International Conference on Bioenergy Utilization and Environment Protection

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CONFERENCE PROCEEDINGS

The International Conference on Bioenergy Utilisation and Environment Protection was held in Dalian, P.R. China, from September 24 – 26, 2003. It was organized jointly by the Latin American Thematic Network on Bioenergy (LAMNET), the Center for Energy and Environment Protection (CEEP) of the Chinese Ministry of Agriculture and the China Association of Rural Energy Industry (CAREI).

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Updated information on this workshop is available at http://www.bioenergy-lamnet.org.

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CONFERENCE INAUGURATION

International Conference on Bioenergy Utilization and Environment Protection
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CONFERENCE KEY NOTE SPEECH

Addressed by Prof. Hong Fuzeng
Vice President of September 3rd Society &
Former Vice Minister of Chinese Ministry of Agriculture

Ladies and Gentlemen, dear Guests,

I am pleased to be invited to participate in this **International Conference on Bioenergy Utilisation and Environment Protection & 6th LAMNET Project Workshop** and I would like to congratulate its successful opening and wish fruitful results from this conference. On behalf of the September 3rd Society, I also would like to express my warm welcome to all the experts and guests coming from far away.

Currently, with globalization and integrated development of economics, the question is how to realise the economic increase in accordance with the principal of sustainable development. How to develop economics and society and how to ensure economic as well as human resources development and environment protection. This is the common mission and the key subject that each country is facing today. The utilization of biomass is not only a source of vitality in the energy sector, but also an important field to set up circular economy models and realise sustainable development. Hence, I believe that the subject of this conference is significant with respect to the elaboration of advanced visions.

All the participants here are experts, researchers in this specific field. My work is related to this field for over a half century, however, I am personally not specialized in biomass. I can only share with you here some personal viewpoints for your consideration.

Firstly, China is a developing country, and also a country in the process of shifting from a planning economic system to a socialized marketing economic system in terms of economics. China is transforming from roughness to intensiveness in terms of management approach, from traditional backwardness to modern approaches in terms of science and technology, and from a closed and ancient oriental state to an open state of learning jointly with developing fine traditions in terms of culture. Indeed, China is in progress in recent years. As is well known, China suffered from SARS in the passed half year, but the GDP increase still reached around 8%, which resulted partially from the adoption of new technologies and the attribution of importance to energy conservation in production.

However, the past 25 years, during an opening to the outside world and many reforms, environmental protection environmental protection has not been given sufficient attention in many places. Some problems like irrational use of resources and environment pollution expressively occurred in some economic well-developed regions. Among them, large unclean energy consumption is one of the most important factors. Since the mid 80's, the state and governments have started to develop demonstration plants on solar, wind, and biomass energy utilization, and until now certain achievements have been made. In the early 90's, China was the first state to work out an "Agenda for the 21st Century" and listed sustainable development as a priority.

Secondly, to increase the contribution of biomass in the overall energy utilization structure is the assured choice of China. China is still a developing country with high energy consumption of unit production and with low energy use efficiency. The increasing energy demand with economic development, population increase, and the increasing need of people for better lifes requests us not only to put more emphasis on domestic energy exploitation and energy conservation with supplementary import, but also to explore a new potential energy source - biomass. The Chinese government is advocating a coordinative inter-active development between urban and rural areas. Interactive with respect to different regions, economic and social issues, international and national players as well as with respect to human beings and nature. To develop biomass energy resource is an absolutely necessary linkage, especially to China. Until now, China is still a country with a majority population living in rural areas and engaged in agricultural production. On the one hand there is an increasing demand for energy due to the improvement of people's living standard in rural regions. On the other hand, the rural area is also a production base for energy sources. To develop biomass is necessary and of high importance for China.

Thirdly, development and utilization of biogas is one of the most popular and effective biomass energy sources in China in recent days. Biogas technology has a long history in China. Some experts here have had discussions on this topic. I personally believe biogas technology is one of the biomass technologies that can be easily accepted by farmers because of its relatively low cost and high economic, social and ecological benefits. However, its popularization is not very fast due to some restrictions. E.g., in northern China the popularization of biogas technology started in the 50's of the last century, but the development speed is slow because there is little gas production with long winter seasons and cold climate. Until the 80's, a model that combines greenhouses for vegetable production, pig sty, toilet, and biogas digesters in one system was developed. This so-called "four-in-one" model leads biogas technology popularization into a new time. In the new century, the state has launched a program titled ***better-off engineering with eco-garden*** in order to develop biomass energy and improve farmers' lives. It integrates biogas production with sanitation, waste treatment and prevention of pollution, provides fuels for cooking and lighting. This program reduces the over-cutting of forestry, resulting in protection of vegetation, and it reduces disposal and direct combustion of crop residues in fields, resulting in improvement of air quality. The model adoption increases income of farmers, for it combines the development of garden economics with structure adjustment of crop plantation and animal husbandry. It becomes an effective systematic approach to promote the integrated development of rural civilization. The living quality and civilization of farmers with biogas systems is obviously improved. Thereby, the state is continuing to increase the input to develop the biogas systems gradually nationwide. It might become an effective and practical approach to construct the rural 'better-off' society in China.

Fourthly, biomass development and utilization has a prospective future, but needs wide cooperation among scientists. Taking biogas as an example, its dissemination still focuses on domestic application. Its large-scale development in farm households needs more advanced and quality-stable equipment as well as improved energy production and utilization technologies. To include biogas into overall energy planning of the state and the connection of biogas power generation with the grid may take a long way to go. In addition, introducing ethanol from sweet sorghum for ethanol-gasoline blends as well as gasification of crop residues requests great technical effort and cooperation among domestic and international scientists. To hold fora like this is beneficial to promote biomass utilization and development.

Now, I would like to propose a suggestion here. I suggest a to hold a senior consultation forum in Cangxi County of Sichuan Province in March of next year in order to promote biogas development in terms of technical and theoretical innovations, to summarize the experiences for a popularizing of improved engineering within the eco-garden concept, and study its comprehensive functions on coordinative development of economics, society, and environment. Integrated future development of biomass taking biogas as the focus will be the major subject of the consultation forum. All the experts and foreign friends here will be warmly welcome to present at the proposed forum.

Ladies and gentlemen, biomass utilization and development has a great potential for future utilisation. Taking this opportunity, I wish you great achievements in your working field and a fruitful conference. I hope that all the experts can work hard hand-in-hand to protect our earth, to promote the civilization of human beings, and to contribute to a future better life.

Thank you.

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