

# Farmer Philosopher Masanobu Fukuoka: Humans Must Strive to Know the Unknown (2) What Does Natural Farming Mean?

By Natsuko TOYODA

Masanobu Fukuoka, the father of natural farming, died of old age on Aug. 16, 2008. He was 95. He passed away around *Obon*, the time of the year when Japanese pay homage to their ancestors; so, Mr. Fukuoka presumably left for heaven with the souls of his forebears, a follower of nature to the very end. But in my heart, I felt as if the beloved weeds in his paddy field have been pulled out by the roots. Of course, so long as the soil is alive, weeds will come up again. As humans are created in similar fashion, nature has taken care of my sorrow with the passage of time. Humans, I have come to realize, are part of nature. It is with such thoughts that I would like to explore the meaning of natural farming in this column.

## How Different from Organic Farming?

Most people mix up organic farming with natural farming because neither of them uses chemical fertilizer. However, Mr. Fukuoka believed that organic farming is one of the modern farming techniques because these techniques are used by humans exclusively for the benefit of humans. The farming method itself is the same; the farmer still has to till the land and apply fertilizer.

Natural farming is different. Here, the means of production is the power of nature; one almost feels that natural farming means production by nature for the benefit of nature. It involves neither tilling nor the giving of fertilizer. It does not need watering or weeding. In natural farming, one has the sensation of slipping unobtrusively into a long skipping rope without getting stuck, the equivalent of humans sliding into the circle of nature.

## Nature Is Labor Force in Natural Farming

Many people would ask: How do crops grow in natural farming? Including me, people who live remote from nature tend to forget that nature has the power to grow vegetation without human help.

To start with, tilling seems commonsense in farming. In reality, tilling reduces the size of soil particles, hardens the soil and makes it difficult for air to penetrate the soil. But it is inside the soil where microorganisms, earthworms and such break down dead weeds and

other organic matters and turn them into rich soil nourishment, night and day. Tilling means the destruction of soil – a natural fertilizer factory. Therefore farmers have to replenish fertilizer by themselves in modern farming.

In the case of natural farming, plants do all the fertilizer production work and provide all the fertilizer the land needs. It is known as green manure. One important source of green manure is the clover, of the legume family. As clovers grow, they store nitrogen – one key element of fertilizer – in their roots, which also loosen the soil and suck water from the subsoil. When dead clovers decompose, they provide good nourishment to the land. Nourished soil attracts weeds and worms and many other living organisms. If living organisms are diverse enough, there will be no room for one particular species of insect to dominate, damage from harmful insects will be limited, and crops will grow and ripen.

The output of produce by natural farming may shrink compared with other farming techniques. However, as the intensity of labor is reduced and there is no insecticide bill to pay, the cost of production can be held down. What is more, under natural farming, crops use their own power to spread roots, and as a result they are strong against drought, cold and storms. Since the soil farmed with natural farming techniques does not weaken, the productivity of natural farming is higher than that of modern farming in the long run. I am digressing here, but I sort of find this moral neatly applies to humans as well. Natural farming is also unparalleled with regard to food safety and environmental impact. Natural farming, in short, is a farming technique that benefits everyone – nature, the producer and the consumer.

## Basics of Natural Farming

One of the famous farming techniques developed by Mr. Fukuoka involves the growing of rice and barley in succession. He sowed rice and barley seeds directly on the soil, without tilling or conserving water in the soil as in a rice paddy.

Let me provide some more details, referring to Mr. Fukuoka's book, *"One-Straw Revolution: An Introduction to Natural Farming"* and the advice of Tsune Kurosawa, who learned farming from him and was involved in the English translation of the book.

First of all, from early to mid-September, the rice crop ripens,

*"Nature knows everything,  
only humans do not know anything,"  
says Masanobu Fukuoka.*



clover seeds are scattered in the field, and the seeds of barley are sown in the middle of October①. The clover, which is used as green manure, will outgrow the weeds. Alfalfa is also used.

In the beginning of November, when harvesting the rice crop, tread on the young clover and barley, which by this time will have grown to over 2-3 cm high. After the rice crop is thrashed, scatter the rice straw over the field, without cutting it into pieces②.

If poultry manure is available, apply it in the field to accelerate fermenting of the rice straw. Everything is sown in a haphazard manner; do not worry too much about uniformity.

In April, when barley ears sprout, sow rice seeds in clay balls. The seed balls are made in similar fashion as piecrusts: mix dried powdery clay with unhusked rice, add water, turn the mixture into small balls about the size of marbles (about 1.5 cm in diameter), coat them with unhusked rice and dry them up. One function of seeded clay balls is to protect the seeds from being ravaged by insects③.

By the time the barley crop ripens in May, clover and rice buds will sprout and grow a little. Now, reap the barley at the end of May, thrash it, and scatter the whole-stem straw on the soil. Then, two to three weeks later④, water enough to cover the clover, leaving it as it is for five or six days. As the field is not tilled, the surface of the soil is slightly uneven. To moisten the field uniformly, it is better to dig ditches for water in straight lines across the field every 4 to 5 meters. Then the clover will wilt and only the rice will grow⑤.

In August, water the field once every seven to 10 days. When weeds still grow even with the above-mentioned method, pluck them up appropriately.

Recently, there is a movement among young natural farmers to reevaluate and try this method. Actually, many farmers have improved their yield by partially applying the methods of natural farming. Also, the sowing of seeds in clay balls has been recognized as effective in stopping desertification, and clay-ball seeding is now used to plant trees in various parts of the world. But there were few people to try the whole methods of natural farming. Mr. Fukuoka argued, however, that natural farming is not a matter of appearance. Ignore appearance and let nature dictate. If people follow these principles, they can come up with their own brand of natural farming.



① *Barley seeds and green manure are sprinkled over paddy fields just before the rice crop is harvested.*



② *Scattering rice straw*



③ *Seed balls are too hard to broke by hand.*



④ *Both clovers and rice plants growing*



⑤ *Clovers are wilted by water.*

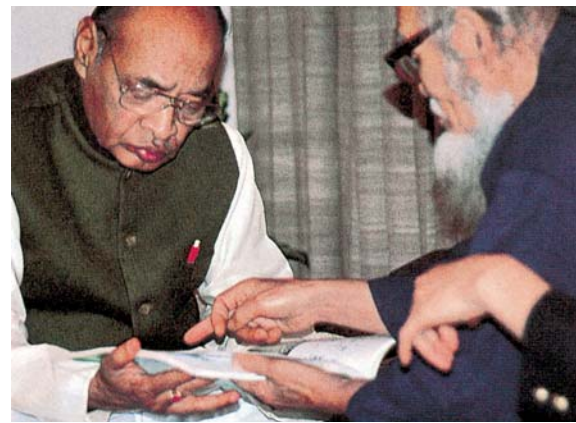


Photo:  
J&P Organic Farm,  
Punjab, India



*Fukuoka talks with India's then Prime Minister Narasimha Rao about natural farming during his second visit to India in 1991.*

*The farm that has switched from organic to natural farming is very successful.*

## Mr. Fukuoka's Legacy

Mr. Fukuoka's legacy lies in putting forth innovative ideas of farming so that human beings live in harmony with nature.

Specifically, he overturned the traditional concept of farming and demonstrated that modern farming is not the only way to raise output. He gave hope to desperate farmers who have seen their farmland wrecked by modern farming techniques. In India, for instance, the central government and some states have made it a policy to switch modern farming to organic farming.

Farming apart, Mr. Fukuoka has also left a big impact on the way we view ourselves. The realization that humans are nurtured by nature has gone beyond the movement to promote organic farming. It has created a movement to conserve the environment, spawning a movement to provide alternatives to the human lifestyle and farming techniques that would not add burden to the environment.

Many people have read Mr. Fukuoka's book not so much as a farming compendium but as a guide to the way of life. In Japan, his work has sold 250,000 copies, most of them in urban areas.

Mr. Fukuoka has called natural farming a way of life. He has treated it even as philosophy, something like the practice of Zen Buddhism. Not only farm work but labor in general carried such profound meanings in the past. But in our time money seems to have become the only yardstick.

In natural farming, production is the work of each of the many living organisms in the field. From this has emerged the concept of cooperation, not destruction, of the things around us. Humans do not live in isolation, but in harmony with the whole. Mr. Fukuoka's concept is broadminded; even those things that we may think are harmful may one day be of service to us if we do not destroy them. Since beliefs born in urban communities tend to lack a dimension of nature, they tend to be narrowly focused and are prone to hit a dead end. Bred in places remote from city areas, Mr. Fukuoka's work provides a fresh and vital perspective that might lead to a breakthrough for our future society.

In this sense, many people in the world have been thankful to this farmer philosopher, and young people have stood up to follow in his footsteps. I will report on such developments in the next issue. JS

*(To be continued)*

*Natsuko Toyoda is a member of the Japan SPOTLIGHT editorial staff.*