## MAJOR CHANGES ON STORAGES AND SAFE STORING IN TIANJIN

Lianghua GUAN<sup>1</sup>, Shaojun YANG<sup>1</sup>, Bin WANG<sup>1</sup>, Run SUN<sup>2</sup> and Chengguang ZHANG<sup>2</sup> <sup>1</sup>Tianjin Animal and Plant Quarantine Service, P. R. China <sup>2</sup>Tianjin Grain Bureau, P. R. China

Many different modern silos are used in Tianjin as well as native silos and house store areas. They all result in good storage. However, there is a great need for stored products fumigation. A large modern silo was built at New port of Tianjin and five kinds of gas pipe systems were developed for grain fumigation. Furthermore an all-weather multi function fumigation house was built for different goods fumigation. Controlled atmosphere is also being investigated. Some sealed silos are being built and some supplemental works are going to seal old silos. These are basic installations for CA. In rural areas some farmers store their grain in "sealed containers" such as brick cells, jars and gasoline bins instead of bags, or bulk storages used in communes. After an investigation was made we found that sealed brick cells had safely stored wheat for 1 year with 10.2% moisture. Farmers made every effort to seal their containers. Once grain was dried and warmed in the sun, the impurities were winnowed away and the wheat poured into the containers. The majority of grains are stored in the countryside. CA is a significant help in safe storage in rural areas. A lot of work should be done in this field including preparation of technical guides.