

Closing Address: Comments on the Proposed Kyusei Foundation for Distribution of EM

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First I would like to take this opportunity to thank all of the participants for their many contributions which have made this Second International Conference on Kyusei Nature Farming such a great success. Second, in view of the many questions during the Conference on EM technology and application as an added dimension to Kyusei Nature Farming, I would like to briefly discuss our current plans for the distribution of EM to those who wish to use it.

Among the various activities of the Mokichi Okada Foundation is the promotion of Kyusei Nature Farming for the benefit of all mankind. This was discussed by President Matsumoto in his inaugural address and also in my keynote lecture. Both of us described the five essential requirements for Kyusei Nature Farming which are similar to the goals, objectives, and recommendations that were just presented by the Working Groups. Throughout the Conference, we have emphasized that EM technology is one of many technologies that is used in Kyusei Nature Farming to satisfy the five requirements. However, we believe that EM is a technology that holds great promise for enhancing the long-term sustainability of Kyusei Nature Farming.

I will now explain our policy on the distribution of EM using Brazil as an example. The Mokichi Okada Foundation has established the Kyusei Nature Farming Promotion Association to oversee this activity. The Association consists of three members, Prof. Adilson Paschoal, Prof. Zilmar Marcos, and Prof. Toshiaki Kinjo, who will serve as technical advisors to the Kyusei Nature Farming Development Center (KNFDC) in Brazil. We hope to develop this center so that it can provide information and technical assistance on EM technology and Kyusei Nature Farming to anyone upon request and without cost. We plan to conduct an annual seminar on EM technology and Kyusei Nature Farming either at this university or at other selected locations. We also plan to publish a newsletter to keep researchers, extension workers, and farmers informed about recent developments on EM, including preliminary research results. The KNFDC will also be responsible for conducting training courses and establishing cooperative programs with organizations such as the International Federation of Organic Agriculture Movements (IFOAM). We also have plans to establish model farms to demonstrate the principles of Kyusei Nature Farming and the use of EM. Eventually we hope to have model farms in all of the states in Brazil.

You should know that we have established certain provisions concerning the distribution of EM in Brazil. First, we want to provide EM to those who understand the philosophy of Mokichi Okada and the requirements of Kyusei Nature Farming. We believe that this is important so as to avoid any misunderstanding about the production and use of EM. Second, in the event that any profit is derived from EM over the cost of production and distribution, the monetary gain shall be used to preserve and protect the environment, and to promote nature farming and natural agriculture. The Mokichi Okada Foundation here in Brazil has agreed to these provisions.

Today, Brazil is the only country in the region where EM is produced; however, in due course we want to produce EM in all of the Latin and South American countries. Currently, we are also producing EM in Japan, Thailand, Korea, and the United States. It was interesting that several of the Working Groups recommended the establishment of a natural agriculture network for Latin and South America similar to the Asia-Pacific Natural Agriculture Network (APNAN). APNAN was founded immediately following the First International Conference on Kyusei Nature Farming that was held in Thailand. The purpose and overall goal of APNAN has been to promote research, development, and implementation of natural agricultural practices and technologies in the Asia-Pacific Region.

Today, there are 15 countries that are participating in the APNAN program, each represented by a scientist who is a member of the APNAN Steering Committee and who has voting privileges. The Steering Committee meets periodically to determine what kinds of research and demonstration projects on natural farming systems and EM technology are needed in the Region. Each country receives a certain amount of financial support from the International Nature Farming Research

Center (INFRC) to conduct in-country research that is recommended by the APNAN Steering Committee. Unfortunately, this Second International Conference on Kyusei Nature Farming did not have enough countries from Latin America and South America to found a network like APNAN. However, I have requested that members of the KNFDC look into the possibility of establishing such networks. I would strongly recommend that if and when these networks are established that they develop cooperative linkages with regional IFOAM groups, just as APNAN has done in the Asia-Pacific Region.

This concludes my formal comments and I would be happy to respond to any questions.

Dr. M. Altieri: Do you see research on Kyusei Nature Farming being done mainly through government agencies and universities, or through farmer's organizations?

Dr. T. Higa: I would hope that initially the research would be conducted by regional networks like APNAN or SANAN, or through in-country organizations such as KNFDC in Brazil. Once the most effective and practical application methods for various farming systems are established, the technology can be transferred to farmers.

Dr. M. Altieri: Most of the conference participants are interested in promoting a more sustainable agriculture based on natural systems with less dependence on agricultural chemicals. However, many of us are hesitant to engage in testing products that are not adequately defined and identified. We have been told that EM is a mixed culture of beneficial microorganisms that can be used effectively as a microbial inoculant to enhance the growth, yield and health of crops. However, we would like additional information on what species are present, what mechanisms are involved, and how the natural ecology of soils may be affected. It also raises the question of how you hope to comply with the very strict regulatory requirements for registration of such products in developed countries such as the United States. Would you please address these issues for us?

Dr. T. Higa: The composition and mechanisms of EM are disclosed and discussed in the Proceedings of the First International Conference on Kyusei Nature Farming soon to be published, and in a book I have written on the subject of EM technology that is now being translated into English. I am well aware of the problems that you mentioned concerning registration in the United States. However, EM is now being tested in California and we hope to obtain state and federal approval for registration in due course.

Mr. E. Rojas: Have you tried any other methods, techniques or practices to improve the quality of soils, that is, in addition to EM?

Dr. T. Higa: Kyusei Nature Farming, through the five requirements stated earlier in my keynote speech and by other speakers, emphasizes the use of best management practices. These include crop rotations, recycling of animal manures, green manure crops, and the use of composts as biofertilizers and soil conditioners. Keep in mind that the use of EM is not one of the requirements of Kyusei Nature Farming. Rather, EM is an added dimension, indeed a new technology that can be used in conjunction with the good management practices associated with nature farming and can significantly enhance the growth, yield, and quality of crops.

Since there are no further questions, I would like to end this final session which also brings to a close this Second International Conference on Kyusei Nature Farming. Again, I would like to thank the participants for their contributions to the Conference. I wish you a safe and pleasant journey home.

We stand adjourned.