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REPORT ON POST-DELIVERY LOSSES FOR THE PERIOD 1 JANUARY–31 DECEMBER 2013

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This document is submitted to the Executive Board for information.										
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EXECUTIVE SUMMARY

WFP's ultimate goal is to achieve a world with zero hunger by working with its partners to provide food assistance and programmes that reduce risk and vulnerability to shocks, break the cycle of hunger, and achieve sustainable food security and nutrition. Owing to the nature of its work, WFP implements programmes in some of the most difficult and unstable environments, where dedicated and competent staff and partners, along with supporting systems, guidelines and control mechanisms, are crucial to success.

To reach its beneficiaries, WFP is continuously improving its practices. One of its areas of focus is commodity management, which aims to ensure that food of the right quality reaches beneficiaries with minimum losses. The target is to keep global post-delivery losses below 2 percent.

Post-delivery losses in 2013 were 25,016 mt - 0.66 percent of the total food handled - valued at USD 18.7 million, or 0.74 percent of the USD 2.5 billion total. In 2013, USD 4.4 million was recovered from third-party losses.

Historically, WFP has managed to keep post-delivery losses well below 1 percent thanks to good loss prevention and mitigation measures along the supply chain. Best practices in the supply chain, and the dedication of staff and partners, have contributed to this result. Practices need to be continuously improved before they become obsolete, and WFP makes use of lessons learned from losses in previous years.

As regards post-delivery losses in 2013:

- a) the volume of post-delivery food losses decreased in 2013 compared with 2012, in both absolute and percentage terms; but
- b) the value of total post-delivery losses increased in 2013 compared with 2012.

WFP is reviewing its business processes, including those relating to the supply chain. In 2013, WFP focused on optimization of the supply chain by enhancing integrated supply chain management with particular focus on supply chain planning. The WFP supply chain for specialized nutritious foods needs to change, which may entail the rethinking of how to plan, procure, and manage delivery. In 2013, WFP and partners produced a training handbook. Other initiatives in 2013 focused on improving food safety through increased cooperation with partners, including by auditing the suppliers of specialized nutritious foods and training partners in food management.

These initiatives will contribute to WFP's loss management by improving its processes.



INTRODUCTION

- 1. The primary objective of the post-delivery loss report is to outline the characteristics of these losses. WFP's target is to keep post-delivery food losses below 2 percent and to ensure that the right food of the right quality reaches beneficiaries. From planning to procurement, delivery and final distribution, the WFP supply chain is geared towards this goal. WFP's support systems and control mechanisms contribute to the mitigation of losses. The secondary objective of the report is to outline the measures taken by WFP to mitigate post-delivery losses in 2013, so that they may be prevented or reduced in the future.
- 2. This report, therefore, has two sections. Section 1 illustrates the main characteristics of 2013 post-delivery losses in terms of size in United States dollars and tons compared with previous years. It also explores the reasons for the losses and identifies countries where losses exceeded WFP thresholds,¹ with examples of post-delivery losses in specific countries. Pre-delivery losses are not part of this report.²
- 3. Section 2 looks at the measures and systems for preventing and reducing post-delivery losses that are being developed or implemented at WFP Headquarters, at the regional and local levels and along the supply chain. The section focuses on how the measures are improving loss management.
- 4. The annexes provide more detailed information on country-specific losses and updates from last year's report.

SECTION 1 – CHARACTERISTICS OF 2013 POST-DELIVERY LOSSES

- 5. In 2013, WFP had operations in 73 countries and distributed 3.1 million mt of food to beneficiaries. WFP handled 3.8 million mt, with post-delivery losses amounting to 25,016 mt, or 0.66 percent of the total handled,³ a reduction compared with the 0.74 percent in 2012.
- 6. The food had a value of USD 2.5 billion. Post-delivery losses of USD 18.7 million represented 0.74 percent of this total, an increase compared with the 0.61 percent in 2012 (Figures 1 and 2).⁴

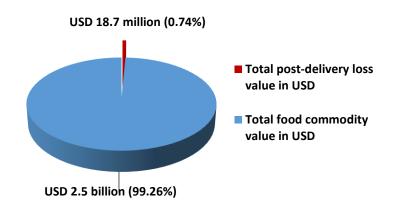
⁴ In the WFP Information Network and Global System (WINGS), food commodities are valued according to moving average prices. This is an inventory valuation method in which the cost of each item is determined from the weighted average of the costs of similar items at the beginning of and during the period. The losses in this report are valued at moving average prices at the end of 2013.



¹ WFP's thresholds for reporting on post-delivery losses are: i) countries where losses of a single food type amount to at least 2 percent of the total tonnage of that food handled and have an absolute value of at least USD 20,000; and ii) countries where losses of a single food type have an absolute value of more than USD 100,000.

² Pre-delivery losses occur before food arrives in the recipient country. They are insured against all risks, with settlements received by WFP for reprogramming. This report does not cover pre-delivery losses or any unintended uses of food after it has been distributed to beneficiaries, such as sharing, theft or sale. Unintended uses are captured through monitoring, and WFP takes appropriate measures to address them.

³ Tonnage or food handled is defined as "opening stocks in the recipient country plus commodities received in the recipient country".



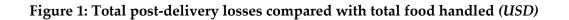
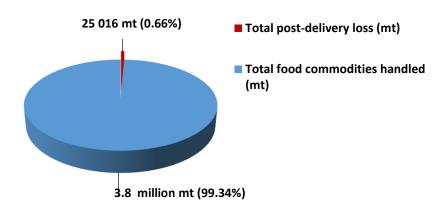


Figure 2: Total post-delivery losses compared with value of total food handled (mt)



7. Figure 3 shows the changes in post-delivery losses in terms of volume (mt) between 2009 and 2013 (see also Annex VIII). The post-delivery losses of 2013 were lower in both absolute and percentage terms than those of 2012. In percentage terms, 2013 post-delivery losses (0.66 percent) were significantly below the WFP target of 2 percent, but higher than the average loss (0.47 percent) of the preceding four years (2009–2012).



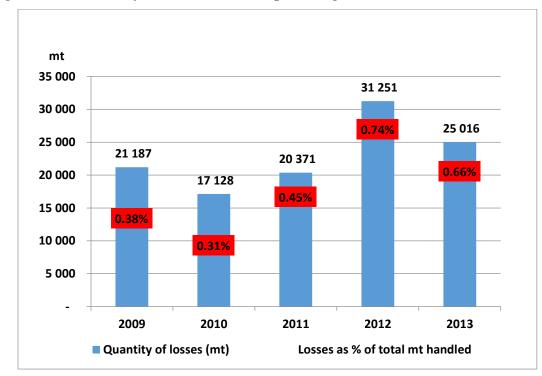


Figure 3: Post-delivery losses in mt and as percentage of total food handled, 2009–2013

- 8. In 2013, the value of post-delivery losses was higher in both absolute and percentage terms than in 2012, and significantly higher than the 2009–2012 average of 0.45 percent (see Annex VIII).
- 9. Reasons for the higher value of post-delivery losses in 2013 relate to the complex and costly delivery to and within certain countries. Food commoditie for countries such as the Central African Republic, the Democratic Republic of the Congo (DRC) and South Sudan often have to travel several thousand kilometres by road before arriving in the recipient country. This increases costs, even when road transport is the cheapest option for the country. (See the section on country-specific losses in 2013 for more information.)

MAIN REASONS FOR LOSSES

- 10. In 2013, the five main causes of post-delivery losses were:
 - i) short deliveries⁵ 0.25 percent of total tonnage handled (0.27 percent in value terms);
 - ii) improper/overlong storage 0.19 percent of total tonnage handled (0.21 percent in value terms);
 - iii) civil strife and conflict 0.08 percent of total tonnage handled (0.12 percent in value terms);
 - iv) pilferage/theft 0.06 percent of total tonnage handled (0.05 percent in value terms); and
 - v) the processing/transformation of food commodities -0.02 percent of total tonnage handled (0.02 percent in value terms).

⁵ Short deliveries are food losses incurred during inland transport within the recipient country; their value is usually recovered from the transporters' invoices.



- 11. Short deliveries, improper/overlong storage and pilferage/theft have traditionally been among the five most important loss factors.
- 12. In 2013, short deliveries of 9,237 mt accounted for 36.9 percent of all post-delivery losses or 0.25 percent of total tonnage handled. The two main causes of short deliveries were transporter fault and the hijacking and theft of consignments during transport.
- 13. For cases of transporter fault, WFP's contracts make provisions for the recovery of losses from the service providers. In 2013, WFP recovered USD 4.4 million from service providers for post-delivery losses. The proper selection and regular performance review of service-providers are crucial for minimizing this type of loss.⁶ WFP therefore invests in continuous training in transport contracting for its staff: in 2013, 286 WFP staff were trained.
- 14. Losses arising from hijacking or security problems are of increasing concern as WFP has stepped up operations in conflict-affected countries. In the Syrian Arab Republic, the majority of post-delivery losses in 2013 were due to armed groups detaining trucks and food. WFP has developed standard operating procedures (SOPs) to reduce losses, including steps to negotiate the release of consignments; more than 50 percent of all seized food commodities were recovered in this way.
- 15. *Improper/overlong storage*, resulting in impaired food safety or expiration, represented 28.5 percent of the total loss in 2013 (7,136 mt) or 0.19 percent of the total tonnage handled.
- 16. *Improper storage* can arise when planned upgrades of warehouses with new partners are not completed in time. Sometimes the storage conditions may be adequate for the short term only, so a delay in programme implementation can lead to losses. This happened in Côte d'Ivoire in 2013, when a school strike caused distribution delays. WFP works with its partners to improve local storage conditions and management, and tries to prevent lengthy storage times by increasing delivery frequencies.
- 17. *Overlong storage* is often the result of changes in programme requirements after food has been procured and delivered. In Haiti, some activities had a lower than expected absorption rate, which led to overlong storage. Changes in national regulations may also delay food distribution. To mitigate these risks, WFP is strengthening integrated supply chain management. Particular attention is given to planning of global demand, sourcing and delivery, and on how to best implement these plans using forward purchasing, forward contracting and network optimization. Investing that time and effort will optimize management of inventories, avoiding problems such as overlong storage.
- 18. Post-delivery losses resulting from *civil strife and pilferage/theft* made up more than 21 percent (5,285 mt) of total losses by volume in 2013 or 0.08 percent of the total tonnage handled. WFP operates in many countries affected by conflict or with difficult security situations. In addition to the Central African Republic, South Sudan and the Syrian Arab Republic, countries currently facing conflict-related challenges include Afghanistan, DRC and the Sudan.

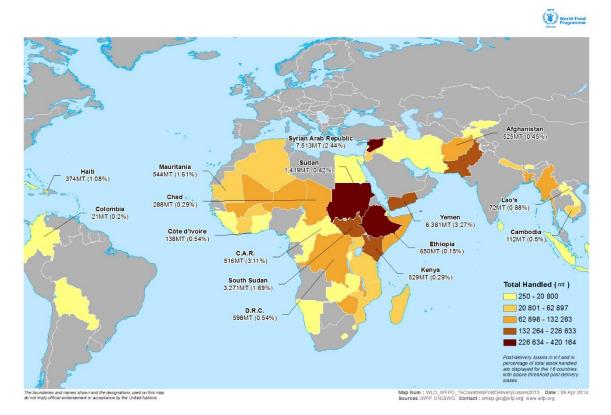
⁶ WFP policies and practices for contracting service providers include regular performance reviews through which poorly performing companies receive a warning or are removed from the shortlist. One of the performance indicators for transporters is the quantity of transit losses. WFP primarily works in countries where the transport market is not well developed and transporters are not well established. It is therefore important to carry out thorough market analyses, company screening and regular performance monitoring to ensure that WFP consignments are carried by responsible and reliable companies.



19. WFP seeks to counter security risks through country- and region-specific SOPs that set out steps for dealing with local security issues. In the Darfur area of the Sudan, the hijacking of trucks and looting were common occurrences in 2013. WFP's SOPs stipulating the use of convoy escorts in the Darfur region alleviated some risk, although vehicles are still targeted and there are other types of inefficiencies in transport lead times and associated costs.

POST-DELIVERY LOSSES BY COUNTRY

- 20. WFP's operations in 2013 are illustrated in the map, which shows the size of operations and post-delivery losses in mt and as a percentage of total food handled. WFP's biggest current operations in terms of volume of food handled are Ethiopia, the Sudan, the Syrian Arab Republic, Pakistan, Yemen, South Sudan and Kenya. Together these seven countries received 1.9 million mt, corresponding to approximately 50 percent of WFP food handled in 2013. It is therefore not surprising that these countries except for Pakistan also have the highest post-delivery losses.
- 21. Sixteen countries had above-threshold post-delivery losses in 2013 (Annex I).



Map: WFP operations countries with above-threshold post-delivery losses, 2013

- 22. The countries with the five largest post-delivery losses in terms of volume of food handled are the Syrian Arab Republic, Yemen, South Sudan, Sudan and the Central African Republic. Although these countries handled less than one third (1.1 million mt) of the WFP total, their losses of 19,100 mt accounted for 76 percent of WFP's total 2013 post-delivery losses.
- 23. These countries are all affected by conflict, and an important cause of the losses was security incidents such as the hijacking of aid trucks (Annex I).



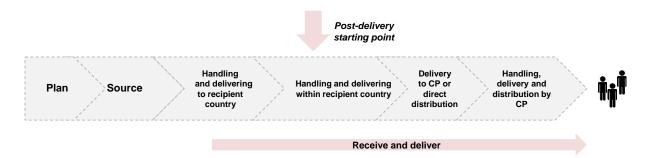
SUMMARY OF CHARACTERISTICS OF POST-DELIVERY LOSSES IN 2013

- 24. The three salient features of post-delivery losses in 2013 are:
 - by volume, they decreased in both absolute and percentage terms compared with 2012; the 0.66 percent overall loss rate is significantly below the WFP target of 2 percent;
 - their US dollar value was higher in both absolute and percentage terms compared with 2012; and
 - the five countries with the highest post-delivery losses were in conflict situations, and security issues were a major contributing factor to these losses.

SECTION 2 – WFP MEASURES FOR PREVENTING AND MITIGATING LOSSES

- 25. This section covers initiatives that WFP put in place in 2013 to counter losses. WFP also keeps post-delivery losses low by applying best practices as set out in its manuals and procedures and as contained in its supply chain control mechanisms. WFP also relies on cooperation with partners, staff training and partner capacity development.
- 26. The contribution of these initiatives to preventing and mitigating losses are best shown through: i) enhanced coordination and planning of the supply chain; ii) better food safety and quality management; iii) extension of the Logistics Execution Support System (LESS); and iv) regional-level action.
- 27. The WFP supply chain is illustrated in Figure 4. It can be divided into the planning, sourcing, and delivery phases. The last phase is shown in more detail, as it is here where post-delivery losses occur, although prevention and mitigation measures are important throughout.

Figure 4: High level integrated WFP supply chain



28. At each phase, WFP has procedures, manuals and systems to help its staff and partners to plan, procure for and implement programmes as effectively as possible. Specialized staff for each area of the supply chain work together to ensure that loss prevention measures are put into effect (see example in Box 1).

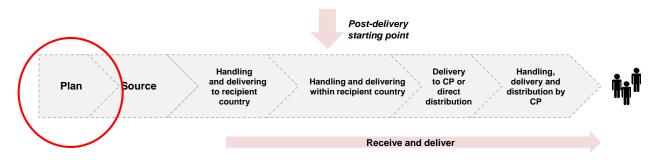
Box 1: Prevention of theft

Smaller packages are easier to steal. Supply chain staff work together on packaging to discourage theft by, for example, bundling five 10-kg bags of corn-soya blend (CSB) into a 50-kg sack. Beneficiaries will still receive the smaller 10-kg bags, which are easier to carry, but in the warehouses and throughout the handling and transit stages, the CSB will be in the larger 50-kg sacks.



FIRST STEP OF THE SUPPLY CHAIN – PLANNING

29. The WFP supply chain starts with the planning of programmes – how much food is required, what type of food, where it is needed, and what is feasible with the funds available.



- 30. The objective is to ensure that the right amount of the right food is available at the right time and place. WFP is currently looking at how to improve its management of pipeline operations to optimize supply chain planning. Ways to do this are being analysed as part of the WFP Business Process Review.
- 31. An important contribution to supply chain optimization and enhanced planning is WFP's Working Capital Financing Facility, which is used for advanced funding of country programmes and the Forward Purchase Facility (FPF). Better operational planning and coordination of FPF, facilitated by the supply chain management working group, have improved global supply chain management, reducing the risk of losses.
- 32. At both Headquarters and the regional level, integrated supply chain coordination is improving the planning phase. A supply chain management working group (SCM-WG) has been established at Headquarters for Level 3 emergencies. For intelligence purposes, the SCM-WG uses the supply chain dashboard, an information tool that enables managers to see at a glance the key aspects of the supply chain for an operation: needs, funding and advance financing options, delivery and distribution status, and options. So far this tool has considerably cut lead times, while maximizing use of available resources and financing mechanisms to assist populations in need.

Box 2: Improved planning – biometric verification

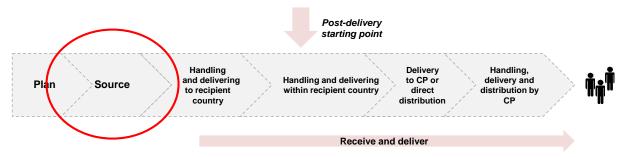
The introduction of biometric verification of beneficiaries in some countries has significantly benefited the planning process, helping to avoid food waste. In Kenya, for example, 2,892 mt less food was needed to feed refugees in camps in the last three months of 2013. The cost to WFP of purchasing, transporting and distributing this food would have amounted to USD 2.9 million.

33. The SCM-WG structure is replicated at the regional level where regional bureaux are establishing supply chain working groups (SCWGs). Management representatives from all parts of the chain discuss issues affecting supply to the countries in the region. The aim is to optimize supply and prevent post-delivery losses caused by overlong storage and changes in programme requirements or national regulations (see the section on the final step of the supply chain).



SECOND STEP OF THE SUPPLY CHAIN – SOURCING

34. The processes involved in sourcing and procuring food are an important part of efforts to prevent post-delivery losses. WFP's strategic shift from food aid to food assistance and its greater focus on nutrition and deployment of the right tools have led to enrichment of the food basket through the addition of specially formulated nutritious products and canned/processed foods with greater nutritional impact. The increasingly sophisticated food basket, along with higher reliance on local purchase, has spurred WFP's efforts to strengthen food safety and quality management along the supply chain.



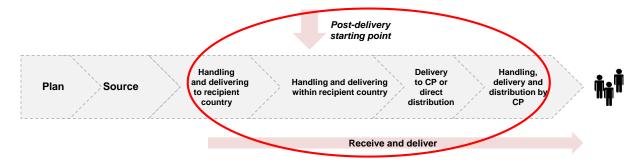
- 35. In 2013, in collaboration with the United Nations Children's Fund (UNICEF), the Food and Agriculture Organization of the United Nations, the International Committee of the Red Cross and *Médecins sans frontières* (MSF), WFP developed and published supply chain management guidelines for specialized nutritious foods, and training modules based on the guidelines were developed. In 2013, training began for field staff, cooperating partners and other agencies that use specialized nutritious foods, and will be rolled out in 2014. This will help all parties involved in managing specialized nutritious foods to mitigate losses.
- 36. Implementation of FOQUS, an information technology (IT) platform for tracking food quality will be rolled out in 2014 and supported by training activities for all parts of the supply chain.
- 37. With the technical and financial support of private sector partners, WFP learned from and incorporated best practices from the food industry to improve food safety and quality. In 2013, major achievements were:
 - completion of product-stability studies to improve the shelf-life of SuperCereal Plus from 18 to 24 months;
 - harmonization of safety and quality standards for all lipid-based nutrient supplements with core partners such as UNICEF and MSF; and
 - review and online publication of 60 commodity specifications to build knowledge and awareness both internally and externally.
- 38. The WFP Food Safety and Quality Assurance Unit also worked with suppliers of specialized nutritious foods, providing guidance on good manufacturing practices, good handling practices and Hazard Analysis Critical Control Point (HACCP). By the end of 2013, 15 processed food manufacturers had been audited by WFP's food quality team.
- 39. In 2014, WFP will continue the transition from quality control to quality management. The technical expertise and experience of private sector partners will be used to address:
 - challenges along the supply chain planning, procurement, superintendence, transport, storage and distribution;



- challenges along product value chains manufacturing, product shelf-life, specifications, packaging, standardized products and development; and
- limitations in operational environments national regulatory frameworks and laboratory facilities.
- 40. WFP's focus on risk prevention and mitigation through robust incident management protocols and responses ensures it can achieve food quality and cost effectiveness.

FINAL STEP OF THE SUPPLY CHAIN – RECEIPT AND DELIVERY

41. In the delivery phase, which includes the handling and delivery processes up to the recipient country, WFP focused on the need for enhanced tracking of food commodities through the development of LESS. Continuous efforts were directed at supporting and controlling its operations at the regional and local levels to strengthen processes for preventing and mitigating post-delivery losses.



- 42. The most important current initiative for the delivery phase is LESS, which will integrate management of the food supply chain, inventory accounting and real-time tracking and will contribute to loss management when it is implemented. LESS was successfully piloted in Liberia and Sierra Leone in 2012; in 2013 WFP began roll-out over a three-year period, with Afghanistan and Pakistan to be covered in 2014.
- 43. LESS will bring substantial efficiency gains to WFP's supply chain by recording handover of the care and custody of goods in all locations where WFP operates, including warehouses and port offices. Improving on the current system, WFP will soon have realtime data for any given time and place.
- 44. With real-time, more detailed and better-quality data, the following will be facilitated:
 - a) *Identification of food at risk of loss through overlong storage*. The best-before date is visible throughout the supply chain, making it possible to target specific food commodities or batches for use before expiry. Food movements can thus be planned even when the food is still on the high seas or when commodities are on loan from other countries.
 - b) *Improved loss mitigation through immediate loss recognition*. LESS recognizes preand post-delivery losses immediately, and provides detailed information on the condition of consignments. This intelligence may be used to flag opportunities and actions for loss mitigation.
 - c) *Mitigation of in-transit post-delivery losses.* LESS incorporates the estimated time of arrival for food commodities in transit, and can therefore identify those that need priority attention.



- d) *Prevention and mitigation of post-delivery losses from damage*. LESS provides detailed information on food commodities, down to the stack levels in warehouses. This is important for follow-up actions such as fumigation and reconstitution after food damage has occurred.
- e) *Mitigation of future post-delivery losses.* LESS provides improved transparency and accountability by identifying segregations of duties, individual accountabilities and audit trails. Its more detailed and better information will enable higher-quality analyses.

REGIONAL AND COUNTRY OFFICE POST-DELIVERY LOSS PREVENTION AND MITIGATION INITIATIVES

- 45. WFP's recent organizational changes have increased the role and responsibilities of the regional bureaux in the support and oversight of country programmes. To prevent and mitigate post-delivery losses, in 2013 the regional bureaux focused on:
 - a) enhanced coordination along the supply chain the SCWGs;
 - b) oversight identification of food commodities at risk; and
 - c) support to country offices in food quality and safety management.
- 46. To enhance the coordination of all aspects of the supply chain, all regional bureaux are establishing SCGWs. The objective is to have a forum for senior management to discuss and address regional supply chain issues, with inputs from all process managers.
- 47. In Nairobi in 2013, the SCWGs dealt with challenges related to products with a short shelf-life by supporting and coordinating inter-country food loans to enable the expedient use of food that would otherwise be susceptible to expiry and spoilage. In Dakar, the SCWG has compiled a comprehensive supply strategy for 2014.
- 48. In relation to oversight, the regional bureaux have focused on identifying food commodities at risk through regular reports on commodity ageing and delayed transit. Ageing food commodities are at risk of loss through damage or expiry, and the report alerts country offices to the danger. The delayed transit report identifies food that has already been dispatched but of which receipt has not yet been confirmed. Among other benefits, this has raised awareness of the damage caused by prolonged transit, thereby reducing the incidence of such delays.
- 49. The regional bureaux also provide oversight through missions to country offices to ensure that WFP practices and procedures for warehousing, inventory, etc. are being followed and to reinforce best practices.
- 50. Regional bureaux support country offices in food quality and safety management through the standardization of practices, development of region-specific tools, monitoring of national regulations, and help on inspection procedures. For example, staff of WFP and an inspection company have been trained on food quality and safety management at the Nairobi Regional Bureau. In Panama, a new tool for assessing supply chain capacity is being developed for national social assistance programmes.



- 51. At the country office level, support in 2013 focused on:
 - a) training, particularly in warehouse management, commodity accounting and supply chain management;
 - b) comprehensive reviews of the supply chain in high-risk countries such as Afghanistan, to minimize WFP's operational risks;
 - c) helping countries draw up clear guidelines and SOPs;
 - d) security issues pipeline reorganization, development of SOPs and negotiations with authorities for improved security;
 - e) the capacity development initiatives of governments and partners; and
 - f) specific challenges facing country offices.

SUMMARY OF MEASURES FOR PREVENTING AND MITIGATING POST-DELIVERY LOSSES

- 52. In 2013, WFP and partners worked on initiatives in different parts of the supply chain to improve loss prevention and mitigation. These efforts have focused on:
 - a) enhancing coordination and planning throughout the supply chain at Headquarters and the regional and country-office levels, including by developing and optimizing pipeline management through the SCWGs;
 - b) managing and adapting WFP's supply chain processes to accommodate the increased use of specialized nutritious foods;
 - c) enhancing food safety and quality management through the harmonization of standards, the review of commodity specifications, and the capacity-development and auditing of processed food suppliers;
 - d) developing LESS to optimize and strengthen end-to-end supply chain management, and food monitoring, tracking and reporting; and
 - e) adopting strategies and actions at the regional/local level to prevent and mitigate losses.
- 53. Country-specific post-delivery losses are detailed in Annex I, which considers the size of the losses, the main reasons for them, and the prevention and mitigation measures employed by each country. In 2014, WFP will continue to work on how best to keep food safe along the supply chain in the often challenging environments in which it operates.

Box 3: "Mega-cocoons" in the Philippines

In many countries, large temperature variations between day and night can harm food. The Bangkok Regional Bureau is supporting the Philippines in piloting the use of "mega-cocoons" – new infrastructure specially designed for longer-term food storage – with very positive results so far.



ABOVE-THRESHOLD LOSSES, BY COUNTRY

- This section presents post-delivery losses that exceed WFP predetermined thresholds in:

 i) countries registering post-delivery losses of a single food type that account for at least 2 percent of the total tonnage of that food handled and that have an absolute value of at least USD 20,000; and ii) countries registering post-delivery losses of a single food type that have an absolute value greater than USD 100,000. The post-delivery loss value and volume are recorded for each country, along with the main reasons for the losses and the prevention and mitigation actions taken by the country in question. The countries are listed in alphabetical order.
- 2. In 2013, 20 projects in 16 countries recorded single post-delivery losses in excess of these thresholds, accounting for 81 percent of the 25,016 mt total post-delivery losses recorded by WFP (Figure 1).

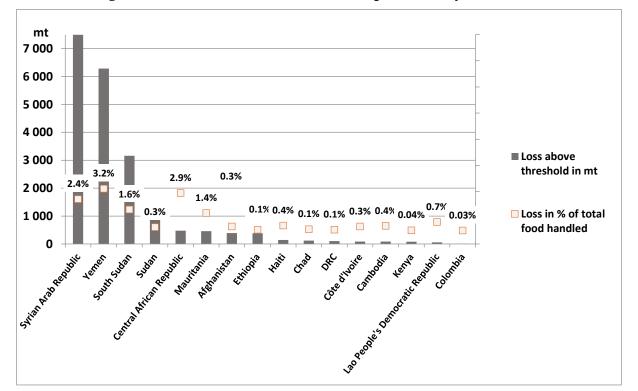


Figure 1: Countries with above-threshold post-delivery losses, 2013

3. Annex IV provides post-delivery loss values aggregated per region. Annex V provides information per food commodity. Annex VI provides information on total post-delivery losses for each country in 2013. Details of larger post-delivery losses are provided in Annex VII; the factors, circumstances and mitigation measures outlined in the following paragraphs refer to above-threshold post-delivery losses.

Afghanistan

4. Total post-delivery losses were 524.6 mt for a value of USD 339,868. This represents 0.45 percent of the total food handled, and 0.44 percent of the total value. Above-threshold post-delivery losses totalled 388.4 mt valued at USD 247,343.



- 5. The main reasons for the post-delivery losses were transport losses (short deliveries), infestation, reconstitution and poor handling. Short deliveries accounted for more than 65 percent of total post-delivery losses (342.9 mt); more than 50 percent of them were due to security incidents.
- 6. Measures to mitigate these security incidents included increased use of escorts, facilitated by the Ministry of Interior, identification of high-risk areas and more use of non-governmental organizations (NGOs). For the remaining short deliveries, WFP recovered losses from the transporters. To enhance the storage and handling of food, WFP has trained partners and its own field staff in warehouse management.

Cambodia

- 7. Total post-delivery losses were 111.7 mt for a value of USD 97,660. This represents 0.50 percent of total food handled, and 0.59 percent of the total value. Above-threshold post-delivery losses totalled 84.8 mt valued at USD 80,735.
- 8. The main reason for post-delivery losses was food expiry prior to registered expiry date. Examples included CSB with different expiry dates on outer and inner bags; and CSB becoming rancid 11 months after the manufacturing date, despite having an 18-month shelf-life.
- 9. In immediate response, the Procurement Division at Headquarters addressed these issues with the suppliers. At the local level, food inspection procedures were reinforced, and random checks of expiry dates on 10 percent of packages were introduced, along with monthly quality checks of products stored in WFP warehouses. To reduce prolonged storage, the country distribution plan was optimized.

Central African Republic

- 10. Total post-delivery losses were 515.6 mt for a value of USD 541,780. This represents 3.1 percent of the total food handled and 3.2 percent of the total value. Above-threshold post-delivery losses totalled 477.9 mt valued at USD 487,325.
- 11. Post-delivery losses resulted mainly from the deterioration of security conditions in 2013, which caused delays or the complete abandonment of some consignments, hindered access to beneficiaries and constrained logistics, leading to expiration and spoilage of foods.
- 12. In response to looting, WFP reinforced security measures to protect warehouses in Bangui. WFP monitored the security situation closely and did its best to distribute whenever conditions allowed. It worked with the Government and other actors in the country to open a humanitarian corridor to the affected population countrywide.

Chad

- 13. Total post-delivery losses were 288.4 mt for a value of USD 318,420. This represents 0.29 percent of the total food handled and 0.31 percent of the total value. Above-threshold post-delivery losses totalled 121.6 mt valued at USD 102.035.
- 14. The main reasons for these post-delivery losses were:
 - > spoilage of food by water or oil during transport; and
 - > poor handling and/or the loading of underweight bags.



15. Mitigation measures included meetings with transporters to raise awareness of good loading and handling practices, enforcement of the requirement for tarpaulins or canvas sheets during rainy seasons, and staff training on the risks of loading underweight bags. In keeping with standard WFP practice, any post-delivery loss incurred during transport was deducted from the transporter's invoice.

Colombia

- 16. Total post-delivery losses were 21.4 mt for a value of USD. 98,850. This represents 0.20 percent of the total food handled, and 1.18 percent of the total value. Above-threshold post-delivery losses totalled 3.6 mt valued at USD 87,717.
- 17. The 3.6 mt lost consisted of micronutrient powder (MNP) purchased for children in highly vulnerable households affected by displacement and violence. The main reasons for the loss were the expiry of the MNP because of extensive delays in programme start-up, and delay in partners' preparation of implementation protocols. It took longer than expected to finalize agreements between partners in the programme and WFP because of legal and financial discussions.
- 18. The country office analysed alternative uses for the MNP, but the risks or costs were too high. The MNP was destroyed in 2013. For new programmes, the country office took additional measures to mitigate risks before procurement starts.

Côte d'Ivoire

- 19. Total post-delivery losses were 137.9 mt for a value of USD 87,083. This represents 0.54 percent of the total food handled, and 0.44 percent of the total value. Above-threshold post-delivery losses totalled 85.4 mt valued at USD 47,150.
- 20. The main reasons for the post-delivery losses were overlong storage, poor storage conditions and poor handling. The 85.4 mt of split peas lost was for a school feeding programme and was delivered to the cooperating partner in April 2013 for distribution. The peas were stored for too long because of a strike in the schools, followed by exams and school holidays. The cooperating partner could not distribute them until October when the students returned. This excessive storage in poor conditions caused spoilage.
- 21. As mitigation measures, the country office:
 - ➢ is working with the cooperating partner to improve storage conditions; and
 - ➤ has reduced the volumes of food stored in schools where storage conditions are inadequate; to the extent possible, food is delivered for immediate distribution.

Democratic Republic of the Congo

22. Total post-delivery losses were 597.8 mt for a value of USD 583,407. This represents 0.54 percent of the total food handled, and 0.52 percent of the total value. Above-threshold post-delivery losses totalled 101.5 mt valued at USD 140,269.



- 23. The main reason for the post-delivery losses was the late arrival of food to distribution sites, leading to its expiry and return before distribution. The late arrival was due to transport constraints in eastern DRC. The food (maize meal) had a short shelf-life when it arrived in DRC because of the long supply route from Europe through Kenya and Uganda.
- 24. As mitigation measures, the country office sought to optimize the supply by increasing its use of the FPF and developing local food purchases. It is also advocating for the distribution of maize rather than maize meal; measures have been taken to purchase maize for milling in DRC.

Ethiopia

- 25. Total post-delivery losses for Ethiopia were 650.1 mt with a value of USD 408,019. This represents 0.15 percent of the total food handled, or 0.18 percent of the total value. Above-threshold post-delivery losses totalled 385.9 mt valued at USD 183,315.
- 26. The main reasons for the post-delivery losses were food misuse, pilferage by drivers and porters, unauthorized distributions with food used as in-kind payments for secure storage and poor handling during offloading and storage at final distribution points. Most of these losses occurred in the Somali region where WFP is challenged by poor infrastructure, remote final delivery points and security issues.
- 27. To mitigate and address these issues, the country office is working with government structures to foster use of the Somali region's "Hubs and Spokes" committees to review food deliveries regularly and identify bottlenecks that hamper smooth distribution. In 2013, the regional authorities made food losses judicially actionable, with some cases resulting in custodial sentences.
- 28. Training was given in the 14 districts identified as the most problematic in Somali region, and 744 representatives of food distribution committees and district officials participated in familiarization workshops where the main issues were discussed and each district identified local solutions for improving distributions. The country office also conducted an evaluation of the effectiveness, efficiency and relevance of the Hubs and Spokes structure in the Somali region.

Haiti

- 29. Total post-delivery losses were 374.0 mt for a value of USD 432,670. This represents 1.08 percent of the total food handled and 1.43 percent of the total value. Above-threshold post-delivery losses totalled 140.7 mt valued at USD 227,606.
- 30. The main reasons for the post-delivery losses were the reconstitution of food and the expiry of nutritious food and powder due to the poor storage conditions of the cooperating partner and lower than expected absorption.
- 31. To prevent post-delivery losses in the future, WFP worked with the cooperating partner to improve warehousing conditions, including through training and awareness raising on food commodity management and reporting standards. The country office adopted a supply chain approach to raise awareness of products with short shelf-life.

Kenya

32. Total post-delivery losses were 529.1 mt for a value of USD 385,232. This represents 0.29 percent of the total food handled and 0.36 percent of the total value. Above-threshold post-delivery losses totalled 80.7 mt valued at USD 110,712.



- 33. The main reason for the losses was changes in local import regulations. CSB was imported prior to an import ban on genetically modified (GM) food, which prohibits the sale, distribution and consumption of GM foods in Kenya. The country office's request for a waiver from the Government to clear the balance of the CSB was not approved, hence the disposal.
- 34. It was not possible to prevent this post-delivery loss, as the CSB was already in the country when the import ban was introduced. As mitigation measure, the country office is monitoring developments in food import regulations and ensuring that suppliers produce a GM-free certificate for any product destined for use in Kenya.

Lao People's Democratic Republic

- 35. Total post-delivery losses were 72.3 mt for a value of USD 49,958. This represents 0.88 percent of the total food handled, and 0.61 percent of the total value. Above-threshold post-delivery losses totalled 56.0 mt valued at USD 40,315.
- 36. The main reason for the post-delivery losses was low overall programme implementation - at 47 percent lower than planned for 2013 – which led to longer storage periods for the food. Mother-and-child health and nutrition was particularly affected by stocks that consisted of 35 percent broken glutinous (sticky) rice, a local variety that is more susceptible to deterioration than ordinary white rice. A total of 563 mt of rice was affected.
- 37. The country office sought to prevent a post-delivery loss through re-milling, polishing and re-sorting to improve quality; stock rotation, with loans to other components; and exchange for better-quality rice from vendors. Of the 563 mt of rice affected, 411 mt was re-milled and 152 mt exchanged with commercial millers, resulting in a post-delivery loss of 10 percent overall (55.96 mt). All food commodities recovered were distributed.
- 38. To avoid recurrence of this situation, in consultation with the regional bureau, the country office:
 - revised quality standards for locally procured glutinous rice from 35 percent broken to 25 percent broken, for improved shelf-life;
 - adopted a procurement strategy with staggered deliveries to avoid prolonged storage periods; and
 - maximized opportunities for stock rotations, procuring ordinary white rice whenever possible.

Mauritania

- 39. Total post-delivery losses were 544.3 mt for a value of USD 418,961. This represents 1.61 percent of the total food handled and 1.86 percent of the total value. Above-threshold post-delivery losses totalled 459.9 mt valued at USD 344,161.
- 40. The main reason for the post-delivery losses was the overestimation of beneficiary numbers, which led to overlong storage and damaged/expired food.
- 41. The immediate action taken was destruction of the food. Mitigation measures included enhanced cooperation between WFP and the cooperating partner to improve planning figures, including through the development of a Memorandum of Understanding and SOPs; and improved quality and quantity control for better storage conditions in Bassikounou.



South Sudan

- 42. Total post-delivery losses were 3,271.2 mt for a value of USD 3,053,356. This represents 1.69 percent of the total food handled and 1.86 percent of the total value. Above-threshold post-delivery losses totalled 3,160.0 mt valued at USD 2,939,817.
- 43. There were three main reasons for post-delivery losses:
 - Looting. Looting from WFP primarily occurred during the civil strife and included approximately 1,200 mt taken from a barge. In June 2013, cooperating partners' warehouses were looted during civil unrest, and approximately 1,150 mt was lost.
 - Transport losses. Approximately 400 mt was lost during in-country transit because of poor road infrastructure and weather conditions.
 - Theft/pilferage. Approximately 240 mt was lost from the warehouses of cooperating partners and WFP through theft/pilferage.
- 44. As prevention and mitigation measures, the country office took the following actions:
 - Looting. Transportation by barge was suspended until the security situation improves. Deliveries by road to insecure areas were placed under mandatory escort. Looting from warehouses created a security situation that required staff and partners to be evacuated. WFP has requested the Government's assistance in protecting humanitarian assets against looting.
 - > *Transport losses.* The post-delivery losses were charged in full to the responsible transporters.
 - Theft/pilferage. The security companies hired were charged for the post-delivery losses, and alternative security companies were identified. Losses at the cooperating partner level included overscooping and pilferage, for which the partner has taken full responsibility. WFP and the partner are working on mechanisms for avoiding such losses in the future.

Sudan

- 45. Total post-delivery losses were 1,419 mt for a value of USD 635,245. This represents 0.42 percent of the total food handled and 0.40 percent of the total value. Above-threshold post-delivery losses totalled 946.7 mt valued at USD 359,833.
- 46. The main reason for the post-delivery losses was the looting of hijacked trucks. The country office has established SOPs stipulating the use of convoy escorts in the Darfur region, but vehicles are still being targeted.
- 47. WFP investigates every case and, if the transporter is found at least partly responsible for the looting, losses are deducted from the transporter's invoices.

Syrian Arab Republic

48. Total post-delivery losses were 7,513.1 mt for a value of USD 5,666,726. This represents 2.44 percent of the total food handled and 2.43 percent of the total value. Above-threshold post-delivery losses totalled 7,491.8 mt valued at USD 5,623,574.



- 49. A large proportion of post-delivery losses occurred while food was in the custody of WFP's cooperating partners and resulted from the prevailing security situation (31 percent), such as when fighting caused delivery delays, damage to WFP warehouses, the loss or destruction of documentation and general lawlessness. WFP also sustained losses during the shipment of containerized cargo (15 percent), and during "security incidents" involving confiscation of partial or whole cargoes by military forces or armed opposition groups (20 percent).
- 50. In addition to the reported 7,513.1 mt of post-delivery losses, a further 412 mt remain under verification and will be classified as lost or recovered once the verification process is complete.
- 51. Throughout 2013, WFP took swift measures to recover part of the lost food, and improved the flexibility of its logistics systems to mitigate the impact of conflict as much as possible. An investigation of losses from containerized cargo revealed that most took place on the road, and WFP was able to recover 70 percent of these losses from transporters.
- 52. Throughout 2013, capacity development initiatives for WFP cooperating partners included training courses in commodity handling, warehouse management and reporting. This was deemed necessary because of the rapid increase in partners from 2 to 27 in response to the scale-up of operations. To address losses due to security incidents, an SOP was developed outlining the steps to be taken with government authorities or other groups to negotiate the release of cargo. Implementation of the SOP has enabled WFP to recover more than 50 percent of all the commodities involved in security incidents.
- 53. The country office coordinates with all parties to ensure that timely and effective mitigation measures are applied. It is seeking to diversify its transporter base and the corridors it uses to reduce the risk of losses, and has built up logistics staffing and oversight within the country.

Yemen

- 54. Total post-delivery losses were 6,381.1 mt for a value of USD 3,998,679. This represents 3.27 percent of the total food handled and 3.58 percent of the total value. Above-threshold post-delivery losses totalled 6,285 mt valued at USD 3,920,771.
- 55. The reasons for the post-delivery losses were local authorities' rejection of shipments in 2012 because of infestation, the loss of wheat from milling, and the introduction of new regulations on nutritious food, which caused food to expire before use. More than 80 percent of the losses were due to shipments being rejected.
- 56. As a mitigation measure for the rejected shipment, the cargo was sold abroad and more than USD 400,000 was recuperated. To avoid recurrence of the situation, arrangements were made to ensure that future wheat grain shipments are milled in Yemen; more than 40,000 mt of wheat has been milled there since. However, a difference in interpretation of this agreement arose in regard to the extraction rate, which led to WFP receiving 797 mt less wheat than expected, 50 percent of which was recovered from the miller. This issue has since been resolved for future contracts.
- 57. A new government regulation requires nutritious food to arrive at the distribution point at least 60 days before its best-before/use-by date. The country office is strengthening its pipeline management to take this new requirement into account.



POST-DELIVERY LOSSES UNDER VERIFICATION

Post-Delivery Losses under Verification from the 2012 Report

- 1. *Eritrea*. Of the food delivered by WFP to the Government of Eritrea in 2005, 64,538 mt with an estimated 2005 value of USD 31 million remains unaccounted for. WFP reports this food as advance stock, but has not received distribution reports from the Government, and so is unable to determine whether the food has been distributed to the intended beneficiaries. WFP intends to recover the value of any food not utilized, in compliance with Eritrea's contractual obligations, and will continue to seek a solution.
- 2. *Syrian Arab Republic*. There were 1,040 mt of post-delivery losses under verification in 2012. The losses have been verified and included in the narrative on Syrian post-delivery losses in 2013 (Annex I paragraphs 48–53).

Post-Delivery Losses under Verification in 2013

- 3. *Afghanistan*. The country office investigated several reported cases of food diversions amounting to approximately 9,000 mt from distributions carried out in 2012 mainly by government partners and community councils. These investigations were a direct response to reports to the beneficiary hotline and involved extensive work by the country office compliance unit. WFP reported the cases to the Government's High Office of Oversight and Anti-Corruption for legal investigation. Distributions were ceased in two provinces. The potential losses were not officially acknowledged by the cooperating partners and were therefore not recorded in the Standard Project Reports (SPRs) for 2012. In 2013, food diversions were significantly reduced following:
 - an outreach campaign using radio and print to ensure that beneficiaries are aware of WFP's distribution principles, their own entitlements, and facilities for reporting grievances, including the beneficiary hotline;
 - ➢ inclusion of more non-governmental organizations (NGOs) as cooperating partners;
 - strengthening of the compliance unit, including by appointing a dedicated investigations officer for part of 2013;
 - printing of the hotline number on all bags and cartons and on posters at distribution sites to inform beneficiaries of their entitlements;
 - recording of photographic evidence of packages in every consignment to allow speedy investigation of food diversions; and
 - active engagement with local police to investigate cases and apprehend guilty individuals; a government decree issued in 2013 states that non-entitled individuals in possession of WFP food are subject to arrest, with the police confiscating the food.



- 4. *Iraq.* In 2013, post-delivery losses of 640 mt of high-energy biscuits (HEBs) were incurred. In 2013, WFP was obliged to meet Iraqi regulations stipulating that HEBs entering Iraq should have a shelf-life of nine months. The HEBs also have to enter Iraq within three months of production. An international consignment delivered through Jordan was delayed because of: i) the lack of a tax facilitation letter at the entry point in Iraq; and, ii) the security situation inside Iraq, which resulted in an increased delivery lead time. The HEBs arrived at the Iraqi border with less than six months of shelf-life remaining, were refused entry by customs officials, and were returned to WFP warehouses in Jordan. The country office's mitigation measures to avoid a similar situation in the future are:
 - ensuring that all involved in the procurement of commodities for Iraq are updated on national regulations and requirements for food commodities;
 - close monitoring of changes in regulations; and
 - continuing to explore possibilities for local and regional purchase to minimize lead times.
- 5. *Syrian Arab Republic*. There are 412 mt under verification yet to be classified as a loss or recovered. Figures will be finalized once the verification process is complete.
- 6. Follow-up will be given in the post-delivery loss report covering 2014.



ANNEX III

LOSSES BY REASON								
	Value (<i>USD</i>)	% of post- delivery losses						
Deterioration of food commodities mainly attributable to problems at origin	234 061	1.25						
Deterioration of packaging materials	334 171	1.79						
Flooding and other natural disasters	65 953	0.35						
Improper/overlong storage	5 156 375	27.60						
Inadequate transport	53 621	0.29						
Infestation	419 485	2.25						
Loss due to fire	84 608	0.45						
Loss due to sampling food analysis	3 097	0.02						
Loss during civil strife	2 899 396	15.52						
Pilferage/theft	1 240 641	6.64						
Poor handling	473 093	2.53						
Processing/transformation of commodity	480 251	2.57						
Reconstitution/rebagging/repacking	88 027	0.47						
Short-delivered	6 831 707	36.56						
Unauthorized distribution	46 808	0.25						
Variance in weight	159 098	0.85						
Wet by water	113 701	0.61						
Total	18 684 094							



ANNEX IV

QUANTITIES AND VALUES OF LOSSES BY REGION									
	Total I	Post-deliv	very losses						
Region	Quantity net (<i>mt)</i>	Value (USD)	Quantity net (<i>mt</i>)	Value (USD)					
ОМВ	686 000	413 487 758	970	730 129					
OMC	1 005 559	625 065 130	15 502	10 440 200					
OMD	502 425	431 893 489	2 199	1 953 115					
OMJ	490 671	331 785 152	1 139	904 782					
OMN	997 199	641 597 049	4 796	4 113 855					
OMP	88 356	67 266 334	411	542 013					
GRAND TOTAL	3 770 209	2 511 094 911	25 016	18 684 094					
Losses as percentag	ge of total		0.66%	0.74%					

* Opening stocks in the recipient country plus commodities received in the recipient country.

- OMB Bangkok Regional Bureau (Asia)
 OMC Cairo Regional Bureau (Middle East, North Africa, Eastern Europe and Central Asia)
 OMD Dakar Regional Bureau (West Africa)
 OMJ Johannesburg Regional Bureau (Southern Africa)
 OMN Name Developed Central Africa)

- OMN Nairobi Regional Bureau (East and Central Africa)
- OMP Panama Regional Bureau (Latin America and the Caribbean)



ANNEX V

	LOSSES BY COMMODITY									
Commodity code	Commodity	Total handled* (USD)	Total post-delivery losses (<i>USD</i>)	Losses in USD as % of total handled*						
BEVTEA	Black tea	19	10	50.00						
CERBAR	Barley	1 152 115	4 763	0.41						
CERBHW	Buckwheat	174 882	-	0.00						
CERBRE	Bread	6 540 156	-	0.00						
CERMAZ	Maize	204 760 794	315 038	0.15						
CERMML	Maize meal	72 017 784	383 658	0.53						
CERPAS	Pasta	13 627 758	518 455	3.80						
CERRIC	Rice	344 080 319	2 693 295	0.78						
CERSOR	Sorghum	299 463 386	2 019 212	0.67						
CERWBG	Bulgur wheat	31 677 015	348 996	1.10						
CERWHE	Wheat	286 148 746	803 747	0.28						
CERWHF	Wheat flour	122 095 720	3 287 331	2.69						
DAIDSE	Enriched dried skim milk	1 802 928	3	0.00						
DAIDSP	Plain dried skim milk	19 457 714	73 045	0.38						
DAIUHT	Ultra high temperature milk	1 416 810	-	0.00						
FRUDFR	Dried fruits	10 525 807	480 795	4.57						
FSHCFI	Canned fish	21 805 921	147 341	0.68						
MIXBIS	Biscuits	278 721	-	0.00						
MIXBP5	BP5 emergency rations	796 798	8 848	1.11						
MIXCSB	Corn-soya blend	217 063 677	1 777 139	0.82						
MIXCSBFAF	Faffa	19 989 973	10 582	0.05						
MIXCSBVIT	Vitacereal	220 421	-	0.00						
MIXCSM	Corn-soya milk	51 317	34 810	67.83						
MIXHEB	High-energy biscuits	49 020 126	108 985	0.22						
MIXRSB	Rice soya blend	2 532 883	1 330	0.05						
MIXRSF	Plumpy	102 980 719	656 691	0.64						
MIXWSB	Wheat-soya blend	14 813 759	66 463	0.45						
MSCMNP	Micronutrition powder	1 729 696	181 815	10.51						
MSCSAL	lodized salt	4 272 761	29 455	0.69						
MSCSUG	Sugar	43 529 908	493 807	1.13						
MSCYEA	Yeast	1 283 130	1 169	0.09						
OILBUT	Butter oil	133 937	112	0.08						
OILVEG	Vegetable oil	287 608 488	2 489 645	0.87						



LOSSES BY COMMODITY									
Commodity code	Commodity	Total handled* (USD)	Total post-delivery losses (<i>USD</i>)	Losses in USD as % of total handled*					
PPFRTN	Rations	10 941 184	64 924	0.59					
PULBEA	Beans	72 487 046	182 260	0.25					
PULCKP	Chickpeas	6 660 300	6 730	0.10					
PULCPU	Canned pulses	17 214 692	262 801	1.53					
PULCVE	Canned vegetables	415 102	26 936	6.49					
PULLEN	Lentils	51 062 161	651 590	1.28					
PULPEA	Peas	28 607 695	67 480	0.24					
PULSLN	Split lentils	340 889	79	0.02					
PULSPE	Split peas	140 311 655	484 754	0.35					
Total		2 511 094 911	18 684 094	0.74					

* Opening stocks in the recipient country plus commodities received in the recipient country.



ANNEX VI

	QUANTITIES AND VALUES OF LOSSES BY RECIPIENT COUNTRY										
		Total I	handled*	Post-deli							
Region	Country	(net mt)	(USD)	(net mt)	(USD)	Losses in USD as % of total handled*					
OMB	Afghanistan	116 560	77 372 535	524.6	339 868	0.44					
	Bangladesh	87 032	51 435 430	6.2	8 781	0.02					
	Bhutan	3 937	2 223 467	4.1	2 464	0.11					
	Cambodia	22 518	16 590 085	111.7	97 660	0.59					
	Democratic People's Republic of Korea	62 898	43 207 470	0.0	16	0.00					
	Indonesia	1 553	1 236 086	0.3	390	0.03					
	Lao People's Democratic Republic	8 244	8 219 177	72.3	49 958	0.61					
	Myanmar	73 640	36 739 953	16.4	9 282	0.03					
	Nepal	29 258	17 262 090	5.9	29 747	0.17					
	Pakistan	226 634	124 020 981	136.1	111 000	0.09					
	Philippines	39 258	22 391 597	40.3	22 072	0.10					
	Sri Lanka	12 159	9 716 553	10.1	8 725	0.09					
	Timor-Leste	2 307	3 072 333	41.7	50 165	1.63					
OMB To	otal	686 000	413 487 758	969.8	730 129	0.18					
OMC	Algeria	32 832	21 322 253	126.4	72 739	0.34					
	Armenia	2 834	2 495 702	0.2	195	0.01					
	Egypt	10 605	7 164 373	0.7	830	0.01					
	Iran (Islamic Republic of)	4 385	2 151 583	7.8	4 498	0.21					
	Iraq	7 547	13 188 667	3.3	3 773	0.03					
	Jordan	23 837	21 184 176	8.5	11 462	0.05					
	Kyrgyz Republic	7 393	6 385 274	0.6	566	0.01					
	Lebanon	3 183	6 181 349	14.3	27 770	0.45					
	State of Palestine	54 458	29 094 688	23.6	15 786	0.05					
	Sudan	337 875	159 981 247	1 419.2	635 245	0.40					
	Syrian Arab Republic	308 198	233 396 762	7 513.1	5 666 726	2.43					
	Tajikistan	17 570	10 913 207	2.8	1 933	0.02					
	Yemen	194 842	111 605 850	6 381.1	3 998 679	3.58					
OMC T	otal	1 005 559	625 065 130	15 501.5	10 440 200	1.67					



	QUANTITIES AND VA	LUES OF	LOSSES BY	RECIPIEN	T COUNTR	Y
		Total I	nandled*	Post-deliv		
Region	Country	(net mt)	(USD)	(net mt)	(USD)	Losses in USD as % of total handled*
OMD	Benin	5 492	2 625 734	0.6	377	0.01
	Burkina Faso	24 908	25 614 206	95.2	92 602	0.36
	Cameroon	11 045	7 717 614	89.4	51 177	0.66
	Central African Republic	16 571	16 856 945	515.6	541 780	3.21
	Chad	98 622	104 163 603	288.4	318 420	0.31
	Côte d'Ivoire	25 491	20 002 174	137.9	87 083	0.44
	The Gambia	6 060	4 316 226	53.9	36 077	0.84
	Ghana	12 945	8 201 741	14.7	9 301	0.11
	Guinea	7 205	4 344 608	4.2	2 499	0.06
	Guinea-Bissau	3 745	2 240 139	3.5	1 899	0.08
	Liberia	12 984	8 312 010	99.1	59 874	0.72
	Mali	108 007	85 422 298	143.5	118 445	0.14
	Mauritania	33 753	22 554 672	544.3	418 961	1.86
	The Niger	96 590	89 993 873	69.6	115 082	0.13
	Sao Tome and Principe	771	541 902	0.0	0	0.00
	Senegal	30 405	23 956 335	114.0	84 493	0.35
	Sierra Leone	7 579	4 865 211	24.9	15 048	0.31
	Тодо	250	164 197	0.0	0	0.00
OMD T	otal	502 425	431 893 489	2 198.7	1 953 115	0.45
OMJ	Congo	9 750	8 092 845	78.8	48 514	0.60
	Democratic Republic of the Congo	109 728	111 485 049	597.8	583 407	0.52
	Lesotho	19 261	9 822 946	50.3	41 253	0.42
	Madagascar	25 390	11 463 535	53.1	25 118	0.22
	Malawi	132 263	81 779 734	142.8	93 651	0.11
	Mozambique	22 118	9 672 925	81.0	34 401	0.36
	Namibia	266	157 386	0.0	0	0.00
	Swaziland	10 940	5 516 433	2.0	1 138	0.02
	Tanzania, United Republic of	48 009	24 376 211	63.3	42 634	0.17
	Zambia	12 068	5 485 428	37.9	13 676	0.25
	Zimbabwe	100 877	63 932 661	32.5	20 990	0.03
OMJ To	otal	490 671	331 785 152	1 139.4	904 782	0.27



		Total	handled*	Post-deli		
Region	Country	(net mt)	(USD)	(net mt)	(USD)	Losses in USD as % of total handled*
OMN	Burundi	20 800	16 783 645	19.3	16 855	0.10
	Djibouti	17 158	10 766 656	24.8	13 355	0.12
	Ethiopia	420 165	223 430 588	650.1	408 019	0.18
	Kenya	181 109	107 801 738	529.1	385 232	0.36
	Rwanda	18 473	12 168 852	46.4	29 567	0.24
	Somalia	99 492		131.6 3 271.2	145 749 3 053 356	0.19 1.86
	South Sudan	193 626				
	Uganda	46 375	28 243 702	123.5	61 722	0.22
OMN To	otal	997 199	641 597 049	4 796.0	4 113 855	0.64
OMP	Bolivia (Plurinational State of)	1 624	1 090 820	4.1	1 950	0.18
	Colombia	10 614	8 381 353	21.4	98 850	1.18
	Cuba	1 168	1 048 828	0.1	74	0.01
	Ecuador	1 648	1 476 741	1.4	1 278	0.09
	El Salvador	4 421	2 621 386	0.9	551	0.02
	Guatemala	13 166	7 552 042	0.2	176	0.00
	Haiti	34 498	30 318 284	374.0	432 670	1.43
	Honduras	12 407	8 100 743	8.9	6 431	0.08
	Nicaragua	8 160	6 216 533	0.0	33	0.00
	Paraguay	652	459 605	0.0	0	0.00
OMP To	otal	88 356	67 266 334	411.0	542 013	0.81
GRAND	TOTAL	3 770 209	2 511 094 911	25 016.3	18 684 094	0.74

* Opening stocks in the recipient country plus commodities received in the recipient country.



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	COMMODITIES WITH POST-DELIVERY LOSSES GREATER THAN 2 PERCENT OF TOTAL TONNAGE AND VALUE OVER USD 20,000 OR VALUE GREATER THAN USD 100,000										
Region	Country	Work Breakdown Structure element	Commodity	Total handled* <i>(net mt)</i>	Total handled* <i>(USD)</i>	Post-delivery losses (net mt)	Post-delivery losses <i>(USD)</i>	Losses in mt as % of total handled*			
OMB	Afghanistan	200063.F.1	CERWHE	70 458.007	30 891 608.59	322.006	141 180.31	0.46			
OMB	Afghanistan	200063.F.1	OILVEG	10 691.631	17 093 672.73	66.402	106 162.85	0.62			
OMB	Cambodia	200202.F.1.C2	MIXCSB	1 759.168	1 674 499.24	84.817	80 734.76	4.82			
OMB	Lao People's Democratic Republic	200242.F.1.C2	CERRIC	701.290	505 230.35	55.960	40 315.26	7.98			
OMC	Sudan	200457.F.1	CERSOR	204 945.210	77 901 723.77	946.655	359 833.03	0.46			
OMC	Syrian Arab Republic	200339.F.1	CERPAS	17 758.707	13 210 169.38	696.152	517 846.59	3.92			
OMC	Syrian Arab Republic	200339.F.1	CERRIC	95 632.563	70 485 024.23	2 758.492	2 033 118.94	2.88			
OMC	Syrian Arab Republic	200339.F.1	CERWBG	22 397.663	12 583 455.03	542.463	304 766.56	2.42			
OMC	Syrian Arab Republic	200339.F.1	CERWHF	47 596.184	20 515 383.19	1 021.720	440 391.97	2.15			
OMC	Syrian Arab Republic	200339.F.1	FSHCFI	715.727	6 227 762.50	14.126	122 914.71	1.97			
OMC	Syrian Arab Republic	200339.F.1	MSCSUG	34 102.344	20 815 729.75	717.993	438 255.75	2.11			
OMC	Syrian Arab Republic	200339.F.1	OILVEG	31 538.218	42 622 324.72	731.048	987 974.82	2.32			
OMC	Syrian Arab Republic	200339.F.1	PULCPU	19 748.187	17 214 692.09	301.478	262 801.39	1.53			
OMC	Syrian Arab Republic	200339.F.1	PULCVE	323.990	415 102.47	21.024	26 936.37	6.49			
OMC	Syrian Arab Republic	200339.F.1	PULLEN	34 859.859	24 779 433.57	687.319	488 566.96	1.97			
OMC	Yemen	104350.F.1.C2	FRUDFR	246.560	377 976.48	246.560	377 976.48	100.00			
OMC	Yemen	200451.F.1	CERWHE	102 831.649	53 140 311.25	797.786	412 271.87	0.78			
OMC	Yemen	200451.F.1	CERWHF	56 521.494	30 143 477.97	5 127.672	2 734 638.75	9.07			
OMC	Yemen	200451.F.1	FRUDFR	72.489	210 731.32	27.931	81 197.65	38.53			



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	COMMODITIES WITH POST-DELIVERY LOSSES GREATER THAN 2 PERCENT OF TOTAL TONNAGE AND VALUE OVER USD 20,000 OR VALUE GREATER THAN USD 100,000											
Region	Country	Work Breakdown Structure element	Commodity	Total handled* <i>(net mt)</i>	Total handled* <i>(USD)</i>	Post-delivery losses (net mt)	Post-delivery losses <i>(USD)</i>	Losses in mt as % of total handled*				
OMC	Yemen	200451.F.1	MIXRSF	2 548.909	9 388 269.07	85.437	314 685.83	3.35				
OMD	Central African Republic	200315.F.1	MIXCSB	1 101.795	1 153 568.35	276.582	289 578.59	25.10				
OMD	Central African Republic	200331.F.1.C1	MIXCSB	162.450	133 792.20	162.450	133 792.20	100.00				
OMD	Central African Republic	200331.F.1.C1	OILVEG	143.168	235 600.12	38.863	63 953.73	27.15				
OMD	Chad	200289.F.1	CERSOR	59 296.136	49 737 598.88	121.644	102 034.99	0.21				
OMD	Côte d'Ivoire	200465.F.1	PULSPE	258.937	143 031.62	85.357	47 149.50	32.96				
OMD	Mauritania	200438.F.1.MR	MIXCSB	2 330.563	1 744 146.74	459.875	344 161.25	19.73				
OMJ	Democratic Republic of the Congo	200480.F.1	CERMML	12 339.904	17 049 921.96	101.520	140 269.17	0.82				
OMN	Ethiopia	200290.F.1	CERWHE	252 291.640	105 165 247.22	351.500	146 519.26	0.14				
OMN	Ethiopia	200290.F.1	PULLEN	1 052.920	1 127 245.62	34.370	36 796.18	3.26				
OMN	Kenya	200174.F.1	DAIDSP	273.580	1 296 421.75	13.296	63 006.15	4.86				
OMN	Kenya	200294.F.1	MIXCSB	3 075.106	2 176 006.51	67.418	47 706.33	2.19				
OMN	South Sudan	200338.F.1	CERMAZ	9 192.111	6 810 159.28	137.334	101 746.64	1.49				
OMN	South Sudan	200338.F.1	CERSOR	136 634.413	85 102 744.14	2 287.456	1 424 741.97	1.67				
OMN	South Sudan	200338.F.1	MIXCSB	9 500.037	15 284 039.53	157.125	252 788.99	1.65				
OMN	South Sudan	200338.F.1	OILVEG	11 343.466	27 797 730.61	365.376	895 372.16	3.22				
OMN	South Sudan	200338.F.1	PULLEN	3 415.572	3 773 114.08	77.316	85 409.44	2.26				
OMN	South Sudan	200338.F.1	PULSPE	12 374.771	16 427 013.51	135.415	179 758.00	1.09				
OMP	Colombia	200148.F.1	MSCMNP	4.273	104 755.76	3.578	87 717.32	83.74				

	COMMODITIES WITH POST-DELIVERY LOSSES GREATER THAN 2 PERCENT OF TOTAL TONNAGE AND VALUE OVER USD 20,000 OR VALUE GREATER THAN USD 100,000										
Region	Country	Work Breakdown Structure element	Commodity	Total handled* (net mt)	Total handled* <i>(USD)</i>	Post-delivery losses (net mt)	Post-delivery losses <i>(USD)</i>	Losses in mt as % of total handled*			
OMP	Haiti	108440.F.1	MIXCSB	1 911.848	1 704 469.85	61.379	54 721.22	3.21			
OMP	Haiti	108440.F.1	MSCMNP	15.824	328 676.98	3.258	67 671.23	20.59			
OMP	Haiti	108440.F.1	PPFRTN	3.874	26 780.23	3.874	26 780.23	100.00			
OMP	Haiti	200150.F.1	PULBEA	3 425.623	3 724 371.58	72.142	78 433.50	2.11			

* Opening stocks in the recipient country plus commodities received in the recipient country plus incoming transactions in the recipient country.



ANNEX VIII

POST-DELIVERY LOSSES 2005–2013							
Year	Total quantity handled (<i>mt</i>)	Quantity of losses <i>(mt)</i>	Losses as % of total mt handled	Total value handled <i>(USD)</i>	Value of losses <i>(USD)</i>	Losses as % of total value handled	
2005	5 077 411	23 677	0.47	1 811 472 229	9 516 413	0.53	
2006	4 994 321	24 133	0.48	1 781 348 513	9 540 580	0.56	
2007	4 166 046	16 724	0.40	1 607 373 215	7 152 643	0.44	
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	



ACRONYMS USED IN THE DOCUMENT

СР	cooperating partner
CSB	corn-soya blend
DRC	Democratic Republic of the Congo
FPF	forward purchase facility
GM	genetically modified
HEB	high-energy biscuit
LESS	Logistics Execution Support System
MNP	micronutrient powder
MSF	Médecins sans frontières (Doctors Without Borders)
SCM-WG	Supply Chain Management Working Group (Headquarters)
SCWG	supply chain working group (regional level)
SNF	special nutritious food
SOP	standard operating procedure
UNICEF	United Nations Children's Fund

