

Field study on milk quality in China

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During the last 10 years China has grown its milk production faster than any other nation has ever done. Today, China is among the 10 biggest milk producers in the world.

The rapid expansion of milk production has included massive investments in animal and production facilities. Investments in milking systems have also played a major role.

The concept of village milking centres (VMC) was quickly adopted and has been constantly improved and developed during the growth period. Today, there are thousands of VMCs in operation for herds with 50 to 2,000 cows, milked in anything from simple bucket plants to large automated parlours.

To collect the experience from operation of VMCs in China a field study was conducted during 2005. The study gave a lot of interesting results and some alarming indications about milk quality. The study was, therefore, followed up by some further field investigations during 2006.

During 2005 20 production sites in Hebei



A farmer in Hebei on his way to milk his cow.



and Inner Mongolia were visited. During 2006 some further tests from sites in Shaanxi and Anhui were added. This may not be representative for all of China, but with the present limited access to field study reports in English it is valuable to publish to allow more parties to add to the development.

In general, all farms had animals with good genetic capacity and modern milking equipment. The main restriction for production volume seems to be feeding, particularly forage quality and quantity.

For milk quality, high values for total bacterial count (TBC) and somatic cell counts (SCC) were noticed.

The high TBC values were due to lack of

correct detergents, insufficient hot water and wrong cleaning routines.

A complete service of the plant and correct cleaning routines immediately brought the TBC value back to European standard levels.

The high SCC values indicate frequent mastitis infections in the herds. There is no general quick cure for this.

You need to find solutions for each individual production site and after diagnosis of type of mastitis combine treatment and culling with different operation and management changes.

The present SCC levels indicate average production losses of 20% in many herds.

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This is a considerable reduction of potential income to the individual farm as well as the total industry.

To continue and support the remarkable and fast development of milk production in China we propose the implementation of a quality payment system where good performance is encouraged through bonuses



above a standard or basic level and substandard performance is observed through a penalty or price reduction.

This has to be implemented in the field and supported by national standards supported and enforced by the authorities.

Such a system will motivate the producers to take the cost of detergents and service to get the additional income from quality



bonuses. It will also encourage steps to reduce and eliminate udder diseases, which will lead to more milk, better milk quality and healthier animals.

China has made major investments in animals and facilities.

The addition of a milk quality payment system will make sure it is used in a more proper and optimal way. ■

