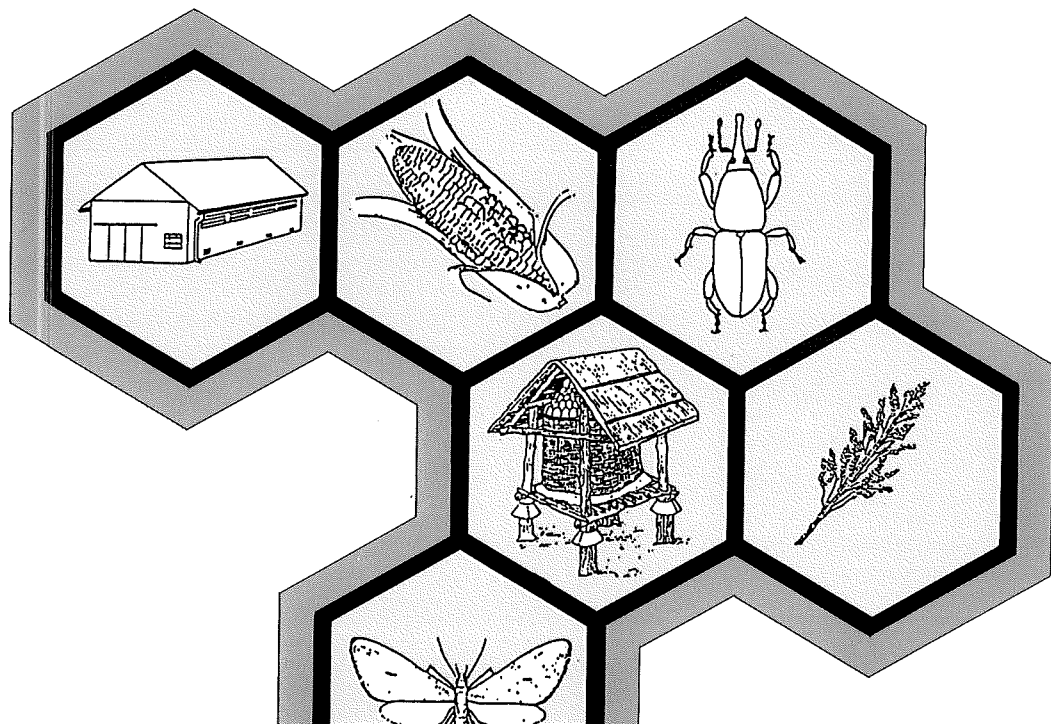




MANUAL ON THE PREVENTION OF POST-HARVEST GRAIN LOSSES

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Foreword

Men in developing countries often suffer losses of basic foodstuffs as a result of poor storage practices. It makes more sense and is economical to safeguard the crops that have been harvested instead of trying to make up for losses through increases in production.

For this reason the Federal Ministry for Economic Cooperation (BMZ) sponsors programs aimed at improving standards of crop storage and post-harvest crop management. Such programs help to secure food supplies and sustain the traditional basis of life for the local population. Specific areas targeted for improvement include hygiene practices, the design of granaries and warehouses, and the development of alternative technologies for controlling storage pests without the use of chemical insecticides.

The small farming sector plays a central role in the storage of food crops, and in recent decades significant changes have taken place here as a result of increased crop yields, the cultivation of new varieties that are often more susceptible to attack by storage pests than traditional ones, and the spread of new pests. These changes have diminished the effectiveness of established storage systems, as used by small farmers for many generations. Now there is a need to adapt traditional practices and develop new alternatives.

The knowledge and experience accumulated in over a decade of advisory work by the GTZ Post-Harvest Project has now been collected and summarized in the present handbook. We hope it will prove a valuable working aid to all those responsible for the storage and protection of harvested food crops.

Johannes Christenn
Federal Ministry for Economic Cooperation (BMZ)

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Introduction

The constant growth of the world's population makes it necessary to use all available resources for the production of food. Post-harvest activities have an important role to play in achieving this objective.

Inadequate storage methods in developing countries still lead to losses in food of an unacceptable degree. In consequence a great deal more attention should be paid to technical and practical aspects of storage protection. This is the main aim of this manual. It has been written primarily to provide practical instruction and assistance to storekeepers, plant protection technicians, agricultural extension and quarantine staff who are concerned with storage problems in their daily work.

At the same time, this manual is intended to provide decision-makers with important information, and to convey the practical side of post-harvest protection to scientists.

The contents of the manual will be centred around simple and economic facilities and storage methods, in line with the requirements of the developing countries.

Particular attention will be paid to the storage of cereals and legumes due to their special importance.

The manual forms part of the efforts being made by the Federal Ministry for Economic Cooperation (BMZ) to prevent post-harvest food losses in developing countries.