USE OF IN-STORE DRYER TECHNOLOGY BY BUREAU OF POSTHARVEST RESEARCH AND EXTENSION ASSISTED COOPERATIVES IN THE PHILIPPINES AND ITS CORRELATES

ISIS DE CASTRO DAVALOS

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ABSTRACT

DAVALOS, ISIS DE CASTRO. Institute of Graduate Studies, Central Luzon State University, Science City of Muñoz, Nueva Ecija, Philippines. May 2006. **USE OF IN-STORE DRYER TECHNOLOGY BY BUREAU OF POSTHARVEST RESEARCH AND EXTENSION ASSISTED COOPERATIVES IN THE PHILIPPINES AND ITS CORRELATES**

Adviser: Aurora S. Paderes, Ph.D.

This study was conducted to determine the impact of the in-store dryer (ISD) after six years of use by the cooperatives assisted by the Bureau of Postharvest Research and Extension (BPRE). It aimed to identify correlates for better utilization rate. A survey schedule was conducted for the recipient cooperatives managers and ISD operators. Pearson Product Moment Correlation Analysis was used to satisfactorily establish the correlates.

Statistical analyses showed that premium grain quality and affordable repair and maintenance and operational cost are the main reasons for using it. The technology improved the grain output of the recipients and did not cause pollution. Socio-economic status and being environment friendly had nothing to do with reason for using it. Educational attributes and the transfer system did not show relationship to ISD technology use.

Grain quality, protection of the grains against infestation and physico-chemical deterioration were highly appreciated. The facility was exclusively used to process the cooperatives procurement. The recipients fixed charging cost but did not maintain records as basis of satisfying economic indices. Non-members were restricted from

availing of the services of ISD technology. Thus, it was never a factor in recruiting new members.

Socially, the technology allows minors and women for its operation. Since its operation is practically passive, noise and dust pollution were sufficiently mitigated.

Four of the recipients have continuously used their ISD technology. Two recipients despite some complaints were unwilling to return their respective ISD facility because of its usefulness in their business operation. Three other recipients could have fully utilized it but were overtaken by bankruptcy and declining postharvest activities. Two discontinued using it due to poor quality components and discouraging result of on-site testing.

The most common complaint was the slow drying principle of the technology. This is unsuitable to the grain industry where fast turn-over rate is the norm. Recipients suggested that the ladder be replaced by a mobile mechanized conveyor to facilitate loading of grain. This would reduce operational cost due to decreased manual labor usually computed on a per move basis.

The third problem was the necessity of manually sweeping the dried grain from unloading halfway through. The recipients wanted modification of the flat flooring to allow grains a continuous outward flow. Fourth is the tendency of the moving components to breakdown.

The recipients never availed of after sales service because they did not know the manufacturer. With lesser frequency is the defective burner, which resulted in grain off-

odor. This might have been due to poor technical management. One recipient did not have the required first stage dryer.

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