INTERNATIONAL CONFERENCE
6th SAADC 2017
Conference on Sustainable Animal Agriculture for Developing Countries

"WISEDOM OF USING LOCAL RESOURCES FOR DEVELOPMENT OF SUSTAINABLE ANIMAL PRODUCTION IN DEVELOPING COUNTRIES"

The Singhasari Resort, Batu City, Indonesia, October 16-19, 2017

Jointly organized by

Faculty of Animal Husbandry
Brawijaya University Indonesia

Institute of Tropical Agriculture
and Food Security

ANIMAL PRODUCTION SCIENCE

Australian Aid

PROGRAM AND ABSTRACT BOOK

of
The 6th International Conference on Sustainable Animal Agriculture for Developing Countries (SAADC 2017)

October 16-19, 2017
The Singhasari Resort, Batu City, Indonesia

Organized by:

Faculty of Animal Husbandry, Brawijaya University, Indonesia

In Collaboration with:

Institute of Tropical Agriculture and Food Security, Universiti Putra Malaysia, Malaysia

Australia's Aid Program, Department of Foreign Affairs and Trade, Australian Government

Message from the Chairman of the 6th SAADC Conference

Dear all,

It is my privilege to welcome you all to this event. My sincere gratitude also goes to all of you for your enthusiasm in participating at this 6th International Conference on Sustainable Animal Agriculture for Developing Countries (SAADC).

More than 200 papers from 16 countries have been received by the organizing committee and are going to be presented and discussed in this event. These will certainly enrich the body of our knowledge and understanding about various aspects related to animal agriculture. In addition, the papers are also reflecting responsiveness of animal scientist from various countries in promoting sustainability of animal agriculture for the prosperity of the never ending generations.

Apart from academic activities in the form of sharing research findings, this event is also prepared to include informal programmes showcasing the beauty of Malang area as well as facilitating the establishment of stronger interactions among participants that may lead to future fruitful networking.

Our special thanks are goes to the SAADC President for his confidence to our Universitas Brawijaya to organize this prestigious conference. Also, congratulation that SAADC is now listed in the International Congress and Conference Association (ICCA) based on its quality and consistent activities.

I also wish to thank all partners and sponsors for their support. To colleague members of the organizing committee, please accept my deep appreciation for your hard working in ensuring the success of this event.

Yours Sincerely,

[Signature]

Prof. Ifar Subagiyo
Chairman
6th International Conference SAADC
Malang, 16 October 2017
Message from President SAADC International Advisory Committee

Ladies and Gentlemen,

First and foremost, I would like to thank the organizing committee of the 6th International Conference on Sustainable Animal Agriculture for Developing Countries (SAADC2017) for inviting me to pen a few words in this souvenir programme.

I am pleased to inform you that Sustainable Animal Agriculture for Developing Countries (SAADC) has been listed in the International Congress and Conference Association (ICCA). The recognition by the ICCA reflects the quality and consistency of this series of conference since the inaugural SAADC2007 hosted by the Yunnan Agricultural University in Kunming, China. I want to take this opportunity to once again congratulate and thank the organizers of all the previous and the present SAADC for their excellent efforts in making SAADC an internationally renowned event.

The primary objective of SAADC is to provide a platform for animal scientists and producers especially from the developing countries to share experiences and establishing networking to promote sustainable animal agriculture in our respective countries. This week, we are here again to share our research findings and ideas for promotion of sustainable animal agriculture. I congratulate the organizing committee for their hard work throughout the last two years to make it possible for us to meet in this beautiful resort-venue in Indonesia. I would like to thank members of the SAADC2017 International Advisory Committee and the SAADC2017 in-house editors for their input and hard work to support the local organizing committee of this conference. Special thanks go to Professor Wayne Bryden (editor-in-chief) and his team for their help to create the SAADC2017-APS special issue in the journal of Animal Production Science for publication of selected papers presented by the participants of this conference. We are grateful to the grant provided by ACIAR, Australia to support young researchers from the developing countries to attend this conference.

Most of all, I thank each and every one of you for your participation in making this conference a great success. I would like to encourage all participants, particularly the younger ones to take this opportunity to make new friends and to create new opportunities to foster cooperation towards promotion and enhancement of sustainable animal agriculture in our respective countries.

Yours sincerely,

Dr Juan Boo Liang
President
SAADC International Advisory Committee
16 October 2017
Ladies and Gentlemen

It is my great honor to welcome all of participants to attend the 6th Sustainable Animal Agriculture for Developing Countries (SAADC) conference which held at Faculty of Animal Husbandry, Brawijaya University Indonesia during 16-19 October 2017. On behalf of Faculty of Animal Husbandry, Brawijaya University, I would like to welcome about 250 participants from 16 countries to participate at the conference. The principal objective of the SAADC 2017 is to provide a scientific forum for junior and senior animal scientists and producers, and administrators of livestock related agencies, particularly from the developing countries, to share their experiences, discuss issues and suggest recommendations to develop further a more sustainable livestock production in their respective countries.

The 6th SAADC 2017 is organized by Faculty of Animal Husbandry, Brawijaya University, Indonesia in collaboration with
1. Institute of Tropical Agriculture and Food Security, Universiti Putra Malaysia, Malaysia
2. Australia’s Aid Program, Department of Foreign Affairs and Trade, Australian Government

Deeply thanks also for the international committees who have given trust to the Faculty of Animal Husbandry Brawijaya University to be host of SAADC 2017. I hope this conference would improve our international cooperation network in the field of animal husbandry.

All sponsors are highly appreciated to make the conference more successful. Last but not least, all partners who contributed to this conference are deeply thanks without your fully supports this conference would never be accomplished.

With best wishes

Prof. Dr.Sc.Agr. Ir. Suyadi, MS
Dean Faculty of Animal Husbandry, Brawijaya University
Malang, 16 October 2017
About the Conference

Conference Name
The 6th International Conference on Sustainable Animal Agriculture for Developing Countries (SAADC 2017)

Themes
Wisdom of Using Local Resources for Development of Sustainable Animal Production in Developing Countries

Chairman
Prof. Dr. Ir. Ifar Subagiyo, M.Agr.St.
(Faculty of Animal Husbandry, Brawijaya University, Indonesia)

Date
October 16-19, 2017

Venue
The Singgasari Resort, Batu City, Indonesia
http://www.thesinggasari.com/

Official Website
http://saadc2017.ub.ac.id

Organized by:
Faculty of Animal Husbandry, Brawijaya University, Indonesia

In collaboration with:
- Institute of Tropical Agriculture and Food Security, Universiti Putra Malaysia, Malaysia
- Australian Government, Department of Foreign Affairs and Trade, Australia’s Aid Program

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Ir. Kusno Waluyo
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Ponidi
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The socio-economic creativity effect of livestock operations on dual production geographically under small-scale peasant in Weda, Halmahera, Indonesia.

J. C. Loing, A. Aiba, B. Rorimpandey and L. Kalangi
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Abstract

The objective study were to characterize low-income livestock production system, powered by the farmer creativity to have the value added income by forming another income beside cattle as the livestock production System. Purposive random sampling were used to select two geographically place namely highland and near coastal land. From 520 sample 52 respondents were selected as cow farmers. Interview schedules were used from them. A descriptive analysis of the data showed that the socio economic creativity of farmers resulted the adding value of the income on the productive age of them. They got income from the livestock production, the creativity of farmers contributed additional household income to increase socio economic benefits.

Keywords: geographically, creativity, value added, socio-economic
### Session 1 Parallel 3 - Socio Economic 1

**Chairman:** Dr. Kiran Dande (India)  
**Co-chairman:** Femi Elly (Indonesia)  

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| 13.30-14.00| Invited Speaker| **Dr. Kiran Dande (India)**  
Symbiotic relationship and sustainable agriculture |
| 14.00-14.12| SE-711        | Business status of small-scale pig farming in rural areas of Cambodia under a decrease of the pig sales price |
| 14.12-14.24| SE-706        | Forage introduction to support development of cattle in Sangkub District |
| 14.24-14.36| SE-710        | The socio-economic creativity effect of livestock operations on dual production geographically under small-scale peasant in Weda, Halmahera, Indonesia |
| 14.36-14.48| SE-721        | The analysis on income of beef cattle breeders in various crop patterns in Umbulsari District, Jember Regency |
| 14.48-15.00| SE-718        | Accessibility of farmers toward resources of broiler livestock farming with use partnership system in Malang Regency |

### Session 1 Parallel 4 - Non Ruminant Nutrition 1

**Chairman:** Dr. Osfar Sjofjan (Indonesia)  
**Co-chairman:** Rikimaru (Japan)  

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<td>Effect of prebiotic and Immunowall® as feed additive in enzyme activity, intestinal characteristic, and broiler performance</td>
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<td>13.42-13.54</td>
<td>ANF-226</td>
<td>Effects of dietary β-1,4-Mannobiose on the growth performance and productivity of Hinai-jidori chicken (slow-growing Japanese meat-type chicken)</td>
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<td>Organoleptic characteristics of egg laid by local hens fed fish oil as source long chain fatty acids in diets</td>
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<td>Feeding microparticle protein-composed diet on protease activity and protein utilization in chickens</td>
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