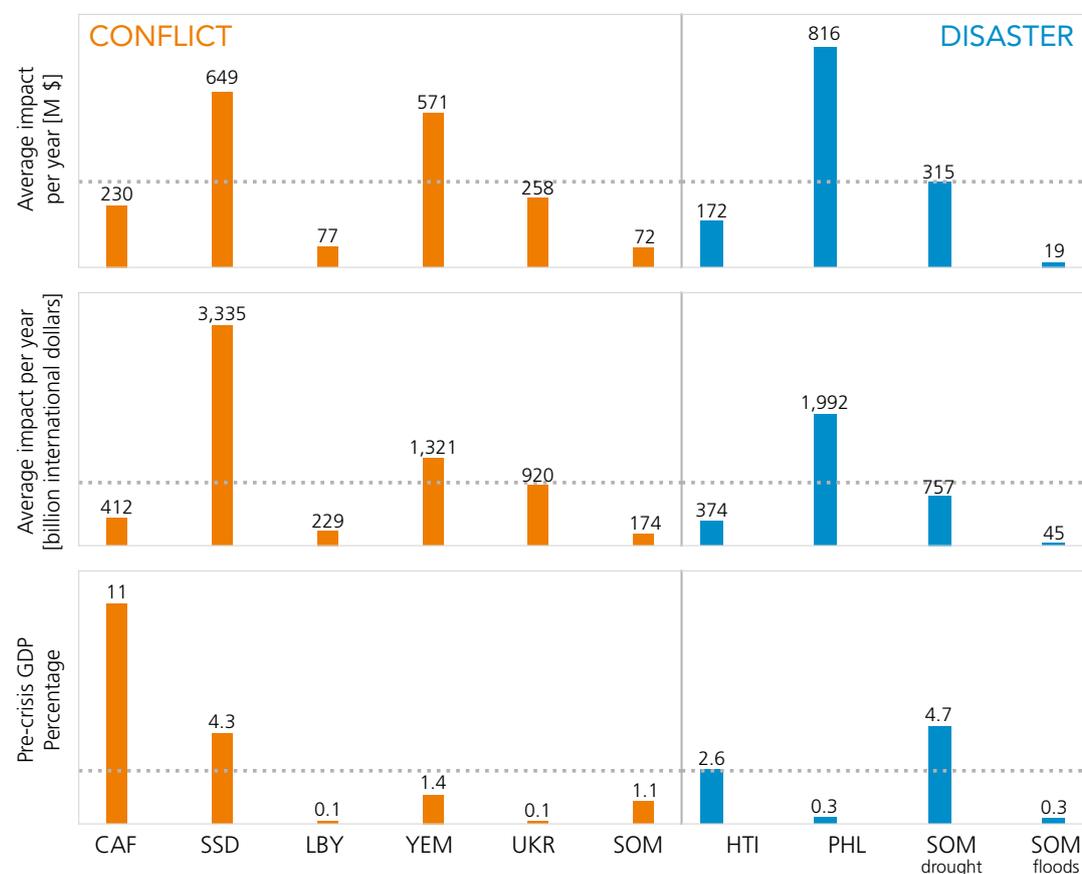
The economic impacts of internal displacement per IDP appear heavier in poor countries (Central African Republic, Haiti, South Sudan, Somalia) compared to lower-middle (Ukraine) or upper-middle income countries (Libya). This can be due because the population was already in a critical situation before the crisis and their capacity to respond to its impacts is very limited.

The total economic impact of a displacement crisis is estimated by applying annual estimates per IDP to the average number of IDPs in the associated years. Figure 22 shows the average total economic impact per year, for all IDPs in each case study.

Displacement affecting more people is expected to result in higher economic impacts, as shown in the top panel of figure 22. Typhoon Haiyan in the Philippines and conflicts in South Sudan and Yemen, which are the events with the highest number of IDPs, record the largest annual economic impacts, of \$816 million, \$650 million and \$570 million, respectively. Floods in Somalia and conflicts in Somalia and Libya displaced fewer people and have lower economic impacts, less than \$100 million per year.

The middle panel in figure 22 takes into account the cost of living and inflation in the countries of analysis by using purchasing power parity (PPP) international dollar instead of simple USD.⁵⁵ The conversion factor of USD to international dollar is around 2-3 in most cases, meaning that the real economic impact in local currency is 2-3 times larger than one obtained by simply considering the exchange rate with respect to USD. In two countries, this is larger still: South Sudan, where the PPP conversion factor is 7.1 in 2016 (but only 1.5 in 2013/14), and Ukraine with a conversion factor of 3.8 in 2016/17.

FIGURE 22: Average total economic impacts per year in USD (top panel), in PPP international dollars (middle panel) and as a percentage of pre-crisis GDP (bottom panel). Horizontal lines are the corresponding average values.



The bottom panel in figure 22 presents the average economic impacts per year as a percentage of the countries' pre-crisis GDP. It highlights the financial burden that internal displacement can represent at the national level, beyond its effects on IDPs and hosts. In the Central African Republic, it exceeds 10 per cent, while in South Sudan, Somalia (drought) and Haiti, it ranges from three to five per cent. All of these cases relate to events that affected most or all of the country. The conflict in Ukraine and typhoon Haiyan in the Philippines were more localised and the displacement impact in each is less than one per cent of pre-crisis GDP. Yet in Libya, where most of the country was affected by conflict, economic impacts also amount to less than one per cent of the country's pre-crisis GDP. This can be explained by the relatively low number of displaced people (half a million) compared to the other situations, along with

a low proportion of IDPs impacted in each dimension (30 per cent for livelihoods and nutrition, 60 per cent for housing).

Figure 23 brings together all the information available on the economic impacts associated with internal displacement, on the number of displaced people and on the duration of their displacement, to estimate the total economic impact of each crisis.

The highest economic impacts are in South Sudan, Yemen and Haiti with \$2.6 billion, \$1.7 billion and \$1.4 billion respectively. All three crises led to large scale protracted displacement.

Comparing the economic impacts of internal displacement in a dimension with the government's corresponding expenditure can help put these estimates in perspective (Figure 24). In South Sudan in 2015 for instance, the economic impacts of internal displacement on healthcare represented more than half of the government's health expenditure for the entire population. In Yemen, it was 30 per cent. In Ukraine, less than 0.5 per cent and in the Philippines, less than one per cent. In the Central African Republic, it was 170 per cent.

In Haiti in 2010, the economic impacts of internal displacement on healthcare represented 161 per cent of the government's health expenditure, but much less in subsequent years, decreasing to four per cent in 2015 (Figure 25).

FIGURE 23: Total economic impacts over years, for each case study. The horizontal line shows the average total value across all case studies.

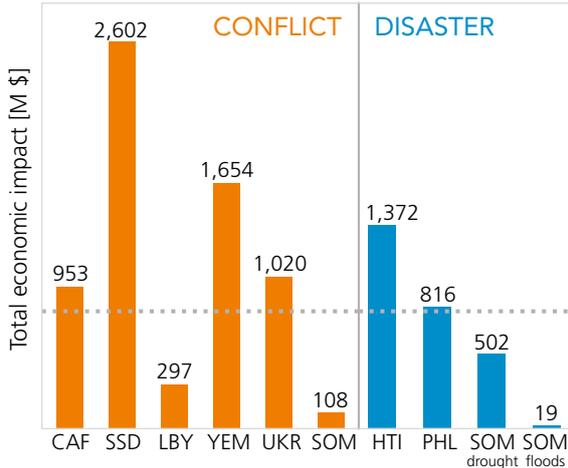


FIGURE 24: Economic impact of internal displacement on healthcare compared with domestic government health expenditure as a percentage of the country's GDP, various countries

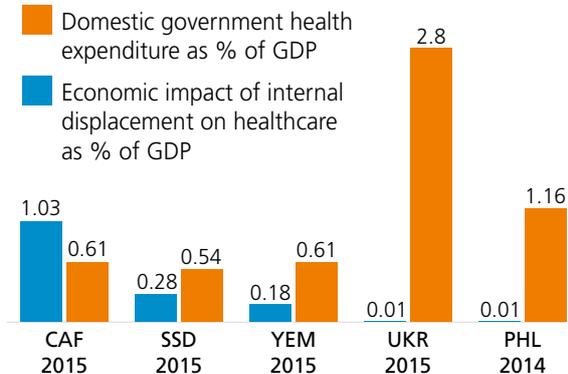


FIGURE 25: Economic impact of internal displacement on healthcare compared with domestic government health expenditure as a percentage of Haiti's GDP, 2010-2015

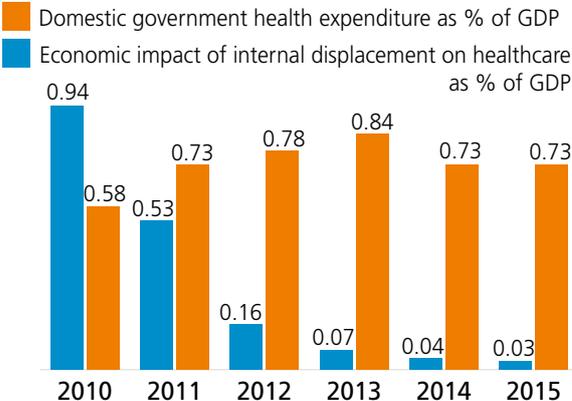


TABLE 11: Economic impacts of internal displacement compared with estimates of the cost of violence.

Country	Year	Cost of violence [million \$]	Economic impacts of internal displacement [million \$]	Economic impacts of internal displacement as a percentage of the cost of violence
CAR	2015	410	220	54 %
South Sudan	2015	3,770	600	16 %
	2017	1,840	820	45 %
Yemen	2015	9,350	300	3 %
	2017	11,000	690	6 %
Libya	2015	5,270	115	2 %
	2017	11,800	65	0.6 %
Ukraine	2015	11,900	290	2 %
	2017	31,300	280	0.9 %
Somalia (conflict)	2017	1,000	34	3 %

TABLE 12: Economic impacts of internal displacement compared with cost of asset destruction by disasters.

Country	Year	Cost of asset destruction by disasters [million \$]	Economic impacts of internal displacement [million \$]	Economic impacts of internal displacement as a percentage of cost of asset destruction
Somalia (drought)	2017	500	240	48 %
Haiti	2010	8,000	840 – 1370	11 – 17 %
Philippines	2013	9,700	800	8 %

This sort of comparison can give an indication of the financial burden internal displacement can place on governments and countries, and of the amount that should be budgeted to cope with future displacement crises.

Tables 11 and 12 compare the estimated economic impacts of internal displacement with estimates of the cost of violence by the Institute for Economics and Peace (IEP) for conflicts and of asset destruction by Munich RE (NatCatSERVICE) for disasters.⁵⁶

The economic impacts of internal displacement caused by conflict in the Central African Republic in 2015 and in South Sudan in 2017 represents respectively 54 and 45 per cent of the estimated cost of violence in these countries for the same years. For other conflict-related

crises analysed in this paper however, the economic impacts of internal displacement represent less than 10 per cent of the cost of violence estimates.

The economic impacts of internal displacement in the context of the drought in Somalia represent 48 per cent of the asset losses estimated by the NatCatSERVICE. For Haiti and the Philippines, they represent 11-17 and eight per cent respectively.

This comparison demonstrates how, in most cases, the financial burden associated with internal displacement is a significant part of the impacts of events as a whole. Therefore, preventing or reducing displacement is a critical step to minimise the negative economic impacts of future similar crises.

CONCLUSION

These estimates are a first systematic attempt to quantify the economic impacts associated with internal displacement across different crises worldwide.

They have to be considered as conservative and limited by the lack of data and the complexity of the problem. Although they uncover only a fraction of the economic impacts of internal displacement, they already amount, in several cases, to a significant share of the countries' GDP or of the governments' expenditure on health, for instance. Though more research is needed to analyse more countries and account for more impacts, this first assessment already points to the risk internal displacement represents, not only for security and human rights, but also for national development. Applying the average impact per IDP to the total number of IDPs recorded across the world as of 31st December 2017 would amount to nearly \$13 billion.

Identifying the areas in which internal displacement has the highest cost can help governments and aid providers tailor their interventions for greater efficiency. In order to

do so, better data is needed on the number of people displaced and otherwise affected, the duration of their displacement, the costs and losses associated with their displacement in different areas, the stakeholders bearing these costs and the underlying factors that influence them.

Comparisons between countries of different regions and income groups, and displacement crises associated with different drivers, are useful to identify cases where economic impacts are lower. These cases can point to potential good practice that can be investigated further, through primary data collection or qualitative research, and serve as examples for other countries.

IDMC will continue to expand and improve these estimates of economic impacts to raise awareness about the benefits of investing in preventing future displacement and responding to existing crises. With additional research, the most effective policy options in terms of cost reduction will be identified, as will the means to seize potential opportunities for development, especially in host areas.



Internally displaced people at a food distribution in Debaltseve, Ukraine. Photo: UNICEF Ukraine/Alexey Filippov, February 2015

METHODOLOGICAL ANNEX

Economic impacts of internal displacement are estimated in five dimensions: housing, livelihoods, education, health and security. They are expressed either as additional costs required to meet the needs of IDPs or as losses compared with the pre-displacement situation of IDPs.

For health, education, housing and security dimensions, our estimates are based on funds required in Humanitarian Response Plans to meet IDPs needs. In particular, we compute the cost per affected person (C_{cap}) in each metric (m) as the total budget (R_{tot}) required by humanitarian organisations to meet IDPs' needs in that metric divided by the number of targeted IDPs (N_{target}):

$$C_{cap}(m) = \frac{R_{tot}(m)}{N_{target}(m)}$$

$m = \text{Food, Health, Education, etc}^{57}$

This is computed for a specific year. For multi-year events, the value of $C_{cap}(m)$ can change every year, although significant variations are rare.

When information on specific requirements for IDPs are not available, the cost per affected person is computed based on total requirements for targeted population, including people affected, whether they are displaced or not.

For instance, in South Sudan in 2016, more than a million children were estimated to be in need of educational services. The 2016 Humanitarian Response Plan budgeted \$38 million for "Education" support targeting 440,000 children. This corresponds to \$86 per student per year. We used this value as a proxy for the economic impact of internal displacement in education, and multiplied it by the total number of IDPs of school age, between 5 and 14 years old. World Bank data indicates

that it corresponds to 26 per cent of the total population, or approximately 460,000 internally displaced children. Multiplying the number of internally displaced children of school age by the cost of providing education per affected person, we arrive at a total figure of \$40 million for the economic impact of internal displacement on education in this specific crisis, in 2016.

Let's look at more detailed estimates for each dimension. The economic impacts of internal displacement on **housing** is represented by the cost of providing shelters, temporary accommodation or other forms of housing support to IDPs. We use several metrics from Humanitarian Response Plans to account for this cost:

- | Provision of emergency/transitional shelter solutions or support (e.g., camps, collective centres, informal settlements), and of non-food items (as kitchen sets, blankets, clothes, etc.). In some countries, this can also include monetary support for rent (as in Ukraine, Libya, Yemen), or home repair and return (as in Ukraine, Philippines, Yemen).
- | Provide or improve access to safe drinking water, basic sanitation and hygiene items.
- | Camp coordination and camp management. This is applied only to IDPs living in camps or collective centres.

The economic impacts of internal displacement on **education** are represented by the cost of providing temporary education to internally displaced children living in camps or in host communities. This covers the costs of providing or restoring educational activities for displaced children in healthy and secure environments. In few cases (Central African Republic, Libya, Haiti and Yemen) psychological support for children is explicitly included. In our analysis, the cost per affected person

associated with this metric is applied only to displaced children/youth of primary and secondary school age, between five and 14 years old.

Our figures for education are largely underestimated as they result from the funds requested by humanitarian organisations in this area, which has consistently been highlighted as one of the most under-funded areas in displacement crises. In addition, they do not take into account the presumably significant impacts of barriers to education on internally displaced children's future income, consumption or income taxes, nor the effects of displacement on children left behind in communities of origin, or in host communities where classrooms may be overcrowded.

The economic impacts of internal displacement on health are represented by the cost of addressing the nutritional needs of IDPs and providing them with emergency or primary healthcare.

The former consists of the costs of providing food assistance and improving access to food security, as well as nutritional assistance for children under five years of age and pregnant or lactating women at risk of malnutrition. Data from the World Bank are used to compute the number of IDPs under five and of pregnant or lactating women.

The latter accounts for costs of providing emergency or essential primary health services to IDPs, including prevention and response to communicable diseases and immunisation coverage for children under five years of age. Emergency healthcare is typically provided by humanitarian organisations, especially in conflict situations.

The economic impacts of internal displacement on security are represented by the cost of ensuring security in camps and host areas. This includes ensuring basic protection services for IDPs with particular attention to child and gender based violence and human rights violations; protection monitoring, advocacy, and response, as well as strengthening community based mechanisms for identifying and responding to protection concerns; legal assistance and advocacy for access to services and documentation provision; psychological support and material assistance for survivors of violence.

Economic costs per affected person are then translated into total economic costs of displacement associated with an event in the following way. They are proportional to the number of IDPs and to the duration of their displacement. We can define the estimated total economic costs (*EEC*) by means of the formula:

$$EEC = \int_{\text{begin}}^{\text{end}} C_{cap}(t) * n_{IDP}(t) dt,$$

where $n_{IDP}(t)$ ⁵⁸ is the number of IDPs at a time t , measured in years. The starting and end times for each particular event are specified case by case. Here, $C_{cap}(t)$ is the sum of costs per affected person from each metric used in the analysis, $C_{cap}(t) = \sum_{m \in metrics} C_{cap}(m, t)$. Assuming $C_{cap}(t)$ to be constant at least in the scale of a year, we can write the total economic costs as the sum of the economic costs over all the years between the starting and the end time of the event in consideration:

$$EEC \cong \sum_{y \in years} C_{cap}(y) * \bar{n}_{IDP}(y),$$

$$\text{where } \bar{n}_{IDP}(y) = \int_{01/01/y}^{31/12/y} n_{IDP}(t) dt.$$

$\bar{n}_{IDP}(y)$ is the average number of IDPs at the year y .

The evolution of the number of displaced persons over time is a key information for an accurate estimate of economic impacts. The number of IDPs can change from zero to millions, or vice versa, in a single year. Because it is only partially possible to track the number of IDPs over time, we often have to use only the number of IDPs at the beginning and end of the selected time period and at the beginning of each year in between. A linear interpolation is then used to fill in the data gaps.

Our accounting of the economic impacts of internal displacement on livelihoods differs both in methodology and in data source from that of the previously discussed dimensions. In this case we estimate losses due to the inability of IDPs to continue a work activity because of their displacement. In the year y , this is computed by multiplying the average lost livelihood among IDPs (all_m) with the number of IDPs that lost their income due to displacement:

$$EL(y) = all_m(y) * \bar{n}_{IDP}(y) * f_{15+} * f_w * f_{lost},$$

where f_{15+} is the fraction of the working-age population, f_w is the fraction of the working-age population employed before the event or among non-displaced population, and f_{lost} is the fraction of IDPs that lost their income. Following the World Bank and International Labour Organization's definition, the working-age population is considered all people 15 and older. Information on f_{15+} and f_w are taken from the World Bank database, while the value of f_{lost} is obtained from the Humanitarian Response Plans or from the Displacement Tracking Matrix assessments. In a few cases, information are in term of the increment of unemployment (Δf_w) among IDPs after displacement with respect to before or with respect to the non-displaced population. This is simply related to previous quantities by $\Delta f_w = f_w * f_{lost}$.

As a proxy indicator for the average lost livelihood among IDPs, all_m , we use the national median income per capita or, in the absence of it, the annual median consumption per capita, from the PovcalNet database. In the case of Libya and Somalia, where both annual median income and consumption levels are not available, we used as proxy the average value of neighbouring countries.

In South Sudan, unemployment among IDPs increased by 34 per cent due to displacement. Considering that 58 per cent of the population is 15 or older and that, in 2016, the average number of IDPs was 1.8 million, we estimated that approximately 350,000 IDPs lost their income because of displacement. The annual median consumption per capita being \$410 in South Sudan, we estimated the total losses in livelihood for that year at \$144 million.

Our figures for this dimension are limited by lack of knowledge on the actual loss of income linked with internal displacement, particularly in countries where very little information is available. Another limitation is that loss of income can be caused by other factors, such as the destruction of production facilities by conflict or disasters. Lastly, accounting only for lost income does not include other economic impacts of internal displacement on livelihoods, such as loss of savings or other assets that may have been left behind in the area of origin.

It is important to stress that the data we use to assess economic costs and losses sometimes apply to all affected people, including IDPs and their hosts. For lack

of better information, we assume that these costs and losses are distributed evenly between IDPs and hosts.

Another limitation is the distinction between costs and losses associated with internal displacement and those associated with the event itself, such as destruction caused by a natural hazard. People displaced by typhoon Hayan in the Philippines were unable to work for months, but it is impossible to say whether they were unable to work because they had to move away from their workplace as their house was inhabitable, or because the workplaces or fields themselves were destroyed.

NOTES

1. IDMC. [The Ripple Effect: economic impacts of internal displacement. Conceptual Framework](#). 2018.
2. IDMC. [The Ripple Effect: economic impacts of internal displacement. Conceptual Framework](#). 2018.
3. UNHRC data are used only for Ukraine. For the other conflicts, OCHA information are considered to complement IDMC data.
4. DTM database is our typical reference for displacement associated with disasters except for the typhoon Haiyan in Philippines. In fact, for this event, DTM reports data of displaced population only in collective sites.
5. IDMC. [Country profile: Central African Republic](#). 2018.
6. OCHA. [République centrafricaine: Plan de réponse humanitaire Janvier - Décembre 2016 \(mars 2016\)](#). 2016; OCHA. [République centrafricaine: Plan de réponse humanitaire 2017- 2019 \(Nov 2016\)](#). 2016.
7. OCHA. [Aperçu des besoins humanitaires 2017](#). 2016.
8. IOM. [Enquête sur les intentions de retour des personnes déplacées internes à Bangui et à Boda en République Centrafricaine, Bangui](#). Septembre 2015.
9. DTM reports. [IDP return intention survey in Bangui](#). April 2014; DTM reports. [République Centrafricaine - Enquête sur les intentions de retour \(Mars 2016\)](#). 2016
10. IDMC. [Country profile: Haiti](#). 2018.
11. OCHA. [Haiti Humanitarian Needs Overview 2017](#). 2017.
12. DTM. [Haiti Earthquake](#). 2018.
13. OCHA. [Consolidated Appeal for Haiti 2011](#). 2011.
14. OCHA. [Haiti Humanitarian Action Plan 2013](#). 2013.
15. OCHA. [Haiti: Humanitarian Appeal Mid-Year Review, June 2010](#). 2010; OCHA. [Consolidated Appeal for Haiti 2011](#). 2011; OCHA. [Haiti: Appel global 2012](#). 2012; OCHA. [Haiti Humanitarian Action Plan 2013](#). 2013.
16. OCHA. [Consolidated Appeal for Haiti 2011](#). 2011.
17. OCHA. [Haiti Humanitarian Action Plan 2013](#). 2013.
18. OCHA. [2016 Libya Humanitarian Response Plan](#). 2015; OCHA. [Libya: 2017 Humanitarian Response Plan \(January - December 2017\)](#). 2016; OCHA. [Libya Humanitarian Response Plan 2018](#). 2018
19. OCHA. [Libya Humanitarian Needs Overview 2018](#). 2018.
20. Because Libya's median values are unavailable, we used the average median consumption from surrounding countries.
21. DTM. [Libya — IDP and Returnee Report 8](#). 2017; OCHA. [Libya Humanitarian Needs Overview 2018](#). 2018.
22. Government of the Philippine's Disaster Response Operations Monitoring and Information Center (DROMIC)
23. IDMC. [The evolving picture of displacement in the wake of Typhoon Haiyan: An evidence-based overview](#). 2014.
24. OCHA. [Typhoon Haiyan \(Yolanda\) Consolidated Cluster Briefs 11 Apr 2014](#). 2014.
25. OCHA. [Typhoon Haiyan \(Yolanda\) Consolidated Cluster Briefs 11 Apr 2014](#). 2014.
26. IDMC. [Country profile: Somalia](#). 2018.
27. IDMC. [Country profile: Somalia](#). 2018
28. UNHCR PRMN. [Somalia internal displacements dashboard 30 September 2017](#). 2017; UNHCR. [Somalia Factsheet - 1 - 31 August 2018](#). 2018.
29. UNHCR. [Somalia Factsheet - 1 - 31 August 2018](#). 2018.
30. OCHA. [2018 Somalia Humanitarian Needs Overview](#). 2018.
31. OCHA. [2018 Somalia Humanitarian Needs Overview](#). 2018.
32. OCHA. [2017 Somalia Humanitarian Needs Overview](#). 2018.
33. Because Somalia's median values are unavailable, we used the average median consumption from surrounding countries.
34. Because Somalia's median values are unavailable, we used the average median consumption from surrounding countries.
35. IDMC. [Country profile: South Sudan](#). 2018.
36. OCHA. [South Sudan: 2018 Humanitarian Response Plan \(HRP\) January - December 2018, December 2017](#). 2017.
37. OCHA. [South Sudan Humanitarian Response Plan 2015](#). 2015.
38. IDMC. [Country profile: Ukraine](#). 2018.
39. DTM. [Ukraine — National Monitoring System: The Situation of IDPs, Cumulative Report](#). June 2017.
40. OCHA. [Ukraine 2017 Humanitarian Needs Overview](#). 2017
41. OCHA. [Ukraine 2015 Humanitarian Response Plan \(Revised\)](#). 2015; OCHA. [Ukraine: 2016 Humanitarian Response Plan \(January-December 2016\)](#). 2016; OCHA. [Ukraine: 2017 Humanitarian Response Plan \(January-December 2017\)](#). 2017; OCHA. [Ukraine: 2018 Humanitarian Response Plan \(January-December 2018\)](#). 2017.
42. OCHA. [Ukraine: 2017 Humanitarian Response Plan \(January-December 2017\)](#). 2017.
43. OCHA. [Ukraine 2016 Humanitarian Needs Overview](#). 2016.
44. OCHA. [Ukraine: 2016 Humanitarian Response Plan \(January-December 2016\)](#). 2016; OCHA. [Ukraine: 2017 Humanitarian Response Plan \(January-December 2017\)](#). 2017.
45. DTM. [Ukraine — National Monitoring System: The Situation of IDPs](#). May 2016.
46. Al Jazeera. [Yemen could be 'worst' humanitarian crisis in 50 years](#). 2018.
47. OCHA. [Yemen: 2017 Humanitarian Needs Overview](#). 2017.
48. IOM/UNHCR. [Yemen - Multi-Cluster Needs Assessment of IDPs, Returnees and Host Communities](#). 2017.
49. OCHA. [Revised 2016 Yemen Humanitarian Response Plan](#). 2016; OCHA. [Yemen: Humanitarian Response Plan 2017 Revision](#). 2017; OCHA. [Yemen: Humanitarian Response Plan January-December 2018](#). 2018.
50. IOM/UNHCR. [Yemen - Multi-Cluster Needs Assessment of IDPs, Returnees and Host Communities](#). 2017; OCHA. [Yemen: 2017 Humanitarian Needs Overview](#). 2017; OCHA. [Period Monitoring Review – Yemen](#). 2017
51. OCHA. [Period Monitoring Review – Yemen](#). 2017
52. OCHA. [Yemen: 2017 Humanitarian Needs Overview](#). 2017.
53. UNHCR. [Multi-Cluster Needs Assessment - Yemen, Feb 2017](#). 2017.
54. Median income is used for Central African Republic, South Sudan, Philippines, Haiti. Median consumption is used for Ukraine, Yemen, where median income is not available. For Libya and Somalia, where no information about median income or consumption are available, we use as proxy the average from neighbouring countries. See the Methodological Annex for more details.
55. The international dollar provides a way to compare prices and currency values between countries. It is defined as the currency unit that would buy in a country a comparable amount of goods and services a U.S. dollar would buy in the United States.
56. [Institute for Economics and Peace \(IEP\)](#). IEP estimates the direct and indirect cost of violence at country level as the expenditure and economic effect related to "containing, preventing and dealing with the consequences of violence." They include 17 variables across three categories: security services and prevention; armed conflict; interpersonal violence. Internal displacement is taken into account as a direct cost estimated as UNHCR's annual expenditure and indirect cost estimated in terms of lost production and consumption; Munich RE. [NatCatSERVICE](#). The NatCatSERVICE focuses on natural catastrophes and losses related to damages to infrastructures and buildings, as well as injuries and casualties. The NatCatSERVICE estimates are partial estimates of direct economic impacts of disasters.
57. Typical metrics considered in Humanitarian Response Plans are: Education, Food Security, Nutrition, Health, Protection, Shelter/NFIs, Water Sanitation and Hygiene (WASH), Camp Coordination and Camp Management (CCCM).
58. Number of IDPs, $n_{IDP}(t)$, is assumed to be zero outside the time period considered for our cost estimates.



The Internal Displacement Monitoring Centre (IDMC) is the leading source of information and analysis on internal displacement worldwide. Since 1998, our role has been recognised and endorsed by United Nations General Assembly resolutions. IDMC is part of the Norwegian Refugee Council (NRC), an independent, non-governmental humanitarian organisation.

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