

# »Integrated Rice Duck Farming | Sustainable Organic Farming System«

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Integrated rice duck farming is growing rice and ducks in an irrigated paddy field. The paddling movement of the ducks stimulates plant growth, while duck manure naturally fertilizes the soil.

The ducks also eat harmful insects and weeds thus eliminating the need for pesticides and herbicides. Based on the experience of more than 1000 rice duck farms in the Philippines, it has increased rice productivity up to 9 tons per hectare. While reducing the cost of production by 30%. It has facilitated the growth of agri-enterprises such as rice duck farms, duck breeder farms, hatcheries, duck meat processing and retail. The enterprises provide market based solutions that increase the productivity, income and overall quality of life of farmers and other value chain players.

### Duck Eggs

Duck eggs stay fresher longer due to their thicker shell. They are also richer in albumin and contain more omega-3 fatty acids.

People who cannot eat chicken eggs due to allergies can often eat duck eggs. 80 to 90 percent of the female ducks lay one egg each day. Fresh eggs can be placed in an incubator to hatch after 28 days and sold to rice duck farmers.

### Organic Farming System

The integrated rice duck farming system eliminates the need for chemical fertilizers and synthetic pesticides or herbicides. Due to the elimination of synthetic inputs the physical and chemical properties of the soil are improved over time.

Liquid duck manure can also be collected and mixed with rice hulls and sold as fertilizer.

## **Greenhouse Gas Emission**

As much as 21% of greenhouse gas emissions worldwide consist of methane gas that is released primarily by flooded rice fields. This is because flooding cuts off the oxygen supply to the soil and accelerates the decomposition of organic matter releasing methane into the atmosphere.

Studies in China show that ducks in the rice paddies effectively reduce the emission of the greenhouse gas methane ultimately contributing to alleviating global warming.