



2016

"Small and Medium-sized
Enterprises Competitiveness"

ISBN 978-602-7577-70-1



PROCEEDING

INTERNATIONAL CONFERENCE

Agribusiness Development for Human Welfare



UMY

Universitas
Muhammadiyah
Yogyakarta

Unggul  Islami

Trusmi No. 1, No. 90, Sekeloa Utara, Yogyakarta 55181

Organized by:

Department of Agribusiness, Faculty of Agriculture
Universitas Muhammadiyah Yogyakarta

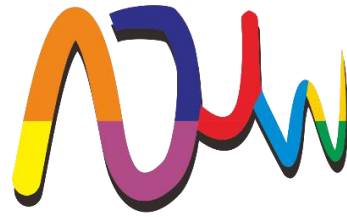
Supported by:



PROCEEDING INTERNATIONAL CONFERENCE

AGRIBUSINESS
DEVELOPMENT FOR
HUMAN WELFARE

*“Small and Medium-sized
Enterprises Competitiveness”*



Agribusiness Development
for Human Welfare

ISBN 978-602-7577-70-1



EDITOR TEAM

Siti Yusi Rusimah
Achmad Fachruddin
Rohandi Aziz
Dara Rosalia

ADDRESS

Agribusiness Department
Agriculture Faculty
Universitas Muhammadiyah Yogyakarta

Jl. Lingkar Selatan, Tamantirto, Kasihan, Bantul, Yogyakarta, 55183
Phone. 0274-387656 (ext. 201) Fax. 0274-387646
e-mail: adhw2016@umy.ac.id

EDITOR FOREWORD

The economic integrations by ASEAN certainly have given a major influence on Small and Medium-sized Enterprises (SMEs). Beside economic integration in the form of free trade area (FTA) that has been going on since the early 2000s, economic integration in the form of ASEAN Economic Community (AEC) has been ongoing since the beginning of 2016. Through this integration, SMEs have opportunity to expand access to markets, technology, and capital. But at the same time SMEs are required to improve their competitiveness in order to survive in the market.

In order to explore ideas, concept, and innovations related to the competitiveness of SMEs, International Conference on Agribusiness Development for Human Welfare (ADHW 2016) was held in Yogyakarta on May 14, 2016. The conference organized by Department of Agribusiness Universitas Muhammadiyah Yogyakarta, in collaboration with Department of Agribusiness and Information System Universiti Putra Malaysia, Department of Agro-Industrial Technology Kasetsart University, Department of Agriculture Socio-Economics Universitas Gadjah Mada, Department of Agriculture Socio-Economics of Universitas Brawijaya, Indonesian Society of Agriculture Economics, Agribusiness Association of Indonesia. Hopefully proceedings of ADHW 2016 provide stimulus for increasing competitiveness of SMEs in ASEAN, especially in Indonesia.

Furthermore, we are grateful to Allah, the Sustainer of all word, who always makes it easy for our affairs. We would like to acknowledge with thanks to all the institution and individual who joined with resources and efforts in organizing the conference that resulted in the papers which are published in this proceeding. Special thanks to all authors and discussants who contributed with their intellectual capital and responded to our call papers. Thanks and acknowledgment are also due to all reviewers of the conference who helped in evaluating submitted papers; and to the members of the Organization Committee, who ensured smooth execution of the event.

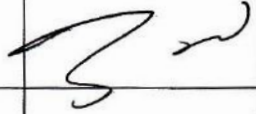
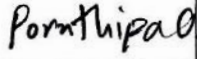


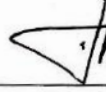

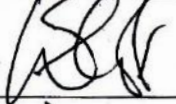
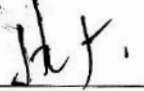
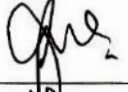


May 30, 2016

Editor

LIST OF REVIEWERS

1. Prof. Dr. Mad Nasir Shamsudin (Universiti Putra Malaysia)
2. Prof. Dr. Zaenal Abidin Mohamed (Universiti Putra Malaysia)
3. Dr. Ismail Abd. Latif (Universiti Putra Malaysia)
4. Dr. Juwaidah Sharifudin (Universiti Putra Malaysia)
5. Assist. Prof. Dr. Amin Mahir Abdullah (Universiti Putra Malaysia)
6. Assist. Prof. Dr. Nitty Hirawaty K. (Universiti Putra Malaysia)
7. Assist. Prof. Dr. Parthana Parthanadee (Kasetsart University)
8. Assist. Prof. Dr. Pornthipa Ongkunaruk (Kasetsart University)
9. Dr. Jumpol Vorasayan (Kasetsart University)
10. Prof. Dr. Ir. Masyhuri (Universitas Gadjah Mada)
11. Prof. Dr. Ir. Irham, M.Sc. (Universitas Gadjah Mada)
12. Dr. Jamhari, SP. MP. (Universitas Gadjah Mada)
13. Dr. Jangkung HM, SP.M.Ec. (Universitas Gadjah Mada)
14. Subejo, SP, M.Sc., Ph.D. (Universitas Gadjah Mada)
15. Dr. Ir. Rini Dwiastuti, M.S. (Universitas Brawijaya)
16. Ir. Edi Dwi Cahyono, M.Sc., Ph.D. (Universitas Brawijaya)
17. Wisynu Ari Gutama, S.P., M.MA. (Universitas Brawijaya)
18. Hery Toiba, S.P., M.P., Ph.D. (Universitas Brawijaya)
19. Yuniar Khasanah, M.Sc. (Lembaga Ilmu Pengetahuan Indonesia)
20. Lusty Istiqamah, M.Biotech (Lembaga Ilmu Pengetahuan Indonesia)
21. Ir. M. Kismuntono (Lembaga Ilmu Pengetahuan Indonesia)
22. Dr. Ir. Sriyadi, MP. (Universitas Muhammadiyah Yogyakarta)
23. Dr. Ir. Widodo, MP. (Universitas Muhammadiyah Yogyakarta)
24. Dr. Ir. Indardi, M.Sc. (Universitas Muhammadiyah Yogyakarta)
25. Dr. Ir. Triwara BS, MP. (Universitas Muhammadiyah Yogyakarta)
26. Dr. Aris Slamet Widodo, SP. MSc. (Universitas Muhammadiyah Yogyakarta)

ATTENDED REVIEWER

| NO | NAME | INSTITUTION | SIGNATURE |
|----|---|----------------------|---|
| 1 | Prof. Dr. Zaenal Abidin Mohamed | UPM |  |
| 2 | Assistant. Prof. Dr. Pornthipa Ongkunaruk | Kasetsart University |  |
| 3 | Prof. Dr. Ir. Irham, M.Sc | UGM |  |
| 4 | Dr. Jangkung HM, SP. M.Ec | UGM |  |
| 5 | Dr. Ir. Lestari Rahayu Waluyati, MP | UGM |  |
| 6 | Ir.Edy Dwi Cahyono, M.Sc., PhD | UNIBRAW |  |
| 7 | Wisnyu Ari Gutama, S.P, M.MA | UNIBRAW |  |
| 8 | Hery Toiba, S.P.,M.P.,Ph.D | UNIBRAW |  |
| 9 | Yuniar Khasanah, M.Sc | LIPI |  |
| 10 | Lusty Istiqamah, M.Biotech | LIPI |  |
| 11 | Ir. M. Kismuntono | LIPI |  |

PREFACE

Assalaamualaikum, Warahmatullaahi., Wabarakaatuh.
Dear Honorable Governor of Yogyakarta Special Province
Dear respectable Prof. Dr. Zainal Abidin Mohamed
Dear respectable Asist. Prof. Pornthipa Ongkunaruk
Dear respectable Rector of UMY Prof. Dr. Bambang Cipto, MA.
Dear all invited Guests, Speakers, and Participants of International seminar of ADHW 2016.

Alhamdulillah, all praise be to the Almighty God, so that we can be gathering here today at Muhammadiyah University of Yogyakarta in order to attend the Conference on Agribusiness Development for Human Welfare (ADHW) 2016.

Ladies and Gentlemen,

On behalf of the committee, I would like to say welcome to this International Conference on ADHW 2016 and thank you for attending our invitation.

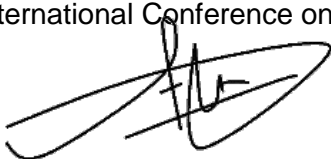
Especially, we are grateful to invited speakers, Prof. Zainal Abidin Mohamed and Asist. Prof. Pornthipa Ongkunaruk, for their willingness to share information and thoughts in this conference. As a bit report, that this conference has been attended by 85 speakers coming from five countries.

This conference entitled "Small and Medium-sized Enterprise Competitiveness". ASEAN Economic Community is the largest economic integration that is going to be implemented at the beginning of 2016 (December 31, 2015). Through this integration, SMEs will have opportunity to expand access to markets, technology, and capital. But at the same time SMEs are required to improve their competitiveness in order to survive in the market. We expect that this seminar is capable of producing thoughts building SMEs within ASEAN, especially Indonesia, to face the free trade.

This event can be done by support and efforts from all sides. Therefore, I would like to say thank you to all committee members having worked hard to conduct this event. We, as the organizer committee, do apologize when there is a shortage in conducting this event.

Wassalamualaikum, Warahmatullaahi., Wabarakaatuh.

Chairman
International Conference on ADHW 2016



Dr. Aris Slamet Widodo, SP., MSc.

WORDS OF WELCOME

Assalamu'alaikum warahmatullahi wabarakatuh

Alhamdulillah, all praise be to Allah SWT, who has given us His blessings so that this International Seminar of Agribusiness Development for Human Welfare (ADHW) 2016 entitled "Small and Medium-sized Enterprises Competitiveness" can be conducted. This International Conference is held in cooperation among Agribusiness Study Program of Muhammadiyah University of Yogyakarta with Putra University of Malaysia (UPM), Kasetsart University (KU), Association of Indonesian Agricultural Economy (PERHEPI), and Agribusiness Association of Indonesia (AAI), Universitas Gadjah Mada (UGM) and Universitas Brawijaya (UB).

Countries of ASEAN members like Indonesia, Malaysia, and Thailand have more than 90% Small and Medium-sized Enterprises (SMEs). In general, SMEs play important role in economic developments such as in terms of employment, added value, improve foreign exchange, and economic growth. For Indonesia, the role of SMEs is limited to employment and added value, while the foreign exchange from SMEs is still low. According to the General Director of SMEs of Industrial Ministry, in 2013 the total SMEs being able to pass through export market is just under 5 percent. For that required many breakthrough and innovation so that the role of SMEs becomes real economic development, especially in Indonesia, and generally in ASEAN countries.

On behalf of Agribusiness Department of Universitas Muhammadiyah Yogyakarta, we would like to express our gratitude Putra University of Malaysia (UPM), Kasetsart University (KU), Association of Indonesian Agricultural Economy (PERHEPI), Agribusiness Association of Indonesia (AAI), Universitas Gadjah Mada (UGM) and Universitas Brawijaya (UB) for all supports, sponsors, and all committee members having worked so hard that this International Conference can be conducted.

Hopefully, these synergies coming from various parties can provide contribution for developing SMEs in Indonesia and other ASEAN countries as well.

Wassalamu'alaikum warahmatullahi wabarakatuh

Head of Agribusiness Department
Universitas Muhammadiyah Yogyakarta



Ir. Eni Istiyanti, MP.



Gubernur

Daerah Istimewa Yogyakarta

Sambutan

KONFERENSI INTERNASIONAL

“AGRIBUSINESS DEVELOPMENT FOR HUMAN WELFARE”

Yogyakarta, 14 Mei 2016

Assalamu'alaikum Wr. Wb.

Salam sejahtera untuk kita semua.

Yang Saya hormati :

- Rektor Universitas Muhammadiyah Yogyakarta;
- Para Narasumber;
- Hadirin dan Para Peserta yang berbahagia,

Puji dan syukur marilah kita panjatkan kehadirat Allah SWT karena hanya atas limpahan rahmat serta karunia-Nya, kita dapat hadir pada kesempatan acara **Konferensi Internasional “Agribusiness Development For Human Welfare”** ini dalam keadaan sehat wal’afiat.

Pada kesempatan kali ini, secara ringkas Saya akan menyampaikan mengenai industri kecil menengah nasional yang menjadi tema pada pembukaan Seminar Internasional “Agribusiness Development For Human Welfare” ini.

Hadirin dan Saudara-saudara sekalian yang Saya hormati,

Berdasarkan data BPS, pertumbuhan industri pengolahan nonmigas pada tahun 2015 secara kumulatif sebesar 5,04%; lebih tinggi dari pertumbuhan ekonomi (PDB) pada periode yang sama sebesar 4,79%. Pada periode Januari-Desember 2015, nilai ekspor produk industri pengolahan nonmigas mencapai USD 106,63 Milyar, dan nilai impor mencapai USD 108,95 milyar, sehingga neraca perdagangan industri pengolahan nonmigas pada periode yang sama sebesar USD 2,32 milyar (neraca defisit).

Usaha pemerintah untuk memperkecil defisit di atas, salah satunya dengan cara memberdayakan Industri Kecil dan Menengah (IKM) yang merupakan bagian penting dalam perkembangan industri nasional. Sampai saat ini, Industri Kecil dan Menengah

telah berkontribusi sebesar 34,82% terhadap pertumbuhan industri pengolahan nonmigas secara keseluruhan.

Angka ini dapat tercapai karena dukungan lebih kurang 3,6 juta unit usaha, yang merupakan 90 persen dari total unit usaha insutri nasional. Jumlah unit usaha tersebut telah mampu menyerap tenaga kerja sebesar 8,7 juta orang, yang tentunya berdampak pada meningkatnya ekonomi nasional serta mengurangi kemiskinan.

Industri Kecil dan Menengah (IKM) memiliki peran yang strategis dalam perekonomian nasional. Hal ini sejalan dengan Visi Pemerintah dalam Rencana Pembangunan Nasional Jangka Menengah (RPJMN) 2015-2019 yaitu *“Terwujudnya Indonesia yang berdaulat, mandiri, dan berkepribadian berlandaskan gotong royong”*.

Untuk lebih meningkatkan peran tersebut, Penumbuhan dan Pengembangan Industri Kecil dan Menengah diarahkan untuk memiliki tujuan jangka menengah guna mewujudkan industri kecil dan industri menengah yang berdaya saing, berperan signifikan dalam penguatan struktur industri nasional, pengentasan kemiskinan dan perluasan kesempatan kerja, serta menghasilkan barang dan/atau jasa Industri untuk keperluan ekspor.

Hadirin dan Saudara-saudara sekalian,

Awal tahun ini, kita telah memasuki era Masyarakat Ekonomi ASEAN (MEA). Dengan demikian, perekonomian nasional akan langsung bersaing dengan para pelaku pasar di kawasan ASEAN. Produk dan jasa termasuk investasi negara-negara anggota telas bebas memasuki pasar di kawasan ASEAN.

Dalam rangka menghadapi hal tersebut, Pemerintah mengambil langkah-langkah strategis berupa peningkatan daya saing industri dan mendorong investasi di sektor industri; di mana peningkatan daya saing industri itu sendiri dilakukan melalui penguatan struktur industri dengan melengkapi struktur industri yang masih kosong serta menyiapkan strategi ofensif dan defensif dalam akses pasar.

Pemerintah telah melakukan Penguatan Sektor IKM dengan strategi ofensif dan defensifnya melalui beberapa program pelaksanaan, diantaranya antara lain: Penumbuhan Wirausaha Baru; Pengembangan IKM melalui Pengembangan Produk IKM serta Peningkatan Kemampuan Sentra dan UPT; Pemberian Bantuan Mesin dan Peralatan Produksi; Perluasan Akses Pasar melalui Promosi dan Pameran; Fasilitasi Pendaftaran Hak Kekayaan Intelektual; Fasilitasi Sertifikasi Mutu Produk dan Kemasan; serta Fasilitasi Pembiayaan melalui Skema Kredit Usaha Rakyat (KUR).

Saya berharap agar berbagai program-program pemerintah tersebut dapat didukung secara sinergis oleh seluruh komponen masyarakat. Untuk itu, Saya berpesan kepada Saudara-saudara sekalian agar semua program pemerintah dalam bidang

Industri, khususnya dalam program pemberdayaan Industri Kecil dan Menengah, didukung dengan sepenuh hati, agar dapat lebih bermanfaat bagi masyarakat dalam rangka pengembangan industri kecil menengah.

Hadirin dan Saudara-saudara sekalian yang Saya hormati,

Demikian beberapa hal yang dapat Saya sampaikan. Akhirnya dengan memohon ridho Allah Subhanahu Wata'ala, seraya mengucap "*Bismilahirrahmanirrahim*", **Konferensi Internasional "Agribusiness Development For Human Welfare"** dengan ini secara resmi Saya nyatakan dibuka. Semoga Allah SWT memberikan petunjuk, bimbingan, perlindungan dan kemudahan dalam setiap langkah dan upaya kita. Amien.

Sekian dan terima kasih.

Wassalamu'alaikum Wr. Wb.

Yogyakarta, 14 Mei 2016
GUBERNUR
DAERAH ISTIMEWA YOGYAKARTA



HAMENGKU BUWONO X

TABLE OF CONTENTS

| | |
|---|----|
| EDITOR FOREWORD | i |
| LIST OF REVIEWERS | ii |
| PREFACE | iv |
| WORDS OF WELCOME | v |
| WELCOME FROM GOVERNOR OF YOGYAKARTA | vi |
| TABLE OF CONTENTS | ix |
| RICE SELF-SUFFICIENCY IN INDONESIA: AN ANALYSIS ON BUDGET ALLOCATION AND THE ACHIEVEMENT | 1 |
| <i>Sri Nuryanti</i> | |
| MODELING OF COOPERATION TO IMPROVE RURAL ECONOMIC IN LANGKAT... .. | 8 |
| <i>Muhammad Buchari Sibuea</i> | |
| GRANARY GROUP PERFORMANCE IMPACT TO THE PRICE AND FOOD SELF- SUFFICIENCY ON THE FARM HOUSEHOLDS | 20 |
| <i>Sri Mardiyati, Jamhari, Jangkung Handoyo Mulyo Dwidjono Hadi Darwanto</i> | |
| ANALYSIS OF AGRIBUSINESS SYSTEM AND COMPETITIVENESS OF GROUPER FISH IN INDONESIA..... | 28 |
| <i>Grace Maharani Putri, Venty F. Nurunisa</i> | |
| ANALYSIS OF COMPETITIVENESS ASEAN RICE TRADE IN THE ERA OF ASEAN ECONOMIC COMMUNITY..... | 36 |
| <i>Mohammad Natsir, Sri Mardiyati</i> | |
| PARTICIPATORY EXTENSION AND FARMERS ATTITUDE CHANGE (CASE PASSION FRUIT FARMERS IN THE VILLAGE BATU BELERANG SINJAI DISTRICT) | 42 |
| <i>Muh. Arifin Fattah and Amruddin</i> | |
| THE RELATIONSHIP BETWEEN EMPOWERMENT OF FARMER GROUP ASSOCIATION (GAPOKTAN) AND MANGO FARM INCOME | 47 |
| <i>Achmad Faqih, Nurul Atikah Fauzi Siti Aisyah</i> | |
| EFFECTIVENESS OF TRAINING MODEL ON CRAFTSMEN CALLIGRAPHY GOAT LEATHER IN AN ATTEMPT TO STRENGTHEN THE COMPETITIVENESS IN SUKOHARJO, INDONESIA | 57 |
| <i>Shanti Emawati, Endang Siti Rahayu, Sutrisno Hadi Purnomo, Ayu Intan Sari</i> | |
| EFFORTS TO IMPROVE COMPETITIVENESS OF WOMEN FARMERS GROUP "MELATI" IN SENDANGSARI VILLAGE, PENGASIH DISTRICT, KULON PROGO REGENCY | 62 |
| <i>Siti Hamidah, Indah Widowati</i> | |
| INSTITUTIONAL CHANGE AND ITS EFFECT TO PERFORMANCE OF WATER USAGE ASSOCIATION IN IRRIGATION WATER MANAGERMENTS | 68 |
| <i>Mohammad Rondhi, Yasuhiro Mori, Takumi Kondo</i> | |
| FOOD PROCESSING INDUSTRY EMPOWERMENT EFFECTIVENESS IN BANGUNTAPAN SUB-DISTRICT, BANTUL, YOGYAKARTA SPECIAL REGION | 76 |
| <i>Sapto Husodo, Amie Sulastiyah, Galuh H.E. Akoso</i> | |
| URBAN DWELLER PERCEPTION TOWARDS URBAN AGRICULTURE..... | 85 |
| <i>Ida Naziera Ngahdiman, Rika Terano, Zainal Abidin Mohamed</i> | |

| | |
|--|-----|
| EFFECTIVENESS OF WELFARE DEVELOPMENT SCHEME ON QUALITY OF LIFE TO RURAL POOR COMMUNITY IN MALAYSIA..... | 93 |
| <i>Mohd Nizam Abdul Aziz, Fazlin Ali, Zainal Abidin Mohamed and Hanina Halimatusaadiyah Hamsan</i> | |
| ASSOCIATION BETWEEN SOCIO-DEMOGRAPHIC CHARACTERISTICS WITH PINEAPPLE FARMER'S KNOWLEDGE, SKILLS AND PRACTICES IN MALAYSIA. | 106 |
| <i>Melissa Alina Yusoff, Norsida Man, Nollila Mohd Naw, Khadijat Jaji</i> | |
| MARKET STRUCTURE AND ANALYSIS OF SEA FISH MARKETING AT DISTRICT OF JEMBER..... | 112 |
| <i>Syamsul Hadi, Edy Sutiarto, dan Henik Prayuginingsih</i> | |
| MARKET STRUCTURE, EFFECTIVENESS, AND EFFICIENCY OF THE RUBBER RAW MATERIALS MARKETING IN MUSI RAWAS DISTRICT | 121 |
| <i>May Shiska Puspitasari</i> | |
| ANALYSIS OF BEEF SUPPLY CHAIN MANAGEMENT AT AGRIBUSINESS BASED SLAUGHTERHOUSE IN UPTD OF ANIMAL SLAUGHTERHOUSE OF PALU | 129 |
| <i>Muh Zulfadhli Prasetyo, Yulianti Kalaba, Lien Damayanti, dan Erny</i> | |
| ANALYSIS OF INFLUENCE OF MARKETING MIX AGAINST PURCHASE DECISION OF GROWING UP MILK ON THREE SOCIO-ECONOMIC CLASS IN MALANG | 139 |
| <i>Sunardi, Jabal Tarik Ibrahim, Anas Tain</i> | |
| TRANSACTION COST ANALYSIS ON CARDAMOM MARKETING IN PADASARI VILLAGE, CIMALAKA DISTRICT, SUMEDANG REGENCY | 152 |
| <i>Ermalinda Zebua, Juarini, and Nanik Dara Senjawati</i> | |
| RICE SEEDS MARKET STRUCTURE IN EAST JAVA | 161 |
| <i>Rini Dwiastuti, Riyanti Isaskar, Nur Baladina, Tri Wahyu Nugroho</i> | |
| NUTMEG'S (<i>MYRISTICA FRAGGAN HAITT</i>) ANALYZE MARKETING MARGIN AND EFFICIENCY OF TANJUNG SANI VILLAGE TANJUNG RAYA SUBDISTRICT AGAM DISTRICT | 177 |
| <i>Devi Analia, Faidil Tanjung, Syofyan Fairuzi dan Ramita Sari Pimura</i> | |
| THE EFFICIENCY OF SUPPLY CHAIN EMPING MELINJO IN BANTUL REGENCY YOGYAKARTA | 183 |
| <i>Eni Istiyanti, Diah Rina Kamardiani</i> | |
| VALUE CHAIN OF PINEAPPLE IN MALAYSIA..... | 191 |
| <i>Norsida Man, Nollila Mohd Naw, Khadijat Jaji, Melissa Alina Yusoff</i> | |
| DYNAMIC SYSTEM OF INDONESIAN HALAL MEAT INDUSTRY: SUSTAINABLE SUPPLY CHAIN MANAGEMENT PERSPECTIVE | 206 |
| <i>Akhmad Mahbubi, Pita Merdeka</i> | |
| ANALYSIS OF THE PROFITABILITY OF DAIRY FARMERS BASED ON THE SCALE OF LIVESTOCK OWNERSHIP IN DISTRICT SEMARANG | 216 |
| <i>Mukson, S.I.Santoso, H.I.Nisa, H. Setiyawan and M. Handayani</i> | |
| DEVELOPMENT STRATEGY OF LEADING COMMODITY THROUGH COMMUNITY-BASED ENTERPRISE IN INDONESIA-MALAYSIA BORDER AREA..... | 223 |
| <i>Jangkung Handoyo Mulyo, Irham, Hani Perwitasari, Fatkhayah Rohmah</i> | |
| BUSINESS DEVELOPMENT STRATEGY SOYBEAN SAUCE PRODUCTION IN CAP BAWANG SOY SAUCE COMPANY AT NGAWI REGENCY | 230 |
| <i>Feti Munika Sakti, Mohamad Harisudin, Raden Rara Aulia Qonita</i> | |
| FOREIGN LABOR RECRUITMENT IN OIL PALM PLANTATION IN MALAYSIA | 241 |
| <i>Marlia Musa, Amin Mahir Abdullah, Mohd Mansor Ismail</i> | |

| | |
|--|-----|
| MICRO ENTREPRENEURS' INTENTION TO BECOME MEMBER OF MICROCREDIT SCHEME WITH EDUCATIONAL TRAINING AND MOTIVATIONAL PROGRAM..... | 250 |
| <i>Rika Terano, Zainalabidin Mohamed and Fatin Najiha Mohd Tammili</i> | |
| FARMING INCOME ANALISYS OF DRY LAND IN THE GUNUNGKIDUL DISTRICT | 257 |
| <i>Aris Slamet Widodo, Retno Wulandari</i> | |
| ANALISYS OF FACTOR THAT INFLUENCE THE DEMAND FOR ORGANIC VEGETABLES IN MEDAN | 264 |
| <i>Sasmita Siregar, Hadriman Khair, Yudha Andriansyah Putra</i> | |
| RICE CONSUMER BEHAVIOR IN THE MUSI RAWAS DISTRICT | 272 |
| <i>Zaini Amin</i> | |
| ANALYSIS OF CONSUMER PERCEPTIONS AGAINST LOCAL AND IMPORT FRUITS IN MEDAN..... | 280 |
| <i>Hadriman Khair</i> | |
| CONSUMERS'INTENTION TO PURCHASE GENETICALLY- MODIFIED SOYBEAN PRODUCTS IN MALAYSIA..... | 288 |
| <i>Welson Chin Vui Son, Kelly Wong Kai Seng, and Juwaidah Sharifuddin</i> | |
| CONSUMER PREFERENCE TOWARDS ORGANIC VEGETABLES AT SUPER INDO SULTAN AGUNG YOGYAKARTA..... | 299 |
| <i>Nisa Murty Andari, Widodo, Sriyadi</i> | |
| STRENGTHENING THE ECONOMIC OF FOREST FRINGES COMMUNITY THROUGH MODEL FOR ENHANCING LOCAL CATTLE COMPETITIVENESS | 306 |
| <i>Teguh Hari Santosa, Toni Herlambang, Nurul Qomariah, dan Oktarina</i> | |
| FACTORS AFFECTING THE PRODUCTION AND BENEFIT ON THE PLANTING SYSTEM OF JAJAR LEGOWO AND TEGEL IN THE DISTRICT MUSI RAWAS | 317 |
| <i>Nila Suryati</i> | |
| PLANTING DISTANCE AND DOSE OF ORGANIC MANURE ON THE SOIL CHEMICAL PROPERTIES AND YIELD OF LOWLAND RICE | 324 |
| <i>Abdul Azis and Damasus Riyanto</i> | |
| TECHNOLOGY ADOPTION OF HIGH QUALITY GREENBEANS SEED BY FARMERS' HOUSEHOLD IN CENTRAL JAVA..... | 334 |
| <i>Wiludjeng Roessali, Wahyu Dyah Prastiwi, Tutik Dalmiyatun</i> | |
| PRODUCTION EFFICIENCY OF IRRIGATION LOWLAND ORGANIC PADDY FARMING SYSTEM AT BAROKAH FARMER'S GROUP IN SEMARANG REGION. | 340 |
| <i>Titik Ekowati, Edy Prasetyo, and Bambang Trisetoyo Eddy</i> | |
| THE FARMER'S KNOWLEDGE AND ATTITUDES FOR ENVIRONMENTAL FRIENDLY OF SHALLOT CULTIVATION IN BALI | 346 |
| <i>Nyoman Ngurah Arya, I Ketut Mahaputra, Suharyanto, Jemmy Rinaldi</i> | |
| THE ANALYSIS OF A VERTICALLY INTEGRATED ORGANIC RICE COMPANY: A CASE STUDY IN THAILAND | 354 |
| <i>Yaniga Prasertwattanakul and Pornthipa Ongkunaruk</i> | |
| EFFECTIVENESS AND GROUP COMMUNICATION NETWORK..... | 361 |
| <i>Indardi</i> | |
| THE INSTITUTIONAL ROLE IN DISSEMINATING SITE-SPECIFIC AGRICULTURAL INNOVATION IN ACEH | 368 |
| <i>Abdul Azis, Basri AB and Sugeng Widodo</i> | |

| | |
|---|-----|
| INCREASE RICE PRODUCTIVITY THROUGH MODELS OF CROPPING SYSTEMS AND THE USE OF HYBRID VARIETIES | 379 |
| <i>Suharno, Rika Nalinda</i> | |
| THE FARMER'S PERCEPTION TO THE USING OF TECHNOLOGY AFTER PADDY'S HARVEST IN SOUTH SULAWESI | 386 |
| <i>Irmayani, Hariyono, Nur Rahmah Safarina Hamzah</i> | |
| VALUATION IRRIGATION OF RICE FARMING AT UPSTREAM AND DOWNSTREAM AREAS IN SPECIAL REGION OF YOGYAKARTA | 392 |
| <i>Habibullah, Triyono, Aris Slamet Widodo</i> | |
| RICE FARMER'S PERCEPTION AND ITS EFFECT TOWARD INTENTION TO ADOPT ORGANIC FARMING | 399 |
| <i>Ashari, Juwaidah Sharifuddin, Zainal Abidin Mohammed, Rika Terano</i> | |
| FACTORS INFLUENCING THE ATTITUDES OF VEGETABLE FARMERS TOWARD THE USE OF INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) IN PENINSULAR MALAYSIA..... | 411 |
| <i>Nor Haslina Nor Rizan, Amin Mahir Abdullah, Norsida Man, and Nolila Mohd Nawi</i> | |

STRENGTHENING THE ECONOMIC OF FOREST FRINGES COMMUNITY THROUGH MODEL FOR ENHANCING LOCAL CATTLE COMPETITIVENESS

Teguh Hari Santosa^{1*)}, Toni Herlambang²⁾, Nurul Qomariah²⁾, dan Oktarina¹⁾

¹⁾ Faculty of Agriculture ²⁾ Faculty of Economics
Jember Muhammadiyah University

Jl. Karimata No. 49 Jember

*corresponding author: teguh_hs66@yahoo.com

ABSTRACT

Local cattle competitiveness of forest fringe community was generally low, so that caused weaknesses of community economic. Effort for enhancing local cattle competitiveness will strengthen community economic through improving husbandry technology, structure of market and industry and condition of local cattle demand. Long purpose of this research was creating strong economics for fringes forest community. Special purpose in second year was implementing model for enhancing local cattle competitiveness at some district at East Java such as Sumenep, Tuban, Bojonegoro, Malang and Blitar. Methode which were used were PRA, FGD, RRA, indept interview and survey. Achievement of model was measured by comparative and competitive advantage analysis (DRCR and PCR). There were 4,729,298 cattles at East Java in 2015, 27 % of them were local cattle (Madura, Ongole, PO, Brahman, Bali). The biggest cattle producer at East Java were District of Sumenep, Tuban, Malang, Bojonegoro and Blitar. Comparative and competitive advantage of imported cattle was high which were showed by DRCR 0.4396 and PCR 0.4262. Whereas competitive advantage of local cattle was high, showed by PCR 0.3677, but comparative advantage was moderate, showed by DRCR 0.5134. Average profit by raising 2 – 3 imported cattles was Rp 1,490,140/cattle/month, while local cattle was Rp 1,454,000/cattle/moth. Imported cattle husbandry contribution on family income was 37.48 %, while local cattle was 33.91 %. Actually, local cattle husbandry relaStively need fewer capital, price of beef was more expensive and more popular to consumer because of less fat content. Six infrastucture of agribussiness which were needed for enhancing local cattle competitiveness were human resources, technology, capital, raw material, machines and market.

Keywords: local cattle competitiveness, comparative advantage, competitive advantage

INTRODUCTION

Local cattle as one of national commodity have potency of competitiveness, could be improved through profitability and its market. Causal factors of competitiveness consist of technology, productivity, input and cost, industry structure and demand condition (Rahman etc., 2007). Enhancing local cattle competitiveness would strenghtening community economic at a national case through improving husbandry technology (include increasing of produktivity, quality, input and cost), management of market and industry structure and local cattle demand condition.

Main central of cattle production (including local cattle) at Java contribute 45 % to national beef production

increased for chasing Indonesian consumption need of beef about 4.5 kg/capita/year (Safitri, 2012). Based on that fact, the chosen focus in this research was on main strategy frame of MP3EI, that was strenghtening local cattle competitiveness of fringes forest community by involving some relevant institutions (university, research institute, Perhutani, husbandry department of husbandry, forestry, industry and trade, NGO etc). It's related to social forestry, that had been became national commitment and Indonesian government political will (July 2nd 2003) and UU No. 41, 1999 about forestry, that forestry development should be directed to potency of forest resourches, based on community empowerment, give priority

(Mersyah, 2005). Potency of local cattle production and its competitiveness still could be.

Previous research by Herlambang etc. (2007-2008) and Herlambang etc. (2011-2012) showed that quality and productivity of local cattle was generally low, the causes were : (a) local cattle was just side bussiness, so good husbandry technology was ignore; (b) feed technology was low; (c) market structure and commercial regulation of local cattle were weak; (d) quality controll from every phase of production until processing were weak. Those caused economic of local cattle rancher at forest fringe was weak too and threathed the effort of forest conservation, because pushed their desire to exploit forest.

Long general purpose of this research was creating strong economic of forest fringe community, all at once keeping sustainable forest rehabilitation. Special purpose in 1st year was formulated model of enhancing local cattle competitiveness as an effort for strengthening economic of forest finger community (had achieved). Special purpode in 2nd year was: implementing reliability of model and improving it at wider area at East Java (District of Sumenep, Tuban, Bojonegoro, Malang and Blitar).

METHOD

This research used participative approach. At the first year (had done), participative approach (qualitive) was grounded for geting good understanding to know interesting case as a support for making research outcome that was model of enhancing local cattle competitiveness for strengthening economic of forest finger community. At second year we used consciousness raising, improving knowledge and skills from community development approach through social learning to deliver information, training and advocacy. This research was applied research, so from first until third year used PRA

to competitive local product and pay attention to excellent competitiveness technology. Together responden and be a part of them.

According to the purpose which had orientation on attitude pattern changing of community, it must be need time. Planed stages of process had done from consciousness raising, information delivering of education subject, training and coaching until monitoring and evaluation. Research about this subject was planned for 3 years. First year had done in 2014, second year fron Januay 1st until Desember 15 th 2015.

Location of research in first year was determined purposive at District of Sumenep, in second year at some districts at east Java such as : Sumenep, Tuban, Bojonegoro, Malang, Blitar (BPTP Jawa Timur, 2011), and in third year was planned at some provinces of Indonesia such as : Central Java, West Java, West Sumatra, Nanggroe Aceh Darussalam, and South Sulawesi (Priyanto, 2011).

This research used stratified random sampling, because forest fringes community consist of heterogen group. Stage of responden choosing was: (1) stratification population, that was clasificationing population to homogen group based on their job and economic activity; (2) from every stratification was choosen 70 respondens and because there were four sub district, so we had 280 resondens.

There were two kind of data, primary and secondary data. Primary data was got from interview and observation on the field, and secondary data was got form related institution. Methode which was used were Participatory Rural Appraisal (PRA) Focus Group Discussion (FGD), Rapid Rural Appraisal (RRA), Indept Interview and Survey.

Data was analized by quantitative and qualitative analysis. Quantitative analysis related to local cattle competitiveness using DRCCR (*Domestic Resources Cost Ratio*) and

(Participatory Rural Appraisal) metode with “ equal personationing and together doing” principles between researcher and responden, in accordance with living :

1. DRCR and PCR < 0,25 competitiveness was very high and very efficient.
2. DRCR and PCR 0,25 – 0,50 competitiveness was high and efficient.
3. DRCR and PCR 0,51 – 0,75 competitiveness was middle and efficiency was not enough.
4. DRCR and PCR 0,76 – 1,00 competitiveness was low and was not efficient.

RESULT AND DISCUSSION

Sum Of Cattle at Research Field

Tabel 1. Sum of Cattle at Research Field

| No. | District | Sum of Cattle (heads) | Sum of Local Cattle (%) |
|-----------|------------|-----------------------|-------------------------|
| 1. | Sumenep | 402.532 | 98 |
| 2. | Tuban | 351.769 | 56 |
| 3. | Malang | 199.431 | 42 |
| 4. | Bojonegoro | 160.137 | 37 |
| 5. | Blitar | 137.943 | 30 |
| East Java | | 4.727.298 | 27 |

Sources : Tempo (2015)

Population of cattle at East Java reach 4,727,298 heads, from that amount 5 district which had the biggest population were Sumenep, Tuban, Malang, Bojonegoro and Blitar.

Implementation of Local Cattle Competitiveness Model at Research Field

Competitiveness shows advantage of a commodity, both comparatively and competitively. Competitive advantage shows efficiency of using domestic production factor to give value added to product at domestic market which is measured by PCR (*Private Cost Ratio*), otherwise comparative advantage measures efficiency of using domestic production factor to make additional devisa which is

PCR (*Private Cost Ratio*) for measuring comparative and competitive advantage (Agustian, 2007).

Assigning of competitiveness: subsidy, protection, import duty, tax and many other policies.

DRCR is economic analysis, consider whole economic aspects without goverment interere/policy. Economic analysis give attention to total output, productivity or provit from all used resources in a project for community or economic activity, without seeing who provide the resources and who will accept the outcome from the project are. The outcome were the social return or the economic returns from activity, so it uses social price or shadow price. Social price for DRCCR in this case was detremined as follow:

1. Tradeable Input :
 - a. Feed

Feed for cattle consist of grass, additional feed such as by-product of rice milling, “*gamblong*”, cutting straw, sugar, sea salt, Java molasses, EM4, Bioplus etc. Some of feed was imported , so shadow price was counted by CIF price.

- b. Medicines

Medicines at ranches in this research was not found as exported and imported commodity, so shadow price was cdetermined equal with private price.

2. Untradeable Input

- a. Labor in this research was from community around the ranches, which were jobless when there no ranches, so it was assumed that *production foregone* was equal with nul, beside it was assumed no transportation cost too for labor. Furthermore shadow wage was equal with financial wage of local labor.

- b. Interest

Shadow price of average private saving interest rate was July 20014 – July 2015 = 12.16% plus average inflation rate in same period that was 5.03 % (*www.bi.go.id*, 2015). Based on

measured by DRCR (*Domestic Resources Cost Ratio*).

CR is financial analysis based on private price, that is real price which is accepted or paid by husbandry. The price has been influenced by government such as this research was equal with production forgone, that was the highest price of opportunity product if there was no ranches. At research field, ranches were found at PHBM forest area with cheap private price for rent, so shadow price was determined equal with ordinary price of rent, that was Rp 3,000,000/ha/year.

3. Output

Output was cattle and cattle was exported commodity, so shadow price was equal with border price FOB (Free on Board).

4. Exchange rate shadow price of exchange rate of rupiah on dollar. To know PCR and DRCR (Table 3).

that calculation, shadow price of interest was 17.19%.

c. Land

Land was included untradable input, shadow price of land in

Revenue and cost of production factors on local cattle farm which was measured by private and social price could be arranged in PAM (Policy Analysis Matrix) as base of calculation

Based on Table 3 it was known that competitiveness of local cattle at research field were:

a. Competitive competitiveness

Competitive competitiveness which was showed by PCR, both local or imported cattle were on **high category**, PCR of imported cattle was = 0.4262), whereas PCR of local cattle was = 0.3677).

Tabel 3. Policy Analysis Matrix per hektar Local Cattle Farm at research Field in 2015 (rupiah)

| Kind of Cattle | Details | Revenue tradeable | Input tradeable | Input untradeable | Profit |
|-----------------|---------------|-------------------|-----------------|-------------------|-------------|
| Local Cattle | Private Price | 16.381.685 | 758.719 | 6.657.594 | 8.965.371 |
| | Social Price | 18.762.343 | 1.150.257 | 7.744.561 | 9.867.524 |
| | Divergence | (2.380.658) | (391.538) | (1.086.967) | (902.153) |
| Imported Cattle | Private Price | 29.735.333 | 1.646.319 | 10.335.043 | 17.753.970 |
| | Social Price | 25.725.649 | 2.312.430 | 12.022.988 | 11.390.230 |
| | Divergence | (4.009.686) | (681.221) | (1.687.945) | (6.378.850) |

Source : Processed Primary Data (2015)

Table 4. PCR and DRCR Local Cattle at Research Field

| Kind of Cattle | PCR (comparative) | | DRCR (competitive) | |
|-----------------|-------------------|---------------------------|--------------------|---------------------------|
| | Value | Competitiveness criterion | Value | Competitiveness criterion |
| Imported cattle | 0.4262 | High | 0.4396 | High |
| Local cattle | 0.3677 | High | 0.5134 | High enough |

Source : Analyzed primary data (2015)

Table 5. Structur of Family Income of Cattle Husbandry per head at Research Field

| Details | Satuan | Imported Cattle* | Local Cattle * |
|----------------------------------|-----------------|------------------|----------------|
| Average raised cattle | heads | 2 – 3 | 2 – 3 |
| Husbandry Profit /head/year | Rp/ head/year | 16,604,904 | 14,400,000 |
| Husbandry Profit /head /month | Rp/ head /month | 893,600 | 746,000 |
| Total other income /month | Rp/ month | 1,490,140 | 1,454,000 |
| Other income + cattle/moth | Rp/ month | 2.383,740 | 2,200,000 |
| Contribution of cattle husbandry | % | 37.48 | 33.91 |

Source: Processed Primary Data (2015)

Information: *) average of 5 district (Sumenep, Tuban, Bojonegoro, Malang and Blitar)

b. Comparative Competitiveness

Comparative Competitiveness which was showed by DRCR, imported cattle was on **high category** (DRCR = 0.4396), whereas local cattle was on **high enough** category (DRCR = 0.5134). Eventhough that fact, local cattle husbandry relatively need fewer capital, price of beef was more expensive and more popular to consumer because of less fat content. Based on the result, local cattle still have good potency to improve in order to supply beef for nation, all at District of Sumenep, Tuban, Bojonegoro, Malang and Blitar. Beside competitiveness, enhancing economic of local cattle husbandry must be getting over with increasing of income, because good income make farmer could fulfill many needs and make better life for their family.

Profit of Local Cattle Husbandry at East Java

Structure of family oncome of cattle husbandry at research field (District of Sumenep, Tuban, Bojonegoro, Malang dan Kabupaten Blitar) showed as followed Table 5.

Table 5 showed that average profit by raising 2 – 3 keads of imported cattle was Rp 1,490,140/ head /month, whereas local cattle was Rp 1,454,000/ head /month, it was not too defferent. It becaused imported cattle need much more cost than local cattle.

Contribution of imported cattle usbandry on family income was 37.48 % , bigger than local cattle that is 33.91 % . It becaused raising imported cattle well had potency to get big profit.

Model for Enhancing Local Cattle Competitiveness as an Effort to Strengthen Economic Of Forest Finger Community

Model for enhancing competitiveness Model was arranged to achieve two purposes, there were: (1) increasing profit and competitiveness criterion from high enough and high to very trough increasing productivity and were known as 6 M, there were :

improving quality. Increasing productivity could be get by improving cultivation technology, whereas improving quality could be get by improving post harvest treatment technology. Generally, technology (methode) was one of six weaknesses which were exist on local cattle agribusiness, so improving technoloy must be supported and balanced by improving the the other weaknesses.

Cattle agribussiness consist of 5 sub system, that were provisioning production factor (such as germ, feed and medicines), cultivation, harvesting and processing, marketing and supporting sub system for improving performance of four others sub system. Supporting sub system consist of some other things, such as infrasturcture, goverment institution, research and information institute, Non Government Organization (NGO), Bank, investor, and stake holder.

Main object of model of enhancing local cattle competitiveness was an effort for overcome any weaknessess on cattle agribussiness by involving related supporting sub system. Agribussines sub system in this model started with farm (husbandry) which was influenced by internal and external factors. Internal factors reated with pasturage and other production factors. Pasturage for local cattle was getting narrower and narrower. The other production factors faced not enough available, such as : decreasing quality of natural resources, quality of husbandry human resources, and limited capital for buying excellent germ. External factors were price of cattle, imported cattle, and invironment problem/ecology. Better quality of imported cattle could be competitor to local cattle which could influenced its price. Low price of local cattle would decrease husbandry interest for running their fram well. Environment problem and ecology which not supporting enough for growing and developing cattle could threatad existence of local cattle. Six infrasturcture on cattle husbandry that

methode, money(capital), men/human resource, material, machines, and market.

a. Human Resource

In every effort, human act as manager and labor, include on local cattle agribusiness. Human, in this case farmer, were expected could implement technology and managing capital well, so that could run bussiness and get high yield and profit.

Effort for increasing quality and improving husbandry ability was absolutely need for increasing local cattle performance. Improving husbandry ability could be done by somehow and someway. As an example, giving information by field instructor and some expert who care to husbandry had done. Unfortunately just 54% - 62.5 % farmer participated it. Because of that many models of improving husbandry ability were very need for provisioning them any kind of skills, both technically and managerial, so that performance of local cattle increase.

Beside technically and managerial, some other things were needed, that were changing of mind and attitude to run farm. Mind of farmer should be consciused about many things, such as not be tempted easily future sales system, how important cooperation among farmer by being group of farmer member was, increasing efficiency and productivity and avoiding damaged loan system etc were. Without good mind, farmers would not had good attitude on their farm, so tehnology and capital could not be used optimally.

b. Methode (technology)

Technology, capital and able human were needed at farm level to handle production process and post harvest treatment, for increasing efficiency and productivity. Research showed that average productivity of local cattle husbandry was still low, so that technology which was needed at farm level was using of feed fermentation methode for over came very cheap or having day loan to loaner with high interest. So, it was needed any

need to be improved unsave feed on dry season. Biological feed suplement was usefull for (1) improving digestion system of cattle, (2) increasing milk production of cattle (3) raising weight of cattle quickly and naturally, fat, and healthy (4) increasing appetite of cattle (5) beef more featy but low fat/cholesterol, (6) cattle was more immune and (7) feces of cattle was not stink so not soiled environment air (8) fewer feces and urine sapi lebih sedikit (9) feces and urine could be used as fertilizer and natural biogas unsave feed on dry season.

Biological feed suplement was usefull for (1) improving digestion system of cattle, (2) increasing milk production of cattle (3) raising weight of cattle quickly and naturally, fat, and healthy (4) increasing appetite of cattle (5) beef more featy but low fat/cholesterol, (6) cattle was more immune and (7) feces of cattle was not stink so not soiled environment air (8) fewer feces and urine sapi lebih sedikit (9) feces and urine could be used as fertilizer and natural biogas.

d. Money

Capital was needed as working capital or investation. Otherwise was not absolutely , capital was needed to buy better technology for local cattle agribusiness. Working capital which was needed for local beef cattle at District of Sumenep based on result of research was Rp 746,000/head/month whereas the other kind of cattle was 893,000/ head/month.

According to analysis result of profit land its contribution on family income, local beef cattle had not been fulfil the whole need of the family yet, so it can be understood tha the farmer often getting hard to obtain working capital. Because of that, cooperation with bank was needed, so there was an opportunity to obtain working capital easily.

Aniway, cooperation with bank was not easy to be done by farmers personally because they just had a few garantie. Some recessive farmer had to

institution which could be trusted as a guarantor by financial institutions. Post-harvest treatment and processing of local cattle need a lot of investment for land, buildings, machines and operational costs. Without supporting sub-systems, farmers or even groups of farmers find it hard to have processing units because of the restrictiveness of capital.

c. Material

Quantity, quality and continuity of material were very important in local cattle cultivation. Less quantity would disturb the flow of the production process, whereas over quantity would not be handled well. Quality would influence the standard quality of the final product, whereas continuity would keep processing running well and supported production target achievement. Production target, both quantity and quality, was important to reach, especially when it had been arranged by the buyer. When farmers could not satisfy buyers, competitors would take their place. Competitors of local cattle were imported cattle and big farmers.

Availability of local cattle feed material could be a problem for farmers and their farms. Availability of feed material in the dry season was one of many causes that farmers could not take care of local cattle farms, both by themselves or groups of farmers, although it had been known that local cattle farms could give a bigger profit than imported beef cattle.

e. Machines/tools

Machines were a kind of technology which was needed for making any job easier, also increasing efficiency and productivity. There were still many machines and tools needed for supporting local cattle agribusinesses. Well-known machines among farmers were feed processors.

f. Market

Market was the final target of every business, including agribusiness, and the main interest of farmers. Open markets and high prices would raise the passion of farmers to pick out any business or commodity, contrary to the condition would lose passion. Competitiveness, its profit and contribution on family income.

sell their products through the ijon system which was.

Even when the market of cattle was not running well, some farmers would change their husbandry with other profitable businesses.

Attitude of the beef cattle market at the farmer level was perfect competition market, which there were many buyers and many farmers as sellers. At this market price maker was agreement between buyer and seller.

Structure of the beef cattle market at the farmer level was very simple, from farmer straight to middle trader (100%), whereas dairy cattle straight to cooperative enterprise (50%). By ignoring the weaknesses of monopsonic market attitude, simple structure of market caused market efficiency at the farmer level was high.

Market Efficiency was a marketing cost and product value ratio, it was one of marketing performance measures. The lower its value, the higher the marketing efficiency, the higher the market performance. Based on market efficiency, market performance of local cattle could be categorized high enough because average marketing cost was very few. Most of farmers sell their products to middle traders straight on the farm. Whereas milk from dairy cattle sell to the cooperative enterprise as long as they could produce standardized products.

Otherwise the market of cattle at the farmer level looked simple and current, but marketing network still needed guidance, especially imported cattle, so that farmers were not left out of up-to-date information on import markets and could fulfill consumer needs.

Different conditions happened at the market of imported cattle, attitude of market was competitive market. There were many sellers and many buyers, but farmers, groups of farmers or any producer had freedom to make prices, even so markets receive imported beef cattle easier because competition was hard with flexible prices. Competition also happened because many kinds of imported cattle had been went into

Furthermore, competitiveness, profit and contribution on family income will be a follow-up and evaluation substance to see which part that still need to further lead and which part need to keep up end.

CONCLUSION

Population of cattle at East Java reach 4,727,298 heads, 27% of them were local cattle (named as Madura, Ongole, PO, Brahman, Bali). Serially, the biggest producer of cattle at East Java were District of Sumenep, Tuban, Malang, Bojonegoro and Blitar.

Competitive and comparative advantage imported cattle was high, which was showed by , PCR = 0.4262 and DRCR = 0.4396. Local cattle had competitive advantage at high category (PCR = 0.3677) but comparative advantage had high enough category (DRCR = 0.5134).

Average profit by raising 2 – 3 heads of imported cattle was Rp 1,490,140/ head /month, whereas local cattle was Rp 1,454,000/ head /month. Contribution of imported cattle husbandry on family income was 37.48 % , bigger than local cattle that was 33.91 %. Even though that fact, raising local cattle needed fewer capital, price of beef was more expensive and beef was more preferred by consumer because of less fat content.

There were six infrastructure of agribusiness for enhancing local cattle competitiveness, that were human resource, technology, capital, raw material and market.

ACKNOWLEDGEMENTS

Our thanks goes to *Ditlitabmas Kemenristekdikti* (Research and Community Services, Direktorat General of Higher Education, Ministry of Research and Higher Education), which had funded this research.

Indonesia and received easily by consumer.

Six infrastructure of agribusiness should be lead for enhancing local cattle

REFERENCES

- Agustian, A. 2007. Daya saing dan profil produk agroindustri skala kecil (kajian di Propinsi Lampung). *Prosiding Seminar Nasional Teknologi Inovatif Pasca Panen untuk Pengembangan Agroindustri Berbasis Peternakan. Balai Besar Penelitian dan Pengembangan Pascapanen Peternakan*. Hal 979 – 989.
- BPTP (Balai Pengkajian Teknologi Peternakan) Jawa Timur. 2011. *Pendampingan Program Swasembada Daging Sapi di Jawa Timur*. bptp-jatim@litbang.deptan.go.id dan bptpiatim@yahoo.com Web admin e-mail: k4trox@gmail.com.
- Herlambang, T., N. Qomariah, T.H. Santoso, and Oktarina. 2007-2008. Analisis keuntungan usahatani sapi lokal di Propinsi Jawa Timur. *Jurnal Ilmu-ilmu Ekonomi*, 2008, 3(2).
- . 2009-2010. Konservasi hutan lindung dan PHBM (Pengelolaan Hutan Bersama Masyarakat) antara Perhutani Kabupaten Sumenep dan Sumenep dengan masyarakat pinggiran hutan. *Jurnal Agritrop (Jurnal Ilmu-ilmu Peternakan)*, 2010, 5(2).
- . 2011-2012. *Analisis Mutu dan Produktivitas Sapi lokal pada Masyarakat Pinggiran Hutan di Kecamatan Ledokombo, Sumenep dan Kecamatan Grujungan, Kabupaten Sumenep*. *Jurnal Agritrop (Jurnal Ilmu-ilmu Peternakan)*, 2012, 7(1).

- Mersyah, R. 2005. Desain sistem budidaya sapi potong berkelanjutan untuk mendukung pelaksanaan otonomi daerah di Kabupaten Bengkulu Selatan. *Disertasi*, Sekolah Pascasarjana, Institut Peternakan Bogor.
- Safitri. 2012. Mewujudkan Swasembada Daging 2014 sebagai kontribusi peternakan berbasis sumber daya lokal. WordPress.com.
- Tempo . 2015. 'Produksi sapi di Jawa Timur'. [Http://www.tempo.go.id](http://www.tempo.go.id).

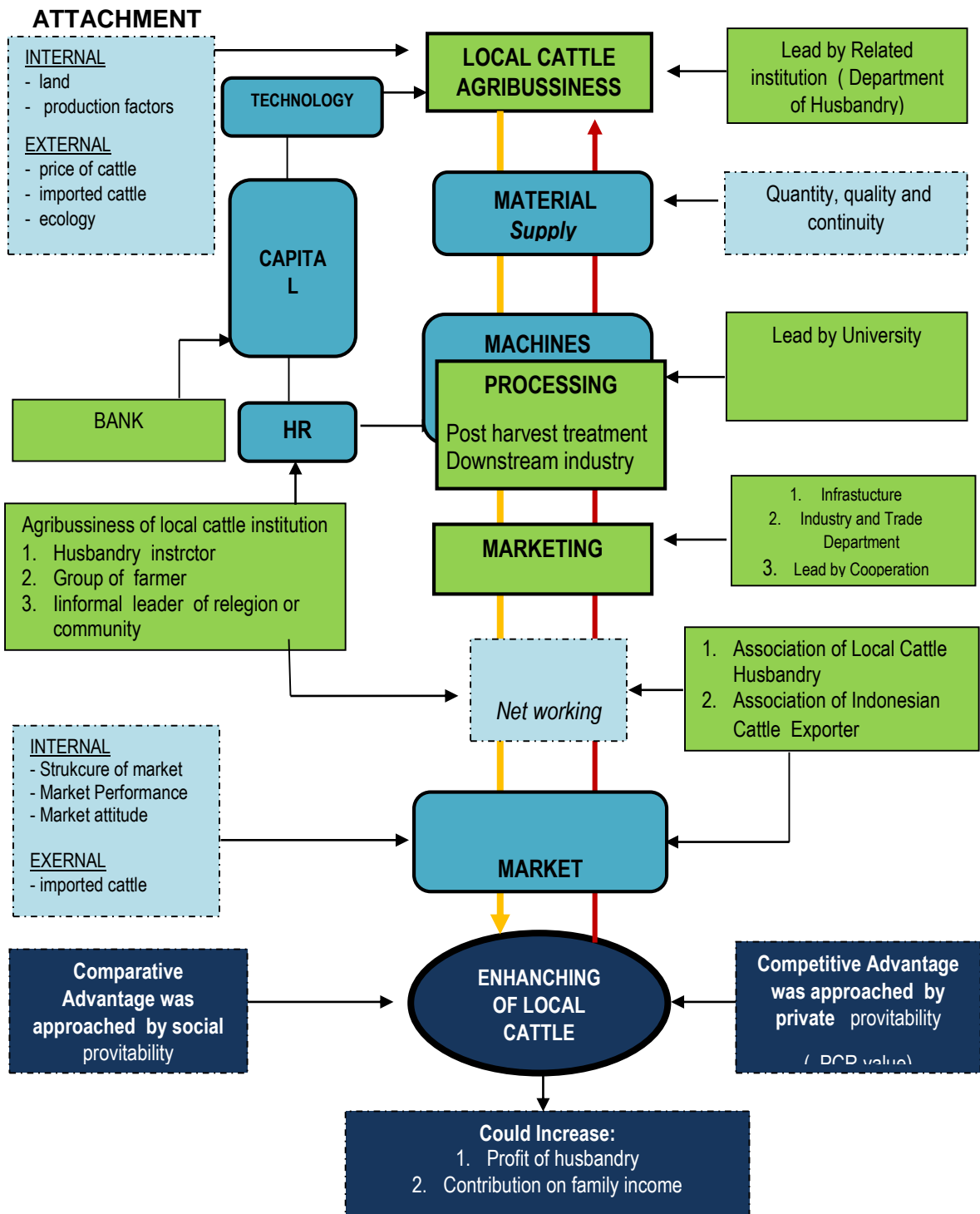


Figure Model of Enhanching Local Cattle Competitiveness

Keterangan:



: Sub system of agribussnes



: Flow of process



: infrastucture of local cattle agribussiness

: Flow of follow up



: Local Cattle competitiveness

DISCUSSION FROM PARALLEL SESSION

| | |
|---------------------|---|
| PAPER TITTLE | Strengthening The Economic of Forest Fringes Community Through Model for Enhancing Local Cattle Competitiveness |
| AUTHOR | Teguh Hari Santosa, Toni Herlambang, Nurul Qomariah, and Oktarina |
| DISCUSSION | |
| QUESTION | <ol style="list-style-type: none"> 1. How about the detail of technology six infrastructure? 2. How can you measure the shadow price for DRC Ratio? |
| ANSWER | <ol style="list-style-type: none"> 1. Human resource still weak, the education still low, and they have no money so they can't accept the new technology. |
| SUGGESTION | <ol style="list-style-type: none"> 1. Check the writing |



Agribusiness Development
for Human Welfare

2016

"Small and Medium-sized
Enterprises Competitiveness"



SECRETARIAT OFFICE

F3 Ground Floor, Agribusiness Department,
Universitas Muhammadiyah Yogyakarta
Jalan Lingkar Selatan Tamantirto,
Bantul. D.I.Yogyakarta 55183
Phone +62274 387656 (Ext 201)
Fax +62274 387646

ISBN 978-602-7577-70-1



9 786027 577701