

# **The Future Role of Agriculture in a Changing World: Challenges of Demography, Geography, Food Supply and Technology**

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Participants of the Conference

Distinguished Guests

Ladies and Gentlemen

I am highly honored to have been invited as a speaker and participant at this conference. My name is Bertrand Hervieu and I am a sociologist and policy study researcher at the National Center for Scientific Research. More precisely, I work at the Center for Studies on French Political Life which is under the Paris Institute of Political Studies. At this center, I concentrate mainly on the role of agriculture in French society and Europe, and for comparative purposes, the world. I am, therefore, a researcher in social science, not a biologist or agronomist, and my research deals more with the world of the agriculturist rather than agriculture itself. This morning, I would like to speak on two subjects, one is diagnostic and evaluative, the other is a prognosis with questions concerning the future.

## **A Growing Agriculture Crisis**

Today, we are trying very hard to understand the nature of an agricultural crisis that is sweeping western Europe and, indeed, countries worldwide. This crisis of which I will speak is not related to the present state of the economy, to a recession, or to international trade negotiations. On the contrary, it is a crisis that agriculture and farmers are experiencing-which will also significantly impact society as a whole and stems from a break or departure from the historical standards that once defined the agricultural establishment. There are four elements that can best describe this agricultural crisis. These are demography, geography, food supply and technology which I will now briefly discuss to make my case.

## **Agricultural Demography**

The first consideration in this crisis is demography. Agricultural populations have shifted and changed dramatically in recent years which has caused extreme disruption. I shall use France as an example, but the situation applies to the entire developed world. At the beginning of the 20th century we still had 55 percent of our population engaged in food production, i.e., as farmers. However as we approach the end of this century and the beginning of the 21<sup>st</sup> century, we have less than 5 percent of our total population as farmers. Thus, in little more than 100 years, we have gone from a situation where a majority of our population was employed on the land to one of only a very small minority.

It is also paradoxical that with the culmination of this demographic change, France has become a major agricultural power. For example, we are now the second leading world exporter of agricultural and food products just when we have ceased to be an agrarian society both in make-up and culture.

## **Considerations of Geography**

The second break or departure from traditional (i.e., historically-based) agriculture concerns the relationship between agriculture and geography, or more precisely the land it-self. In this regard, we are confronted by an unusual phenomenon, i.e., that agriculture in our country is severing its long-standing relationship with geography. This is difficult to comprehend, especially in view of our long-established image of agriculture. Ironically, it seems that that agriculture tends to follow the same logic as all other economic enterprises which attempt to break their strong dependence on geographic areas and locations

The 10 main crops grown in France (i.e., involving 10 departments out of the 100 French regional

departments) produce as much as 45 other departments, and consume twice as many agricultural inputs. These 10 departments are all located north of the Loire (more or less northern France) and the 45 others are all located south of the Loire. Moreover, these 10 departments are also those with the lowest proportion of the active population employed in agriculture, and receive the highest proportion of public funds. Therefore, in comparison, the other 45 departments have the highest proportion of the active population employed in farming yet receive the lowest proportion of public funds. There has been a sort of abandonment of farming in the interior of our country, which has also occurred in most European countries and in other countries worldwide. This can be attributed to the demographic changes that occurred during the 20<sup>th</sup> century. As people were displaced from agriculture they migrated to the coastal regions to secure employment in the industrialized areas. Consequently, farming and food production activities followed the mass migration of people to the coastal regions.

In Europe, by the year 2025, some 60 to 70 percent of agriculture could be concentrated in the coastal regions, particularly in the “golden triangle” of Rouen/London/Rotterdam, with extensions towards Brest and Copenhagen. The reason for this, quite simply, is that agriculture like all other economic activities tends to relocate its production areas in relation to the zones of exchange, communication and consumption. We can say the same of North America, for part of South America and for what remains of African agriculture. Asia partially escapes this phenomenon, though we know that today some sixty million Chinese peasants are moving from the interior toward the littoral and that agriculture in the interior regions is declining.

### **Food Supply and Availability**

The third element which indicates that we are undergoing a quantum change in the history of mankind, and in agriculture per se, is the separation of agriculture from food supply and availability. Until the last part of the 20<sup>th</sup> century, the majority of human existence on earth faced a survival situation. Most people were preoccupied by what they were going to eat on any one day, or the following day. An incredible reality today is not that two-thirds of the world’s population has difficulty nourishing itself, but rather that one-third of humanity now lives with the absolute assurance that they can eat them-selves to death! Of course, it is scandalous that two-thirds of the population go hungry, particularly when we have the means to feed them. Historically, however, this is not new and has been documented through history to the present in the developing world as natural disasters, followed by food shortages, starvation and famine.

What is really new is the consistency and reliability of food supply and availability today that pervades most developed countries where agriculture and food supply are to-tally excluded from the concerns and realities of daily living. Our food supply, like the rest of the necessities we consume (many were once considered as luxuries) such as clothes, housing, automobiles and television sets are all produced by complex and difficult-to-analyze manufacturing operations. In praise of this system one often hears “we have never eaten so well” as to supply, variety, diversity and freshness. However, at the same time, we have never known so little about what we are eating.

There are now entire generations, ourselves, our children and our grandchildren, who are constantly being born into this abstraction and removal from the reality of the food supply. If you have never seen a potato growing or a cow being milked and you are brought up on processed foods, where potatoes come freeze dried in packets and milk arrives in cardboard containers, then there is abstraction from the food supply. All of this has created an extraordinary cultural dilemma which has become a major challenge, particularly in countries such as France with a strong agrarian tradition.

### **Agriculture and the Balance of Nature**

A fourth and final break in the structure of traditional agriculture is the separation, indeed the alienation, that has developed in the last few decades between agriculture and nature itself. Since agriculture began some 80 to 90 centuries ago it has evolved slowly around a process that involved

the domestication of plants and animals, and tillage of the soil. Yet in less than a third of a century, a series of remarkable scientific and technological discoveries have dramatically transformed this cultural inheritance. This has resulted in a technically- and ecologically-based agriculture that is more decreed and imposed than inherited. This is a complete disregard for our relationship with everything around us, and involves a radical realignment of our relation to the universe.

### **The Challenges Ahead: Where Do We Go from Here?**

So what is to be done, faced with such a break with the past, with such cleavage? Which once again I repeat is not directly related to the present economic climate, but is in fact an immense turning point in history. We can, of course, with nostalgia dream of a return to peasant farming. But I believe that the magnitude of the challenge facing us rules out such self-deception. What we need to imagine is not a return to the past, but something even more difficult, i.e., an overcoming of the present. For my part I am convinced that it can be done, and I am most enthusiastic about the possibilities.

In regard to the five requirements for Kyusei Nature Farming cited by earlier speakers, perhaps an additional requirement is appropriate, i.e., which states that agriculture and food are no longer to be regarded simply as commodities like all other goods. Such an awareness would help to ensure that agriculture and food can provide the basis of a new world order which is less commercialized, and equally apolitical and humanistic. Finally, since we are in France, I would ask the question of whether in our famous Declaration of the Rights of Man (which brought so much hope and enlightenment to humanity) we should also include a right for people to feed and nourish themselves. This could be the foundation of a new world order without conflicting ideologies and commercial dominance

Thank you very much.