

PROGRAM BOOK

The 7th AIC-ICMR on Health and Life Sciences

The Annual International Conference 2017
Syiah Kuala University

October 18-20, 2017 - Banda Aceh, Indonesia

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“Advancing Knowledge, Research, and
Technology for Humanity”





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Welcome Speech from Rector of Syiah Kuala University —

Assalamualaikum Wa Rahmatullahi Wa Barakatuh,

In the name of Allah, the Most Beneficent and the Most Merciful. May peace, mercy, and blessings of Allah be upon you.

Dear colleagues, professors, lecturers, researchers, ladies and gentlemen. On behalf of Syiah Kuala University, I would like to express my sincere gratitude and welcome you to the 7th AIC-ICMR on Health and Life Sciences 2017. This year, the 7th AIC-ICMR on Health and Life Sciences is supported and co-organized by Universiti Sains Malaysia, Hasanuddin University, Universitas Islam Sumatera Utara, BKS-PTN Barat, and IMT-GT Uninet. Thus, I would be glad to express my sincere appreciation for their collaboration and support for the conference. Moreover, I honorably welcome our keynote speakers Prof. Dr. Antonius Suwanto, Bogor Agricultural University, Bogor, Indonesia and Prof. Dr. Wolfgang Nellen, Johann Gottfried Herder Fellow of the DAAD, Germany as our keynote speakers.

It is my hope that the 7th AIC-ICMR on Health and Life Sciences 2017 would be able to achieve its objective in providing an effective forum for academician, researchers, and practitioners to advancing knowledge, research, and technology for humanity. There has always been a gap between peoples and communities who can make effective use of technology and those who cannot. 'Humanity' (or being 'humane') can also in one usage refer to civil rights and social causes, or in other words to people treating each other with care, compassion, and dignity; respecting the common 'humanity' in the other person. Therefore, despite what we may have been falsely led to believe, matters of 'human' rights have no relation to politics or any part of the so-called political spectrum: they do not belong to any political party or faction, nor to any individual or organization; they are part of our common nature, part of the collective 'humanity' spoken for by our very existence. For that matter, all academicians, researchers, and practitioners should consider humanity things to make a peaceful world. With humanity, we change to the better environment and a better life. We believe knowledge, research and technology for all people, for minorities, people with disabilities, and to help anyone. No matter how much we can accomplish by ourselves, whether it be research or development, it is never sufficient in this world of knowledge. Therefore, the focal drive of this conference is to exchange ideas, and by participating in this exchange, it is hoped that all parties who may benefit from the conference can apply it in managing activities in their areas. It is pleasing to note that the agenda of this conference covers a wide range of interesting topics related to all theoretical and practical aspects, but not limited to Agriculture, Bio-Diversity, Bio-Technology, Health Science, Marine and Fisheries, and Veterinary Sciences.

Last but not least, my deepest gratitude goes to the Advisory Board, Organizing Committee, International Scientific Committee, institutions, companies, and volunteer who have directly and indirectly supported the success of this seminar. The committee has organized a vibrant scientific program and is working hard to present highly respected and internationally notorious speakers to lead it. Although we try our finest to be professional, on behalf of Syiah Kuala University, please accept our sincere apologies should there be

inconveniences that occur before, during, or after the event. I wish you a very productive conference with exciting and encouraging discussions and exchange of knowledge so that together we can anticipate a future of groundbreaking knowledge, research, and technology for humanities.

May God bless us all with good health to make this event a successful and enjoyable one!

Best Regards,

Prof. Dr. Ir. Samsul Rizal, M.Eng.
Rector of Syiah Kuala University

A Comparative Study of Land and Tree Tenure on Community Forestry in West Sumatra, Indonesia and Kita-Fuji, Japan

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ABSTRACT

The importance of this research was to build the land and tree tenure models on communal ownership, in this case, the communally managed forests. A comparative study conducted to get an overview of the land and tree tenure model in communal systems in Koto Malintang, West Sumatra, Indonesia and Kita-Fuji, Japan. The research uses descriptive method to identify the forms of the relationship between land tenure and tree tenure. Observation study to assess and describe patterns of land and tree tenure on communal land refers to the Rapid appraisal of social forestry for land and tree tenure. The results showed the communal forest management in Koto Malintang, land ownership by communal as a system of rules in the indigenous communities, but utilization managed by individually (private) where a household can use the land. While in Kita-Fuji, the land ownership occupied by an agency that has authority to use them, but as the communal ownership of land controlled by the institution members and by government. Whereas the tree tenure in Koto Malintang determined by the type and use of trees, especially not for economic purposes. At the Kita-Fuji, the agencies have function as an entrepreneur towards forest products for economic purposes for all members of the group. The difference illustrates that in the communal system at Kita-Fuji carried out by an agency to utilize the forest products i.e. timber and non-timber. Thus the security and sustainability of forests as communal ownership can be maintained in the long term System rules were implemented centrally and work effectively for all members of the organization promote the sustainability of communal property better with a system of rules that were made by the members of communal system itself. However, a system of rules that implemented in a variety of different institutional forms was the determining factor of resource management sustainability in various levels of utilization (individual and/or communal). Therefore encourage communal society in a well-defined institution will be able to promote sustainable resource management.

Keywords: comparative study, land and tree tenure, system rules, sustainable