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MAINSTREAMING FOOD LOSS REDUCTION INITIATIVES MAINSTREAMING

MAINSTREAMING FOOD LOSS REDUCTION INITIATIVES FOR SMALLHOLDERS IN FOOD DEFICIT AREAS

FOOD LOSS ANALYSIS FOR IDENTIFICATION OF CRITICAL LOSS POINTS AND SOLUTIONS OF MAIZE AND RICE VALUE CHAINS IN THE DEMOCRATIC REPUBLIC OF THE CONGO

BACKGROUND

The RBA Project is jointly implemented by the Food and Agriculture Organization of the United Nations (FAO), the International Fund for Agricultural Development (IFAD) and the World Food Programme (WFP). Funded by the Government of Switzerland, the Project seeks to improve food security and income-generating opportunities through the reduction of post-harvest losses in supported grain and pulse value chains. The Project identified critical loss points, and supported the piloting of good practices and solutions to reduce post-harvest losses and improve handling and storage in the pilot countries Burkina Faso, Uganda and the Democratic Republic of the Congo (DRC). The Project will also support the development of regulatory frameworks covering policy, standards and norms to reduce food losses in food supply chains in each of the countries.



MAIZE

Critical Loss Points (CLP) are found in selected supply chains in Kwilu at drying, on-farm storage, storage at bulking depots, transport to terminal depots and storage at terminal depots.

All along the supply chain, it is observed that the most important losses are attributed to insects, before those caused by molds. The alterations originate from the field. The long drying period (1.5 months) exposes the ears to bad weather and infestations.

On-farm storage: Long storage (1 to 8 months) in precarious infrastructures. Storage in traditional granaries, in-house, on bare ground, mats, racks, wooden crates, bags and baskets.

METHODOLOGY APPLIED

The identification of critical loss points of the selected value chains was done applying the FAO methodology "Food Loss Analysis: Causes and Solutions, Case Studies in the Small-scale Agriculture and Fisheries Subsectors". It consists in 4 steps: screening, load tracking to estimate qualitative and quantitative losses along selected supply chains, survey and synthesis. This methodology allows to identify critical loss points (CLP) along the selected supply chains, the major causes of losses, appropriate, feasible and sustainable solutions (including on equipment and investments), best practices and reduction strategies.



Exposure to insects and rodents, moisture uptake are often observed. **Indicative loss levels are reported as follows:** quality losses: 5-23%. **Storage in bulking depots:** 1 to 4 months storage length. **Indicative loss levels are reported as follows:** Weevils: 10%; Molds: 5%. Significant impact of losses on the product's market value (reduction of at least 10%). Causes of losses: precarious infrastructures, insalubrity, absence of treatment, heat. **Transport to terminal depots. Indicative loss levels are reported as follows:** quantity losses: 6-13%. Causes of losses: spillage, poor condition of packaging (reuse bags), roads and vehicles, handling of bags without precaution. **Storage in terminal depots. Indicative loss levels are reported as follows:** quality losses: 16-22%. Proliferation of insects and mold if the product is not removed quickly. Causes of losses: insalubrity, absence of treatment, heat. **Sales in Kinshasa:** Quantitative losses are estimated at 3-6% (after sieving and sorting). Decrease in market value. Causes of losses are the accumulation of waste and insect proliferation due to the absence of treatment along the chain.

RICE

CLP are found in the selected supply chains studied in the Kongo Central region at harvesting, drying, on-farm storage and loading for transportation

along the rice supply chain. **Drying:** Panicles dried in the village in a rudimentary way, on racks or on the ground, without protection against poultry; humid weather, identified level of losses 3-4%. **On-farm storage:** Between 1 to 7 months in the farmers' storage structures before their evacuation to Kinshasa. **Indicative loss levels are reported as follows: qualitative losses:** 4 to 5% (especially mold: 3-4%). **Loading for transportation:** Level of broken rice, **indicative loss levels are reported as follows:** up to 80% (which greatly reduces the market value).



RECOMMENDATIONS

In DRC it is recommended to provide training and build capacity (sensitization and training of extension agents, producers and other actors) on:

- ▶ Post-harvest losses and their prevention (including gender-related issues to be tackled).
- ▶ Good harvest and postharvest management practices, taking into consideration the specific needs and priorities of both sexes, also in terms of times and resource constraints.
- ▶ Reinforce public services in charge of training on PHM and in the monitoring and control of storage facilities.

- ▶ Improve storage facilities at the farm and bulking stages.
- ▶ Inclusive value chain development.
- ▶ Increase women's voice and equal participation to decision-making over post-harvest activities.

WOMEN' ROLES IN POST HARVEST ACTIVITIES

Gender relations are a primary component of the social and economic context which influences how women and men participate in and benefit from food value chain activities. Gender inequalities in access to and control over productive resources and participation to decision-making process are an underlying reason of the inefficiencies of food value chains and subsequently of food losses. By recognizing the link between gender and food losses, the FAO Methodology for Food Loss Analysis looks at the different roles played by women and men in Critical Loss Points, by collecting sex disaggregated data and identifying specific constraints and opportunities for women and men to reduce food losses.

In DRC it was found that women's limited participation in decision-making over post-harvest tasks leads to the adoption of inappropriate practices, which cause increased work-burden and ultimately leads to food losses. Interventions to reduce losses have to include women's voices, needs and priorities.

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