

Syllabus for Long- Term Training Course (LTTC) on "Scientific Methods of Storage & Inspection of Foodgrains " at IGMRI, Hapur and its Field Stations at Ludhiana & Hyderabad.

(04 weeks duration)

A. STORAGE

1. General problems and factors responsible for storage in foodgrain at commercial / farm level
2. Food policy of India.
3. Post-harvest losses in foodgrain.
4. Sources & detection of insect infestation on stored foodgrain; preventive and control measures.
5. Traditional and modern methods of grain storage at farm level.
6. Insect pests of stored grain and milled products, their identification, biology and natures of damage.
7. Vertebrate pests and their control.
8. Toxic contaminants in foodgrain, their ill –effect prevention.
9. Pesticide contaminants, tolerance limit of residue and anti- dotes.
10. Pesticides formulation their physical, chemical and biological properties; precautions for safe handling application and their efficacy.
11. Principal of scientific godown construction, and their specifications; Metallic & non-metallic structures, importance of bulk storage.
12. Role of moisture in godowns, its measurement on foodgrain & milled products.
13. Godown management and code of storage practices including sanitation, hygiene and security measures in warehouse complex.
14. Safe storage of cereal seeds.
15. Fumigation of foodgrain by different fumigants including methyl bromide.
16. Insecticide Act.
17. Use of safety equipments-demo.
18. Fire fighting procedure –demo.

## B. INSPECTION

1. Foodgrain production and warehousing in India.
2. Morphology of cereals (wheat, rice, paddy etc.) and their constituents.
3. Milling, Processing and Packaging of wheat & paddy.
4. Pulses, their important variation, Constituents and milling procedures.
5. Handling & Transportation of foodgrain, calculation of LAS.
6. Procurement policy of foodgrain in India.
7. Inspection of foodgrain: Necessity, utility and terminology.
8. Sampling techniques and grading of foodgrain.
9. Grain quality during storage of foodgrain i.e., Categorisation, classification and grade designation etc.
10. Uniform Specification of wheat, rice, paddy maize etc.
11. Categorisation of issuable and non-issuable stock and disposal of non-issuable/damaged foodgrain.
12. Maintenance of godown accounts and book keeping.
13. Consumer Protection Act, 1986 and its importance.
14. Food safety & standards Act and its importance.
15. National food security Act, 2013 and its importance.
16. Overview of warehousing (development & Regulation) Act 2007 and importance of Negotiable warehouse Receipt.
17. Maintenance of aptitude and code of ethics by the Civilian Employees on equality, justice, dutifulness, integrity, empathy and compassion during the service.
18. Issue of foodgrain to the state Govt. and their agencies for TPDS and other welfare schemes.
19. Role of India in SAARC Food Bank.