

## PREPARATION OF MANUALS OF OPERATIONS OF FREQUENTLY-USED EQUIPMENT/MACHINERIES OF FNRI (PART II)

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### ABSTRACT

**Background:** Determination of technical requirements of scaled-up production of food processes developed by the FNRI Food Laboratory, the implementation of Technology Business Incubation, and the training of personnel of FNRI technology adoptors, regional and Metro Manila-based alike, are conducted at the FNRI Food Pilot Plant. In order to facilitate and make efficient the preparation of these research and technology transfer activities, the updating, improvement, and preparation of the Manual of Operations of the frequently used equipment and machineries of the Pilot Plant was undertaken. **Objective:** To prepare 13 Manual of Operations of frequently used equipment/machineries, such as: 1) basket centrifuge; 2) can seamer; 3) double-cone mixer; 4) drum dryer; 5) fire-tube boiler; 6) freeze dryer; 7) liquid packaging machine; 8) manual screw press; 9) oil expeller; 10) ribbon mixer; 11) silent cutter; 12) stuffing machine with linker; and 13) vibroscreen. **Methods:** Needed information inputs (e.g., purpose, terms and definitions, principles involved in the operations, schematic diagrams, operating procedures, assembly and dismantling procedures, cleaning, maintenance and troubleshooting of the listed machineries and equipment as well as personnel safety precautions) were gathered from printed reference materials and the internet. Actual pictures of machine operations were taken using a digital camera. Soft and hard copies of the Manual of Operations were produced. The printed Manual of Operations were pre-tested among FNRI users. **Results:** Thirteen Manual of Operations were prepared and reproduced in hard copies and CDs. Seventeen CDs and thirteen hard copies were submitted to the DOST Undersecretary for Regional Operations for distribution to the DOST Regional Offices. **Recommendation:** It is recommended that: (1) the DOST Regional Offices pre-test the Manuals for user-friendliness among adoptors of FNRI-developed technologies in the regions using similar equipment and machineries, employing the self-administered questionnaire format, to be returned to the FNRI Pilot Plant and (2) detailed Manual of Operations for the other equipment/machineries of the FNRI Food Pilot Plant be prepared for increased usage, decreased maintenance costs and downtime, and effective training of the newly hired staff members, students undergoing on-the-job training, and personnel of clients/customers of the Technology Business Incubation Program.

