According to Mr. Miyagi, the main point to success in chicken farming is in "how to achieve a suitable environment that avoid disturbing the digestion system of the chicken.







■ Basic data

Where: Nanjo City, Okinawa Scale: 8.000 chickens

■ Process

Miyagi farm, a naturally (cage free) grown chicken farm is located in the southern part of the Okinawa Island. When they started their chicken farm, the general method involved using lots of chemicals. However, in order to make a suitable environment to avoid disturbing the chicken's digestion system, they were looking for a natural way of growing chickens using microorganisms, and eventually, they found EM. Using EM, they managed to achieve a better environment within the farm, and made it possible for high density breeding resulting in an increase in the ratio of egg laying, survivability and egg quality, etc.

■ EM Utilization

How long?: 15 years (as of 2008)EM materials applied: EM-1, molasses, EM-X Ceramics Application method: In the drinking water: EM-A at 4,000 times dilution rate. Insert 2kg of EM-X Ceramics in a 2-ton tank. Mixing to feed: 1% EM Bokashi to the chicken feed. Washing eggs before shipping: apply EM-A at 4,000 times dilution rate.

■ Resulting Effects

The use of EM resulted in a clean environment in the farm, leading to less stress on the chickens and two times the breeding density compared to the conventional method of 30chickens per $3.3\,\mathrm{m}^2$. Eggs laying ratio increased from 80% to 92%. The survivability ratio per month reached 99.4% which is a high figure considering the high density breeding. Productivity also increased.

■ Treatment of the Chicken Dropping

They used to take out the droppings and clean the farm everyday. Now that they have a system that allows the EM to activate well, the chicken droppings are left as it is in the farm. The droppings accumulate to a depth of 40-50cm and its condition is dry similar to composted soil found in the forest. This indicates that there's a balance kept between the continually added droppings and the decomposition of the dropping layer. That balance is thanks to a harmony between the intestinal microbes of the chicken and the microbes in the dropping layer, according Mr. Miyagi.

■ Eggs

The eggs expiration period is 2 weeks at room temperature or 1 month if refrigerated. People with allergy to eggs can actually eat the Miyagi Farm eggs. These eggs are used as ingredients for processed products including mayonnaise, egg oil, etc. These eggs also have a good reputation as an excellent healthy food. In addition, the meat of the destroyed chickens is in such adequately high quality that it's suitable for use at the restaurant.



EM Bokashi added to a mixture of feed



Chicken dropping s at the farm $% \left\{ 1,...,n\right\}$



Processed products made with the eggs.