

Introduction

*Every agricultural enterprise
is a self-contained, biological unit*

To the degree that human beings participate in nature through nourishment, they will likewise, as producers and consumers, be interested in the fruitfulness of the earth. This is especially true of farmers, because for them the yield of the earth represents their livelihood, while the cultivation of the soil is their occupation. For consumers, the quality and taste of the farm or garden's yield offer the corporal basis of life and health.

The methods of agriculture are not, therefore, the center of a mere occupational life, but rather the focal point of a common human cultural life. Culture, then, in its original sense, means work performed on the earth, just as in the broadest sense it means an achievement of the human spirit. Accordingly, at a high cultural level, a people has well-cultivated farms and gardens, as well.

Modern agriculture has become an economic objective; it has been invaded by economic thinking. Increasing industrialization and technical considerations now exercise an influence on the structure of the agricultural establishment. The soil's productive capacity and the cost involved are the basis for evaluation of the profit motive. Likewise, scientific research has investigated the nutritive content of the soil, as well as the nutritive balance between soil and plant. Comprehensive studies have been made of the soil's mineral content. Under the influence of a progressive chemical science since the middle of the last century, so-called

rational farmers have been forced increasingly to assume the role of small manufacturers, whose means of production are the soil, their farming implements and tools, and the growth characteristics of certain plants.

Just as the usefulness of a motor can be calculated, similarly the usefulness of agriculture is calculable. Agriculture, however, is far less amenable to quantification. A great deal of effort must be expended to obtain even a modest return. When economic depressions occur in world commerce, this return is even smaller—that is, the agricultural “production machine” pays poorly. If the production of an industrial machine does not pay, the manufacturer shuts down; the means of production are sold, converted to other use, or liquidated entirely.

Because of such limitations of modern industrial economy, its mechanistic ways of thinking cannot be applied to agriculture. A single abandoned farm in a well-cultivated region means widespread damage to the environment—for example, the spread of weed seeds by the wind and a change in soil quality. The presence of many such farms together in the same area can lead to the devastation of a whole district and to natural catastrophes. Examples of this sort are known; in ancient times, Mesopotamia and, more recently, dust storms in the U.S. In matters of technique, we are dealing with a preponderance of inorganic material, for which the calculability and individual factors are clearly definable. Agriculture, however, deals with the conditions of life. The growth, health, and disease of plants and animals, as well as restoration of the soil, are continuously variable factors whose individual levels of importance are interdependent and unite into *a higher unity, or a complete whole as an organism.*

The technological process of production takes raw materials and manufactures them into finished products. The production machine between these two conditions alters very little, except through the wear and tear to which it is subjected. Agriculture receives fertilizer

and seed as “raw materials” and delivers vegetables, grains, beets, and other produce as the “finished articles.” The life process occurs between those two factors. Economic thinking in agriculture cannot be justified unless it includes the life process in its calculations. If biological unity of the agricultural enterprise becomes the basis of calculation, then the following statement will apply: *Whatever is biologically correct is also the most economically profitable.* Three fundamental characteristics become clear in every life phenomenon:

The *first* is the fact that life (if the corresponding conditions are at all prevalent) always wants to create growth and increase. Unlimited exuberance of growth is an unrestrained expression of life.

The *second* characteristic points to an inner condition of strain—for wherever life and building-up exists, deterioration, breakdown, decay, and death are also present. One contains the other within itself—indeed, presupposes it. Goethe beautifully expressed this reciprocal relationship in his essay on Nature: “*Life is Nature’s most beautiful discovery, and Death is her artifice for obtaining abundant life.*” This condition of strain between two processes is often called “equilibrium.” This does not mean a stable, fixed mechanical equilibrium, but an extremely active, mobile state. This state can be better described in the sense of Hippocrates and Heraclitus as *eucrasia*—the right mixture. Thus, it means active occurrences, whose final result is “life.” All of the factors that participate in the creation of a phenomenon of life stand in a certain equalizing relationship to one another. Thus, it is not merely a matter of the inner characteristics of an individual living being, but one of the influence of the whole surrounding world. This can never be overestimated. When the harmony is disturbed, this expresses itself in a continuous dislocation of all the conditions of life.

The *third* fundamental characteristic can be outlined somewhat with the following: *The whole is not the mere sum of all its parts, but a harmonic unity of a higher order that, as organic being—as an organism with laws of a higher order—lifts the world of the*

physiochemical inorganic to the world of the organic and living. Expressed consciously for the first time by Goethe, today this truth increasingly affects all of our biological thinking. Through this, we learn not only that any person, animal, or plant is an organism, but also that the cohabitation of plant world and earth, of plant with plant in certain groupings, of plant with animal and human, likewise forms itself into an organic unity. Indeed, the entire development of the “living space,” let’s say, of a people or a continent, is fashioned according to the same fundamental laws of “the will to evolve,” or “the proper interaction of all factors,” and “the organic unity of a higher order.” *The disturbance of one factor means the disturbance of the whole system.* Since we are then dealing with a changeable, unstable, strained condition, an insignificant disturbance might, in due time, lead to serious consequences.

These three fundamental characteristics of life point to one result—the inner efficiency of the organism. In technological terms, we speak of a “safety factor” or a “modulus of elasticity.” A steel rod breaks under a certain stress or loses its elasticity under a certain tension. Every material has a specific factor of safety that cannot be exceeded without causing structural damage. Today, we hear much about the use of technology in life—for example, the increased use of technology in agriculture. This is conceived as increased efficiency through the use of machines as means of increased production and such. All of this, however, advances only to a certain limit—namely, the biological efficiency of a given natural foundation.

The purpose of the following chapters is to show how biological unity of these agricultural efforts can be attained. Here, the author relies on many years of experience. The practical insight that comes from the management of one’s own farm, as well as from the contact with the management of farms in nearly all the countries of Europe, represents the basis of one’s experience. This has been broadened

by journeys to North America, North Africa, and Anatolia for the purpose of observation and study.

This is how I reached a comprehensive understanding of the possibilities of the so-called biodynamic agricultural method. The originator of this method, Rudolf Steiner, provides the basis for this book. To him, first, our thanks are due, as well as to all those who, in the past 12 years, took up the impulse given by Steiner and who, in fact, have realized it in practice, whether as farmers, gardeners, foresters, or scientific researchers; their number already exceeds a thousand. Their experiences were collected by means of testimonials and the exchange of opinions.

In various sections of this book, measures for practical means of carrying out these methods—including the treatment of manure, healthy farm management, and so on—are treated in minute detail.

In conclusion, the author would like to express a more general human view. He is convinced that the cleverest methods of technology and chemistry alone do not suffice to make good farmers, even when they have mastered them well. It is a peculiarity of the farming vocation to deal with “living matter.” Our entire inner attitude has to take this fact into consideration. Technology and our attitudes must be brought into harmony before improvement seems possible. I am aware of the fact that this statement will often be set aside as impractical or impertinent to the problems of Western countries; idealism doesn’t pay the bills. Although life, health, and lack of health can be expressed numerically, they are far from being something one can buy and sell. We must bear in mind the fact that we have here a creative task to perform. First, however, to create something new requires a building plan; we must have the idea for this if we don’t want to be taught by the damage that arises from uncontrolled empiricism.

The reader will find references to certain “preparations”—numbers 500 to 508—that are an essential of biodynamic farming and have become known to farmers by these numbers. Certain of these

preparations are used in the manure and compost piles to hasten the rotting process and to give it the proper direction. Two of the preparations are sprays for soil and plants. Biodynamic farmers can make these preparations themselves or obtain them from other biodynamic farmers. The substances from which they are made are described in this book.

Although those who wish to start biodynamic farming might have these preparations and instructions for their use, directions for *making* them are reserved to bona fide biodynamic farmers of standing. This seeming secrecy is observed to prevent these preparations from being commercialized or being manufactured by incompetent individuals. No biodynamic farmer (or anyone else) is permitted to profit financially from them.

There are now biodynamic farms in nearly all English-speaking countries. In some places, associations of biodynamic farmers have been formed to discuss problems and mutual assistance to make these preparations available.

The experiences of biodynamic farmers in all fields have been gathered at the end of this book. Thus, readers will not be burdened with unnecessary quotations and references in the text.

Those who are seriously interested in the perspective presented here will be able to obtain further information—especially advice and counsel on the method of farm conversion—from the authorized information bureaus for biodynamic methods of agriculture. For Europe, the addresses of these can be obtained from the Central Bureau of Biodynamic Agricultural Methods, Dornach near Basel, Switzerland. For the United States and Canada, from the Biodynamic Farmers and Gardeners Association, Kimberton Farms, Phoenixville, Pennsylvania.*

Ehrenfried Pfeiffer

Dornach, February 1938

* Currently: Biodynamic Association; www.biodynamics.com.