

Case studies for the nutritional management of non-breastfed infants in emergencies



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Acknowledgements

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Glossary

Breastmilk substitutes (BMS)	Any food being marketed or otherwise represented as a partial or total replacement for breastmilk, whether or not it is suitable for that purpose. BMS include formula milk marketed for feeding infants and young children up to 3 years of age (including follow-up formula and growing-up milks) and complementary foods for young children aged 6–23 months and may also include modified or unmodified milk or milk substitutes.
Infant formula	A milk or milk-like product of animal or vegetable origin that is industrially formulated in accordance with national standards or the Codex Alimentarius Standard for Infant Formula, which is intended to satisfy the nutritional requirements of infants during their first six months of life. Only products that conform to the Standard for Infant Formula CC 72-1981 or national food standards should be considered suitable for breastmilk substitutes.
BMS-dependent	An infant and young child who relies on breastmilk substitutes as either a full or partial substitute for breastmilk.
Non-breastfed	An infant or child who does not receive any breastmilk.
To wet-nurse (verb)	When an infant is breastfed by a woman who is not the infant's biological mother.
Wet-nurse (noun)	A woman who breastfeeds an infant who is not her biological child.
Mixed feeding	Feeding breastmilk to an infant younger than 6 months of age along with other liquids and/or foods (i.e., the child is not exclusively breastfed).
Powdered infant formula	An infant formula product that needs to be reconstituted with safe water before feeding.
Ready-to-use infant formula (RUIF)	A type of infant formula product that is packaged as a ready-to-feed liquid and does not need to be reconstituted with water.
Relactation	The resumption of breastmilk production (lactation) in a woman who has stopped lactating recently or in the past. Relactation may be initiated in order to breastfeed one's own infant or another infant, even without a further pregnancy. Inducted lactation is the stimulation of breastmilk production in a woman who has not previously lactated.



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Executive summary

Background: Breastfeeding is the safest way to feed an infant, including during an emergency. The benefits of breastfeeding for children, mothers, and society are widespread. Breastfeeding protects infants against life-threatening infections, supports healthy brain development in children, and prevents chronic childhood and maternal illness, reducing health care costs. In emergencies, breastfeeding can make the difference between life and death for babies. When an infant is not fed by his or her mother, global guidelines¹ recommend that emergency response programmes explore, in priority order, the viability of relactation, wet-nursing and donor human milk, informed by cultural context, current acceptability to mothers and service availability of the intervention. If these options are not acceptable to mothers or caregivers or feasible to deliver, programmes must enable access to a sustainable supply of appropriate breastmilk substitutes (BMS), accompanied by an essential support package to ensure safe use.

UNICEF is committed to supporting recommended breastfeeding practices from birth to age 2 years and beyond in all contexts, including during humanitarian crises, as highlighted in the [UNICEF Nutrition Strategy 2020–2030](#). The protection, promotion, and support of breastfeeding is central to all humanitarian programmes.

However, there are circumstances in which infants are not breastfed or do not have access to breastmilk.² Non-breastfed infants are highly vulnerable and require urgent and targeted support, given their increased risk of morbidity and mortality. Evidence shows that not being breastfed is associated with increased infectious morbidity and elevated risks of childhood obesity, type 1 and type 2 diabetes, leukaemia, and sudden infant death syndrome.³

Fully formula-fed infants are three to five times more likely to be hospitalized with infections compared to fully breastfed infants.⁴ BMS-dependent infants are,

therefore, highly vulnerable in emergency settings and face an increased risk of malnutrition and illness. When BMS are provided as part of an emergency response, the priority must be to mitigate risks and provide contextualized care and support to protect the nutrition and health of vulnerable infants.

In 2021, UNICEF updated its guidance on the **Procurement and Use of Breastmilk Substitutes in Humanitarian Settings**. The guidance confirms that where BMS procurement is warranted in humanitarian settings, UNICEF can procure BMS whether or not the nutrition cluster has been activated as part of an overall humanitarian response that supports optimal infant and young child feeding (IYCF). This approach aligns with the UNICEF Core Commitments for Children in Humanitarian Action⁵ and highlights the agency's crucial role in supporting emergency preparedness and response efforts for all infants. The decision to procure, use or distribute BMS in a humanitarian emergency must be made by informed technical personnel from the Ministry of Health as the sector lead agency and, where possible, in consultation with nutrition staff from UNICEF as cluster lead agency in nutrition. It must also be governed by strict criteria. When resources are limited, infants under 6 months of age should be prioritized for support. Procurement must be carried out in accordance with global UNICEF guidelines. UNICEF country teams that are considering the procurement and distribution of BMS need to seek agreement from UNICEF headquarters (HQ) in New York (Child Nutrition and Development Programme, Programme Group) and Copenhagen (Medicines and Nutrition Centre, Supply Division). UNICEF position on donations of BMS remains the same as is articulated in the Code of International Marketing and Promotion of BMS: BMS donations are not sought or accepted and follow-up formulas or toddler formula, bottles and teats are not procured.

Following the release of the updated guidance in 2021, UNICEF provided a number of targeted webinars to UNICEF staff and nutrition cluster partners involved in programming on IYCF in emergencies to disseminate the core recommendations. One year on from the release UNICEF then commissioned compendium of case studies from a select number of countries that have applied the new guidelines to document learning – **Haiti, Lebanon, Myanmar, the Sudan, Ukraine and Uganda**. An additional example of good practice in a country-led response to support the needs of non-breastfed infants in an emergency setting using milk banks is included from **the Islamic Republic of Iran**.

Well-designed programmes that safely provide BMS are crucial to protecting the health and nutrition of non-breastfed infants. Yet, the availability of documented good practice examples has been limited. These case studies aim to fill this gap by illustrating real time examples on the appropriate provision of BMS to support the nutritional needs of BMS-dependent infants.

The **key messages** from the case studies are as follows:

Preparedness:

- 1.** The core principles of optimal infant feeding are the protection, promotion and support of breastfeeding in all contexts including in emergencies.
- 2.** However, it is recognized that some infants may not be able to access breastmilk for a variety of reasons and thus require BMS and an essential package of support to meet their nutritional need, therefore the needs of these infants should be considered in any emergency preparedness plans.
- 3.** The updated BMS procurement guideline defines UNICEF as a provider of first resort in humanitarian contexts, and provides the criteria and process for timely and safe procurement and distribution.
- 4.** Effective preparedness means keeping governments more at the center of that decision- so they can combine a range of strategies to meet the needs of non-breastfed infants, including establishing ways of monitoring unsolicited donations. It also ensures that a rapid response team is trained and ready to respond and implement programs to manage non-breastfed infants in emergencies.
- 5.** While programmes need to care for the needs of non-breastfed infants, support through pregnancy care, post-partum, and at community level to strengthen infant feeding along with Mental Health and Psychosocial Support should continue as part of the package of care.

Coordination:

1. UNICEF's cluster or sector lead role, which includes convening Government and implementing partners, is key to the success of IYCF in emergency preparedness and response programming.
2. A key part of that role is centralising the approval process and procurement of BMS in emergencies. This centralized process facilitates the safe and appropriate procurement of BMS – primarily, ready-to-use infant formula (RUIF) – from trusted suppliers to mitigate the risks associated with artificial feeding.
3. UNICEF offices who need to procure BMS on behalf of government or as part of an emergency request must follow the standard operating procedures and request approval for the procurement of BMS directly from the UNICEF HQ as part of the due diligence process.

Advocacy and communications:

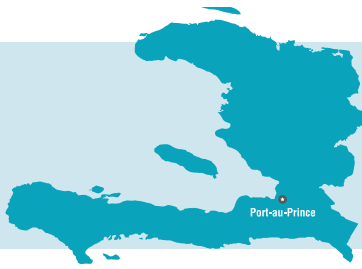
1. The development of communications and advocacy materials, such as joint statements (e.g., a call to uphold, promote, protect and support infant feeding in emergencies), is important at the onset of an emergency, highlighting relevant policies and clarifying the Government's position on donations and distributions of BMS.
2. UNICEF's updated BMS procurement guidance provides for timely assessments. This has helped establish the importance of identifying infants in need of BMS, before a decision is made to procure BMS. Within the context of the updated guidance, UNICEF has and continues to work closely with partners and ministries of health to support programmes that include risk reduction, to mitigate any unintended spillover effects of the BMS procured outside of its intended use.

Capacity development:

1. A key learning is the need to develop the capacity of health and nutrition workers and front-line service providers to safely deliver IYCF programmes including the use of BMS in emergency contexts including ensuring familiarity with the IFE operational guidance and the updated procurement guidance.
2. Specific interventions such as relactation require highly skilled breastfeeding and psychosocial support by qualified health and nutrition providers and this needs to be sustained at community level.

Supply chain:

1. Opportunities to identify efficiencies in the procurement of BMS should be explored by UNICEF especially to ensure the timely availability of the product. This can include prioritizing infant formula orders over other less essential items, as well as identifying additional suppliers across different regions.
2. To ensure the availability of BMS in a timely manner, particularly in countries where access to potable water is freely available, it may be useful to explore: regional and/or local procurement of an approved Powdered Infant Formula (PIF) as an interim measure once approval is received from Programme Group and Supply Division at UNICEF HQ. This can be used until supplies of Ready to Use Infant Formula (RUIF) are availed.
3. The management of non-breastfed infants in emergencies remains a challenge. Nutrition programmes struggle to control and limit the flood of unsolicited and untargeted BMS donations and distributions that arrive after a disaster. This can undermine measures to protect BMS supplies from being distributed outside their intended use. Therefore measures to identify and manage unsolicited donations must be put in place prior to an emergency as part of preparedness measures.



Haiti



Background

In August 2021, Haiti was hit by a magnitude 7.2 earthquake, which killed more than 2,200 people and left an estimated 650,000 people in need of humanitarian assistance. In the wake of this disaster, the Government of Haiti and its humanitarian partners intensified their efforts to help people in humanitarian need.

Key indicators

According to the [Haiti Demographic Health Survey \(DHS\) of 2016–2017](#), before the earthquake:

- 40 per cent of infants under 6 months of age were exclusively breastfed.
- 15 per cent of infants aged 4–5 months were exclusively breastfed.
- 25 per cent of infants under 6 months were bottle-fed.
- 25 per cent of young children aged 6–23 months were receiving a diet that met the minimum dietary diversity (i.e., meals from at least four food groups).
- 11 per cent of children aged 6–23 months were receiving a minimum acceptable diet.

Non-breastfed infants were left at particularly high risk after the earthquake, given the compromised water supply systems. Many infants and young children also lost their parents or were separated from their mothers. These children were at particularly high risk of malnutrition and death.

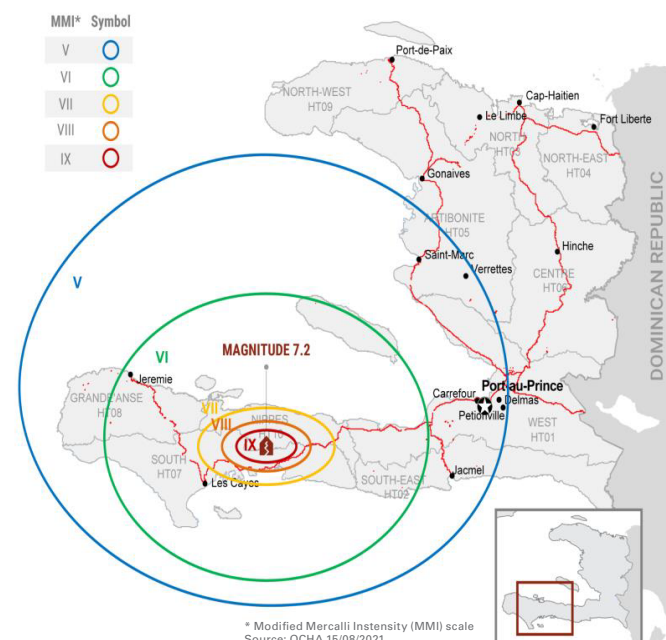
Management of non-breastfed infants in Haiti

In the week following the earthquake, the Haitian Government requested UNICEF to procure on their behalf RUIF for infants who had been orphaned or separated from their parents by the earthquake. The decision to select RUIF was based on a risk analysis of the context and was defined in a joint statement, which also noted that when possible, relactation by the mother was the first choice. Powdered infant

formula (PIF) and donor human milk were excluded owing to the unhygienic environment and lack of a cold chain to support storage and distribution.

In addition, donor human milk and wet-nursing are not culturally accepted in Haiti given traditional beliefs about emotions transmitted through breastmilk and the concerns as to the risk of transmission of HIV given the lack of knowledge of status.

Based on the steps delineated in the [UNICEF Guidance on the Procurement and Use of Breastmilk Substitutes in Humanitarian Settings – Version 2.0](#), and with guidance from the UNICEF Regional Office for Latin America and the Caribbean and UNICEF HQ, the UNICEF Haiti Country Office sent a formal letter of request to HQ requesting RUIF for 10 per cent of non-breastfed infants in affected areas and for infants over 6 months of age. UNICEF HQ recommended to procure a smaller volume than requested initially and then to scale up requests once systems were established for safe delivery and utilisation. UNICEF HQ also advised on the need to



conduct a rapid assessment on infant feeding practices to support the estimation of the number of infants in need of BMS.

The initial rapid assessment was delayed until September 2021 owing to insecurity, lack of trained and available personnel, and the desire of the Government and partners to prepare for a comprehensive assessment. In the interim, based on secondary data review, a revised request letter was submitted with a reduced target of 190 infants, an estimated 1 per cent of the 0–6-month-old population ([Haiti Annexes](#), Annex 1). In addition to the procurement of RUIF (provided in 200ml tetra packs) for infants aged 0–6 months), feeding cups⁶ were purchased. The shipment was made by air, which was expensive but necessary to reduce transit time given local markets were unable to supply.

With the support of the Regional Office and the Global Nutrition Cluster (GNC) Technical Alliance, UNICEF drafted a response plan⁷ and an analysis of needs ([Haiti Annexes](#), Annex 2). The costed response plan contained actions to prevent malnutrition and death in children under 5 by strengthening the recommended IYCF practices, supporting non-breastfed infants, and managing unsolicited donations of BMS.

An interagency joint statement, issued after the earthquake, stated that donations of BMS should not be solicited or accepted ([Haiti Annexes](#), Annex 5). It reinforced the need to protect infant feeding practices and provide targeted and skilled support for non-breastfed infants.

The IYCF in Emergencies (IYCF-E) Technical Working Group, established post-earthquake, discussed a number of sector-level implementation questions, such as how to organize the distribution of BMS, who would support the effort, and which sections of the Government would be involved. In addition, the GNC Technical Alliance and the Infant Feeding in Emergencies (IFE) Core Group conducted a review of lessons learned from the previous 2010 earthquake response ([Haiti Annexes](#), Annex 3), stemming from a request made by the UNICEF Haiti Country Office to the GNC Alliance Help Desk.

A module on the management of RUIF was developed in December 2021, which specified that all infants under 6 months of age who were non-breastfed owing to the earthquake were eligible to receive artificial feeding support ([Haiti Annexes](#), Annex 4).

UNICEF and partners were guided by an existing national guideline developed in Haiti in 2010, which covers supporting breastfeeding mothers, sensitization on IYCF-E practices and water, sanitation and hygiene (WASH) services and many others. Mother and baby spaces, known as “point conseil nutrition pour bébé” (PCNBs, or Baby Nutrition Counselling Points), were implemented by the Ministry of Health, with technical support from four non-governmental organizations (NGOs).

NGOs involved in implementing the PCNBs were also invited to attend a three-day online IYCF-E orientation session organized by the Nutrition and Food Programme Coordination Unit⁸ a department of the Ministry of

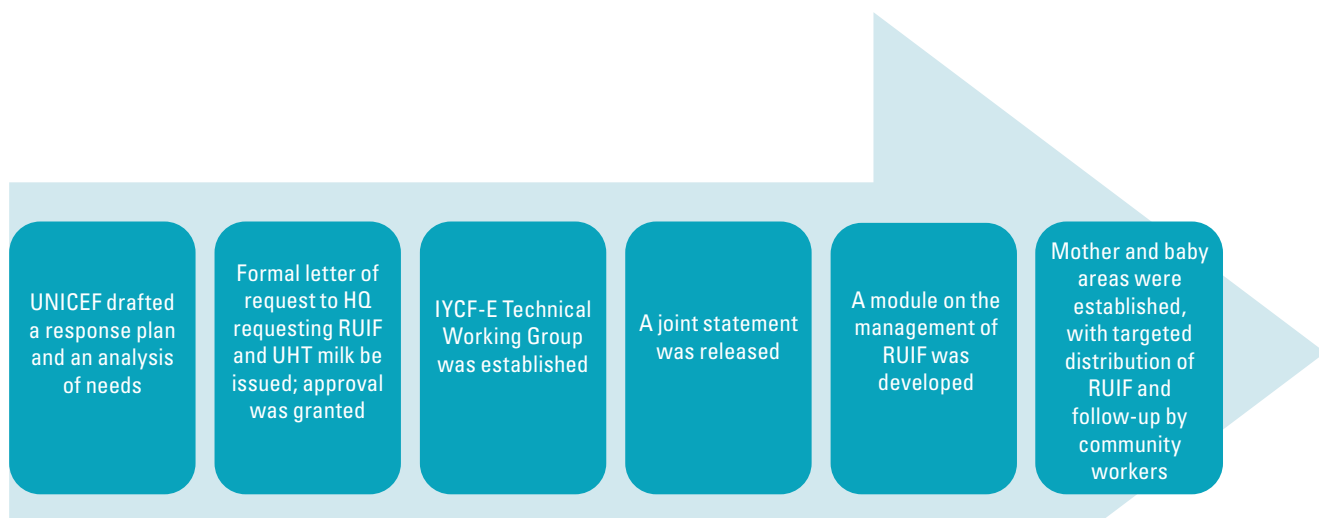


Figure 1. Activity flow chart in Haiti.



Sofia feeds her five-month-old daughter a cup of ready-to-use infant formula, in a baby-friendly tent set up in the Champs-de-Mars Plaza in Port-au-Prince, the capital. © UNICEF/UNI79193/Noorani

Health, with the technical support of the GNC Technical Alliance. After the IYCF-E orientation, in November and December 2021, three cascade trainings on the management of non-breastfed infants were organized for front-line workers in the three affected departments. The first PCNB was implemented in March 2022, including discreet and targeted distribution of RUIF to avoid undermining ongoing breastfeeding efforts as part of a comprehensive IYCF-E package.

The flooding after the earthquake exacerbated a poor hygiene and sanitation situation, where 63 per cent⁹ of the population lacked access to basic sanitation before the earthquake. To ensure that hygiene and handwashing practices were promoted in the context of the delivery of RUIF, the health workers in the mother and baby areas delivered targeted messages. Messages included handwashing with soap at critical times: before feeding RUIF to a child, before cooking, after using the toilet and after cleaning a child. Healthworkers also gave handwashing demonstrations to mothers receiving RUIF. Handwashing stations equipped with soap and water were also installed in the mother and

baby areas to demonstrate appropriate handwashing practices further. Community health workers also promoted handwashing with soap and water during their weekly follow-ups on the acceptable use of RUIF, and to strengthen and promote hygiene practices at the household level.

The PCNBs were implemented at the community level and maintained a close link with the existing health facilities for the referral of children screened for wasting.

Table 1. Use of infant formula post-earthquake – year 2022

Area	Quantities delivered (boxes of 24 bottles/200 ml)	Number of infants aged 0–6 months reached with RUIF
Sud	458	79
Grand’Anse	285	33
Nippes	207	61
Total	950	173

Before targeted distributions commenced, the UNICEF Haiti Country Office, with support from the IYCF-E specialist, developed a generic BMS label in French and Haitian Creole. The label was part of the training package and guidance developed nationally.

The management of RUIF was overseen by the government nutrition focal points, who ensured distribution at PCNBs based on their requisition. Caregivers of RUIF beneficiaries received a weekly amount after attending a group session in the PCNBs on how to use it. Community health workers provided follow-up home visits to assist families with proper use.

Key achievements

- 1. Early Response:** UNICEF country, regional and HQ offices worked collaboratively with the Government during the planning process, with partners involved early on. This allowed for the drafting of a clear nutrition plan one week after the disaster and a joint statement two weeks afterwards, with key messages diffused across inter-cluster partners while awaiting the Government's approbation and signature.
- 2. BMS procurement:** UNICEF served as the BMS provider of first resort, resulting in several advantages:
 - Provide quality assurance on BMS suppliers.
 - Proactive estimation of the need for RUIF, in the absence of rapid needs assessment data. Ordering a smaller amount of RUIF initially prevented the acquisition of RUIF, which would expire before it could be distributed.
 - UNICEF coordinated BMS supply management, ensuring that BMS was distributed only to infants whose need had been established by individual assessment.
 - Implementing partners oversaw BMS storage in their offices for two out of the three departments (because Government facilities had no space, and storage conditions were unsafe), thus reducing risk of spillage outside of intended use.
- 3. Trainings:**
 - A comprehensive, five-day, face-to-face IYCF-E training of trainers was organized at the national level, although expensive compared with sub-national training modalities.
 - A training using an existing national guideline successfully educated health workers and enabled them to identify infants, mothers and caregivers who needed support. A training using NGO

implementing partners provided front-line workers with an integrated and comprehensive support package.

- The effort of all actors to develop appropriate guidelines and strengthen capacities contributed to the programme's success.

4. Targeted distribution of BMS:

- A careful system of targeted distribution was developed for RUIF, relying heavily on community health workers' support, which allowed an effective distribution platform for BMS.¹⁰
- The GNC Alliance's support was key and included timely remote and on-site support, the development of a monitoring system and related field visits for quality assurance.

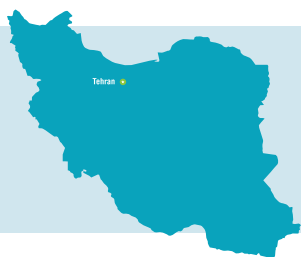
Challenges

1. Despite the best efforts of Government, UNICEF and implementing partners, targeted RUIF distribution was delayed, owing to constraints in shipment and delivery of RUIF in country.
2. The security situation in Port-au-Prince also contributed to delays in holding IYCF-E training at the national level. This ultimately led to the need to hold residential training in a location outside of Port-au-Prince, which was much more expensive.
3. Although some institutional capacity remained after the implementation of mother and baby spaces after the earlier crises (the 2010 earthquake and the 2016 cyclone), the programme for the management of non-breastfed infants had not been sustained. There was a need to re-establish the programme, including capacity-building of personnel. However this also provided an opportunity as the guidelines and data management tools developed during the previous IYCF-E responses were found, updated and used for the current response.
4. Limited resources resulted in shorter programme cooperation agreements between UNICEF and partners, which constrained the continuity of the programme beyond a few months.
5. The question of how to address feeding infants and young children aged 6–24 months was discussed but not resolved because of limited financial resources to buy UHT milk internationally and lack of availability locally.
6. There were delays in developing and collectively endorsing a BMS guidance for training.
7. The national information system did not include information on numbers or proportions of breastfed

and non-breastfed infants. A database was therefore set up as the crisis unfolded, with information collected through implementing partners.

Lessons learned

- 1.** Ongoing efforts will be needed to incorporate the management of the non-breastfed infant within the IYCF programme before an emergency, including refining a system to monitor and assess the needs. This allows nutrition partners in country to simply expand an already existing programme in case of a crisis. If this programme is mainstreamed, then a small stock of RUIF should always be available.
- 2.** To aid in the procurement of RUIF, as a preparedness measure, an increased number of suppliers across different regions need to be identified by UNICEF Supply Division to provide supplies in a timely manner.
- 3.** Conducting a rapid assessment of IYCF-E within the first two weeks after the emergency is a strategy that should also be used in future emergencies. IYCF-E interventions should be included in the response strategy based on the rapid assessment results. Preliminary information should be collected as soon as possible with a more comprehensive assessment should be done at a later stage. IYCF-E interventions should also be included in the response strategy based on the rapid assessment results.
- 4.** It is important to carefully consider the size of RUIF units purchased during and emergencies and to consider ordering smaller bottles, such as 125-ml or 70-ml bottles. This will allow caregivers to use the needed amount of RUIF and minimize wastage, particularly for the youngest infants.
- 5.** To implement the programme at an uninterrupted pace and avoid short programme cooperation agreements, sustained funding is required.
- 6.** It has been critical to develop an interim IYCF-E policy and guidance while waiting for official legislation or approval, including a monitoring and reporting system on violation of the Code of Marketing of Breastmilk Substitutes.



Islamic Republic of Iran



Background

After the Taliban's takeover in Afghanistan in August 2021, about 5,000 Afghans refugees crossed daily into the Islamic Republic of Iran, a sharp increase from the 1,400–2,500 who were reported to cross daily pre-crisis.

The United Nations High Commissioner for Refugees estimated that between 500,000 and 1 million refugees from Afghanistan have crossed into the country since the beginning of the crisis.¹¹ The population was placed in settlements and the host community. Before August 2021, 780,000 registered Afghan refugees and 2.3 million undocumented Afghans lived in the Islamic Republic of Iran, the vast majority of them in suburban and urban areas, whereas a minority were spread out in 20 refugee camps.¹²

Refugees in the settlements and host community had access to the health services offered by the Iranian

Ministry of Health and Medical Education. Mothers and/or caregivers and infants residing in settlements had access to the health posts. The basic health and nutrition services package covered breastfeeding promotion, protection and support. The needs of non-breastfed infants were also addressed through the national programme for the management of the non-breastfed infant, which includes identification and referral to a comprehensive health centre for further assessment and support.

In addition to favourable policies, several programmes to promote and support breastfeeding have been implemented by the Iranian Ministry of Health. In 2018, 25 master breastfeeding counsellors were trained. In 2022, UNICEF collaborated with the Ministry of Health to conduct training of master breastfeeding counsellors, adding to the existing pool of trainers, who are involved in training breastfeeding counsellors.



Training of master breastfeeding counsellors in Iran.

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Human milk processed at Alzahra Teaching Hospital in Tabriz, Iran, where the first milk bank was established in 2016 with the support of UNICEF.

The Islamic Republic of Iran has 11 active milk banks in Tehran, Mashhad, Zahedan, Ahvaz, Kermanshah, Shiraz, Tabriz and Kerman, and another is in the process of being established in Isfahan ([Iran Annexes](#), Annex 1 and 2). The first milk bank was established in Tabriz six years ago, with UNICEF's support.¹⁴ Breastmilk from the milk banks is widely used in the country's neonatal intensive care units (NICUs).

Management of non-breastfed infants in the Islamic Republic of Iran

The Iranian Ministry of Health leads a programme for the management of non-breastfed infants in health facilities. Milk banks have been established to provide donor human milk for premature newborns or sick infants in need. The milk banks are also promoting and supporting breastfeeding counselling for pregnant and lactating women.

Currently, human milk is used mainly for premature newborns or sick infants. For other non-breastfed infants, standard operating procedures (SOPs) on the management of non-breastfed infants are available in Farsi, with details on how infant formula provision should be implemented ([Iran Annexes](#), Annex 3). The SOPs state that infants are eligible to receive infant formula when they meet the following criteria:

- Infant is under 12 months of age and
- Infant has an active electronic file in the health system and
- Infant is separated from his or her mother and the father takes care of the infant or
- Infant's mother has died or

- Infant has been adopted or was born by surrogacy or
- Infant's mother has health conditions that make it difficult to breastfeed or
- Infant's mother takes medications that are contraindicated during breastfeeding or
- Infant's mother is addicted to drugs and a doctor approves the necessity of using infant formula.

In health facilities, an initial identification and assessment process takes place to ensure that the infant formula is provided as a last resort. The assessment includes the mother's ability to breastfeed, the infant's growth and the health and nutritional status of the mother. If the mother can breastfeed or is mixed feeding, she will be supported to breastfeed exclusively again while the infant is still less than 6 months old.

The eligibility of the mother and child to receive the formula is assessed by a trained health care provider. The potential for relactation is also assessed, and if they are eligible for infant formula, then the caregiver is provided with either a voucher to purchase infant formula if they reside in an urban area, or free-of-charge PIF cans if they reside in a rural area.

In urban areas, health posts are easily accessible, and in rural areas, caregivers can go to the health posts for growth monitoring of their infants and are referred to urban/rural health centres for IYCF counselling.

Afghan refugees have access to the same health services as Iranian nationals. Mothers and/or caregivers with infants are therefore able to access breastfeeding counselling and support for non-breastfed infants as part of this Government-led programme. Regular

refresher trainings are organized for health staff to ensure the programme's quality, and UNICEF plays a role in supporting the training of master breastfeeding trainers.

According to the Ministry of Health and Population information, in 2022, 5.8 per cent of infants and young children under 2 received infant formula in health facilities. However, data relevant to the private sector are not available.

Key achievements

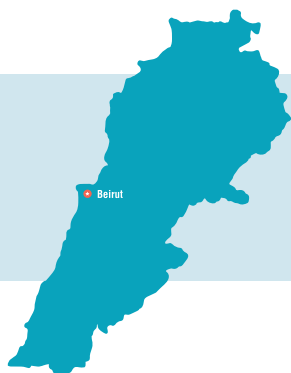
1. Management of the non-breastfed infant is part of the IYCF programme mainstreamed within the health service in the country. It is available equally to Iranian nationals and refugees. Because the programme is mainstreamed, the country can support non-breastfed infants during an emergency response.
2. UNICEF had a key role in establishing the first milk bank in Tabriz, which led to the establishment of 10 other milk banks that are all functional and used by NICUs.
3. The country is also self-sufficient in the production of PIF and does not accept donations from abroad; donations of BMS are successfully prevented via an existing policy that precludes their use during an emergency (because they may be labelled in another language, near expiry date, etc.).
4. UNICEF supported the Government in publishing a breastfeeding promotion training book¹⁵ aimed at health professionals and organized social media campaigns to promote breastfeeding, especially during World Breastfeeding Week. In August 2022, UNICEF, WHO and the United Nations Population Fund ran a breastfeeding campaign that reached over 60,000 people through one social media platform alone.

Challenges

1. The number of breastfeeding counsellors in the country is still relatively low compared with need, and the health care professionals trained in breastfeeding counselling usually have a high workload and conflicting priorities.
2. Mothers and caregivers are sometimes unaware that breastfeeding counselling services are available.

Lessons learned

1. Mainstreaming the management of BMS programme into routine health care delivery while protecting, promoting and supporting recommended breastfeeding practices is reported to have worked well with Government leadership and ownership.
2. Providing training for breastfeeding counsellors and establishing a roster of trained counsellors can help build capacity within the health system.
3. The knowledge and skills of mothers, caregivers and families are important in improving breastfeeding practices. Increasing awareness about the advantages of the recommended breastfeeding practices is key, especially among families with children under 24 months of age. In addition, sensitizing the population on the availability of breastfeeding counselling and services is essential.



Lebanon



Background

For more than a decade, Lebanon has weathered a series of crises. Beginning in 2011, fighting from the Syrian conflict spilled over into the country, and an estimated 1.5 million refugees have sought refuge in the country, in addition to 479,000 refugees from the State of Palestine.¹⁶ The COVID-19 pandemic in early 2020 caused lockdowns and restrictions, which overwhelmed the health system and exacerbated an existing nationwide economic collapse. Further, a massive explosion in August 2020 at the Beirut port destroyed part of the capital, medical facilities and supplies. These overlapping crises have created unprecedented hardships in the country: The multidimensional poverty rate in Lebanon doubled in just two years, from 42 per cent in 2019 to 82 per cent in 2021. As a result, nearly 4 million people and 77 per cent of Lebanese-national households live in multidimensional poverty.¹⁷

In addition, Government financial shortfalls have led to the removal of subsidies for items such as fuel, medicines and formula milk, which has deepened financial deprivations for many families. In 2008, the Government of Lebanon passed Law 47 to protect breastfeeding by regulating the marketing of BMS in line with the International Code of Marketing of Breastmilk Substitutes (known as 'the Code'), adopted by the World Health Assembly to regulate the promotion of BMS.¹⁸ Law 47 included all provisions of the Code and exceeded them in banning the marketing of formula products for children up to 3 years of age, a year later than the Code's guidelines.

A National Advisory Committee for the Promotion and Protection of Breastfeeding was created in Lebanon in March 2011 and is responsible for monitoring the implementation of the law. An IYCF subcommittee (also called the Nutrition Task Force) chaired by the



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IYCF specialists providing breastfeeding counselling for a mother of a 4-month-old baby at a primary health care centre.

Ministry of Public Health (MOPH) was formed in 2012 and reactivated in 2017. Members include international and national non-governmental organizations (INGOs and NGOs), academic institutions and United Nations agencies such as UNICEF and WHO. In 2012, the Baby-Friendly Hospital Initiative was launched. Research conducted from 2015 to 2018 in a private hospital in Beirut found that the initiative succeeded in raising rates of exclusive breastfeeding from 2 per cent to 49 per cent among infants at discharge; however, only 18 per cent of hospitals in the country had ever been accredited.¹⁹ Efforts to sustain progress in accredited facilities are ongoing, with UNICEF support.

Management of BMS donations

The Beirut port blast in August 2020, which killed more than 200 people, mobilized Lebanese citizens and groups both within and outside the country to procure and send in unsolicited donations, including BMS, and led to widespread BMS donations and unregulated distribution. Customs clearance of these goods fell to the MOPH, while the Lebanese army was tasked with allocating donated supplies, in part to INGOs and NGOs. Both entities were overwhelmed and lacked experience dealing with such a situation. In addition, donors, governments, charities and various organizations brought in BMS.

A search of publicized efforts revealed that tens of thousands of cans of BMS of different brands, types and formulations were brought into Lebanon in the wake of the blast, for infants of varying ages.²⁰ Little is known about how infant formula was allocated to recipients. Organizations interviewed for this case study reported that BMS were often advertised in social and traditional media, and many organizations gave out formula on demand, with no questions asked. Except in limited circumstances, the supply disbursements did not generally include an assessment or advice from an IYCF specialist to ensure that breastfeeding and optimal feeding practices could be maintained and lactation issues addressed. As a result of these well-intentioned efforts, BMS were often distributed on demand and without assessing the specific needs of mothers and infants or the appropriateness of the available formulations and tools for appropriate preparation.

In Lebanon and in many middle- and high-income countries, formula or mixed feeding is the norm. As such sustaining breastfeeding during an emergency can be even more challenging. In addition to discouraging breastfeeding, the donation and importation of BMS during an emergency in an ad hoc manner can result in the distribution of supplies that do not meet quality

standards, do not have local language information and instructions, have not been properly stored, are expired or are inappropriate for the intended use (e.g., the use of therapeutic milks instead of infant formula). For these reasons, UNICEF does not accept donations of BMS and has established guidelines on their procurement and use in emergency situations.²¹

Key achievements

In the wake of the Beirut port explosion, UNICEF and other organizations took actions to assist mothers and caregivers to support breastfeeding and to ensure optimal nutrition during the emergency. This included working with decision makers, donors and a variety of organizations, health workers, front-line staff, communities and families.

Actions to prevent donations

- 1. Advocacy among key decision makers:** In response to the importation and distribution of BMS in violation of Law 47, the IYCF subcommittee worked with decision makers, donors and a variety of organizations to ensure that they understood the local laws, the reasons for supporting breastfeeding, and the reasons for not importing and/or distributing BMS inappropriately. However, participation by organizations distributing BMS was voluntary, and some declined, while continuing ad hoc distribution of BMS. The IYCF subcommittee also advocated with the MOPH to manage the customs clearance of shipments, including BMS. Members of the IYCF committee conducted advocacy with the army to encourage organizations to redirect some BMS for use in kitchens or for cooking, as appropriate, to reduce waste. Specialty formulas, such as those for lactose/ or cows milk protein allergy infants, were diverted to hospitals for use with newborns in need.
- 2. A joint statement issued and disseminated:** The IYCF subcommittee also issued a joint statement in December 2019 (**Lebanon Annexes**, Annex A) during the economic crisis on the importance of supporting breastfeeding and protecting children's right to be breastfed, and on abiding by Law 47/2008 against the unethical marketing of products that replace breastfeeding. An advocacy brief (**Lebanon Annexes**, Annex B) was issued just a month after the blast, targeting donors, embassies, international organizations, NGOs and grassroots organizations, explaining that BMS should "only be distributed following specific health protocols and by specialized actors" and urging organizations that had already received supplies, contact the IYCF subcommittee

National IYCF campaign poster launched in October 2021, to promote IYCF practices and the use of the IYCF hotline



for guidance. The subcommittee also developed an SOP on IYCF (Lebanon Annexes, Annex C) during the emergency in Lebanon for organizations to follow, including a decision tree for assessing breastfeeding and resources for food assistance, reproductive and mental health services. The IYCF subcommittee worked with local and international organizations in the health and nutrition sectors to train them on IYCF assessment protocols, focusing on promoting and protecting breastfeeding and the proper use of substitutes for infants.

Actions to promote appropriate IYCF

1. Health workers and front-line staff were trained on optimal IYCF practices and the appropriate use of BMS, and mobilized to support the IYCF campaign. UNICEF, along with the Women and Children Parliamentary Committee and MOPH, initiated a nationwide IYCF social and behaviour change campaign, which reached more than 450,000 caregivers of children under 5 years of age, on core IYCF messages, trained more than 1,500 health care staff and front-line workers, and mobilized more than 65 organizations to take part. Trainings consisted of a two-hour curriculum based on the IYCF standards.
2. An IYCF hotline was introduced in September 2020, managed by the IYCF committee under the auspices of the MOPH and with support from UNICEF, to provide immediate counselling after the Beirut blast. A year later, in concert with the nationwide IYCF campaign, an additional national IYCF hotline was added. Both hotlines remain active and are advertised and managed together. These allowed parents, caregivers and the public to call and ask questions and receive counselling on the recommended IYCF practices and what to feed their children in the context of a dire economic situation. Callers are also assessed for IYCF and breastfeeding practices and support.

3. From 5 January 2021 to 31 July 2022, the hotlines received 9,032 calls. Calls to the hotlines increased during 2021 and continue to the present, suggesting that there remains a great need for IYCF support more than two years after the August 2020 explosion.

Challenges

Gaps in implementing the Code /Law 47/2008:

1. Many organizations ignored Law 47 and solicited donations, giving BMS to parents and caregivers on demand and without proper assessment. This made it impossible to understand how donations were used and ensure follow-up with beneficiaries. In addition, the arrival of donated BMS was publicized in the news and on social media, prompting many individuals to request formula, including those who intended to sell the supplies for profit.
2. **Political instability has also hampered efforts to encourage appropriate distribution and use of BMS.** Strikes by Government staff and long periods without a designated Government and ministerial assignments have created delays in addressing issues and reluctance by administration members to take up new issues. The Ministry of Justice has been contacted about pursuing cases that violate Law 47; however, enforcement has been slow. The Law 47 Implementation Decree has been prepared but is pending translation into English and cannot be presented to the Government until a new administration is formed.
3. **Low breastfeeding rates for many years and long-standing social norms in Lebanon that encourage the use of BMS are ongoing challenges.** Poor knowledge and negative attitudes towards breastfeeding by health professionals and families undermine optimal feeding practices. A national survey in 2006 found that only 38 per cent of infants had breastmilk as their first food, and the strongest influences on a mother’s decision to breastfeed were physicians (43 per cent), grandmothers (22 per cent), mothers-in-law (10 per cent), the media and books (7 per cent each).²² The widespread promotion of infant formula in the media and by paediatricians is challenging to overcome.
4. **Gaps in the humanitarian response related to addressing non-IYCF needs:** In responding to callers to the hotlines, it was noted that many Lebanese caregivers are unfamiliar with the work of NGOs, which required answering a series of personal questions to assess needs. Many Lebanese families (approximately half, according to the estimate of the

International Orthodox Christian Charities) declined to complete the IYCF assessment, while refugee parents were more accustomed to such a process and generally completed it.

Lessons learned

1. The MOPH, UNICEF, International Orthodox Christian Charities and others worked together to promote and support mothers to breastfeed. Strong advocacy by the IYCF subcommittee members also provided a channel of communication and information for organizations that received donations to manage them according to national guidelines properly.
2. The hotlines provided assessment and appropriate counselling to address issues related to breastfeeding and IYCF. The hotlines continue more than two years after the Beirut port explosion, representing a valuable opportunity to engage with and educate caregivers on optimal nutrition. The hotlines were critical for ensuring an outlet for accurate information, counselling and follow-up with families in need.
3. The formation of a new government and advocacy with Cabinet members and leadership in the Ministries of Justice and Public Health now present new opportunities, particularly if the Law 47 Implementation Decree is agreed upon. The engagement with Baby-Friendly Hospitals is continuing and offers a platform for improving health care providers' knowledge and the successful

experience of breastfeeding for mothers from the very beginning of their child's life. In addition, the IYCF subcommittee and members took on the challenge of advocating for the proper management of formula donations at all levels. This included working with the Government, army, NGOs and other organizations to support the appropriate use of BMS, confronting violations of Law 47 among the non-compliant, and lobbying the relevant ministries to implement the law adequately.

4. Law 47 provides a tool to temper the promotion of BMS, although enforcement remains lax. The Implementation Decree for Law 47 still needs to be accepted by the Government, and further monitoring is needed to ensure that it is enforced.
5. Before the emergency, hospitals, paediatricians and the media were promoting the use of BMS. However, the removal of subsidies due to the economic crisis meant that companies producing BMS were less interested in Lebanon as a market for formula, and paediatricians and other providers who had previously been a source of misinformation on breastfeeding to parents were no longer distributing BMS.
6. Including Government and military leaders in advocacy efforts, especially before an emergency, can help to forestall the improper distribution and marketing of BMS.
7. Given the central role of physicians as influencers of breastfeeding, efforts to build awareness among health care providers on the importance of breastfeeding are key, such as the Baby-Friendly Hospital Initiative.
8. Research in Lebanon shows that family members and the media can play an important role in discouraging the inappropriate use of BMS.²³ Reaching these audiences with behaviour change campaigns and raising public awareness are therefore important contributions towards the adoption of recommended IYCF practices.



A mother breastfeeds the youngest of her two children seated on the steps of their house.



Myanmar



Background

Myanmar is currently experiencing an unprecedented humanitarian and human rights crisis. Attacks against civilians are increasing and a peaceful civil disobedience movement evolved into armed resistance in the first months of 2021, while armed conflict at border areas is surging.

A political crisis, escalating conflict and violence, the impact of the Covid -19 pandemic, climate-related disasters, rising poverty and a collapse in public services have left many people in need of humanitarian assistance.

After one of the previous emergencies in Myanmar – Cyclone Nargis in 2008 – a Myanmar Standard Operational Guidance for IYCF in Emergencies was developed and implemented. Myanmar is one of the first countries in the region to have developed

such guidance. It was applied subsequently in all the emergencies up to 2021: Cyclone Giri (2010), the Kachin armed conflict (2012–2013), the Rakhine communal conflict (2013) and the COVID-19 pandemic (2020).

The Government of Myanmar adopted the 'Order of Marketing of Formulated Food for Infant and Young Child' (the Order) in 2014. In addition to regulating the marketing of formula milk and complementary foods targeted to children under 2 years of age, the Order requires that designated food products and accessory feeding utensils comply with relevant Myanmar and international standards and guidelines, including the Codex Code of Hygiene Practice for Foods for Infants and Children and Codex Alimentarius Commission standards and guidelines. The Myanmar Nutrition Cluster, in collaboration with Scaling Up Nutrition networks, monitors and reports violations to the Order for necessary actions.



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The IYCF-E Standard Operational Guidance was updated in 2022 as per global recommendations and local context as an interim document during the COVID-19 pandemic and military takeover. Myanmar's IYCF-E Standard Operational Guidance includes a detailed section on the management of non-breastfed infants ([Myanmar Annexes](#), Annex 1).

Between 2020 and 2021, owing to a series of crises – fighting between ethnic groups and the Government and a civil disobedience movement – most nutrition interventions implemented through the Government health system stopped in Myanmar. UNICEF has since continued operating via NGOs, amid challenges.

Management of non-breastfed infants in Myanmar

Starting on 20 April 2022, as the situation continued to deteriorate, UNICEF was informed by its implementing partner, Relief International–in Shan State that the crises had left several infants under 6 months of age orphaned, and that these infants were entirely reliant on infant formula. Based on this, UNICEF and partners conducted an assessment to explore possible options and ensure the use of infant formula as a last resort.

Wet-nursing is not a viable option in Myanmar due to sociocultural norms, and donor human milk banks are not available in conflict-affected areas. Non-breastfed infants would need to be provided with infant formula as a last resort. Following the Nutrition Cluster endorsement of the management of non-breastfed infant programme on 26 April 2022, the UNICEF Myanmar nutrition team followed the steps to procure BMS as delineated in the recently released guidance on BMS procurement and use. A request was sent to UNICEF HQ and approved within 48 hours.

Activities to allocate and distribute BMS in Shan State are implemented through Mawkon, a local development organization, and Relief International, and in Rakhine state through Save the Children and International Community Empowerment and Resilient Action. UNICEF, with implementing partners, provided orientation to caregivers on the proper use of infant formula at the household level. Implementing partners and community volunteers closely monitored and provided on-site support on a weekly basis in the first month, followed by monthly monitoring, to ensure appropriate preparation and use of infant formula and to avoid any unintended or unmonitored distribution.

In addition to these efforts, community sensitization and awareness-raising were conducted to inform

caregivers and communities that breastfeeding offers adequate support and protection for optimal growth and development of children. Virtual trainings for 70 field workers were conducted to enhance their capacity for provision services as per standard and guidelines. The arrival of stocks (i.e., PIF) was delayed, while repackaging, re-labelling and transportation of the PIF to the field also took additional time.

Despite the policies in place, violations of the Code – including advertisements for infant formula in the supermarkets and through social media and the unsolicited and untargeted donations of BMS – are a significant challenge in Myanmar. Code violations have intensified since the February 2021 military takeover. Two cases of unsolicited distribution of infant formula were reported in 2021 – one by a community-based organization in a hard-to-reach area, and another by an infant formula-importing company.

Key achievements

1. In the context of intensified armed conflict and displacement, in collaboration with implementing partners, UNICEF started a programme for non-breastfed infants in May 2022. A training module was developed, as per national IYCF Standard Operational Guidance, and a total of 90 staff from implementing partners were trained for appropriate assessment and management of non-breastfed infants. Partners are also conducting regular monitoring to ensure optimal growth and development of these infants.
2. UNICEF and partners implemented a series of measures in 2021 to manage BMS donations. Below is a non-exhaustive list of the measures taken:
 - Setting up a monitoring and reporting system for unsolicited BMS distribution and violation of the Code.
 - Reaching out to a community-based organization distributing infant formula to explain the harm that this practice can cause and to convince them to stop the unsolicited and untargeted distribution of BMS.
 - Releasing a joint statement titled '[Nutrition partners caution against unnecessary use of breastmilk substitutes](#)'. The online statement was viewed by more than 30,000 people.
 - Organizing a Facebook Live session on the topic, titled 'Human Milk is the Best for Human Babies – It is Timeless.' The session was viewed by more than 28,000 people.

- Setting up a nutrition programme in hard-to-reach areas, where the unsolicited and untargeted distribution of BMS was taking place.

The steps were also repeated when donations were reported. Some groups distributing BMS were also politically affiliated, which made it even more difficult for UNICEF staff to intervene.

Challenges

UNICEF Myanmar is facing a series of challenges in relation to the management of non-breastfed infants:

1. The military coup in 2021 reduced engagement with the de facto authorities and led many civil servants to join the movement against them. Health services were interrupted and NGOs and INGOs have had limited access and presence, leading to a limited coverage of the programme in the country.
2. Violations of the Code are frequent and unsolicited; untargeted donations of BMS are common. As a result, the UNICEF team is implementing a set of response measures described in the section above.
3. The receipt of PIF for the management of non-breastfed infants in the country was delayed owing to international procurement and shipment procedures.

Lessons learned

1. It is critical to include the management of non-breastfed infants as part of ongoing nutrition programmes implemented before any emergency. Emergency preparedness plans should also include support for the non-breastfed infants.
2. Once approval is reached from HQ including a waiver for local procurement, there is need to provide further guidance on quality requirements and recommendations on the closest markets where supplies can be sourced for timely response, as a preparedness measure.
3. A comprehensive media pack should be developed to avoid negative feedback from the media on the management of the non-breastfed infant programme.
4. It is important to explore options for reducing the procurement in place of processing time for PIF and RUIF country orders and ensure that RUIF and PIF orders are systematically prioritized over non-priority supplies.



Sudan



Background

The Sudan has witnessed multiple and complex emergencies, including ethnic clashes, wars, floods and disease outbreaks. Throughout the years, violent conflicts, coupled with impunity, have displaced many Sudanese people internally, especially in Darfur and Kordofan, but also to neighbouring countries: Chad and South Sudan. Humanitarian actors cannot access several areas, such as the Blue Nile and South Kordofan.

Since January 2018, Sudan has faced a double crisis of recession and high inflation. The inflation rate reached 388 per cent in August 2021. This high inflation contributed to an increase in the number of food-insecure people in the country, which limited household purchasing capacity and raised the price of basic goods. In June 2021, the Sudan reached the heavily indebted poor countries decision point, an important milestone that would enable the country to clear nearly all of its

estimated US\$50 billion in external debt. However, people's well-being did not improve. Between 2018 and 2021, the number of acutely food-insecure people in the country (Integrated Food Security Phase Classification Phase 3 or above) has increased.

Fighting between the Sudanese Army and military rival the Rapid Support Forces (RSF), erupted in April 2023, and resulted in the displacement of 1.7 million children within the country while more than 470,000 have fled across the border to safety. It is estimated that 20.3 million people in Sudan would be food insecure between July and September, based on the latest Integrated Food Security Phase Classification (IPC) report for the country. As a result, the health and nutrition status of close to 10 million children is expected to worsen. Currently, nearly 9.5 million children in Sudan lack access to safe drinking water, and 3.4 million under-fives are at high risk of diarrhoeal diseases and cholera.



On 11 October 2022 in Hajlmak village, Kadugli town, South Kordofan state in the Sudan, a woman breastfeeds her child during a mother support group session for pregnant women, lactating mothers and grandmothers, delivered by the nutrition team from Mugamaa Elbahar Health Centre.
© UNICEF/UN0741889/Zehbrauskas

Meanwhile, violence continues to hamper the delivery of health and nutrition services, putting millions of young lives at risk.

For the purposes of this case study we report on an experience from 2022 prior to the current crises.

In November 2020, after military confrontations in the Tigray region between the Ethiopian government and the Tigray People's Liberation Front, UNHCR started recording an influx of Ethiopian refugees at the border entry points in eastern Sudan from northern Ethiopia, in the states of Kassala and Gedaref. Similarly, Ethiopian people seeking asylum were crossing from Benishangul-Gumuz region into the Sudan's Blue Nile State.

While the situation analyses conducted in 2022, reported that breastfeeding practices in the Sudan were improving, though complementary feeding remains a major challenge. However, the analyses did not indicate the impact of the influx of Ethiopian refugees from Tigray because the percentage of infants who are non-breastfed, among those aged 0–5 months who have fled into the Sudan with their caretakers, was difficult to assess.



A mother and child are examined by UNICEF Health and Nutrition staff at the breastfeeding room in Hamdayet Reception Centre in Gedaref state on 24 November 2020.
© UNICEF/UN0403165/Abdalkarim

Key indicators

- A study done in 2018²⁴ showed that on average, 61.5 per cent of infants aged 0–5 months were exclusively breastfed.
- The prevalence of exclusive breastfeeding increased from 55.5 per cent in 2014 to 61.5 per cent in 2018.
- Rates of exclusive breastfeeding vary among and within states.

Management of the non-breastfed infant

The Sudan Nutrition Cluster has developed an IYCF-E Response Strategy for refugees from Ethiopia for eastern Sudan. An IYCF-E Standard Operational Guidance was developed with the support of the GNC Technical Alliance in response to the multiple crises and subsequent needs of internally displaced people or refugees in the Sudan. The IYCF-E Standard Operational Guidance ([Sudan Annexes](#), Annex 2), which includes guidance on artificial feeding and a multisector response plan, is the main reference for the implementation of the IYCF interventions in emergencies. Before the influx of refugees from Tigray, there was no programme to support non-breastfed infants, mainly a result of reluctance from national stakeholders. Several mothers who were not breastfeeding came from Tigray into Hamdayet, on the border between the Sudan and Ethiopia. Upon registration, in a nearby mother and baby area in Hamdayet, a rapid assessment was performed on mothers with infants under 24 months of age. The rapid assessment identified the mothers with infants who were non-breastfed before they entered the country.

The Government and the Federal Ministry of Health initially did not favour setting up a programme to artificially feed non-breastfed infants, as they were worried it could undermine breastfeeding. All the stakeholders, including NGOs and donors, were undecided about the artificial feeding programme as they were worried about it affecting their reputation (i.e., they did not want to be seen as an organization supporting artificial feeding, or potentially undermining breastfeeding).

With further advocacy and support from Government, UNICEF started planning to respond to the needs of non-breastfed infants, as part of its Core Commitments to Children in Humanitarian Action. UNICEF compiled the needed supplies, including RUIF, into BMS kits.

The Sudan nutrition country team followed the steps in the Standard Operational Guidance. The request was made jointly with the supply team and using the

supply catalogue details. The process was smooth, from delays in the arrival of supplies. While waiting for the supplies, the Nutrition Cluster worked on the criteria that needed to be met for an infant to be supported with artificial feeding and the modalities of distribution ([Sudan Annexes](#), Annex 1).

In the refugee camps in Gedaref state, the targeted distribution of infant formula took place through the Ministry of Health points of service in areas separate from the breastfeeding counselling areas. The decision was made to distribute infant formula discreetly to avoid undermining ongoing breastfeeding efforts. The community was also sensitized to the importance of breastfeeding through key messages provided to the Ethiopian community health workers, who spoke the same language.

After rapid and thorough assessments, non-breastfed infants who were identified as needing artificial feeding support were referred to the appropriate point of service. After receiving a month's supply of infant formula, cups to feed the infants and the necessary instructions, families returned to their homes, and community health workers followed up with them weekly or biweekly to ensure the infant formula was being provided correctly. The programme supported seven infants, as several mothers with mixed-fed infants were supported to relactate and were able to exclusively breastfed. Wet-nursing is not acceptable in Sudan, and not common in Tigray. A UNICEF staff member on site provided technical support to the overall programme.

UNICEF continues to be involved in preventing and managing BMS donations, a persistent issue in the Sudan. A large donation was provided from neighbouring countries to the Government and was accepted, despite UNICEF's reservations. Because the Sudanese Standards and Metrology Organization approved the PIF donation, UNICEF supported its redistribution to orphanages after re-labelling it. UNICEF subsequently provided an orientation session for the Ministry of Health management team on the risks associated with BMS donation. A second donation was rejected by the Sudanese Standards and Metrology Organization; it was thus returned to the donor country.

Because of the unhygienic conditions in refugee camps, the choice to order RUIF was key. RUIF allowed caregivers to mitigate the risks associated with the absence of potable water and hygienic conditions.

Challenges

1. The main challenge was related to delays for the supplies to arrive in the country. In addition, the process required clearance of the supplies by governmental agencies upon arrival, which was a lengthy process and further delayed the start of the programme.
2. As the lead on the Tigray refugee response, UNHCR initially took a number of inconclusive steps to explore solutions with its HQ on the management of non-breastfed infants. To address this challenge, the interim Nutrition Cluster in Sudan requested support from the GNC Technical Alliance on managing non-breastfed infants. The request was then referred to the appropriate section in UNICEF HQ, which recommended that the Sudan Country Office purchase RUIF. All these steps led to a delay in the process.

Lessons learned

1. Effective preparedness ensures that a rapid response team is trained and ready to respond and implement the management of the non-breastfed infant programme in emergency areas.
2. To ensure the availability of supplies, particularly in countries experiencing frequent emergencies, it is useful to explore: regional and/or local procurement of an approved PIF as an interim measure to be used at the onset of an emergency once approval is received from Programme Group and Supply Division at UNICEF HQ.
3. Sensitization of humanitarian actors on the need for an intervention to manage non-breastfed infants during emergencies and identification of ways to mitigate the risks linked to artificial feeding are critical.
4. It is important to explore (with UNICEF Supply Division) various ways of speeding up the delivery of infant formula to countries that request it (for instance, prioritizing infant formula orders over other less essential items,).
5. There is a need to continue advocating, sensitizing and communicating with UNICEF country management, programme officers, decision makers, Nutrition Cluster partners and donors about the importance of including the management of the non-breastfed infant in IYCF interventions as a preparedness measure and during emergencies.



Ukraine



Background

On 24 February 2022, the Russian Federation invaded Ukraine. This marked a sharp escalation of the Russian–Ukrainian military conflict that had begun in 2014. The invasion caused Europe’s largest refugee crisis since World War II. In 2022, the number of displaced people grew by 21%, standing at an estimated 108.4 million at the end of the year. That likely rose to over 110 million people in May 2023, with Russia’s ongoing invasion, according to UNHCR.

Management of the non-breastfed infant

A nutrition response plan was developed and provided a framework for promoting, protecting and supporting adequate IYCF practices to improve nutritional outcomes for those most at risk in emergencies: children under 2 years of age and pregnant and lactating

women. Providing support for breastfed infants and young children was critical to the response.

However, given the low rates of exclusive breastfeeding and the high rates of mixed feeding in the Ukrainian context, the targeted provision of BMS emerged as a critical element of the IYCF-E response.

At the start of the crisis in Ukraine, UNICEF received requests from partners for nutritional support for newborns, infants and young children.

Several discussions were held among UNICEF HQ, UNICEF Europe and Central Asia Regional Office, the GNC and the UNICEF health programme, to explore options for supporting non-breastfed and mixed-fed infants during the crisis.



Since the outbreak of war in Ukraine, breastfeeding has become an important ritual for this mother’s family. Feeding is the key to survival and safety for her baby, having experienced shelling and evacuation, and periods without hot water. © UNICEF/UN0679247/ Filippov

Table 2: Estimated total number of infants in need of nutritional support in Ukraine 2022, based on calculations made on 12 March 2022

Age groups	Host population	Internally displaced persons	Total
0–5 months	135,969	7,534	143,503
0–12 months	271,938	15,068	287,006

Caseload calculations and a subsequent beneficiary targeting process were made based on Ukraine state population statistics (Ukraine State Statistics, 2022) and developed through multiple intensive consultations with relevant United Nations nutrition partners (UNICEF, WHO and the World Food Programme) and CDC.

It was estimated that about 287,006 infants aged 0–12 months (Table 2) in Ukraine, both in host communities and in communities of internally displaced people, urgently needed emergency nutrition support.²⁵

The GNC, UNICEF HQ and regional and country office teams agreed on the following input data for calculating the need for BMS:

1. The liquid RUIF needed per infant per day averaged 700 ml.
2. The PIF per infant per month averaged eight tins (400 g).
3. The estimated proportion of infants and children aged 0–11 months who were not exclusively breastfeeding was 74.5 per cent. Given the lack of up-to-date information, data from available nutrition surveys were used to estimate total BMS needs.
4. The estimated proportion of children aged 0–11 months to be reached with BMS as the first in the nutrition emergency response was 10 per cent. The plan was to adjust the number of reachable infants in the following ‘batches’ by referring to the field monitoring reports received from partners.
5. The estimated duration of BMS provision was 30 days.

These estimations considered BMS procurement and distribution in line with the UNICEF Core Commitments for Children in Humanitarian Action. This included balancing the need for artificial feeding with the continued protection and promotion of breastfeeding. UNICEF HQ approved the procurement of infant formula based on the estimated quantities.

Infant formula procured by UNICEF was stored in UNICEF warehouses in country. Country partners

with partnership agreements requested formula from UNICEF to support the needs of non-breastfed infants. To mitigate any spillover effects and risk of untargeted distribution of infant formula procured by UNICEF, the RUIF targeted distribution was carried out solely by implementing partners who had partnership agreements with UNICEF and had signed a memorandum of understanding with the Ministry of Health. These agreements required the implementing partner to ensure that qualified personnel were responsible for administering the mother and baby areas, adhering to the standard protocols or national guidelines, reporting to the nutrition sector on use of RUIF, and providing RUIF stock updates each month. In addition, the RUIF targeted distribution by implementing partners took place in an isolated manner, to avoid discouraging breastfeeding mothers.

Programming for the management of non-breastfed infants and the subsequent procurement and distribution of BMS was also confirmed by the Ministry of Health and the Ministry of Social Policy, and a discussion was held to better understand how BMS would be distributed and reported on via the government network.

UNICEF’s support and leadership included a coordination role. The Ukraine Nutrition Working Group (March 2022) works to provide life-saving nutrition services to the most vulnerable populations, including infants, young children, and pregnant and breastfeeding women. Protection, promotion and support of breastfeeding is a priority, as is support for non-breastfed infants, in line with agreed protocols on the management of UNICEF-procured infant formula. Nutrition partners include six operational agencies working in 17 regions of the country.

UNICEF set up daily internal coordination calls in collaboration with country, regional and HQ teams to discuss programme needs and challenges and how to address them. During the first phase of the response, UNICEF, in collaboration with the partners, developed guidance for the establishment of mother and baby areas, where pregnant women, caregivers, and women with infants and small children are supported to meet their own needs, including those related to feeding and caring for their children.

Partners, including Action Against Hunger, Save the Children, FHI 360, International Medical Corps, Caritas Drohobych, I’M Mariupol also established mother and baby areas where caregivers can access support for feeding and caring for their infants and young children and themselves while on the move. A front-line



Anastaysiya Lavrentieva (26 years old) and her husband Kostyant escaped from Kharkiv, Eastern Ukraine to Zhytomyr. © UNICEF/UN0740593/Filippov

workers' training package on mother and baby space guidance was developed with support from UNICEF and IFE Core Group members, which was followed by an orientation session on mother and baby spaces for front-line service providers.

Nutrition partners provided nutrition services in the mother and baby areas, had contact with a large number of caregivers of children under 2 years of age, and were able to identify non-breastfed infants in need of specialized feeding support. When a non-breastfed infant was identified, the first step was to discuss and seek agreement on feeding options within the family.

Trained staff of implementing partners provided counselling on safe BMS usage to caregivers of eligible infants, along with a weekly ration of PIF or RUIF. In addition, mothers being provided with BMS also received leaflets translated into Ukrainian and Russian, to give them further instructions on how to use infant formula safely. UNICEF also leveraged the IFE Core Group for translation of IYCF-E infographics²⁶ into Ukrainian and Russian and their dissemination.

Key achievements

1. UNICEF, UNHCR, the GNC, the IFE Core Group and 25 other partners released a **joint statement**, which included a call to uphold, promote, protect and support infant feeding in emergencies. The

joint statement is an advocacy tool for highlighting relevant policy, clarifying the government's position on donations and distributions of BMS to support the non-breastfed infant, providing context-specific guidance, harmonizing communication and mobilizing calls for action from stakeholders. Thanks to UNICEF and the IFE CG efforts, the joint statement was translated into **10 languages**, and disseminated globally and regionally for those bordering countries hosting Ukrainian refugees.

2. UNICEF worked closely with Communications and Social and Behaviour Change colleagues in developing key nutrition messages on the importance of breastfeeding and the dangers of BMS. These messages were disseminated inside Ukraine and in neighbouring countries, through social media, radio stations and multimedia displays in train stations, and in printed form.²⁷
3. UNICEF mobilized resources and personnel to support coordination of the nutrition response and information management inside Ukraine. At the time of writing, an interim Nutrition Coordinator had already been appointed, and members of the GNC Secretariat were providing additional support remotely – Technical Assistance was also routinely provided by Programme Group and regional office. A flash appeal was also launched, seeking an estimated US\$23.5 million to support the infant feeding response.
4. A front-line worker training for mother and baby areas was developed and finalized in March 2022. Terms of reference for this support were finalized and shared with a consortium of partners.²⁸ An IYCF-E training covering the management of the non-breastfed infant was completed for key responders in Ukraine in August.
5. Mother Baby Areas run by UNICEF supported partners offered breastfeeding counselling and skilled lactation support for breastfed infants and supported the non-breastfed infant through appropriate identification, assessment and providing a package of support.
6. To implement the new policy guidelines, capacity needed to be rapidly scaled up, particularly as pre-existing IYCF/ IYCF-E capacity was low. While the Nutrition Cluster was not formally activated and there was limited authority or leadership on the ground to make recommendations, UNICEF, the IFE Core Group and other actors provided technical guidance and resources to support both breastfed and non-breastfed infants in accessible areas, however significant gaps remained in areas under conflict.

To support conflict-affected mothers and children, UNICEF with partners developed a programme to promote breastfeeding in emergency.
 © UNICEF/UNI194034/Krepkih



7. UNICEF and cluster partners/ MoH developed guidance that provided operational direction on the management of unsolicited donated BMS.
8. Since February 2022 UNICEF has procured and distributed enough infant formula to meet the needs of 24,750 non-breastfed infants aged 0–6 months.
9. UNICEF co-led a series of external-facing calls, which were a platform for responders to benefit from global guidance and minimum standards and share critical information. The calls also helped disseminate IYCF-E programmatic tools and guidance and provided rapid sensitization and orientation on context-specific issues. This also included sensitisation of partners in neighboring countries hosting Ukrainian refugees.

Challenges

Quantification and forecasting of BMS needs

1. There were a high number of infants (aged 0–11 months) who were either partially or fully dependent on infant formula in this emergency. While UNICEF was in the process of procuring infant formula as per policy as a provider of first resort, the volumes under the initial order were insufficient to meet the needs inside Ukraine. As additional resources were availed and suppliers identified, volumes increased over time.
2. It was challenging to calculate the specific need for infant formula to avoid surplus and monitor distribution. The primary challenge in Ukraine was

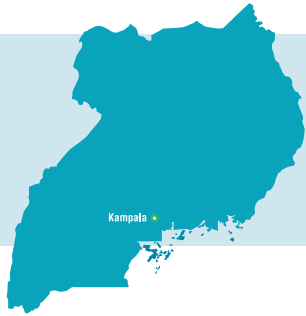
developing a humanitarian needs overview for the emergency nutrition response, considering the nutrition needs of infants aged 0–11 months as well as older children given the active movement of people in the war-torn country.

3. **Messaging on the nutritional needs of the non-breastfed infants given the infant feeding norms of the population while promoting protecting and supporting breastfeeding.** Ukraine has very low exclusive breastfeeding rates therefore the RUIF needs of non-breastfed infants were acute and significant. Concerns that such an approach could undermine breastfeeding practices and increase infants’ risk of diarrhoeal disease, malnutrition and death were recognised and balanced against the acute nutritional needs of those infants with no access to breastmilk.
4. **Insecurity and the geographic spread of the conflict presented logistical challenges:** Responding to these challenges required significant resources for the deployment of experts and transportation of BMS supplies.
5. **The recruitment of individuals to support nutrition in emergencies in Ukraine was delayed, constraining the provision of dedicated technical support during the emergency.** Nutrition interventions in emergency contexts are often associated with wasting. With no public health priority on wasting in Ukraine, the Government’s priority on IYCF-E response was low.

6. Wide spread donations of BMS and the lack of Code violation monitoring system: Some of the challenges found in the 2015 response remained, including BMS donations and challenges related to preventing the untargeted distribution of BMS, especially by Government and local and small civil-society and volunteer organizations.²⁹ There were widespread unsolicited donations and untargeted distribution of BMS, with an absence of monitoring and reporting mechanisms for Code violations. Stakeholders' awareness of their roles and responsibilities in upholding the Code in emergencies and monitoring and reporting were also low.

Lessons learned

1. As UNICEF continues to deliver on its commitment as a provider of first resort for BMS in humanitarian contexts, further efforts will be needed to ensure that UNICEF-procured BMS are distributed in a timely manner to implementing partners and, subsequently, to caregivers of non-breastfed infants. This will require continued targeted training support for staff in mother and baby areas and clear and practical operating procedures for distributing such products to national governments. This is an area of work with well-known reputational risks and clear obligations under the Code, and the ways of working must manage those risks proactively.
2. The joint statement helped raise the alarm on the need to prevent and manage BMS donations. As a result, the IFE Core Group and partners developed a reporting mechanism to alert agencies about unsolicited donations and provide technical support in its management.
3. Awareness-raising is important to reiterate the importance of promoting and supporting infant feeding during emergencies, including preventing and appropriately managing BMS donations. As in the 2015 response, the organizations involved in the untargeted distribution of BMS need to be engaged in coordination activities and provided with other programming options.
4. UNICEF established emergency partnerships with NGOs and INGOs. At that time, Government stakeholders mainly focused on food security response rather than nutrition. However, the Government has gradually begun to promote nutrition and proposed using the existing Government institutions' network for promoting IYCF-E.
5. The development of a training package, the short training for front-line workers and the availability of key technical materials in Russian and Ukrainian further facilitated the delivery of technical support to the response for increased uptake of positive IYCF practices.
6. The rapidly evolving situation in Ukraine and neighbouring countries did not allow for commensurate technical assistance on IYCF-E from the outset, given the challenges for UNICEF and nutrition sector partners to access Ukraine and other more immediate life-saving interventions (emergency obstetric care, shelter, WASH child protection) that were prioritised for the initial phase of the response. However, given that UNICEF had an existing presence in the country, staff with some nutrition experience were able to support and provide a level of technical oversight in nutrition. Therefore, supporting the Ukraine Country Office in identifying the optimal arrangements for providing dedicated infant feeding support and oversight in the short- and midterm has been critical.
7. Many guidance tools were produced by UNICEF and other collaborating partners of the IFE Core Group for infant feeding programming to support the response. However, continuous capacity building for national actors, primary health care workers and humanitarian or civil society or volunteer organizations on IFE including the management of the non-breastfed infant, remain a priority in the response especially given the conflict and large population displacement which have led to a high turnover of qualified staff.
8. It is critical to adequately implement the International Code of Marketing of Breastmilk Substitutes, enforce its monitoring, and report violations. As the nutritional needs of Ukrainian people and refugees from Ukraine are increasingly met, UNICEF and its partners recognize the need to address the widespread donation of BMS and document and report these Code violations more systematically. Efforts by the UNICEF regional office to establish a simple online mechanism to report these violations offer a unique platform to meet this expectation. However, that will require continued dedicated attention and leadership with resources as operating procedures for using this platform are developed and the information generated and reported.



Uganda



Managing non-breastfed infants in the 2022 response to the Ebola Virus Disease outbreak in Uganda

Background

In line with the WHO global guidance¹, the Uganda Ministry of Health recommends early initiation of breastfeeding within the first hour of life; exclusive breastfeeding for the first six months; introduction of age-appropriate, nutritious and safe complementary foods from 6 completed months of age; and continued breastfeeding for two years or beyond.² Breastfeeding is the prevailing norm in Uganda: 98 per cent of infants below 2 years of age are breastfed at some point in their lives. However, only 66 per cent of infants under 6 months of age are exclusively breastfed and only 60 per cent of infants are breastfed within one hour of birth. Complementary feeding is also a challenge, as only an estimated 15 per cent of children aged 6 to 23 months receive a minimum acceptable diet.³

Ebolavirus Disease (EVD or Ebola) is a very rare but severe illness that causes haemorrhagic fever and is often fatal in humans. Sudan Ebolavirus (SVD) is a species of Ebolavirus. A SVD outbreak was declared in Uganda on 20 September 2022.⁴ By the end of the epidemic on 11 January 2023, eight districts (Bungyangabu, Kagadi, Kampala, Kassanda, Kyegegwa, Masaka, Wakiso and Mubende) had been affected by SVD. Demographic analysis of the SVD outbreak in Uganda reported that women and children were at the highest risk for contracting SVD. Further, children

had a very high case-fatality rate (60 per cent as of 21 November 2022) according to UNICEF.

Nutrition is a critical component of the overall response to Ebola to enhance population immunity to the virus, aid the clinical management of Ebola patients and protect IYCF.⁵ In Uganda, a strong IYCF-E response was paramount to promote, protect and support breastfeeding within the wider community. Simultaneously, to support the specific nutrition needs of infants exposed to or infected with SVD, given that ebolavirus genetic material has been identified in the breastmilk of lactating women with EVD,⁶ this required specific protocols to provide nutrition to breastfed infants whose mothers were suspected or confirmed to have EVD. The recommendation for replacement feeding for these infants using Breast-milk Substitutes (BMS) is in line with the Ministry of Health Infant Young Child and Adolescent guidance, which allows for replacement feeding with BMS in exceptional circumstances where breastfeeding is contraindicated. This is also in line with the recommendations of CDC, WHO and UNICEF in the context of EVD. In this context, UNICEF provided technical support to the Ministry of Health for the management of non-breastfed infants during the SVD outbreak. This document describes the steps taken, results, challenges and lessons learned that can be used to support future IYCF-E programming during future ebolavirus outbreaks.

1 <https://www.who.int/news-room/fact-sheets/detail/infant-and-young-child-feeding>

2 [https://www.unicef.org/uganda/media/12161/file/Guidelines%20on%20maternal,%20infant,%20young%20child%20and%20adolescent%20nutrition%20\(MIYCAN\)_2021.pdf](https://www.unicef.org/uganda/media/12161/file/Guidelines%20on%20maternal,%20infant,%20young%20child%20and%20adolescent%20nutrition%20(MIYCAN)_2021.pdf)

3 Demographic Health Survey Uganda (2016) <https://dhsprogram.com/pubs/pdf/FR333/FR333.pdf>

4 <https://www.who.int/emergencies/situations/ebola-uganda-2022>

5 WHO/UNICEF/WFP. Interim guideline: Nutritional care of children and adults with Ebola virus disease in treatment centres. Geneva: World Health Organization; 2014.

6 Nordenstedt H, Bah IE, de la Vega M-A, et al. Ebola Virus in Breast Milk in an Ebola Virus-Positive Mother with Twin Babies, Guinea, 2015. *Emerg Infect Dis.* 2016;22(4):759.

Country response to the Ebola outbreak

Overall response plan

Following the declaration of the SVD outbreak, an overall national response plan was adapted from the previous EVD response and preparedness plans, as well as learning from recent outbreaks in the Democratic Republic of Congo and Western Africa. The national response plan was based on the second of three possible scenarios:

- **Scenario 1 (Best case scenario):** Early detection, contact tracing >90 per cent of cases, outbreak limited to current geographical location. Outbreak is estimated to run its course in 3.5 – 4 months.
- **Scenario 2 (Sustained):** With an initial delay in detection and inadequate contact tracing, outbreak spills over into other districts but limited to 20 high-risk districts. Additional isolation facilities may be required. Outbreak is estimated to run its course in 6-8 months.
- **Scenario 3 (Worst Case scenario):** Inadequate contact tracing, mobility of population, outbreak spread beyond current high-risk districts and/or into complex urban settings and/or spillover into the neighbouring countries. This would stretch existing resources and require a whole government response. The timeline for the outbreak in this scenario unclear.

A meeting of UNICEF Uganda Country Office senior management and core programme teams was held to determine critical areas of the national response aligned with UNICEF's mandate and the Core Commitments for Children in Humanitarian action. UNICEF Uganda Country Office, with support from UNICEF Eastern and Southern Africa Regional Office (ESARO) and UNICEF HQ worked in partnership with the Government and

partners to ensure sustained technical support for the following sectors: Risk Communication and Community Engagement (RCCE) and water, sanitation and hygiene promotion and infection prevention (WASH/IPC); child protection; and health and nutrition. UNICEF ESARO also supported preparedness actions in five countries with high risk for Ebola importation (Kenya, Rwanda, Burundi, South Sudan and Tanzania) in line with national and global recommendations.

Building on learning from the previous Ebola outbreak response, nutrition was fully integrated into national and UNICEF SVD response plans and protocols. The nutrition response focused on five core areas including: nutrition coordination; nutrition care and management of SVD patients; IYCF counselling and management of non-breastfed infants; continuity of essential services; and food assistance to the affected population. Operational guidance and standard operating procedures (SOPs) were rapidly developed in each of these areas, building on learning from previous Ebola response experiences and emerging evidence.

UNICEF Uganda Country Office continued to support national nutrition coordination and response efforts, with weekly emergency meetings initiated in October 2022 and ad hoc meetings with the Ministry of Health and partners to provide comprehensive technical assistance and troubleshoot issues arising.

To guide the IYCF-E response of the nutrition sector, a rapid IYCF-E capacity assessment was undertaken using the Global Nutrition Cluster/UNICEF capacity mapping tool.⁷ Though not validated, results of the analysis summarized in key areas requiring support were IYCF-E service delivery; communication and advocacy; policy, plans and guidelines on IYCF-E;

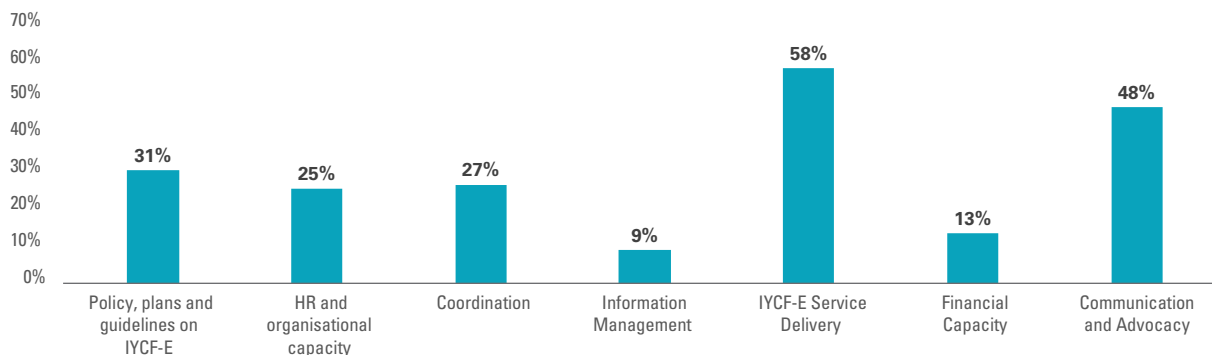


Figure 2: IYCF-E capacity mapping

7 <https://www.nutritioncluster.net/resources/infant-and-young-child-feeding-emergencies-iycf-e-capacity-mapping-and-assessment-toolkit#:~:text=The%20IYCF%2DE%20capacity%20mapping,IYCF%2DE%20and%20outstanding%20gaps.>

Table 3: Estimated needs of BMS for affected infants

Total population	Estimated affected population	Population children 0–5 years	Estimated affected population children 0–5 years	Population children 0–6 m	Estimated affected population of children 0–6 m	Estimated quantity of RUIF required in packs, e.g. 200ml
11,837,400	35,512	2,050,600	5,514	212,661	638	153,116

coordination; and human resources and organizational capacity. Results helped to prioritize response actions.

Given the high rates of breastfeeding in Uganda, it was critical that the IYCF-E response were orientated towards protecting breastfeeding in the wider population while meeting the unique needs of the affected population. An IYCF statement was rapidly developed and disseminated to this effect. To enable appropriate replacement feeding for infants under 6 months of age directly impacted by EVD, clear communication was also required to allow for the proper and safe use of BMS in specific individual circumstances. To support the MoH with support from UNICEF and partners led in the development of this nuanced messaging, IYCF-E guidance and a series of factsheets were rapidly developed, based on evidence, global guidance and experiences from other EVD outbreaks. These gave clear guidance and messages on the promotion of breastfeeding in the wider population and for those infants and young children whose mothers were suspected or confirmed to have EVD. The following key areas were clarified: 1) the management of feeding of infants aged 6–23 months with UHT milk and complementary foods, 2) the handling of breastmilk substitutes donations and supplies to prevent violations of the International Code of Marketing of Breast-milk Substitutes, and 3) the management of BMS within the supply chain (forecasting, requisition, delivery and monitoring).

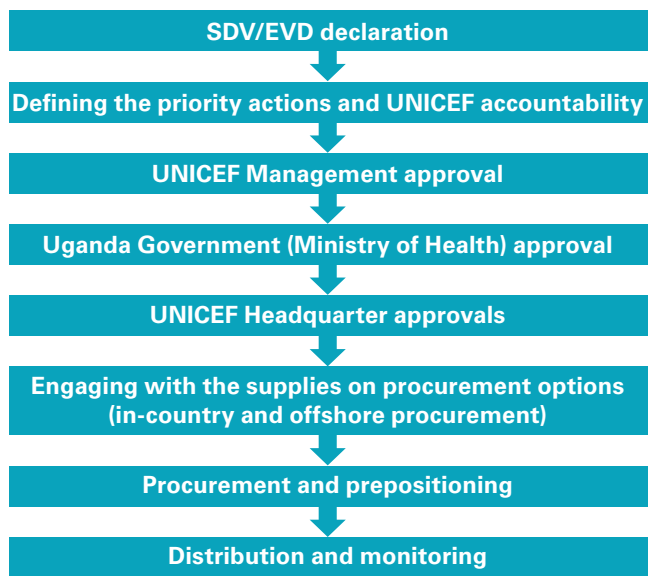
During October and November 2022, these documents were disseminated to decision-makers and health workers and key messages integrated into wider communications. To support the uptake of IYCF-E guidance and SOPs for the management of non-breastfed infants directly affected by SVD, all health workers received IYCF-E sensitization and a public awareness campaign was also launched via radio broadcast in the affected districts.

Management of the non-breastfed infant

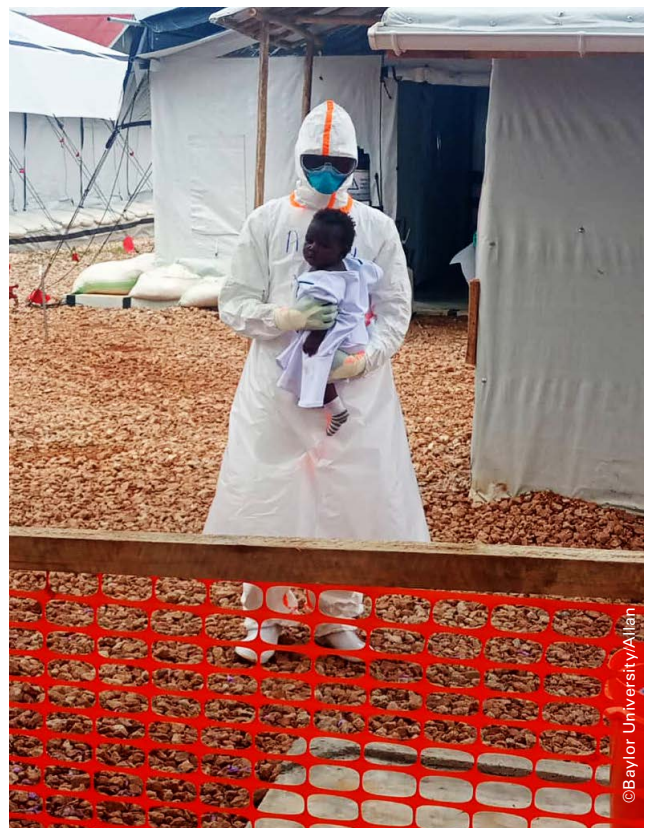
To support service delivery and the procurement and repositioning of supplies, UNICEF Uganda Country Office, in collaboration with HQ and ESARO, conducted a rapid assessment of the IYCF needs of infants directly impacted by SVD. The assessment drew from data from the Uganda Bureau of Statistics (Table 1) to help UNICEF, the Ministry of Health and partners understand the scale of potential needs and resources required, particularly in terms of BMS and specifically Ready to Use Infant Formula (RUIF) requirements.

UNICEF sought approval from the Ministry of Health for the procurement of RUIF supply and the related supplies for safe distribution. Protocols and key accountabilities were then agreed for the management of RUIF supplies in-country using national structures including ETUs and Isolation Centres (summarized in Box 1). This process is described in Figure 1. Following approval, RUIF was ordered by UNICEF from a pre-approved manufacturer in South Africa on 29 September 2022 and delivered on 9 October 2002. Supplies were delivered in two batches to ETUs and Isolation Centres in October and December.

Figure 3: Institutional arrangements for the procurement and prepositioning of RUIF



The management of feeding for non-breastfed infants directly affected by EVD (either exposed or infected) was clearly laid out in national guidance, in line with global guidance⁹ (Box 2 and Figure 2). SOPs were developed to operationalize the guidance within the emergency structures set up in Uganda, summarized in Box 3.



An infant and a health care provider at an Ebola Treatment Center.

Box 1: Actions and accountabilities to ensure proper use of RUIF in-country

- The Ministry of Health will draft or adapt the available user guide into SOPs on the use of RUIF
- The Ministry of Health will print and distribute these user guides to the facilities managing Ebola upon receiving a request
- The Ministry of Health will ensure that only required quantities are released to the facilities upon receiving a request
- The RUIF procured shall be pre-positioned in the UNICEF warehouse and the Ministry of Health will make a requisition for distribution to the facilities upon receiving a request
- The RUIF as a breastmilk substitute will be used in line with the existing regulations on the marketing of foods for infants and young children (i.e., according to the Code and subsequent World Health Assembly resolutions) to avoid violations and spillage outside of the intended purpose
- The RUIF released is to be stored in the pharmacy of the facility (not the general stores) for proper record management and accountability
- RUIF would only be released following a prescription from a health worker (i.e., paediatrician) and will be given strictly to infants whose mothers have been also suspected with EVD and cannot breastfeed, to avoid mismanagement
- The release of the RUIF from the pharmacy to the child (ren) in need must be endorsed by multiple signatories as approved and agreed by the facilities
- Only quantities will be provided to the infant for the period in accordance with instructions on the packet
- There will be continuous supervision of the in-charge Ebola Isolation Unit to ensure the formula is being used and managed according to the prescribed recommendations
- Strong monitoring by the nutrition division is important to ensure no violation of the regulations on infant and young child foods (i.e., the Code)
- The response team, together with the community health workers, will monitor the children and caregivers who used RUIF post discharge in the ward

⁹ [Further clarification on infant feeding and Ebola. Download the guidance document developed jointly by WHO, UNICEF, CDC and the Emergency Nutrition Network, Sept 2014](#)

Box 2: National guidance on infant feeding and Ebola

Breastfeeding should be stopped if acute EVD is confirmed or suspected in a lactating woman or a breastfeeding child (e.g., if the infant was exposed to EVD).

Children without confirmed Ebola virus infection who are exposed to breastmilk of women with confirmed EVD should be considered contacts. The child should stop breastfeeding, be given a breastmilk substitute as needed, and undergo close monitoring for signs and symptoms of EVD for 21 days.

If a breastfeeding woman and her child are both diagnosed with EVD, breastfeeding should be discontinued and appropriate BMS provided. However, if the child is under 6 months of age and does not have safe and appropriate BMS, or the child cannot be adequately cared for, then the option to not separate and continue breastfeeding can be considered.

A woman who has recovered from EVD-cleared viremia and wants to continue breastfeeding should wait until after two consecutive negative EVD breastmilk tests by Reverse Transcription- Polymerase Chain Reaction (RT-PCR), separated by 24 hours. She will need skilled counselling for relactation.

To support implementation of the SOPs for the management of non-breastfed infants, existing IYCF and nutrition capacities needed to be rapidly strengthened. To this end, UNICEF supported the development of IYCF SVD training materials and facilitated a three-day training of facility-based health workers and managers in affected districts. All nutrition workers throughout the country were also sensitized on IYCF-E in the context of the SVD outbreak. In Mubende and Kasanda districts, which were the epicentre of the outbreak, all front-line health workers also received sensitization. The management of non-breastfed infants under 6 months was closely managed throughout the outbreak both in ETUs and Isolation Centres in affected districts.

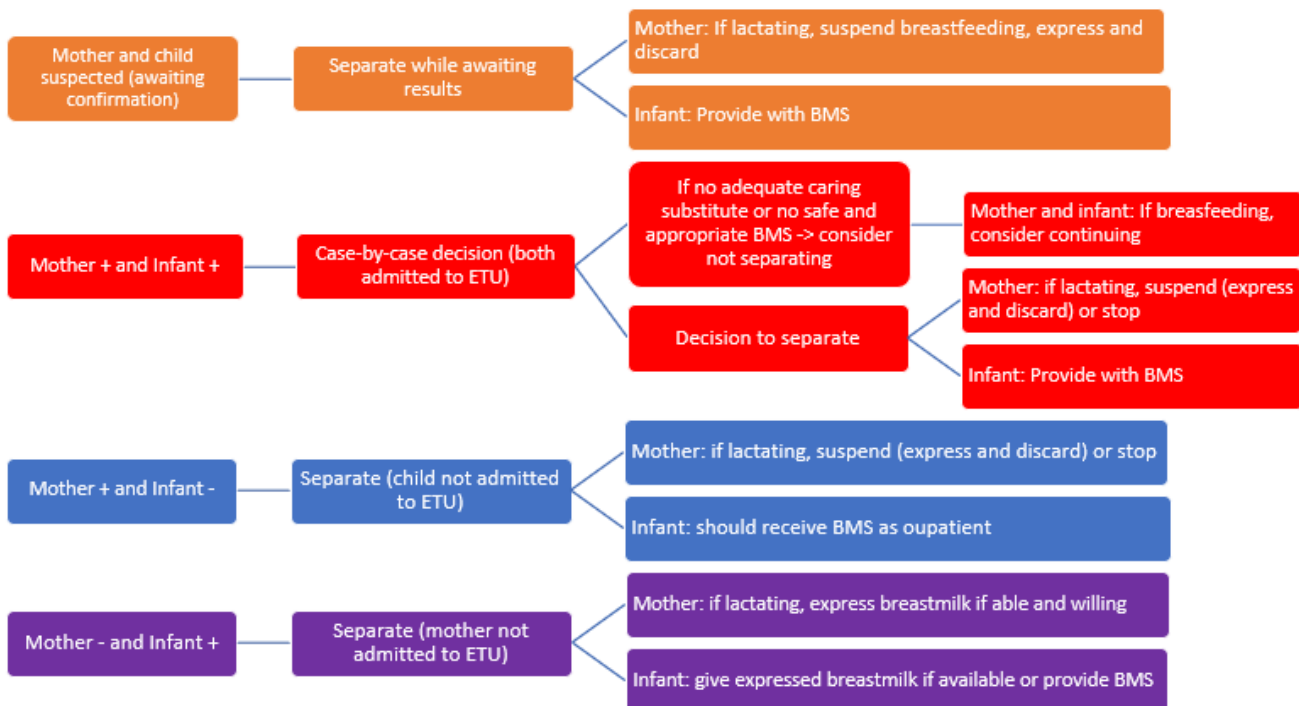


Figure 4: Decision-tree for mother-infant pairs assessed at ETUs⁸

⁸ Adapted from the draft Global FAQs 5: How to manage infant and young child feeding including breastfeeding in ETUs? (Forthcoming)

Box 3: Summary of SOPs for the management of non-breastfed infants during SVD outbreak in Uganda

Where breastfeeding mothers and/or infants were exposed to SVD or had suspected systems, they were taken to ETU sites for testing following standard prevention and control measures.

Infants or mothers with positive laboratory results were admitted to the ETU for SVD management. Infants under 6 months of age with positive laboratory results were admitted to the ETU and provided with RUIF as part of the management of SVD. Where the mother was admitted to the ETU, but the infant tested negative, the infant was separated and placed in an Isolation Unit and fed with RUIF by a healthworker and monitored for SVD signs and symptoms. Where the separation of mothers and infants was

indicated, mothers and caregivers received immediate counselling by a trained provider on the need for temporary separation and temporary cessation of breastfeeding pending recovery and the results of RT-PCR testing of breastmilk. For infants indicated to receive RUIF, at least four packs of 200mg of RUIF were provided to cover their daily needs.

Where both the mother and infant are being treated for SVD and recover and are discharged, they are discharged with a one-month take-home ration of RUIF for one month and mothers are encouraged to come for additional supplies as they attend the survivors clinic. Provision of RUIF is up to six months of age of the infant, or less if relactation is successful (where the

infant was under 6 months of age). Mothers were advised to re-start breastfeeding after two consecutive laboratory (RT-PCR) tests confirmed that the virus was no longer detectable in the mothers' breastmilk. Mothers received counselling from community-level nutritionists, health workers and psychosocial workers to support relactation and increase breastmilk supply.

Caregivers of infants from 6 months to 2 years of age either exposed to SVD or who tested positive for SVD were counselled to temporarily cease breastfeeding and substitute with any other Ultra heat treated full fat animal milk alongside optimal complementary feeding.

Achievements

In total, 79 infants aged 0–6 months directly affected by SVD (either exposed or infected) were supported with replacement feeding with RUIF during the Uganda SVD outbreak. In total, 63 infants aged 0–6 months were discharged from ETUs and Isolation Units and were followed up in the community in line with SOPs. During the course of the outbreak, 291 mothers and caretakers of children under 2 years of age received counselling on IYCF and SVD for the 219 children under 2 years directly affected by SVD (this included infants aged 0–6 months and 6–23 months). Overall, 64,901 mothers and caregivers of children under 2 years received counselling on IYCF and SVD.

Among recovered mothers whose infants remained under 6 months of age at time of writing, two had a negative breastmilk RT-PCR test; one of these children received ongoing support for relactation, while for the other, relactation was unsuccessful so supplies of RUIF were provided. One infant of a recovered mother is being taken care of by family members. The mother was reported to have walked away and abandoned the baby. Two recovered mothers still had a positive breastmilk RT-PCR test at the time of writing and so relactation has not been attempted and RUIF supplies have been provided.

Overall, 959 health workers were trained by the Ministry of Health with support from UNICEF in the eight districts. In total, UNICEF procured 73,125 200ml-packs of RUIF to support the IYCF-E response. In terms of the wider IYCF-E response, results included

successful coordination of actors involved in IYCF-E; rapid development of guidance, SOPs and fact sheets; sensitization and orientation of decision-makers, health workers and nutritionists; and monitoring of the response. No violations were reported against the Code, which represents a significant achievement.

Challenges

Although the programme was regarded a success, several challenges needed to be overcome:

- Nutrition was not one of the six pillars that were established for the response, which created difficulty in navigating and mainstreaming nutrition across pillars. UNICEF addressed this by 'nutritionalizing' the six pillars by integrating nutrition actions within them.
- Limited capacities existed within partner agencies to support the nutrition response, as most partners had not previously been engaged in the nutrition aspects of Ebola outbreaks. In response, several efforts were made to build the capacity of nutrition focal points in Uganda and to support cross-country learning from the UNICEF Country Office in the Democratic Republic of Congo, who had been previously engaged in the response to Ebola outbreaks. This learning was also shared with surrounding countries considered to be at risk of SVD as part of preparedness efforts.
- There was inadequate human resource capacity within the health system in affected districts, both in terms of numbers of health workers and skills, to provide nutrition support to infants discharged from ETUs/Isolation Units. This led to some delays in implementing the IYCF-E and wider nutrition



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response. Capacity building was undertaken in the affected districts to address this.

- Data gaps existed in terms of the numbers of infants affected by and infected with SVD at established ETUs/Isolation Units. This made it difficult to correctly quantify the amount of RUIF needed to support non-breastfed infants.
- At the beginning of the response, the possibility of local procurement of RUIF was explored. However, following a feasibility analysis, this was not deemed possible. As a result, the procurement and prepositioning of RUIF supplies was fast-tracked with assistance from UNICEF HQ and SD to ensure the rapid delivery of supplies from offshore suppliers.

Key opportunities have emerged from the nutrition response to SVD in Uganda, as follows:

- Following the outbreak declaration, the nutrition coordination mechanism was activated to coordinate the nutrition sector and address emerging issues. This coordination remains active and provides an opportunity for continued engagement with multiple nutrition actors in the country to respond to public health and other emergencies as they arise.
- The response highlighted several gaps in nutrition emergency preparedness plans which are now being addressed.
- The nutrition response to SVD provided an opportunity to better position nutrition for greater

visibility at national level and specifically in the context of public health emergencies.

- The lack of information to support the nutrition response to SVD highlighted areas for nutrition information system strengthening. This has led to a review of current indicators, the feasibility of reporting and the information system's readiness to report for quick decision-making.

Lessons learned

- Pre-existing **nutrition and IYCF-E guidance and SOPs** at global, regional and country levels ensured that IYCF-E was included in the first phase of the response and supported the fast-tracking of implementation. Joint and timely efforts to develop and update the national SOPs and guidance on nutrition and EVD was the cornerstone of a quality and uniform multi-level response.
- Embedding nutrition within response **coordination mechanisms**, including IYCF-E coordination, supported the effective management of non-breastfed infants in the response and motivated partners to support the response.
- **Cross-country learning** from previous EVD outbreaks, responses and previous in-country responses enable the building of skills to support an effective nutrition and IYCF-E response.

- **Human resource capacity** to support the appropriate nutrition care and management of children affected by EVD/SVD is essential to support a rapid response. Capacities must be built as part of preparedness and post-recovery plans. Capacities must also exist for the training, monitoring and supportive supervision of health workers engaged in support for IYCF-E and the management of non-breastfed infants.
- **BMS/RUIF** must be available to support EVD response as early as possible after the declaration of an outbreak. This requires pre-approval for the procurement of RUIF once an EVD outbreak is declared. Supplies should be enough to sustain RUIF supply during admission of infants in ETUs and within the community post discharge, where indicated, until the infant reaches 6 months of age or until relactation has been established.
- **Monitoring the use of RUIF** from the start to the end of the emergency was key and helped to curb violations against the Code, particularly in terms of the use of RUIF by health workers among infants not directly affected by SVD. Leadership of the Ministry of Health was essential in avoiding the misuse of BMS/RUIF.
- **Access to up to date population data to facilitate the estimation of numbers of infant and young children affected** are needed to support the appropriate procurement of and management of RUIF and to target resources for the management of non-breastfed infants. This may require the strengthening of the nutrition information system as part of preparedness actions.
- **Public awareness and health worker sensitization** on IYCF-E, including support to non-breastfed infants, is critical to enable adoption of protocols.
- **Consistent testing of the breastmilk of mothers recovering from SVD** is necessary to confirm inexistence of the virus in the milk even after the mother tests negative. This helps to inform decisions about the optimal feeding of the infant moving forward.
- **Successful relactation** requires highly skilled breastfeeding and psychosocial support at facility level during admission and ongoing support in the community; a high level of capacity building and human resource commitment are critical.

Annexes

The annexes for each case study can be accessed on the GNC website, at this [link](#):

[Haiti Annexes](#)

[Lebanon Annexes](#)

[Myanmar Annexes](#)

[Sudan Annexes](#)

[Iran Annexes](#)

[Ukraine Annexes](#)

[Uganda Annexes](#)

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