PROCEEDINGS
The 7th ISTAP
International Seminar on Tropical Animal Production

September 12 – 14, 2017, Yogyakarta, Indonesia

“Contribution of Livestock Production on Food Sovereignty in Tropical Countries"

Published by:
Faculty of Animal Science
Universitas Gadjah Mada

ISBN: 978-979-1215-29-9

©2017, Faculty of Animal Science Universitas Gadjah Mada

No part of this publication may be reproduced or transmitted in any forms or by any means, electronic or mechanical, now known or heretofore invented, without written permission from the publisher.

Address: Faculty of Animal Science, Universitas Gadjah Mada
Jl. Fauna 3, Kampus UGM, Bulaksumur, Yogyakarta 55281, Indonesia
Phone: +62-274-513363/+62-274-560868
Fax: +62-274-521578
Email: istap@ugm.ac.id
Website: www.istap.ugm.ac.id
**Editor-in-Chief**

Cuk Tri Noviandi  
(Universitas Gadjah Mada, Indonesia)

**Editorial Board**

<table>
<thead>
<tr>
<th>Name</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abdul Razak Alimon</td>
<td>Universiti Putra Malaysia</td>
</tr>
<tr>
<td>Adiarto</td>
<td>Universitas Gadjah Mada, Indonesia</td>
</tr>
<tr>
<td>Bambang Suhartanto</td>
<td>Universitas Gadjah Mada, Indonesia</td>
</tr>
<tr>
<td>Endang Baliarti</td>
<td>Universitas Gadjah Mada, Indonesia</td>
</tr>
<tr>
<td>F. Trisakti Haryadi</td>
<td>Universitas Gadjah Mada, Indonesia</td>
</tr>
<tr>
<td>Ismaya</td>
<td>Universitas Gadjah Mada, Indonesia</td>
</tr>
<tr>
<td>Jamhari</td>
<td>Universitas Gadjah Mada, Indonesia</td>
</tr>
<tr>
<td>John Moran</td>
<td>Profitable Dairy System, Australia</td>
</tr>
<tr>
<td>Liang Chou Hsia</td>
<td>National Pingtung University of Science and Technology, Taiwan</td>
</tr>
<tr>
<td>Metha Wanapat</td>
<td>Khon Kaen University, Thailand</td>
</tr>
<tr>
<td>Nono Ngadiyono</td>
<td>Universitas Gadjah Mada, Indonesia</td>
</tr>
<tr>
<td>Nurliyani</td>
<td>Universitas Gadjah Mada, Indonesia</td>
</tr>
<tr>
<td>Ristianto Utomo</td>
<td>Universitas Gadjah Mada, Indonesia</td>
</tr>
<tr>
<td>Sudi Nurtini</td>
<td>Universitas Gadjah Mada, Indonesia</td>
</tr>
<tr>
<td>Sumadi</td>
<td>Universitas Gadjah Mada, Indonesia</td>
</tr>
<tr>
<td>Tety Hartatik</td>
<td>Universitas Gadjah Mada, Indonesia</td>
</tr>
<tr>
<td>Vu Dinh Ton</td>
<td>Vietnam National University of Agriculture</td>
</tr>
<tr>
<td>Wihandoyo</td>
<td>Universitas Gadjah Mada, Indonesia</td>
</tr>
<tr>
<td>Yuny Erwanto</td>
<td>Universitas Gadjah Mada, Indonesia</td>
</tr>
<tr>
<td>Zael Bachruddin</td>
<td>Universitas Gadjah Mada, Indonesia</td>
</tr>
<tr>
<td>Zuprizal</td>
<td>Universitas Gadjah Mada, Indonesia</td>
</tr>
</tbody>
</table>

**Editorial Staff**

Amir Husaini Karim Amrullah, Ahmad Fathoni, Aji Praba Baskara, Endah Wulandari,  
Galuh Adi Insani, Rima Amalia Eka Widya, Slamet Widodo,  
Sri Agtin Tejawati, Sutari, Zazin Mukmila
# LIST OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>PREFACE</td>
<td>iii</td>
</tr>
<tr>
<td>REPORT FROM ORGANIZING COMMITTEE</td>
<td>iv</td>
</tr>
<tr>
<td>WELCOME ADDRESS</td>
<td>v</td>
</tr>
<tr>
<td>OPENING REMARKS</td>
<td>vi</td>
</tr>
<tr>
<td>LIST OF CONTENTS</td>
<td>vii</td>
</tr>
</tbody>
</table>

## PLENARY SESSIONS

1. Feeding Strategies on Farms to Improve Livestock Productivity and Reduce Methane Production  
   Metha Wanapat, Thiwkorn Ampapon, Chaowarit Mapato, Burarat Phesatcha and Bounnaxay Viennasay  
   ................................................................. 1-9

2. Success Stories in Asia’s Quest for Increasing its Domestic Milk Production  
   John Moran, Geoff Walker and Mohammad Abdus Salam  
   ................................................................. 10-19

3. The Use of Modern Technology for Production of Traditional Tropical Small Ruminants  
   Liang Chou Hsia  
   ................................................................. 20-23

4. Role of Livestock Production in Farm Households’ Economy and Challenges in Perspective of Sustainable Development  
   Vu Dinh Ton  
   ................................................................. 24-32

5. Halal Life Style and Global Trade  
   Tridjoko Wisnu Murti  
   ................................................................. 33-39

6. Shelf-life Extension of Fresh and Processed Meat Products by Various Packaging Applications  
   Keun Taik Lee  
   ................................................................. 40-51

## RUMINANT NUTRITION

23306-45670-1-SM  
Nafiutul Umami, Bambang Suhartanto, Ali Agus, Bambang Suwignyo, Nilo Suseno, Farrah Siti Zakkiyah, and Tim Cookson  
................................................................. 52-56

24926-50079-2-SM  
Bambang Suwignyo, Bambang Suhartanto, Briyan Ahmad Suparja, Wahyudin, and Galih Pawening  
................................................................. 57-61

24480-48720-1-SM  Incremental Level of Chromolaena odorata in Complete Diet for a Cows Fattening G.F. Bira, M.L. Mullik, and Dahlanuddin ......................................................... 68-72

24745-49463-1-SM  In Vitro Degradation and Rumen Fermentation Characteristics of Soybean Meal Protected with Different Levels of Formaldehyde Wulandari, Budi Prasetyo Widyobroto, Cuk Tri Noviandi, and Ali Agus ......................................................... 73-78


24713-49288-1-SM  Chemical Composition and In Sacco Degradation of Fish Waste Meal as Alternative Protein Feed Source Maurinda Safitri, Cuk Tri Noviandi, and Ristianto Utomo ......................................................... 85-89


24778-49582-1-SM  The Effect of Alfalfa Meal Supplementation in Concentrate on Feed Digestibility of Ettawa Crossbred Goat Chusnul Hanim, I Gede Supartu Budisatria, and Retnowati Diah Pratii ......................................................... 97-102

23593-46215-1-SM  The Inclusion Effects of Indigofera zollingeriana in Oil Palm Fronds Based Diet on Rumen Fermentation Kinetics and Microbial Yields In Vitro S. Fakhri, A. Jayanegara, and Yurleni ................................................................. 103-106

24618-49103-1-SM  Fermentation Characteristics of Corn Stover and Gliricydia sepium Combination Silage with Different Presentations Trisna Ayuni, Widhi Kurniawan, Astriana Napirah, and Rahman ......................................................... 107-111

24704-49268-1-SM  The Effect Additional of Sodium Carbonate as Buffer in Utilization of Tofu Byproduct Lactic Acid Bacteria Fermentation as Basal Ration on Rumen Fermentation Bignon Goat During Lactation Farkhan Ihsani, Zaenal Bachruddin, Cuk Tri Noviandi and Lies Mira Yusiai ................................................................. 112-116
<table>
<thead>
<tr>
<th>Paper ID</th>
<th>Title</th>
<th>Authors</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>23734-46739</td>
<td>Vegetable Tanning Process of Starry Trigger Fish (<em>Abalistes Stellaris</em>) and Its Plotting to Leather Products</td>
<td>Indri Hermiyati, Muh. Wahyu Syabani, and Fitrilia Silvianti</td>
<td>475-484</td>
</tr>
<tr>
<td>24494-48760</td>
<td>Utility of Biogas Sludge as Media for White Oyster Mushroom (<em>Pleurotus florida</em>)</td>
<td>Ambar Pertwingrum, Nanung Agus Fitriyanto, Cahyono Agus, and Ramdhani Dwi Nugroho</td>
<td>485-495</td>
</tr>
<tr>
<td>23356-45848</td>
<td>The Effect of Volcanic Ash Addition to the Chemical Quality of Excreta Organic Fertilizer</td>
<td>Viagian Pastawan, Yuny Erwanto, and Nanung Agus Fitriyanto</td>
<td>496-500</td>
</tr>
<tr>
<td>24585-48983</td>
<td>The Case of Helminthiasis on Beef Cattle at Slaughter House in Indonesia</td>
<td>Retno Widyani and Ida Herawati</td>
<td>501-505</td>
</tr>
<tr>
<td>23566-46148</td>
<td>Physical-Chemical, Microbial and Sensory Characteristics of Buffalo and Cattle Grinding Dry Cured Meat at Sunlight and Oven Drying Methods</td>
<td>Bastoni, Setiyono, and Yuny Erwanto</td>
<td>506-514</td>
</tr>
</tbody>
</table>

**AGRIBUSSINES AND LIVESTOCK SOCIO-ECONOMICS**

<table>
<thead>
<tr>
<th>Paper ID</th>
<th>Title</th>
<th>Authors</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>23333-45741</td>
<td>Canvassing the Complexity of Beef Cattle Farming; an Entry Point to Qualitative Modeling</td>
<td>Novie Andri Setianto, Nunung Noor Hidayat, and Pambudi Yuwono</td>
<td>522-527</td>
</tr>
<tr>
<td>23565-46131</td>
<td>Studies Institute Capital PT PNM Branch Cirebon against Cattle Development in the Sub District Cibingbin Dukuhbadag Village District Kuningan</td>
<td>Fitri Dian Perwitasari and Devi Yuliananda</td>
<td>528-532</td>
</tr>
<tr>
<td>24675-49219</td>
<td>Beef Cattle Farmers’ Group Cohesion in Bantul and Sleman Regencies Yogyakarta Special Region</td>
<td>Fransiskus Trisakti Haryadi, Rini Widiati, Tri Anggraeni Kusumastuti, and Siti Andarwati</td>
<td>533-537</td>
</tr>
<tr>
<td>24640-49141</td>
<td>Farmers’ Individual Potential in Different Sizes of Local Beef Cattle Farming in Kebumen, Indonesia</td>
<td>Moch. Sugiarto, Syarifuddin Nur, Oentoeng E. Jatmiko, and Marti Ike Wahyu</td>
<td>538-543</td>
</tr>
<tr>
<td>Document Number</td>
<td>Title</td>
<td>Authors</td>
<td>Pages</td>
</tr>
<tr>
<td>-----------------</td>
<td>------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>23614-46249</td>
<td>The Motivation of Sheep Farmers in the Villages around the IPB Campus to Improve Livestock Productivity</td>
<td>L. Cyrilla, M. Yamin, and F.N. Rahmah</td>
<td>549-553</td>
</tr>
<tr>
<td>23921-57773</td>
<td>Adoption of Animal Husbandry Innovations by Dairy Farmers in Pasuruan Regency, East Java Province</td>
<td>Nurlaili, Dewi Ratih Ayu Daning, and Rochijan</td>
<td>554-559</td>
</tr>
<tr>
<td>24463-48673</td>
<td>Assistance Technology of Livestock Development Area in East Nusa Tenggara</td>
<td>Sophia Ratnawaty and A. Pohan</td>
<td>560-565</td>
</tr>
<tr>
<td>24654-49184</td>
<td>Evaluation of Perception and Preference of Milk Consumption Among Elementary School Age Children in Low Income Household</td>
<td>Suci Paramitasari Syahlan and Mujtahidah Anggriani Muzzayanah…..</td>
<td>566-570</td>
</tr>
<tr>
<td>28129-62396</td>
<td>The Effect of Innovation on Increasing Productivity and Goat Farming Income in Cocoa-Goat Integration System</td>
<td>Gunawan, Wiendarti Indri Werdhany, and I. Gede Suparta Budisatria..</td>
<td>571-575</td>
</tr>
<tr>
<td>24714-49294</td>
<td>Determining the Cost of Beef Production from Cattle Fattening in the Smallholder Farming</td>
<td>Rini Widiati, Tri Satya Mastuti Widi, and Tian Jihadhan Wankar ……</td>
<td>576-580</td>
</tr>
<tr>
<td>24465-48678</td>
<td>Feasibility of Introducing Feeding Technology on Beef Cattle Fattening in Timor Island, East Nusa Tenggara</td>
<td>Sophia Ratnawaty, Didiek A. Budianto, and Firmansyah Tri Saputra….</td>
<td>581-588</td>
</tr>
<tr>
<td>24178-48037</td>
<td>Factors Influencing Smallholder Farmer’s Decision to Adopt Artificial Insemination as A Cattle Reproduction Technology in Yogyakarta</td>
<td>R. Ahmad Romadhani Surya Putra, Restiyana Agustine, and Tri Satya Mastuti Widi…..</td>
<td>589-593</td>
</tr>
<tr>
<td>24817-49668</td>
<td>The Potential of Livestock Farming in the Agricultural Income Structure of Rural Farmers</td>
<td>Sudi Nurtini, R. Ahmad Romadhani Surya Putra, and Defi Chusnul Chotimaḥ ……..</td>
<td>594-597</td>
</tr>
</tbody>
</table>
Optimizing Farm Inputs on Silage Maize Production Integrated with a Small Scale Dairy Farming

Hadiana, M.H, Rivianda, A.D., Suptraman, H., and Suryadi D. ............. 598-603

Financial Analysis of Minister of Agriculture Regulation no 49 / permentan/pk. 440/10/2016 About the Ration of Import Cow


Corn and Cattle Integration to Support NTB’s One Million Cattle Program in Lombok Island

Soekardono and Anwar Fachry .................................................. 608-615

The Influence of Social Capital on the Effectiveness of Farmers’ Group Functions

Aditya Alqamal Alianta, Fransiskus Trisakti Haryadi, and Yustina Yuni Suranindyah ......................................................... 616-620

Financial Analysis of Medium Scale Pig Farming Livestock in The Gianyar District

Ida Ayu Parwati and Nyoman Suyasa ........................................... 621-627

Participation of Jabres Cattle Farmers in The Development of Jabres Cattle Rising at Barokah Farmers Group Kebandungan Bantarkawung Brebes

Siti Andarwati, Nono Ngadiyono, I Gede Suparta Budi Satria, Muhammad Hasan Albanna, Miftahush Shirotul Haq, and Panjono ...... 628-633

Income Analysis on Capital Assistance Model through the Revolving Etawa Crossbred Goat in Yogyakarta Indonesia

Tri Anggraeni Kusumastuti, Rini Widiati, and Agung Wijaya .................. 634-638

Developing Strategy for Dairy Cattle Business in Boyolali Regency, Central Java, Indonesia

Sutrisno Hadi Purnomo, Bayu Setya Hartanto, and Nila Falansari .......... 639-644

Financial Feasibility Study of Establishment of Poultry Feed Mill in Bintuni District West Papua Province


The Quality of Chilled Fat Tail Sheep Ram’s Semen with Antioxidant Addition, Vitamin C and Vitamin E In Citrate Egg Yolk Extender

L. Abdillah, S. Bintara, D. Maharani, I.G.S. Budisatria ........................ 650-654

BREEDING AND GENETIC
The Potential of Livestock Farming in the Agricultural Income Structure of Rural Farmers

Sudi Nurtini, R. Ahmad Romadhoni Surya Putra, and Defi Chusnul Chotimah
Faculty of Animal Science Universitas Gadjah Mada, Yogyakarta, Indonesia
Corresponding email: nurtini@ugm.ac.id

ABSTRACT

In addition to foodstuff farming by most Indonesian farmers are also raise livestock whether cattle, goats, sheep or even poultry. While agricultural areas decrease over time, livestock should play greater role in improving the welfare of farmer’s household. The aims of this study were to determine the contribution of livestock farming income and the potential of livestock farming in the agricultural income structure of rural farmers. The research was conducted in rural areas at Yogyakarta Province. Survey methods were used in this study and interviews were conducted on 211 farmers. Data were analyzed by income and cost analysis and multiple linear regression analysis. The result showed that the income of livestock rising contributed 31.58 % to the total of agricultural income. Based on multiple regression analysis showed that the total of agricultural income jointly (P ≤ 0.01; R² = 0.630) was influenced by controlled land (X1), length of education (X2), number of family member (X3), the number of the livestock raised (X4) and the income of livestock raising (X5). Partially the controlled land (X1), the number of the livestock raised (X4) and the income of livestock raising (X5) were to have positive and very significant influence (P ≤ 0.01) on the agricultural income of the farmers. It can be concluded that livestock farming was a branch of agriculture farming and has a very real potential to increase agricultural income of the farmers.

Keywords: The potential of livestock farming, Agricultural income of farmers, Foodstuff farming, The welfare farmer’s household.

INTRODUCTION

Most of Indonesian people get their earnings on the agriculture sector, and they are as smallholder farmers. Those indicate that smallholder farmers are important for the household welfare of the most Indonesian people.

According to Soekardono, (2017) the household of Indonesian farmers had very small controlled land which is less than 0.5 Ha, so the welfare of household Indonesian farmers were low. More over it could be explained that around 60 % household of Indonesian farmers only had controlled land less than 0.5 Ha. Even in the areas which had done agriculture intensively (such as Java, Bali and Lombok) the average of agriculture controlled land only 0.3 Ha. With the limited of the controlled land, the agriculture productivity would not meet agriculture household welfare. In general therefore agriculture household carry out diversification of farming horizontally or vertically. Horizontal diversification is mostly done in rural area that is integrated crop-livestock system.

According to De Leeuw et al (1999) in smallholder systems, which dominated tropical agriculture, livestock were important because they produced much more than food: they provided direct cash income; they were assets capital ; they produced manure used as fertilizer and fuel; and they may be a source of power for transport and cultivation.
Nevertheless, one function, the production of livestock product for human food, is often the primary reason for keeping livestock, whether by pastoralists to meet their subsistence needs in arid and semi-arid regions, or by peri-urban smallholder farmers as a source of income from product livestock sales.

Therefore, the objectives of this research were to determine the contribution of livestock farming income and the potential of livestock farming in the agricultural income structure of rural farmers.

**MATERIALS AND METHODS**

**Sample of Research**

The samples of this research were farmers who have controlled land to cultivate and also keep livestock. The samples of 211 farmers were taken by purposive sampling.

**Data Analysis**

Some analysis methods were used. Each was described as following.

1. Analysis of cost and income (Soedjana, 2007)

\[
\pi = TR - TC \\
= TR - (VC + F) \\
= Py. Y - Px.X - F
\]

\(\pi\): Total of agricultural income

\(TR\): Total revenue from the integration of crop farming + livestock farming

\(TC\): Total Cost of the integration of crop farming + livestock farming

\(VC\): Variable Cost

\(F\): Fixed Cost

\(Py\): The price of output

\(Px\): The price of input

\(Py. Y\): Total Revenue (TR)

\(Px.X + F\): Total Cost (TC)

2. To prove that the factors affect to agricultural income, multiple regression analysis was done (Greene, 1993). Factors used in the research were controlled land \((X_1)\), length of education \((X_2)\), number of family member \((X_3)\), the number of the kept livestock \((X_4)\) and the income of livestock raising \((X_5)\).

The formula used to know the factors influencing the agricultural income was:

\[Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5\]

\(Y\): Total of agricultural income (IDR/year/farmer)

\(X_1\): controlled land (m2)

\(X_2\): length of education (year)

\(X_3\): number of family member (person)

\(X_4\): the number of the livestock raised (AU, according to Njuki et al., 2011)

\(X_5\): the income of livestock raising (IDR/year)

\(a\): Constant

\(b_1, ..., b_5\): regression coefficient
RESULTS AND DISCUSSION

Based on income and cost analysis the income of livestock raising contributed 31.58 % to the total of agricultural income. It indicated that livestock farming was a branch of agriculture farming.

From Table 1 it could be seen that the value of $R^2$ was 0.630. It was indicated that 63.00 % of the variance of total agricultural income was influenced by controlled land ($X_1$), length of education ($X_2$), number of family member ($X_3$), the number of the livestock raised ($X_4$) and the income of livestock raising ($X_5$), while 36.90 % was influenced by variables outside the model. The result of multiple regression analysis showed that the agricultural income can be explained jointly and very significant ($P \leq 0.01$) by controlled land ($X_1$), length of education ($X_2$), number of family member ($X_3$), the number of the livestock raised ($X_4$) and the income of livestock raising ($X_5$).

Table 1. The result of multiple regressions analyze

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient regression</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constanta</td>
<td>2805359.434</td>
<td>0.760</td>
</tr>
<tr>
<td>Controlled land</td>
<td>1966.359</td>
<td>0.000</td>
</tr>
<tr>
<td>Length of education</td>
<td>568518.853</td>
<td>0.372</td>
</tr>
<tr>
<td>Number of family member</td>
<td>-610805.571</td>
<td>0.732</td>
</tr>
<tr>
<td>The number of the livestock raised</td>
<td>1962182.649</td>
<td>0.000</td>
</tr>
<tr>
<td>The income of livestock raising</td>
<td>0.226</td>
<td>0.001</td>
</tr>
</tbody>
</table>

$R^2 : 0.630$

$F : 72.479 (P \leq 0.01)$

Partially, the controlled land ($X_1$), the number of the livestock raised ($X_4$), and the income of livestock raising ($X_5$) were to have positive and very significant influence ($P \leq 0.01$) on the agricultural income of the farmers.

Actually the results of this research are identical to the former findings those are Mubyarto (1986), said that the more land controlling will be influence positively to the number of product that will increase the income of farmers.; Kitalyi et al said, (2005) beyond their role of providing food and inputs for agriculture, livestock are important as savings or investments for the farmers, and provide security or insurance through various ways in different production systems. Livestock allow what economists call “consumption smoothing”, because they provide food for almost the whole year and because they can be sold to buy food and other necessities at any time of year; unlike crops, which are highly seasonal. Crop harvests do not necessarily coincide with needs for cash. Livestock are an excellent way of accumulating wealth over the year or even over generations in systems where other investment opportunities may be few or untrustworthy. Many remote areas populated by livestock-keepers have no banking systems, and in many countries livestock have been a better investment than bank accounts in unstable and depreciating national currencies. Livestock act as an insurance against droughts that plague many dry–land areas, although livestock themselves are extremely vulnerable to drought. Much literature exists on this and related questions such as: For agro-pastoralists and dry-land mixed farmers, whether livestock really are an important buffer stock (Fafchamps et al., 1998). For livestock keepers,
what are the best strategies in the face of looming drought (selling or retaining livestock) and how are these strategies affected by real-world variations in marketing opportunities and external action (Morton and Barton, 2002).

According to Soedjana, (2007) some principal risks in a farming systems include production risk, business and financial risk, and destruction risk. From these principal risks, by using functional benefit, calculation integrated farming system between crops and animal has a minimum risk.

More over Lemaire et al (2014) suggested increasing diversity local integration of cropping with livestock systems, the systems will achieve economic, sociological, ecological, energy, environmental, and biogeochemical synergies and efficiencies.

CONCLUSION

It can be concluded that livestock farming was a branch of agriculture farming and has a very real potential to increase agricultural income of the farmers.

REFERENCES


CERTIFICATE

This is to certify that

SUDI NURTINI

has participated as

ORAL PRESENTER

at the 7th International Seminar on Tropical Animal Production
"Contribution of Livestock Production on Food Sovereignty in Tropical Countries"
Faculty of Animal Science Universitas Gadjah Mada, Yogyakarta-Indonesia
September 12 - 14, 2017

Dean
Faculty of Animal Science
Universitas Gadjah Mada

R. Ahmad Romadhoni Surya Putra, Ph.D.
Chairman
Organizing Committee

Prof. Dr. Ali Agus