



World Food Programme
Programme Alimentaire Mondial
Programa Mundial de Alimentos
برنامج الأغذية العالمي

Executive Board
Annual session
Rome, 10–14 June 2019

Distribution: General

Agenda item 10

Date: 30 May 2019

WFP/EB.A/2019/10-C

Original: English

Administrative and managerial matters

For information

Executive Board documents are available on WFP's website (<https://executiveboard.wfp.org>).

Report on global losses for the period from 1 January to 31 December 2018

Executive summary

In 2018, WFP handled 4.6 million mt of food in 79 countries. Despite the challenges posed by an unprecedented eight concurrent Level 3 emergencies, which increased operational complexity, WFP provided safe, high-quality food assistance to more than 80 million people globally while minimizing losses.

An efficient end-to-end supply chain supported by strong management processes and risk mitigation systems and the targeted support to country offices provided by regional bureaux were instrumental in ensuring that global losses were the lowest since 2011 in terms of both tonnage and value.

In 2018, pre-delivery losses were 9,994 mt for a total value of USD 4.6 million – the second lowest tonnage and value since 2011. The main cause of pre-delivery losses was inadequate transport, which accounted for 71 percent, or 7,071 mt valued at USD 3.3 million.

Post-delivery losses were 12,218 mt for a total value of USD 9.8 million – the lowest since 2011. Seventy-five percent or 9,222 mt of post-delivery losses were attributable to five main causes: fire, inadequate transport, pilferage or theft, reconstitution or repacking, and improper or overlong storage

Ten country operations accounted for 9,758 mt or 80 percent of post-delivery losses in 2018. The Level 3 emergency operations in Yemen, the Syrian Arab Republic, South Sudan, Nigeria and Bangladesh accounted for 58 percent of losses, with 7,119 mt.

Focal points:

Ms V. Guarnieri
Assistant Executive Director
Operations Services Department
tel.: 066513-2200

Mr J. Kern
Director
Supply Chain Division
tel.: 066513-2293

Introduction

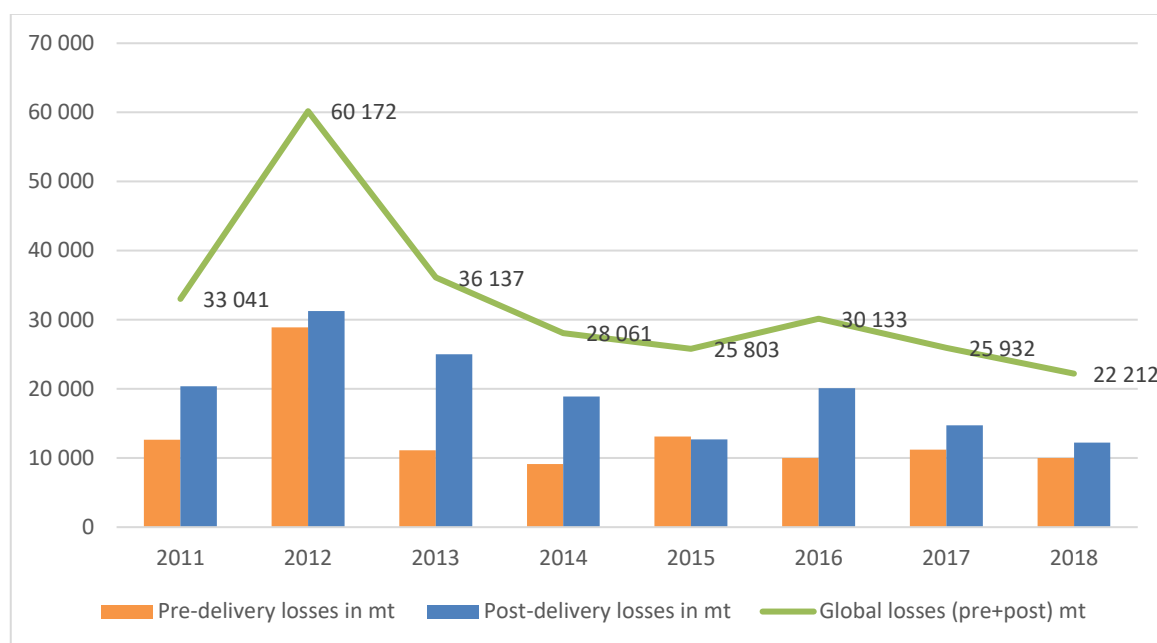
1. This report provides an overview of global losses – pre-delivery and post-delivery losses – in 2018 and describes recent measures for preventing or minimizing them. The annexes detail country-specific losses and identify countries where losses were above WFP’s reporting thresholds.¹
2. Pre-delivery losses are those that occur up to the point where legal title to the food passes to the government, usually at the first delivery point in the recipient country.
3. Post-delivery losses are those that occur after food arrives in the recipient country and before it is distributed to people in need.
4. Within the legal framework in which WFP operates, legal title of food commodities normally passes to the government of the recipient country at the commodities’ point of first entry into the country where they are to be distributed. However, although legal title may have passed for food commodities held in WFP warehouses in recipient countries, WFP generally retains possession far beyond the point at which title is transferred.
5. The report does not cover unintended uses of food after distribution to beneficiaries. Unintended uses such as sharing, theft or sale are captured through monitoring and addressed accordingly.
6. Following its approval by the Executive Board, the WFP self-insurance scheme has been extended to cover post-delivery losses. All WFP losses are therefore covered by insurance from when WFP takes possession up to the physical hand-over to the cooperating partner, beneficiaries or the government.²

Characteristics of global losses in 2018

7. Global losses in 2018 are presented in terms of volume (tonnage) and value (United States dollars) and are compared with losses in previous years.
8. Despite the difficulties posed by the eight concurrent Level 3 emergencies, the tonnage of global losses in 2018 amounted to 22,212 mt, the lowest level since 2011 (see figure 1).

¹ These are countries where losses of a single food type amount to at least 2 percent of the tonnage handled and have an absolute value of at least USD 20,000, and countries where losses of a single food type have an absolute value of more than USD 100,000.

² WFP Management Plan (2018–2020). WFP/EB.2/2017/5-A/1/Rev.1.

Figure 1: Global food losses, 2011–2018

9. The value of global losses was also the lowest since 2011, at USD 14.4 million.
10. Losses of sorghum, rice, vegetable oil, corn-soya blend and wheat amounted to 13,865 mt valued at USD 7.6 million, accounting for 62 percent of global losses in tonnage and 53 percent in value (see details in figure 2).

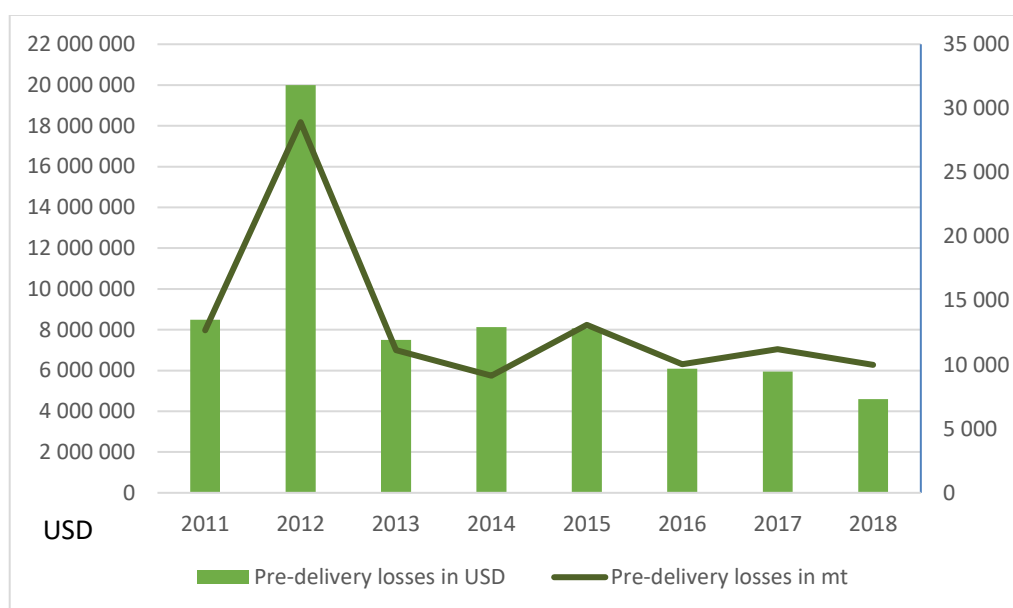
Figure 2: The five commodities of which losses were highest, 2018

Commodity	mt	USD per mt	Loss as % of total losses (mt)
Sorghum	3 206	324	14
Rice	2 966	496	13
Vegetable oil	2 765	1 023	12
Corn-soya blend	2 690	657	12
Wheat	2 238	244	10

11. By the end of 2018, USD 9.4 million had been recovered from insurance, and further insurance settlements are being processed.

Characteristics of pre-delivery losses in 2018

12. Pre-delivery losses in 2018 are presented in terms of volume (tonnage) and value (United States dollars) and are compared with losses in previous years in terms of volume, value and causes.
13. In 2018, pre-delivery losses amounted to 9,994 mt, which was the second lowest level since 2011.
14. Pre-delivery losses were valued at USD 4.6 million, which was the lowest value since 2011.

Figure 3: Pre-delivery losses in value and tonnage, 2011–2018

15. Losses of rice amounting to 2,176 mt at an average value of USD 470/mt accounted for 22 percent of all pre-delivery losses.
16. Losses of 1,990 of wheat at an average value of USD 241/mt accounted for 20 percent.
17. Losses of 1,850 of sorghum at an average value of USD 285/mt accounted for 19 percent.

Main reasons for pre-delivery losses

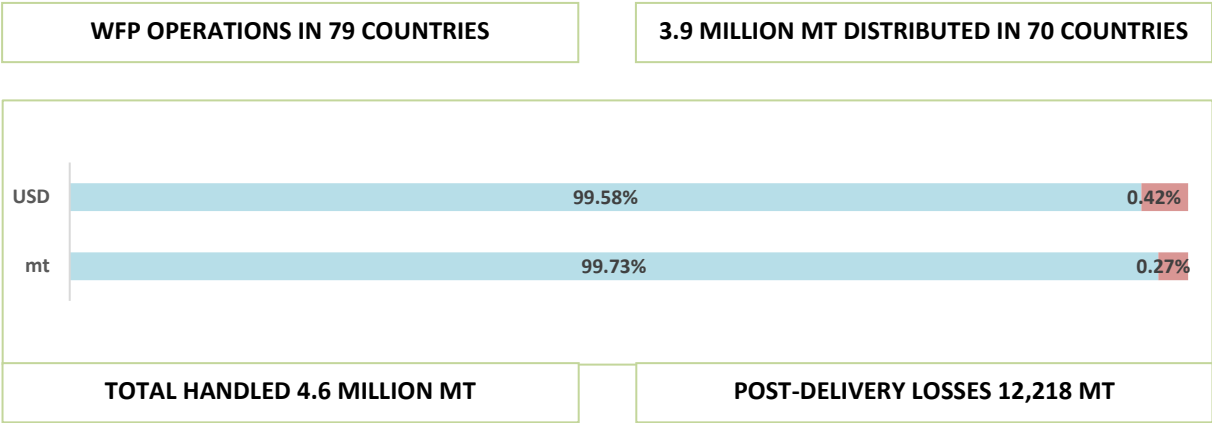
18. In 2018, 71 percent or 7,071 mt of pre-delivery losses, worth USD 3.3 million, were attributable to inadequate transport.
19. Of these losses, 81 percent occurred during ocean transport and 19 percent during overland transport. Ocean transport is generally the first transport modality for internationally procured commodities, which means that most WFP food is transported via ocean-going vessels. In addition, the transport of food in bulk on such vessels increases its susceptibility to water damage, spillage and other causes of spoilage.

Characteristics of post-delivery losses in 2018

20. Post-delivery losses in 2018 are presented in terms of volume and value and are compared with losses in previous years in terms of volume, value and causes.
21. Despite the difficulties posed by the eight concurrent Level 3 emergencies, the tonnage of post-delivery losses in 2018 was the lowest since 2011 in absolute terms and as a percentage of food handled.³
22. In 2018, post-delivery losses were 12,218 mt, or 0.27 percent of the 4.6 million mt of food handled; the corresponding figures in 2017 were 14,733 mt and 0.33 percent (see figure 2 and annex VII).

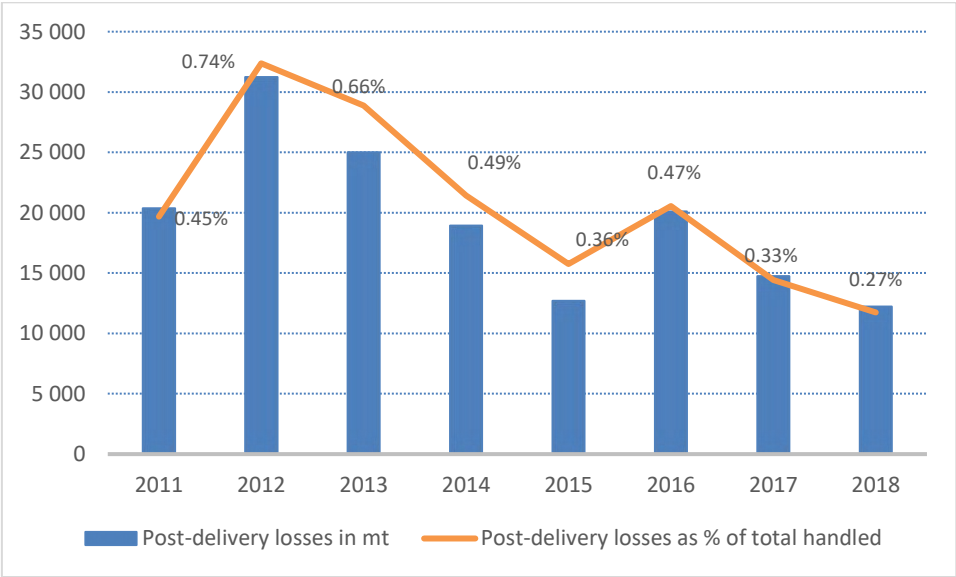
³ Tonnage of food handled is defined as “opening stocks in the recipient country plus commodities received in the recipient country”.

Figure 4: Post-delivery losses, 2018



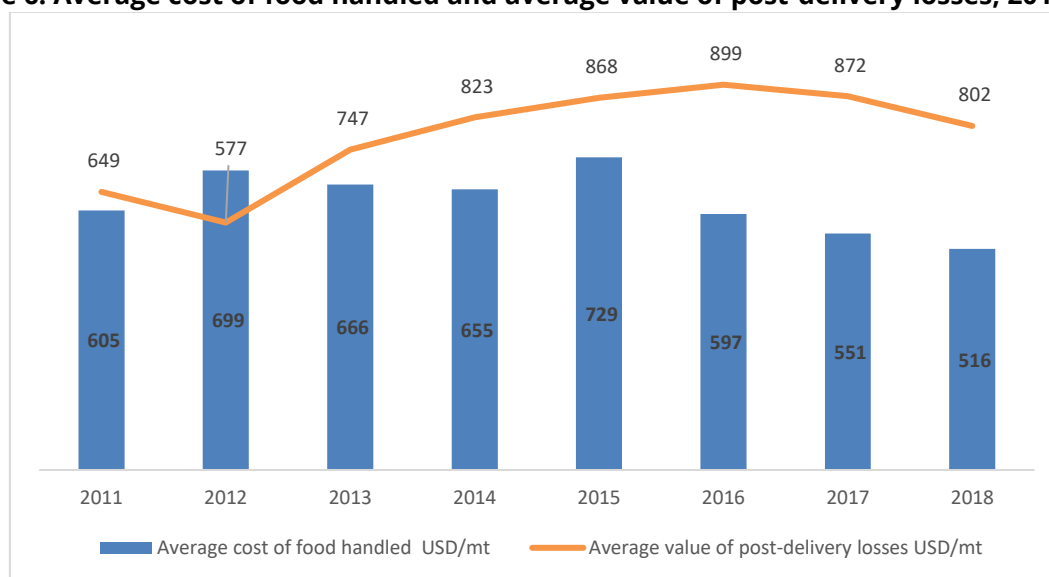
23. In 2018, post-delivery losses had a total value of USD 9.8 million, the lowest since 2011 in absolute terms. At 0.42 percent of the USD 2.35 billion of food handled, it was also the lowest in percentage terms. The corresponding figures for 2017 were USD 12.8 million and 0.52 percent (see figure 5 and annex XI).⁴

Figure 5: Post-delivery losses, 2011–2018



24. The average value of food handled in 2018 was USD 516/mt, compared with USD 551/mt in 2017. The average value of post-delivery losses was USD 802/mt, compared with USD 872/mt in 2017 (see figure 6).

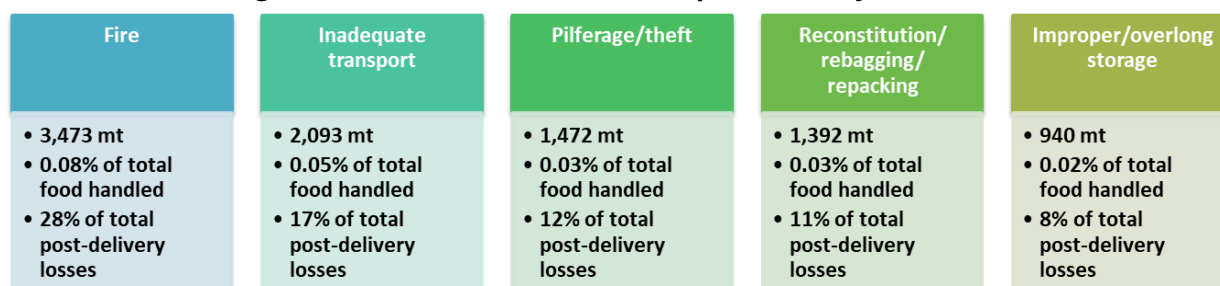
⁴ Food items are valued according to “moving average prices”, whereby the cost of each item is determined from the weighted average of the costs of similar items at the beginning of and during the period. The losses in this report are valued at the moving average prices as at the end of 2017.

Figure 6: Average cost of food handled and average value of post-delivery losses, 2011–2018

25. Conflict-affected Yemen, with losses of 4,511 mt at an average value of USD 882/mt, accounted for 37 percent of all post-delivery losses. The Syrian Arab Republic and Nigeria each accounted for 9 percent: the former with 1,141 mt at an average value of USD 801/mt and the latter with 1,064 mt at USD 746/mt.
26. Losses of vegetable oil amounting to 2,305 mt at an average value of USD 1,002/mt constituted 19 percent of all post-delivery losses. Of these, 74 percent, or 1,695 mt with an average value of USD 925/mt, occurred in Yemen.
27. Losses of 1,356 mt of sorghum at an average value of USD 376/mt accounted for 11 percent of all post-delivery losses. Nigeria accounted for 28 percent of these losses and the Sudan for 18 percent, with 386 mt at an average value of USD 462/mt in Nigeria and 246 mt averaging USD 219/mt in the Sudan.
28. Losses of 1,252 mt of corn-soya blend at an average value of USD 756/mt accounted for 10 percent of post-delivery losses. Of these corn-soya blend losses, 33 percent occurred in Somalia with 417 mt at an average value of USD 713/mt.

Main reasons for post-delivery losses

29. In 2018, 77 percent or 9,370 mt of post-delivery losses were attributable to fire, inadequate transport, pilferage or theft, reconstitution or repacking, or improper or overlong storage (see figure 7). Specific details by country are available in annex I.

Figure 7: The five main reasons for post-delivery losses, 2018

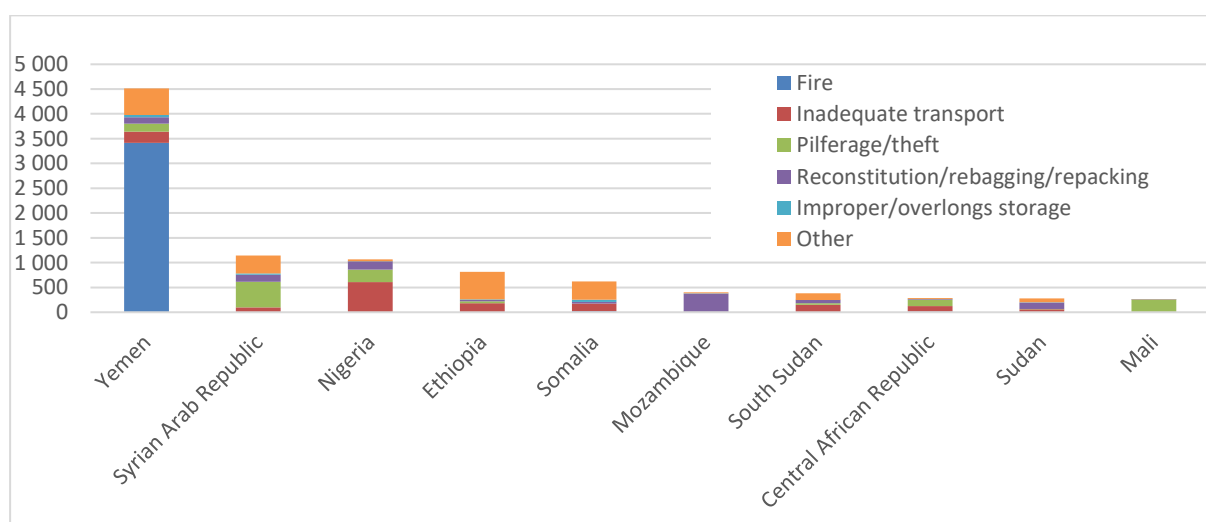
30. Fire resulted in post-delivery losses of 3,473 mt or 0.08 percent of the food handled and 28 percent of all post-delivery losses. Almost all of these losses – 3,413 mt or 98 percent – occurred in Yemen.

31. Inadequate transport accounted for 2,093 mt of losses, or 0.05 percent of food handled and 17 percent of all post-delivery losses. Of these losses, 69 percent or 1,436 mt occurred in Nigeria, Yemen, Ethiopia, Somalia, South Sudan and the Central African Republic. Contractual provisions for recovering post-delivery losses from service providers enabled recovery of USD 2.0 million in 2018. Rigorous selection and review of service providers are crucial for minimizing food losses.⁵
32. Pilferage and theft resulted in post-delivery losses of 1,472 mt, or 0.03 percent of food handled and 12 percent of all post-delivery losses. Of these losses, 1,318 mt or 90 percent occurred in the Syrian Arab Republic, Nigeria, Mali, Yemen and the Central African Republic.
33. Problems related to reconstitutions or repacking resulted in post-delivery losses of 1,392 mt, or 0.03 percent of food handled and 11 percent of all post-delivery losses. Of these losses, 925 mt or 66 percent occurred in Mozambique, Nigeria, the Syrian Arab Republic, the Sudan and Yemen.
34. Improper or overlong storage resulted in post-delivery losses of 940 mt, or 0.02 percent of food handled and 8 percent of all post-delivery losses. Of these losses, 437 mt or 47 percent occurred in Libya, Egypt and Jordan.

Post-delivery losses by country

35. Ten country operations accounted for 9,758 mt or 80 percent of post-delivery losses in 2018 (see figure 8). The Level 3 emergency operations in Yemen, the Syrian Arab Republic, South Sudan, Nigeria and Bangladesh – WFP’s largest and third, fourth, sixth and seventh largest operations in terms of tonnage of food handled – accounted for 58 percent of losses at 7,119 mt.

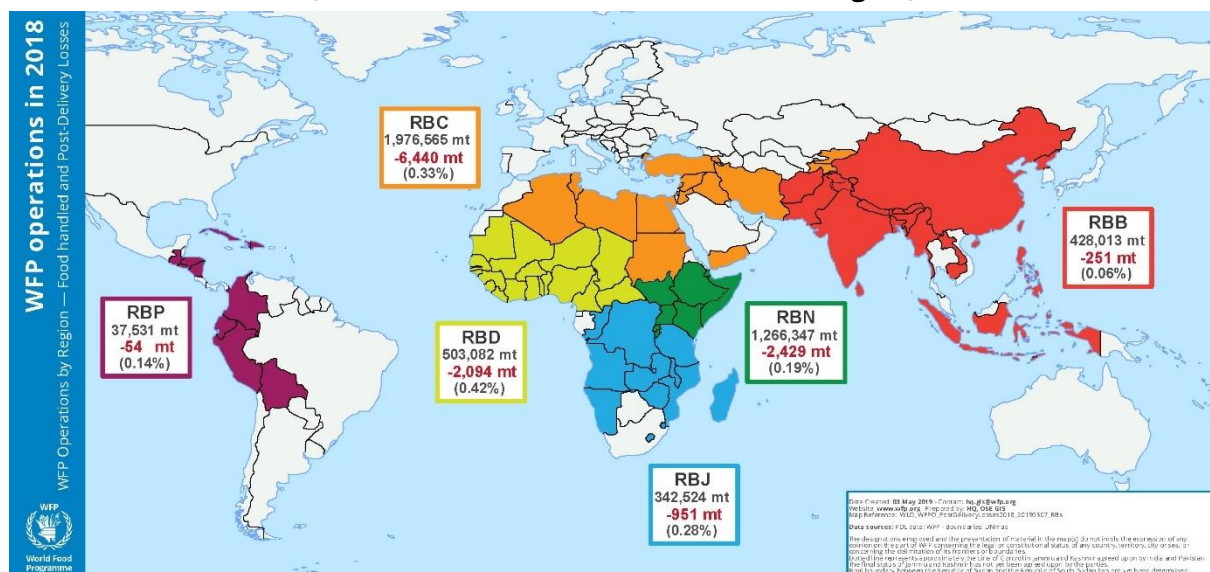
Figure 8: The ten countries with the highest post-delivery losses in 2018, by cause of loss (mt)



36. WFP’s ten largest operations in terms of volume of food handled in 2018 were, in descending order, Yemen, Ethiopia, the Syrian Arab Republic, South Sudan, the Sudan, Uganda, Nigeria, Bangladesh, Afghanistan and the Democratic Republic of the Congo. These operations handled 3.4 million mt of food or 76 percent of the total and accounted for 8,664 mt or 71 percent of all post-delivery losses (see figure 9 for an overview by region).

⁵ Poorly performing service providers receive a warning or are removed from the list of suppliers. Performance indicators for transporters include amounts lost in transit.

Figure 9: WFP operations by region – food handled and post-delivery losses (mt and % of total food handled in the region)



37. WFP operations in 19 countries had above-threshold post-delivery losses totalling 7,761 mt in 2018 (see annexes I and II). Of these countries, five were in the Middle East, North Africa, Eastern Europe and Central Asia region, accounting for 66 percent of all above-threshold post-delivery losses; five in the West and Central Africa region, accounting for 18 percent; four in the East Africa region, accounting for 10 percent; and five in the Southern Africa region, accounting for 6 percent.⁶

Measures for preventing and mitigating losses

Sourcing and food quality and safety for WFP operations

38. Through its supply chain function, WFP is committed to identifying ways of reducing food losses. Robust processes for sourcing food and ensuring its quality and safety, complemented by monitoring at all levels, are key to ensuring that post-delivery losses are minimized. System enhancements that facilitate loss mitigation have been incorporated into INFOHUB⁷ and include loss reporting, monitoring of best-before dates and an automated system that provides alerts when batches of commodities are approaching their best-before dates.
39. In 2018, WFP updated its guidelines to the supervision of vessel loading to align them with industry standards by, for example, requiring the use of kraft paper and other dunnage for all containerized cargo prone to condensation or – as in Turkey – requesting that the providers of inspection services add a metal seal to the plastic seal used by suppliers in order to reduce thefts of jumbo bags during loading.
40. Strict measures were introduced for specialized nutritious foods, banning their shipment when less than 80 percent of their shelf-lives remain.

⁶ These are post-delivery losses that exceed WFP's thresholds for country-level post-delivery losses of single food types: valued at USD 20,000 or more and accounting for at least 2 percent of the tonnage handled; or valued at USD 100,000 or more.

⁷ INFOHUB is an online platform that WFP uses for oversight and reporting on stock movements and the status of fund availability and consumption, at varying levels of detail.

41. In 2018, WFP worked on several policies and procedures for food safety and quality. For instance, a memorandum that incorporates quality assurance systems into WFP's procurement and contracting modalities for processed and nutritious foods was signed in June, and a guidance note on food safety and quality assurance in cash-based transfer programmes was signed in July. During the year, WFP also worked to finalize a protocol for the management of incidents involving food, which was signed in January 2019.
42. The Food Safety and Quality Unit also worked on building the capacities of 200 WFP staff members involved in 48 operations and external partners such as school workers participating in home-grown school feeding activities.
43. During 2018, the unit streamlined 20 food specifications with the aim of aligning WFP's food safety and quality requirements with the latest international standards and guidelines, for instance, for fortified food.
44. The unit also carried out research and development for new foods and locally produced processed foods that can be included in the food basket to satisfy local preferences, such as cassava products in Cameroon and Madagascar.
45. The unit led the improvement of packaging specifications for high-energy biscuits, allowing their shelf-life to be increased to 24 months; for lipid-based nutrient supplements, reducing the use of plastic and the cost of packaging while improving the packaging; and for oil jerrycans, which have been strengthened to reduce losses and adverse environmental impacts.
46. WFP also reduced oil losses during transportation by transporting the oil cans on pallets, thereby reducing breakages caused by handling.
47. Building on its streamlining of supplier audits in 2017, the Food Quality and Safety Unit coordinated 23 audits in 9 countries, including audits of Level 3 emergency operations. Supplier audits mitigate the risk of non-conforming commodities entering WFP's supply chain.
48. In addition, field support missions were conducted to strengthen the capacities of SuperCereal suppliers, particularly regarding standards at their facilities.

Tracking of food

49. In 2018, a team from the Monitoring and Evaluation Liaison Unit, which manages WFP's country office tool for managing programme operations effectively, COMET, conducted five regional workshops with training sessions on data verification and reconciliation and logistics for programme and monitoring staff. This led to the following improvements:
 - Strengthened monitoring systems now include regular verification of the stock and distribution reports submitted by partners prior to their validation in COMET. For example, partners' data on commodity movements is verified against other information sources such as monitoring findings and waybills.
 - The transparency and integration of on-line data systems such as COMET and the Logistics Execution Support System (LESS) enable regional bureaux to identify issues and follow up with the concerned country offices, providing support through field missions and training, including on-line.

- In headquarters, teams from the Monitoring and Evaluation Liaison Unit and LESS work together providing technical support and advice to country offices on a daily or weekly basis and conducting missions as necessary. In 2018, a team from the Monitoring and Evaluation Liaison Unit travelled to Iraq, Nigeria and South Sudan and assisted country offices in significantly reducing partners' losses, by 86 percent compared with 2017 in South Sudan, 39 percent in Nigeria and 93 percent in Iraq.

Regional bureau initiatives for minimizing losses

50. Regional bureaux assisted country offices through direct support initiatives, such as oversight and compliance missions, training, technical assessments and technical audits of suppliers, and through guidance on the mitigation of food safety and quality risks and the management of incidents. These efforts were aimed at ensuring that country offices were applying WFP best practices in food management and logistics.

Direct support initiatives

51. The Regional Bureau for the Middle East, North Africa, Eastern Europe and Central Asia conducted missions, meetings and training aimed at identifying country offices' needs and strengthening their planning and operational capacities.
52. The Regional Bureau also monitored the best-before dates of stored commodities and alerted country offices so that they could prioritize the distribution of commodities that were approaching their best-before dates.

Box 1: Example of support from a regional bureau

In collaboration with the Operational Risk Management Service (OSCR) and the Regional Bureau for Latin America and the Caribbean, the Haiti country office reviewed port operations with a view to designing supply chain systems that mitigate the risk of losses due to short-landed food in containers and facilitate the identification of liable parties.

Measures implemented include more robust inspections of containers at the port (where cargo is delivered from the shipping line to WFP), container weighing, emptying of all containers in Port-au-Prince prior to transfer to sub-office warehouses at Gonaives and Cap-Haitien, and the installation of global positioning systems (GPS) in trucks.

53. The Regional Bureau for Latin America and the Caribbean increased local purchases in order to reduce the lead times for product delivery and storage, thereby minimizing the risk of food losses.

54. The Regional Bureau for East Africa conducted oversight missions to eight country offices to observe warehouse management, transport modalities and packaging and recommend appropriate measures for mitigating food losses, including monitoring of the best-before dates of commodities using LESS, quality checks of packaging materials with a view to preventing spills and leaks, truck inspections and the installation of GPS tracking devices in trucks in order to track commodity movements from warehouses to delivery points, thereby improving monitoring and helping to reduce diversions of food.

55. The Regional Bureau for Asia and the Pacific worked with the Bangladesh country office on the prevention of losses of locally produced fortified foods. Technical assessments and technical audits of suppliers were conducted in support of corrective and preventive action plans for improving food production efficiency, safety and quality and ensure compliance. The assessments and audits were scheduled to make them overlapping and thus mutually reinforcing. The Bangladesh country office will begin to implement the action plan in 2019.

56. The Regional Bureau for Asia and the Pacific conducted training sessions on food safety and quality for country office supply chain staff with the aim of increasing awareness of food safety practices and preventing incidents. It also developed training for the cooperating partners, monitors and retailers involved in voucher operations with a view to minimizing post-delivery losses resulting from commodities not being in compliance with WFP standards.
57. The Regional Bureau for West Africa conducted training sessions on LESS and stock management in order to enhance participants' knowledge of how losses are categorized and can be minimized.
58. The Regional Bureau also worked on strengthening the capacities of cooperating partners by conducting training in warehouse management, visiting storage locations at health units, schools, etc. and coordinating with programme staff to facilitate training for cooperating partners in best food handling practices during their field monitoring missions.
59. The Regional Bureau for Southern Africa conducts regular training for staff and partners in warehouse management, commodity handling and food quality and safety, and for transporters in the handling of food commodities during transit.
60. Together with the Food Safety and Quality Unit, the Regional Bureau for East Africa trained about 70 people from eight country offices on the HACCP hazard analysis and critical control points system.
61. The Regional Bureau for Latin America and the Caribbean and the Royal Society for Public Health of the United Kingdom of Great Britain and Northern Ireland conducted training on food safety and quality management in accordance with level 2 of the hazard control and critical control point system for 40 participants from all the country offices in the region.
62. The Regional Bureau also carried out oversight missions and training in warehouse management, which led to improved warehouse inspections in country offices in the region and was repeated for implementing partners.
63. The Regional Bureau for East Africa conducted refresher training on food safety and quality and integrated pest management for warehouse staff and on food handling – loading, receiving, dispatch and quality inspection – for support staff.

Guidance tools

64. The Regional Bureau for Asia and the Pacific issued a regional “food incident charter” aimed at guiding country offices in handling critical incidents and ensuring consistent responses at the country office and regional levels.
65. The Regional Bureau also outlined an action plan for the evaluation and monitoring of food safety and quality risks as part of the emergency preparedness plan of the Nepal country office. The plan facilitates the prioritization of preventive and mitigation measures based on a risk profile outlining the possibility of a rapid-onset emergency.
66. The Regional Bureau for the Middle East, North Africa, Eastern Europe and Central Asia, jointly with country offices, collected the national food standards of each country in the region and used them to update global corporate specifications, hence reducing the risk that imported food will be rejected for failure to meet national standards.

ANNEX I

Above-threshold losses, by country

1. This annex presents post-delivery losses that exceed WFP's thresholds for country-level post-delivery losses of a single food type valued at USD 20,000 or more and accounting for at least 2 percent of the tonnage handled, or valued at USD 100,000 or more. In 2018, such losses amounted to 7,761 mt from 22 projects in 19 countries (see Table A1).

TABLE A1: OPERATIONS IN COUNTRIES WITH ABOVE-THRESHOLD POST-DELIVERY LOSSES (mt and percentage of food handled)		
Country	Sum of post-delivery losses net mt	Sum of % losses mt vs. total handled
YEMEN	4 298	15.44
NIGERIA	958	9.16
SOMALIA	505	12.78
SYRIAN ARAB REPUBLIC	466	34.60
MOZAMBIQUE	323	30.85
MALI	237	10.15
LIBYA	165	1.94
EGYPT	139	10.69
KENYA	136	10.98
ETHIOPIA	110	0.27
CENTRAL AFRICAN REPUBLIC	102	18.95
GUINEA	88	44.41
CAMEROON	51	8.49
JORDAN	51	89.07
MALAWI	37	95.22
ZIMBABWE	27	2.54
ANGOLA	24	21.65
SOUTH SUDAN	23	100
MADAGASCAR	20	3.07

Angola

2. A consignment of 24 mt of palm oil was received close to its expiry date in January 2018. The issue was identified by warehouse staff on receipt.
3. Because of the proximity of the expiry date, the oil could not be distributed. The country office immediately contacted the Global Commodity Management Facility office where the commodity had been sourced and requested a replacement.

4. The matter was addressed by the country office and the Regional Bureau for Southern Africa. The oil was sent for analysis, deemed unfit for human consumption and, with authorization from the Operational Risk Management service (OSCR), donated to BIOCOM, a local bioenergy company.
5. Following the incident, the country office decided not to buy commodities with less than four months of shelf-life remaining and informed dispatching offices of this decision.
6. In addition, protocols for commodity shelf-life management have been reviewed with a view to strengthening commodity management systems, and warehouse staff have received training on commodity handling.

Cameroon

7. Above-threshold losses in the Cameroon country office concerned 51 mt of corn-soya blend, of which 49 mt expired because of overlong storage and 2 mt because of operational causes such as improper transport practices, poor handling at WFP warehouses and distribution sites, wet bags, reconditioning and the distribution of over-sized portions. Transport losses were recovered from the invoices of the transporter concerned.
8. In November and December 2017, the country office received 1,481 mt of corn-soya blend with a best-before date on the packaging differing from the date in the system: some bags were labelled as expiring in August rather than September 2018.
9. According to the 2018 distribution plan, it would have taken six months to distribute all the stocks marked as expiring in August or September, which was not feasible because of operational constraints. As a result, the commodities expired and the country office requested OSCR approval for their disposal, which enabled the recovery of USD 2,363 from a sale.
10. Mitigation measures included the implementation of physical checks by storekeepers during offloading to ensure that the best-before date on the packaging matches the date in the system, with discrepancies being reported.
11. Items in warehouses are stacked according to their best-before dates to ensure that those with the earliest expiry dates are delivered first, and weekly stock reports, including best-before dates, are issued.
12. On-the-job stock-management training was provided to WFP warehouse staff, cooperating partners and transporters.
13. A new feature provided by INFOHUB (see paragraph 38 in the main document) enables stakeholders registered on the INFOHUB platform to receive automatic alerts on the best-before dates of stocks held.

Central African Republic

14. In February and May 2018, two significant looting incidents took place on the Bangui-Bambari route. In both instances, trucks broke down on the road and were looted, resulting in the loss of 50 mt of vegetable oil and 36 mt of rice.
15. The ageing vehicles used by local transporters and the poor road network throughout the country contributed to the breakdowns. WFP's Legal Office advised that the transporters should be held accountable and the losses recovered from them. Completion of the recovery is expected by June 2019.
16. To mitigate the risk of similar incidents, all trucks now undergo basic mechanical checks before loading and only those found to be in suitable condition are loaded. In addition, a WFP local security assistant accompanies each escorted food convoy. These measures have led to a significant reduction in breakdowns and looting.

17. On 15 November 2018, the camp for internally displaced persons in Alindao, in the eastern part of the country, was attacked by armed groups and set on fire. A nearby warehouse belonging to a WFP cooperating partner was burned and a significant part of the stored food was destroyed while other commodities were looted by the population. Losses included 17 mt of high-energy biscuits, some of which were burned and some looted by local people living near the camp, and considerable tonnage of pulses, vegetable oil, corn-soya blend, rice and SuperCereal Plus.
18. The incident was considered *force majeure* and therefore no process for recovering the value of the loss was initiated.
19. To mitigate security risks in areas suffering from violence and high criminality, WFP is seeking storage space in secure compounds and has moved its storage facility in Alindao close to the compound of the United Nations Multidimensional Integrated Stabilization Mission in the Central African Republic; in addition, commodities remain in the secure compounds until just before their distribution, at which time they are collected by the implementing partner.

Egypt

20. Above-threshold losses in the Egypt country office concerned 139 mt of date bars procured locally for the school feeding programme. The commodities expired as a result of concerns regarding alleged safety and quality issues with a local supplier, which created challenges for the planning and implementation of distributions.
21. To reduce the risk of food incidents arising from poor storage conditions, the Government requested the country office to change from weekly to daily delivery. The change in delivery model led to over-production by the local supplier, which resulted in 54 mt of undistributed stock at the end of the school year.
22. The Government also requested the country office not to distribute 74 mt of date bars with specific production dates because of alleged safety issues raised in certain governorates. An independent evaluation established that the date bars were compliant with WFP standards, and no relation between the date bars and any of the food safety incidents reported was found.
23. An additional 11 mt of date bars was confiscated by authorities: 1 mt in Assuit because of reported food safety issues, and 10 mt in Alexandria because of claims of incorrect specification numbers printed on the packaging.
24. Laboratory tests conducted by national health authorities showed no abnormalities in the confiscated date bars, and WFP addressed the irregularities in specification numbers on packaging by immediately instructing that the bars be repackaged in all governorates.
25. As the Government does not release confiscated stocks, the country office is seeking to ascertain the destruction date of the date bars so that staff members can oversee the destruction process.
26. To help recover the losses, after consulting the Regional Bureau for the Middle East, North Africa, Eastern Europe and Central Asia and OSCR, the country office sold 128 mt of date bars to a fodder plant and recovered USD 14,321.
27. To mitigate any similar incidents in the future, the country office signed a memorandum of understanding with the national food safety authority, which has the aim of strengthening the capacities of stakeholders along the supply chain for school feeding.
28. To address storage concerns, WFP designed food storage cabinets under the guidance of the national food safety authority, and installed 550 cabinets in the schools it supports.

29. In addition, the country office has adopted a strategy of minimal production at its contracted date bar supplier. Under the strategy, production is first increased to develop sufficient stocks to sustain operations, before being reduced so that stocks for only one week of distributions are held. This mitigates the risk of overstocking and reduces the quantities of undistributed stocks in the case of an incident or the halting of distributions.

Ethiopia

30. On 2 July 2018, five WFP contracted trucks carrying 197 mt of food aid comprising maize, corn-soya blend, pulses and oil in transit from the main hub in Nazareth to Moyale woreda in Somali region, Dawa zone were stopped and looted near Moyale. The most significant loss was 111 mt of corn-soya blend.
31. Looters also took the waybills, which may indicate that the theft was intended to prevent aid from reaching Somali region. WFP reported the issue to the national disaster risk management commission and the Somali regional state government and suspended food dispatches from Adama to Dawa zone until clearer procedures and assurances are in place.
32. Following clashes in November 2018, WFP faced several incidents of looting of food aid in the border areas between Oromia and Somali regions, mainly on the main road to Moyale and the road between Hudet and Negelle.
33. Given that the risk of such incidents had been considered to be relatively low, WFP decided to assign only limited responsibility to the transporters and will seek to recuperate only 50 percent of the loss value from them.
34. WFP is examining options such as the introduction of “hubs and spokes” operations¹ in Somali region; identification of “hot spots” where security risks are high, and negotiation of humanitarian access, with the use of armed escorts as a last resort; regular coordination and information sharing with stakeholders regarding the movement of humanitarian cargoes; and promotion of joint assessments, planning, implementation and reporting.

Guinea

35. Above-threshold losses in the Guinea country office concerned 88 mt of vegetable oil. Operational reasons such as reconstruction and inadequate transport caused the loss of 1 mt, while 87 mt was lost because of overlong storage.
36. The oil was part of a larger batch purchased through the Global Commodity Management Facility in 2017, part of which was dispatched, while the remainder was stored to await the arrival of other commodities in the food basket. Rice, the main food basket commodity, did not arrive until a year later.
37. The delay was caused by a lengthy international food procurement process followed by delays in maritime transport. The country office explored the possibility of borrowing food from other project activities, but that was not possible. As a result, the country office could not implement its planned operation at the beginning of the lean season in May.
38. In June 2018, three months before the expiry date of 31 August, a plan for distributing the remaining quantity of oil through blanket feeding for the prevention of acute malnutrition in the southeast of the country was endorsed. The food basket was completed in July, but the collapse of a bridge on the main national road paralysed transport activities for more than two weeks and the 20 mt capacity of the temporary bridge that was installed was inadequate for WFP’s contracted transporters.

¹ In the hubs and spokes model, transport routes are planned as a series of “spokes” between central “hubs”.

39. WFP had to transfer the food to a cooperating partner for immediate distribution in late July. However, the operation was suddenly interrupted by the Government's quality control office, which requested laboratory analysis prior to distribution as the expiry date of the oil was approaching. Test results were not received until 22 August and indicated that the oil was short of some nutrients and therefore unfit for human consumption.
40. OSCR authorized the country office to carry out a local salvage sale, providing instructions and guidelines on the necessary procedures. As advised by OSCR, the oil was sold to local soap manufacturers for USD 108/mt.
41. The country office pursued several initiatives for avoiding and mitigating similar incidents in the future, including reviews of distribution plans against stock reports, the supervision of food quality in warehouses and the reporting of potential issues.
42. In addition, standard operating procedures for storage and transport have been updated and shared with WFP staff and service providers, and letters of understanding with warehouse owners detail their responsibilities for ensuring good-quality storage infrastructure.
43. Stock management training for storekeepers and logistics assistants is planned for 2019, and internal control measures, including oversight missions, are being strengthened.

Jordan

44. Above-threshold losses in the Jordan country office were 7 mt of Halawa and 44 mt of date bars and were caused mainly by expiry of the commodities. No costs were recovered from third parties.
45. The Halawa was purchased in 2016 as part of a planned food ration for Syrian beneficiaries stranded at the Berm on the northeastern border between Jordan and the Syrian Arab Republic.
46. Because of security concerns, humanitarian assistance was suspended by the Jordanian armed forces in August 2016. Commodities were stored at a warehouse pending the resumption of distributions. A few months later, the armed forces informed the country office that the operation would be resumed later under new conditions, and that WFP teams would no longer be carrying out distributions.
47. It was therefore decided to redirect the commodities to Azraq refugee camp. However, distribution at the camp had to receive donor approval, which was obtained a few months later when some of the ration components, including the Halawa, had expired.
48. The date bars were purchased in 2015 for a school feeding programme. Quality issues were reported during distribution and the date bars were returned to the WFP warehouse to be checked.
49. Tests showed that the bars were fit for human consumption, and part of the returned quantity was distributed at Shuwaier summer camp. The remaining 42 mt of bars were kept at the WFP warehouse as their expiry date was three months later and there was no guarantee that schools would be able to distribute them within that time. WFP therefore decided to destroy these date bars.
50. An additional 2 mt of date bars were written off on the recommendation of the Regional Bureau for the Middle East, North Africa, Eastern Europe and Central Asia. As a result of a return of stocks to the supplier and the roll-out of LESS throughout the country, 2 mt of date bars that did not exist were incorrectly recorded as being in the supplier's stock.
51. WFP has established local food supply agreements to reduce the costs of and tonnage in storage, hence also reducing the risk of commodities expiring before distribution, and

will conduct logistics and food inspections and safety training for cooperating partners. In addition, supply chain staff are working more closely with programme staff to improve distribution plans and reduce the risks linked to prolonged storage.

Kenya

52. In March 2018, the Uganda country office raised concerns regarding the quality and safety of corn-soya blend and flagged these concerns with other country offices.
53. In the Kenya country office, more than 90 percent of the stocks that were purchased under the same purchase order had already been distributed to refugee operations in Dadaab and Kakuma and no concerns had been raised. Nonetheless, the country office decided to suspend further distributions and the remaining corn-soya blend was put into storage.
54. In April, the Kenya country office asked an inspection company to collect samples from Kakuma and Dadaab for analysis to establish whether the commodity was fit for human consumption. Laboratory analysis indicated that the commodity did not comply with WFP specifications for corn-soya blend.
55. The country office undertook additional analysis to establish whether the consignment could be disposed of through sale for animal consumption, but the results were negative. The country office therefore obtained OSCR authorization for the destruction of 134 mt of corn-soya blend through burning.
56. An additional 2 mt of corn-soya blend was lost as a result of operational causes including poor handling.
57. The country office worked closely with the Regional Bureau for East Africa and headquarters in addressing the issue and recommendations were made for improving food safety and procedures for the management of quality incidents.
58. It was also agreed that WFP would engage with the supplier to confirm the impact of extended storage in equatorial conditions on the organoleptic qualities of blended foods. WFP headquarters is following up on recoveries.
59. The Kenya country office has been undertaking capacity strengthening activities in commodity management for warehouse staff and regular compliance missions to all warehouses managed by WFP or cooperating partners. Periodic reviews followed by proper reporting have reduced commodity losses significantly.
60. The country office also carries out regular compliance missions and periodic capacity strengthening in commodity management and integrated pest management for service providers.

Libya

61. Above-threshold losses in the Libya country office concerned 165 mt of food rations. Operational reasons such as poor handling caused the loss of 2 mt, while 163 mt expired as a result of overlong storage.
62. The food rations were to be distributed by a cooperating partner, which did not receive the permission of Libyan authorities to continue activities in the east of the country. Commodities were therefore handed over to the Libyan Relief Agency in January 2018.
63. The agency expressed concerns about some of the commodities in the ration and the food and drugs control centre in Benghazi reported these commodities as infested.
64. In February 2018, the country office appointed a local independent laboratory to test the commodities, but laboratory staff were not granted access to the warehouse for testing until March 2018.

65. The commodity analysis report confirmed that the commodities had expired (in January 2018). The country office therefore proceeded with the destruction of the rations in December 2018 after receiving approval from OSCR.
66. A meeting was held with Libyan authorities in July 2018 to discuss the challenges and agree on how to avoid similar incidents in the future.
67. As local authorities in Benghazi had designated the Libyan Relief Agency as the only cooperating partner allowed to work with international organizations, the country office revised its distribution plans and invited staff of the agency to a workshop for cooperating partners held in December 2018 and aimed at building partners' capacities, particularly in reporting and monitoring.
68. The country office will select cooperating partners that have been authorized by the authorities to work in the specific area of WFP operation.
69. Actions will be taken to reduce delays at customs and to select commodities with longer shelf-lives.

Madagascar

70. The total amount of above-threshold losses in the Madagascar country office was 20 mt: 15 mt was lost as a consequence of the incident described in paragraphs 71–74, and 5 mt was lost in various minor incidents including those involving transport problems and pest infestations.
71. During the emergency response to El Niño in 2017, the warehouses in Amboasary received two batches of vegetable oil, one with a best-before date of 30 November 2017 and the other with a best-before date of 30 June 2018.
72. The first of these batches was programmed for delivery during the response, but the second batch was erroneously dispatched instead. Warehouse staff were preoccupied with the sudden increase in requirements and did not notice the mistake and, in LESS, the second batch was incorrectly recorded as being in stock, meaning that the system could not notify staff when the expiry date of the first batch – the one that was actually in stock – was approaching.
73. The error went unnoticed until the best-before date had passed and the batch became a loss resulting from inadequate warehouse management.
74. The expired oil – 15 mt – was sent for analysis and deemed unfit for human consumption.
75. The Regional Bureau for Southern Africa addressed the issue during an oversight mission and, after consultation with OSCR, the country office donated the oil to a local charity working on income-generating projects for vulnerable women in the south of Madagascar, where it was used for soap production.
76. Lessons learned from the incident were discussed extensively by the country office supply chain team, and standard operating procedures for warehouse management, which include regular oversight missions, were developed and applied. In addition, monthly inventory forms were modified to include a check on whether the best-before dates marked on stocks correspond with those recorded in LESS.

Malawi

77. A total of 37 mt of corn-soya blend was lost because of overlong and inadequate storage and poor handling.
78. Most of the loss, 27 mt, was due to expiry dates. The commodities were transferred to the cooperating partner's warehouse one day before the best-before date because

the wrong dates were registered in the LESS system. The commodities were returned to WFP for disposal after two months following the standard process of consultations and reporting. An additional 3 mt was found to have passed its best-before dates during offloading.

79. A further 6 mt was damaged by rodents in the warehouse, making it unfit for consumption, while the remaining 1 mt was damaged by water while being transported to the warehouse.
80. The transport loss was recovered through deduction from the transporter's invoice.
81. Reconstitution of the 6 mt in warehouse losses was not possible because the commodities were deemed unfit for human or animal consumption. The Malawi country office therefore sought authorization from OSCR for their disposal.
82. Measures that were put in place or strengthened to avoid future losses included stock monitoring through LESS to ensure that the correct best-before dates are recorded and alerts are issued to all staff via weekly updated dashboards; increased inspection of warehouse stocks and infrastructure; training for the warehouse staff of WFP and cooperating partners on commodity management best practices; and engagement with commercially contracted transporters to ensure that they use protective measures during harsh weather conditions.

Mali

83. Terrorist and criminal activity in the north of the country were the main reasons for commodity losses.
84. On 6 June, the first convoy to deliver food to beneficiaries in Ténenkou (Mopti) as part of the Sahel shock response was intercepted by armed groups and all nine trucks were burned with their contents. This resulted in a loss of 172 mt of food, including 164 mt of sorghum, which constitutes an above-threshold loss.
85. The value of the food lost will be recovered from corporate insurance.
86. WFP holds a yearly meeting with non-governmental organizations and transporters to provide an update on its requirements and procedures. Constraints and difficulties are discussed with a view to finding the best operational solutions. Monthly technical meetings are held with transporters in the Mopti region at which to discuss deliveries to cooperating partners.
87. In July 2018, a truck transporting 25 mt of Plumpy'Sup to Timbuktu sub-office broke down in Douentza (Mopti). During the night, the truck was attacked by armed individuals and the commodities were lost.
88. Additional small losses of Plumpy'Sup registered during the year and totalling 1 mt had operational causes such as inadequate transport.
89. In November, two trucks carrying 43 mt of corn-soya blend to a cooperating partner in Gossi were attacked by armed individuals and looted in Hombori. Additional small losses of corn-soya blend registered during the year totalled 4 mt.
90. The value of the food lost in these two incidents will be recovered from the transporters. The service providers agreed that WFP will retain payment of all pending invoices from 2018 and that they will deduct 15 percent from all future invoices until the value lost has been recovered.
91. The Mali country office consulted headquarters and the Regional Bureau for West Africa to seek guidance on loss recovery and mitigation measures. Following these discussions, the country office requested transporters to reimburse the value of lost commodities and issued new requests for quotations for transport services for 2019.

92. The country office also held sensitization sessions with transporters in Bamako and at all sub-offices at which it explained transporters' liability.

Mozambique

93. In January 2018, the Mozambique country office started to distribute maize meal purchased from a local supplier to schools in seven provinces under the national school feeding programme.
94. In February, a WFP school feeding field mission to four of the targeted provinces detected signs of weevil infestation and national authorities in another two provinces raised concerns about the quality of the maize meal.
95. The country office immediately requested an inspection company to assess storage conditions at schools in one of the provinces and to take samples of the commodity for laboratory testing. Results showed that part of the maize meal was damaged as a result of poor roofing in school warehouses.
96. The country office addressed the infestation by testing the commodities and purchasing a second batch from the same supplier to replace the infested commodity.
97. The country office also organized a joint inspection with the provincial department of education to examine the quality of the commodities at the supplier's facilities. In April, a joint report was issued confirming that the maize meal was of acceptable quality.
98. In May, following resumption of its food distributions and despite the positive findings of the joint inspection, WFP was asked to halt all distributions and collect remaining stocks from the schools.
99. Following consultations with government authorities, WFP was requested to resume food distribution activities contingent on the results of an investigation led by the National Inspectorate of Economic Activities.
100. In July, the country office and the national inspectorate carried out several joint missions to inspect the warehouses of WFP and its cooperating partners and to take samples from the commodities destined for distribution to schools.
101. In August and September, the country office raised with government authorities its concerns about the impact that withholding the commodities would have on operations, particularly in view of the fast approaching best-before date of 30 September.
102. On 2 October, the authorities shared the laboratory results, which showed that the maize meal was fit for human consumption, but a second sampling was then necessary to determine whether the shelf-life of the commodity could be extended. These tests indicated that the product was unfit for human consumption, but suitable for animal consumption.
103. The country office will seek to sell the commodities, 323 mt, as animal feed to mitigate the financial losses incurred.
104. Although the quality of the maize meal was sound, factory audits undertaken in May showed that none of WFP's suppliers were able to meet WFP's production standards for food safety and quality. The country office therefore decided to cease purchasing maize meal locally, pending implementation of audit recommendations. Meanwhile, to ensure continuation of the national school feeding programme, it was decided to replace maize meal with rice, which has a longer shelf-life.
105. In addition, the country office and the Ministry of Education and Human Development agreed that any commodities procured locally should be cleared by the provincial department of education before being distributed.

106. It was also decided to contract a food safety and quality technologist as a consultant to work with the country office on supplier assessments, the interpretation of laboratory results, capacity building of suppliers and cooperating partners and warehouse management systems.

Nigeria

107. WFP operates in northeastern Nigeria, where nine years of conflict have caused a large-scale humanitarian crisis in the worst affected states of Adamawa, Borno and Yobe. Secondary overland supply routes into the area extend from storage hubs in Maiduguri and Damaturu to final delivery points located in the three states. In 2018, the country office contracted 400 trucks to move approximately 151,000 mt of mixed commodities. The trucks operated in an insecure environment and were subject to attacks and looting along the road, which resulted in food losses.
108. Along with transport challenges, poor handling arising from the limited capacity of cooperating partners is another main cause of food losses, while inadequate background checks of third-party transporters have exposed WFP commodities to the risk of theft.
109. Following these incidents, the Nigeria country office witnessed above-threshold losses of 958 mt of mixed commodities, mainly sorghum, vegetable oil and rice.
110. Transport losses were recovered from transporters' invoices for all incidents except those considered to be beyond the control of the transporter, such as the ambush of a convoy under armed escort; of the 17 in-transit incidents recorded in 2018, only one fell into this category. A total of USD 137,647 was recovered, accounting for 99 percent of the value of all in-transit losses in 2018.
111. WFP procured 100 GPS units for installation on contracted trucks to monitor commodities in transit to major destinations. The equipment is linked to a remote-access tracking platform.
112. In addition, a daily report on commodities in-transit is shared with the operations team to alert concerned personnel of the transit status of dispatched trucks as a way of flagging possible truck diversions. The country office has also established a database that records all incidents occurring along the road to final delivery points, with the date, time and cause of each incident.
113. The country office plans to establish a small control tower that would allow real-time monitoring of truck movements and deliveries.
114. Compared with 2017, there has been a significant reduction in non-recoverable transport losses. This can be attributed to the mitigation measures implemented, such as the establishment of a service for recovering vehicles that have broken down on the road, loss sharing between the recovery service provider and the transporter, introduction of a GPS tracking system in the last quarter of 2018, and the blacklisting of trucks involved in disputed incidents.
115. To mitigate in-transit losses caused by vehicle breakdowns, WFP enhanced its 2017 memorandum of understanding with the national union of road transport workers to include a penalty clause under which the costs of any loss arising from failure to provide empty trucks for transshipment when a breakdown occurs along the eastern route are shared between the transporter and the union and the recovery service provider.
116. To reduce the risk of theft, the country office emphasized the need for transporters to carry out thorough background checks and a strict vetting process for subcontracted service providers.

117. To reduce operational losses, in 2018 the country office organized seven training sessions on commodity storage and handling and warehouse management. More than 160 participants from 16 organizations including WFP cooperating partners, third-party monitors and government agencies attended the three-day training sessions.
118. Another workshop was organized to sensitize stakeholders to WFP's core principles. A total of 259 transporters, procurement suppliers and retailers involved in cash-based transfer programmes participated.

Somalia

119. In August 2018, a leakage of hydraulic oil on the WFP-chartered vessel PETRA II, which was on its second voyage for WFP, stained 103 mt of commodities. After a reconstitution exercise, 88 mt of Plumpy'Sup were reported as unrecoverable and was paid for through WFP's self-insurance
120. In March 2018, the Uganda country office reported quality issues with corn-soya blend. In June 2018, the Somalia country office, which had received corn-soya blend from the same supplier, asked an inspection company to test the commodity, which was assessed as being unfit for human consumption. This finding was confirmed by additional tests conducted in July by a WFP food technologist and the inspection company.
121. Additional losses totalling 417 mt of corn-soya blend resulted from the expiry of commodities in the cooperating partner's warehouse and inadequate transport conditions.
122. The country office requested OSCR to authorize the destruction of the spoiled corn-soya blend.
123. Headquarters is following up with the supplier to recover the loss.

South Sudan

124. Above-threshold losses incurred in South Sudan concerned 23 mt of rations that were lost during civil strife and through theft in Bor and Bentiu, two locations where insecurity and armed conflict cause major difficulties.
125. The looting occurred at cooperating partners' warehouses, where food is pre-positioned during the dry season to facilitate the continuation of planned deliveries when access becomes difficult.
126. Local authorities are investigating the incidents and WFP is supporting the cooperating partners, including through the budgets of field-level agreements, in improving storage security and employing additional guards.
127. Cooperating partners have documented all incidents through police incident reports and notes for the record that account for the losses and outline the remedial actions taken and any recovery processes initiated.

Syrian Arab Republic

128. Escalation of conflict in the southern Syrian Arab Republic in June and July 2018 in Dar'a and Quneitra governorates resulted in significant food loss incidents. On 29 June and 11 July 2018, the warehouse of a cooperating partner in Tiba was looted and all the food in storage was reported as lost. In consultation with WFP, the partner closed the warehouse and evacuated staff when military operations in the area escalated. When staff regained access to the warehouse, 466 mt of food rations were missing. The Syrian Arab Republic country office contacted the Syrian Ministry of Foreign Affairs to inquire about the incident, and the ministry confirmed that the commodities had been looted by armed groups.

129. A review of the incident showed no negligence on the part of the cooperating partner and hence no financial liability for the food losses was attributed.
130. The country office accepted the losses, following the standard OSCR procedures and the applicable risk appetite statements. All documentation related to the incident was shared with OSCR.
131. Initiatives pursued by the country office in 2018 that helped to mitigate losses along the supply chain included coordination of security and context analyses with the United Nations Department of Safety and Security and training of cooperating partners in warehouse management, including loss mitigation where feasible.
132. Other mitigating measures not linked to the incidents described in the previous paragraphs include the wrapping of commodities during transport, the reallocation of commodities among project activities to reduce losses resulting from expiry when activities are interrupted by conflict, and monitoring of the best-before dates of stored commodities by the commodity accounting unit in order to alert warehouse managers when certain batches should be prioritized for distribution. In addition, the Food Safety and Quality Unit monitors the production of locally purchased processed food (date bars, vegetable oil and salt) and ensures that all items are properly sealed to avoid exposure that could lead to spoilage.

Yemen

133. Above-threshold losses at the Yemen country office amounted to 4,298 mt of mixed commodities including 1,695 mt of vegetable oil. The majority of these losses, 3,413 mt, were the consequence of fire affecting four WFP warehouses in Hudaydah.
134. On 31 March 2018, a fire erupted at a storage facility in Hudaydah city and four WFP warehouses and their entire contents were burned. No CCTV camera was covering the area where the fire started, but footage from cameras covering other areas showed that the fire spread within minutes. The efforts of the warehouse operator to contain the fire were unsuccessful and even the intervention of firefighters failed.
135. WFP was not permitted to investigate the cause of the fire, but the criminal investigation department of Hudaydah shared the report of its investigation with the warehouse operator on 13 May 2018. According to the report, the cause of the fire was spontaneous combustion triggered by a combination of large quantities of flammable debris at the facility, high temperatures and oxygen.
136. WFP recovered the value of the losses immediately from self-insurance, and additional safety measures taken after the fire included the installation of additional CCTV cameras inside and outside each warehouse, with control rooms for 24-hour monitoring of the cameras inside the guard's room and in the warehouse operator's office in Hudaydah. WFP has access to the cameras for monitoring purposes.
137. To enhance security, the warehouse operator has been asked to install at each warehouse a tank of firefighting foam holding 5,000–6,000 litres and connected to a long hose, pump and generator, and fire sensors, alarms and extinguishers. The operator will also ensure that firefighting vehicles are available at the location. Fences around the warehouses and an observation tower will be installed to enhance security and facilitate surveillance.
138. In consultation with Yemen's civil defence department, the country office is purchasing five firefighting trucks from the United Nations Humanitarian Response Depot in Dubai. The trucks will be positioned at WFP storage hubs.
139. In consultation with OSCR, the superintendent appointed by WFP conducted a survey of the fire incident at the warehouses and prepared a detailed incident report.

140. Other activities that the country office plans to carry out to prevent or mitigate similar incidents include training of warehouse staff on warehouse management and firefighting practices and contracting of a service provider specialized in firefighting and prevention to assess the safety and security procedures and arrangements at all WFP warehouses.
141. Additional mixed commodities were lost because they passed their best-before dates while in a warehouse that had become inaccessible to WFP.
142. In June, following an intensification of conflict around Hudaydah, all road access to four WFP warehouses was blocked. The country office negotiated with local authorities for authorization to remove the stock from the warehouses and transfer it to Bajil warehouse outside Hudaydah city. After intensive negotiations and despite the severe security situation, the required deconfliction was achieved and WFP secured access to the warehouses for two limited periods and was able to remove approximately 650 mt of food.
143. In October, the security situation around the warehouses deteriorated even further and WFP lost all access to the area. The condition of the stocks held in the warehouses is currently unknown.
144. Additional losses occurred because of the mishandling of cargo in Berbera and improper transport on board a chartered vessel.

Zimbabwe

145. A consignment of 27 mt of expired palm oil was received in January 2018. The oil was sent for analysis but deemed unfit for human consumption.
146. The matter was addressed by the Zimbabwe country office and the Regional Bureau for Southern Africa and authorization to donate the expired vegetable oil was requested from OSCR.
147. The oil was donated to a local charity working on income-generating projects with vulnerable women in Tongogara refugee camp.
148. The country office decided not to buy commodities with less than six months of shelf-life remaining, and dispatching offices have been instructed not to send commodities to Zimbabwe in the three months prior to their expiry.
149. In addition, protocols for the monthly monitoring of commodities' shelf-lives have been introduced to strengthen commodity management in the warehouse.
150. Lessons learned from the incident have been discussed extensively by the supply chain team. Standard operating procedures for commodity shelf-life management have been drawn up and applied, monthly inventory forms have been modified to include checks on whether the best-before dates on packaging correspond with those recorded in LESS, and warehouse staff are encouraged to be more vigilant when receiving and handling commodities.

ANNEX II**Post-delivery losses from verification of previous reports****2015 report****Eritrea**

1. Of the food delivered by WFP in 2005 to the Government of Eritrea, 64,538 mt with an estimated 2005 value of USD 31 million remains unaccounted for. WFP reports this food as advance stock because no distribution reports have been received from the Government and WFP has thus been unable to determine whether the food has been distributed to the intended beneficiaries. Without prejudice to the contractual obligations of the Government of Eritrea, exploratory discussions have been held since October 2018 between the Government and WFP for the purposes of resolving this matter.

2016 losses under verification**Syrian Arab Republic**

2. Non-reconciled inventory differences totalling 2,653 mt of various commodities in the Homs warehouse were investigated because the differences were eliminated from the system as a result of a data entry error in LESS in 2016. The error is explained below under "2017 losses under verification".

2017 losses under verification**Syrian Arab Republic**

3. Along with the inventory differences of 2,653 mt of various commodities in 2016 (see above), another 1,231 mt of non-reconciled inventory differences of commodities in the Homs warehouse in 2017 were investigated because they too had been eliminated from the system as a result of a data entry error in LESS.
4. The findings of the investigation indicated that in both years lack of knowledge, lack of staff and improper data entry were the main contributing factors behind the error, which was primarily a failure to ensure that stock movements were correctly entered in the corporate reporting system.
5. The case has been closed and a note for the record has been prepared requesting clearance for the reversal of the wrongly posted losses and posting of the stock adjustment transaction
6. Two refresher training sessions on LESS were conducted at the country office, one for staff in Aleppo, Qamishli and Damascus, one for staff in Homs, Tartous and Latakia.

ANNEX III

Global Losses

2018 GLOBAL LOSSES REPORT - LOSSES BY COMMODITY			
Commodity code	Commodity	Sum of net mt	Sum of USD
BEVMNW	Mineral water	1.1	326
CERBAR	Barley	0.2	75
CERBHW	Buckwheat	0.0	9
CERCSF	Corn sorghum flour	0.0	4
CERMAZ	Maize	706.9	194 701
CERMMF	Soya-fortified maize meal	0.2	41
CERMML	Maize meal	568.3	248 827
CERPAS	Pasta	0.2	88
CERRIC	Rice	2 965.8	1 471 973
CERSOF	Sorghum flour	0.1	26
CERSOR	Sorghum/millet	3 205.9	1 038 328
CERWBG	Bulgur wheat	111.5	51 584
CERWHE	Wheat	2 238.4	545 698
CERWHF	Wheat flour	1 180.3	444 915
DAIDSP	Plain dried skimmed milk	4.0	11 944
DAITHM	Therapeutic milk	0.1	425
DAIUHT	UHT milk	15.2	13 921
FRUDFR	Dried fruits	21.9	31 797
FSHCFI	Canned fish	1.2	4 896
MEACHK	Canned chicken	0.0	9
MEAMEA	Canned meat	0.6	-
MIXBIS	Biscuits	1.3	8 111
MIXCSB	Corn-soya blend	2 689.7	1 766 436
MIXHEB	High-energy biscuits	271.8	463 465
MIXLNS	LNS	148.6	373 151
MIXRSF	Ready-to-use supplementary food	446.3	1 238 943
MIXRTF	Ready-to-use therapeutic food	4.9	15 443
MIXWSB	Wheat-soya blend	718.7	488 703
MSCCRA	Crackers	0.0	81
MSCHAL	Halawa	7.1	24 636
MSCMNP	Micronutrient powder	1.1	19 081
MSCSAL	Iodized salt	52.8	16 211

2018 GLOBAL LOSSES REPORT - LOSSES BY COMMODITY			
Commodity code	Commodity	Sum of net mt	Sum of USD
MSCSUG	Sugar	1 164.9	759 222
MSCTOM	Processed tomato	0.0	-
MSCYEA	Yeast	0.1	128
OILOLV	Olive oil	3.8	14 398
OILVEG	Vegetable oil	2 765.4	2 828 161
PPFRTN	Rations	656.5	845 370
PULBEA	Beans	638.9	443 841
PULCKP	Chickpeas	28.0	25 900
PULCPU	Canned pulses	0.5	355
PULCVE	Canned vegetables	0.1	97
PULLEN	Lentils	186.0	119 302
PULPEA	Peas	311.3	166 871
PULSLN	Split lentils	44.1	26 567
PULSPE	Split peas	1 048.7	700 512

ANNEX IV

2018 PRE-DELIVERY LOSS REPORT – LOSSES BY COMMODITY				
Commodity code	Commodity	Pre-delivery losses (mt)	Pre-delivery losses (USD)	% losses (USD)
CERMAZ	Maize	369.9	97 611	2.12%
CERMML	Maize meal	69.9	35 903	0.78%
CERRIC	Rice	2 175.6	1 022 178	22.22%
CERSOR	Sorghum/millet	1 850.2	527 981	11.48%
CERWBG	Bulgur wheat	82.7	35 377	0.77%
CERWHE	Wheat	1 990.3	479 321	10.42%
CERWHF	Wheat flour	167.9	57 807	1.26%
DAIDSP	Plain dried skimmed milk	1.5	5 048	0.11%
DAITHM	Therapeutic milk	0.0	200	0.00%
DAIUHT	UHT milk	0.1	123	0.00%
FRUDFR	Dried fruits	0.3	473	0.01%
FSHCFI	Canned fish	0.5	2 349	0.05%
MIXCSB	Corn-soya blend	1 437.2	819 870	17.82%
MIXHEB	High-energy biscuits	7.9	11 767	0.26%
MIXLNS	LNS	53.0	135 731	2.95%
MIXRSF	Ready-to-use supplementary food	5.3	14 428	0.31%
MIXWSB	Wheat-soya blend	6.6	3 635	0.08%
MSCMNP	Micronutrient powder	0.0	120	0.00%
MSCSAL	Iodized salt	1.0	181	0.00%
MSCSUG	Sugar	411.8	259 242	5.63%
OILVEG	Vegetable oil	460.7	517 913	11.26%
PPFRTN	Rations	8.5	5 593	0.12%
PULBEA	Beans	86.3	63 535	1.38%
PULCKP	Chickpeas	23.0	22 029	0.48%
PULLEN	Lentils	129.5	83 882	1.82%
PULPEA	Peas	150.1	78 463	1.71%
PULSLN	Split lentils	32.1	18 566	0.40%
PULSPE	Split peas	472.1	301 472	6.55%
Grand total		9 994.1	4 600 797	

ANNEX V

2018 PRE-DELIVERY LOSS REPORT - LOSSES BY REASON		
Reason for loss	Pre-delivery losses (mt)	Pre-delivery losses (USD)
Deterioration of food commodities mainly attributable to problems at origin	1 388.0	575 317
Deterioration of packaging materials	17.2	16 224
Flooding and other natural disasters	320.1	72 694
Improper/overlong storage	249.8	147 145
Inadequate transport	7 070.6	3 280 378
Loss due to fire	0.4	146
Loss due to sampling food analysis	1.0	584
Loss during civil strife	1.9	957
Pilferage/theft	34.4	17 184
Poor handling	124.8	73 278
Processing/transformation of commodity	20.6	15 386
Reconstitution/rebagging/repacking	765.4	401 504
Grand total	9 994.1	4 600 797

ANNEX VI

2018 POST-DELIVERY LOSS REPORT - LOSSES BY REASON		
Reason for loss	Post-delivery losses value (USD)	% of total loss
Attack by termites	14 565	0.15%
Broken during loading	343 088	3.50%
Deterioration of food commodities mainly attributable to problems at origin	473 090	4.83%
Deterioration of packaging materials	30 350	0.31%
Flooding and other natural disasters	60 873	0.62%
Improper/overlong storage	797 058	8.13%
Inadequate transport	1 583 115	16.15%
Infestation	100 861	1.03%
Loss due to fire	3 333 100	34.0%
Loss due to overscooping	48 888	0.50%
Loss due to sampling food analysis	70 418	0.72%
Loss during civil strife	565 900	5.77%
Pilferage/theft	1 188 925	12.13%
Poor handling	272 543	2.78%
Processing/transformation of commodity	103 673	1.06%
Reconstitution/rebagging/repacking	731 100	7.46%
Short-delivered	1 724	0.02%
Unauthorized distribution	60 428	0.62%
Variance in weight	7 968	0.08%
Wet bags	208	0.00%
Wet by gasoil	6 850	0.07%
Wet by water	9 050	0.09%
Grand total	9 803 775	

ANNEX VII

2018 POST-DELIVERY LOSS REPORT QUANTITIES AND VALUES BY REGION								
	2018 opening stock		Received in recipient country		Total handled		Post-delivery losses	
Region	Quantity net mt	Value (USD)	Quantity net mt	Value (USD)	Quantity net mt	Value (USD)	Quantity net mt	Value (USD)
RBB	26 412.6	22 628 089	401 600.1	192 761 411	428 012.6	215 389 500	250.7	128 070
RBC	237 486.1	137 007 489	1 739 078.9	766 029 575	1 976 565.0	903 037 064	6 439.9	5 725 329
RBD	79 178.8	58 337 696	423 903.1	289 050 870	503 081.9	347 388 566	2 093.9	1 607 005
RBJ	76 157.7	43 539 413	266 366.7	154 925 951	342 524.4	198 465 363	950.6	644 915
RBN	223 445.1	128 022 435	1 042 902.2	526 995 672	1 266 347.3	655 018 106	2 429.0	1 651 986
RBP	12 792.3	9 715 203	24 738.4	18 623 623	37 530.7	28 338 826	54.2	46 469
Grand total	655 472.6	399 250 325	3 898 589.4	1 948 387 101	4 554 062.0	2 347 637 426	12 218.4	9 803 775
Percentage of total handled							0.27%	0.42%

Total handled = opening stocks in recipient country plus commodities received in recipient country

- RBB Bangkok Regional Bureau (Asia and the Pacific)
RBC Cairo Regional Bureau (Middle East, North Africa, Eastern Europe and Central Asia)
RBD Dakar Regional Bureau (West Africa)
RBJ Johannesburg Regional Bureau (Southern Africa)
RBN Nairobi Regional Bureau (East Africa)
RBP Panama Regional Bureau (Latin America and the Caribbean)

ANNEX VIII

2018 POST-DELIVERY LOSS REPORT – LOSSES BY COMMODITY				
Commodity code	Commodity	Total handled (USD)	Post-delivery losses (USD)	Losses in USD as % of total handled*
BEVMNW	mineral water	3 773	326	8.65%
CERBAR	Barley	674 099	75	0.01%
CERBHW	Buckwheat	78 961	9	0.01%
CERBRE	Bread	3 551 010	-	0.00%
CERCSF	Corn sorghum flour	4	4	100.00%
CERMAZ	Maize	105 878 623	97 090	0.09%
CERMMF	Soya-fortified maize meal	41	41	100.00%
CERMML	Maize meal	52 251 119	212 923	0.41%
CERPAS	Pasta	368 078	88	0.02%
CERRIC	Rice	246 593 759	449 795	0.18%
CERSOF	Sorghum flour	26	26	100.00%
CERSOR	Sorghum/millet	326 099 344	510 347	0.16%
CERWBG	Bulgur wheat	12 064 216	16 207	0.13%
CERWHE	Wheat	187 668 261	66 377	0.04%
CERWHF	Wheat flour	204 877 501	387 108	0.19%
DAIDSP	Plain dried skimmed milk	4 201 560	6 895	0.16%
DAIDWM	Dried whole milk	147 726	-	0.00%
DAITHM	Therapeutic milk	202 990	225	0.11%
DAIUHT	UHT milk	19 653 320	13 798	0.07%
FRUDFR	Dried fruits	6 210 251	31 324	0.50%
FSHCFI	Canned fish	7 931 556	2 547	0.03%
MEACHK	Canned chicken	973 630	9	0.00%
MEAMEA	Canned meat	182 344	-	0.00%
MIXBIS	Biscuits	106 382	8 111	7.62%
MIXCSB	Corn-soya blend	254 240 723	946 566	0.37%
MIXHEB	High-energy biscuits	31 759 078	451 699	1.42%
MIXLNS	LNS	66 064 973	237 420	0.36%
MIXRSF	Ready-to-use supplementary food	90 706 349	1 224 515	1.35%
MIXRTF	Ready-to-use therapeutic food	1 742 760	15 443	0.89%
MIXWSB	Wheat-soya blend	32 533 170	485 069	1.49%
MSCCRA	Crackers	5 689	81	1.42%

2018 POST-DELIVERY LOSS REPORT – LOSSES BY COMMODITY				
Commodity code	Commodity	Total handled (USD)	Post-delivery losses (USD)	Losses in USD as % of total handled*
MSCHAL	Halawa	110 607	24 636	22.27%
MSCMNP	Micronutrient powder	776 837	18 962	2.44%
MSCMNT	Micronutrient tablets	65 587	-	0.00%
MSCSAL	Iodized salt	4 155 593	16 030	0.39%
MSCSPC	Spices	176 799	-	0.00%
MSCSUG	Sugar	27 606 511	499 981	1.81%
MSCTOM	Processed tomato	53	-	0.00%
MSCYEA	Yeast	667 062	128	0.02%
OILOLV	Olive oil	434 500	14 398	3.31%
OILVEG	Vegetable oil	281 326 885	2 310 248	0.82%
PPFRTN	Rations	41 437 688	839 776	2.03%
PULBEA	Beans	98 887 110	380 306	0.38%
PULCKP	Chickpeas	7 358 723	3 871	0.05%
PULCPU	Canned pulses	1 204 788	355	0.03%
PULCVE	Canned vegetables	210 971	97	0.05%
PULLEN	Lentils	51 052 371	35 420	0.07%
PULPEA	Peas	48 967 707	88 407	0.18%
PULSLN	Split lentils	13 717 586	8 001	0.06%
PULSPE	Split peas	112 708 732	399 040	0.35%
		2 347 637 426	9 803 775	0.42%

* Total handled = opening stocks plus food received in-country.

ANNEX IX

2018 POST-DELIVERY LOSS REPORT						
Quantities and values by recipient country						
Region	Recipient country	Total handled		Post-delivery losses		Losses in USD as % of total handled*
		Net mt	USD	Net mt	USD	
RBB	Afghanistan	140 362.5	60 115 855	86.3	37 437	0.06%
	Bangladesh	148 414.0	76 324 204	22.3	12 436	0.02%
	Bhutan	838.3	420 744	1.3	785	0.19%
	Cambodia	10 374.5	8 264 653	4.5	2 729	0.03%
	DPR Korea	12 006.5	5 512 842	1.9	5 285	0.10%
	Lao People's Dem. Rep.	8 144.0	7 583 195	31.4	21 429	0.28%
	Myanmar	50 270.9	22 359 104	8.7	5 728	0.03%
	Nepal	7 322.9	5 612 590	7.2	6 232	0.11%
	Pakistan	41 736.2	23 038 826	81.5	32 031	0.14%
	Papua New Guinea	352.0	334 210	0.2	257	0.08%
	Philippines	7 957.2	5 605 376	4.3	2 359	0.04%
	Timor-Leste	233.6	217 900	1.1	1 362	0.62%
RBB total		428 012.6	215 389 500	250.7	128 070	0.06%
RBC	Algeria	28 785.5	13 761 019	24.6	10 512	0.08%
	Armenia	2 333.1	1 269 811	-	0	0.00%
	Egypt	10 139.2	10 517 123	139.7	245 169	2.33%
	Iran (Islamic Rep. of)	3 472.8	1 082 574	11.9	3 316	0.31%
	Iraq	57 259.3	31 323 637	13.9	6 684	0.02%
	Jordan	11 509.4	7 517 997	144.9	146 238	1.95%
	Kyrgyzstan	7 046.4	4 035 484	0.0	6	0.00%
	Lebanon	74.1	120 952	-	0	0.00%
	Libya	9 312.7	11 110 871	171.6	325 729	2.93%
	State of Palestine	13 995.1	9 567 048	0.1	81	0.00%
	Sudan	228 720.4	79 732 936	280.4	93 450	0.12%
	Syrian Arab Republic	449 382.3	275 814 259	1 141.1	913 886	0.33%
	Tajikistan	7 572.2	4 955 752	0.7	485	0.01%

2018 POST-DELIVERY LOSS REPORT						
Quantities and values by recipient country						
Region	Recipient country	Total handled		Post-delivery losses		Losses in USD as % of total handled*
		Net mt	USD	Net mt	USD	
	Ukraine	20.2	10 388	0.1	68	0.66%
	Yemen	1 146 942.3	452 217 214	4 510.7	3 979 704	0.88%
RBC total		1 976 565.0	903 037 064	6 439.9	5 725 329	0.63%
RBD	Benin	16 452.5	7 603 137	1.2	570	0.01%
	Burkina Faso	29 729.4	20 408 982	26.0	17 602	0.09%
	Cameroon	21 534.7	12 679 803	82.9	45 854	0.36%
	Central African Rep.	40 512.3	37 559 244	286.1	272 027	0.72%
	Chad	78 872.8	64 718 588	134.8	88 216	0.14%
	Côte d'Ivoire	8 447.1	5 560 297	4.1	2 492	0.04%
	Gambia	3 629.9	2 809 712	1.4	1 160	0.04%
	Guinea	8 396.6	5 153 807	99.8	100 134	1.94%
	Guinea-Bissau	7 023.7	4 995 652	5.2	5 374	0.11%
	Liberia	1 988.3	1 187 787	2.9	2 442	0.21%
	Mali	22 506.0	21 631 340	257.2	190 979	0.88%
	Mauritania	6 783.8	3 530 857	16.8	14 692	0.42%
	Niger	81 199.3	54 974 155	25.7	21 402	0.04%
	Nigeria	169 523.3	100 222 587	1 063.8	793 675	0.79%
	Senegal	1 394.9	1 406 914	1.0	769	0.05%
	Sierra Leone	5 087.4	2 945 704	85.0	49 615	1.68%
RBD total		503 081.9	347 388 566	2 093.9	1 607 005	0.46%
RBJ	Angola	3 444.7	1 243 295	25.7	22 647	1.82%
	Congo	5 208.4	4 242 769	56.0	36 693	0.86%
	Dem. Rep. of the Congo	96 890.8	82 467 345	146.2	178 771	0.22%
	Eswatini	3 676.2	1 828 913	0.4	169	0.01%
	Lesotho	7 342.2	2 977 323	0.9	714	0.02%
	Madagascar	30 500.1	17 682 306	44.0	52 222	0.30%
	Malawi	62 172.1	26 333 959	161.6	116 553	0.44%
	Mozambique	22 895.7	12 130 939	400.4	163 501	1.35%
	United Rep. of Tanzania	75 321.0	31 979 163	80.6	38 643	0.12%
	Zambia	5 658.8	2 456 034	2.7	1 842	0.08%

2018 POST-DELIVERY LOSS REPORT						
Quantities and values by recipient country						
Region	Recipient country	Total handled		Post-delivery losses		Losses in USD as % of total handled*
		Net mt	USD	Net mt	USD	
	Zimbabwe	29 414.4	15 123 317	32.3	33 161	0.22%
RBJ total		342 524.4	198 465 363	950.6	644 915	0.32%
RBN	Burundi	31 930.3	20 689 561	94.4	49 006	0.24%
	Djibouti	5 280.9	2 778 506	107.1	47 121	1.70%
	Ethiopia	503 328.3	226 705 348	815.1	414 722	0.18%
	Kenya	79 042.7	41 043 311	190.1	93 116	0.23%
	Rwanda	14 813.8	8 384 528	1.8	855	0.01%
	Somalia	76 676.7	63 905 739	622.1	582 040	0.91%
	South Sudan	327 049.2	194 100 840	381.0	354 443	0.18%
	Uganda	228 225.5	97 410 275	217.5	110 683	0.11%
RBN total		1 266 347	655 018 106	2 429.0	1 651 986	0.25%
RBP	Bolivia (Plurinational State of)	273.9	208 981	-	0	0.00%
	Colombia	2 006.8	1 777 488	0.3	267	0.02%
	Cuba	4 269.4	3 302 062	4.1	3 186	0.10%
	Dominican Republic	442.5	325 416	-	0	0.00%
	Ecuador	0.9	761	-	0	0.00%
	El Salvador	0.0	4	-	0	0.00%
	Guatemala	1 377.4	929 360	0.1	58	0.01%
	Haiti	12 138.9	7 310 798	48.1	42 111	0.58%
	Honduras	12 511.1	10 388 154	1.4	695	0.01%
	Nicaragua	4 509.7	4 095 802	0.2	153	0.00%
RBP total		37 531	28 338 826	54.2	46 469	0.16%
Grand total		4 554 062.0	2 347 637 426	12 218.4	9 803 775	0.42%

* Total handled = opening stocks plus food received in-country.

ANNEX X

2018 POST-DELIVERY LOSS REPORT									
Commodities with post-delivery losses									
greater than 2 percent in tonnage and value over USD 20,000 or value greater than USD 100,000									
Region	Country	WBS element	Project	Commodity	Total handled net mt	Total handled (USD)	Post-delivery losses net mt	Post-delivery losses (USD)	Losses in mt as % of total handled*
RBC	Egypt	EG02.01.011.SMP1	EG02	MIXHEB	1 298.668	2 464 923.76	139	244 389.04	10.69%
RBC	Jordan	200987.F.1.JO	200987	MIXHEB	619.261	994 108.59	44.3	73 293	7.15%
RBC	Jordan	200987.F.1.JO	200987	MSCHAL	8.676	30 063.43	7	24 632.73	81.93%
RBC	Libya	200925.F.1	200925	PPFRTN	8 543.088	10 280 858.06	165.4	318 193	1.94%
RBC	Syrian Arab Rep.	SY01.01.011.URT1	SY01	PPFRTN	38 012.719	23 441 560.11	421	452 937.31	1.11%
RBC	Syrian Arab Rep.	SY01.01.021.ACL1	SY01	PPFRTN	134.920	37 441.62	45.2	39 424	33.49%
RBC	Yemen	201068.F.1	201068	CERWHF	314 271.274	120 901 024.41	555	222 758.53	0.18%
RBC	Yemen	201068.F.1	201068	MIXRSF	6 542.400	17 807 870.86	327.0	890 730	5.00%
RBC	Yemen	201068.F.1	201068	MIXWSB	22 501.811	15 524 949.24	693	472 605.66	3.08%
RBC	Yemen	201068.F.1	201068	MSCSUG	16 471.104	6 748 669.49	716.0	480 345	4.35%
RBC	Yemen	201068.F.1	201068	OILVEG	69 534.444	72 240 574.65	1 695	1 567 593.06	2.44%
RBC	Yemen	201068.F.1	201068	PULSPE	76 979.810	38 217 014.12	312.4	254 786	0.41%
RBD	Cameroon	CM01.01.011.URT1	CM01	MIXCSB	603.775	335 162.35	51	27 491.18	8.49%
RBD	Cent. African Rep.	CF01.01.011.SMP1	CF01	CERRIC	1 010.000	1 046 743.80	35.6	37 077	3.52%

2018 POST-DELIVERY LOSS REPORT									
Commodities with post-delivery losses									
greater than 2 percent in tonnage and value over USD 20,000 or value greater than USD 100,000									
Region	Country	WBS element	Project	Commodity	Total handled net <i>mt</i>	Total handled (<i>USD</i>)	Post-delivery losses net <i>mt</i>	Post-delivery losses (<i>USD</i>)	Losses in <i>mt</i> as % of total handled*
RBD	Cent. African Rep.	CF01.01.011.URT1	CF01	MIXHEB	131.000	207 806.61	17	26 765.85	12.89%
RBD	Cent. African Rep.	CF01.01.011.URT1	CF01	OILVEG	1 957.019	2 440 013.53	49.7	58 006	2.54%
RBD	Guinea	GN01.02.021.NTA1	GN01	OILVEG	198.681	196 505.54	88	94 578.01	44.41%
RBD	Mali	ML01.01.011.URT1	ML01	CERSOR	7 240.150	3 301 255.15	164.3	74 398	2.27%
RBD	Mali	ML01.01.011.URT1	ML01	MIXCSB	1 109.225	902 331.55	47	28 544.02	4.23%
RBD	Mali	ML01.02.031.NTA1	ML01	MIXRSF	714.585	2 076 255.30	26.1	69 661	3.65%
RBD	Nigeria	200777.F.1.NG	200777	CERRIC	4 887.501	2 513 436.20	132	88 926.86	2.71%
RBD	Nigeria	200777.F.1.NG	200777	CERSOR	95 070.000	39 144 012.91	386.4	178 342	0.41%
RBD	Nigeria	200777.F.1.NG	200777	MIXRSF	489.165	1 383 674.15	12	33 178.18	2.41%
RBD	Nigeria	200777.F.1.NG	200777	OILVEG	6 125.740	7 097 310.52	152.9	207 414	2.50%
RBD	Nigeria	200777.F.1.NG	200777	PULBEA	24 153.325	21 245 416.45	274	225 405.80	1.14%
RBJ	Angola	201083.F.1	201083	OILVEG	109.429	118 333.64	23.7	21 795	21.65%
RBJ	Madagascar	MG01.01.011.URT1	MG01	OILVEG	641.424	639 826.65	20	25 572.14	3.07%
RBJ	Malawi	200692.F.1	200692	MIXCSB	38.838	27 462.22	37.0	24 105	95.22%
RBJ	Mozambique	MZ01.01.033.SMP1	MZ01	CERMML	1 046.000	391 220.00	323	121 325.30	30.85%
RBJ	Zimbabwe	ZW01.01.011.URT1	ZW01	OILVEG	1 082.182	1 111 534.25	27.5	30 121	2.54%
RBN	Ethiopia	200712.F.1	200712	MIXCSB	40 294.984	43 949 620.28	111	111 687.08	0.27%

2018 POST-DELIVERY LOSS REPORT									
Commodities with post-delivery losses									
greater than 2 percent in tonnage and value over USD 20,000 or value greater than USD 100,000									
Region	Country	WBS element	Project	Commodity	Total handled net <i>mt</i>	Total handled (<i>USD</i>)	Post-delivery losses net <i>mt</i>	Post-delivery losses (<i>USD</i>)	Losses in <i>mt</i> as % of total handled*
RBN	Kenya	KE01.01.011.URT1	KE01	MIXCSB	1 236.652	801 321.58	135.8	62 316	10.98%
RBN	Somalia	200844.F.1	200844	MIXCSB	16 070.125	10 973 075.93	417	297 240.74	2.60%
RBN	Somalia	200844.F.1	200844	MIXLNS	865.680	2 206 253.66	88.2	218 456	10.19%
RBN	South Sudan	SS01.02.021.NTA1	SS01	MIXRSF	22.833	64 851.80	23	64 851.80	100.00%
					760 016.49	450 862 482	7 761.10	7 168 944.26	

* Total handled = opening stocks plus food received in-country.

ANNEX XI

POST-DELIVERY LOSSES 2008-2018						
Year	Total quantity handled (mt)	Quantity of losses (mt)	Losses as % of total mt handled	Total value handled (USD)	Value of losses (USD)	Losses as % of total value handled
2008	4 831 067	21 699	0.45	2 604 005 060	11 388 899	0.44
2009	5 567 314	21 187	0.38	2 755 152 374	10 131 966	0.37
2010	5 508 365	17 128	0.31	2 915 989 860	10 180 080	0.35
2011	4 517 972	20 371	0.45	2 734 427 882	13 217 691	0.48
2012	4 201 302	31 251	0.74	2 936 389 248	18 033 222	0.61
2013	3 770 209	25 016	0.66	2 511 094 911	18 684 094	0.74
2014	3 898 691	18 921	0.49	2 553 059 658	15 563 533	0.61
2015	3 559 176	12 694	0.36	2 596 324 005	11 019 934	0.42
2016	4 234 149	20 109	0.47	2 527 081 008	18 070 937	0.72
2017	4 457 644	14 733	0.33	2 458 337 114	12 841 501	0.52
2018	4 554 062	12 218	0.27	2 347 637 426	9 803 775	0.42