

Supported by :



Melayani Dengan Setulus Hati



BANK PEMBANGUNAN DAERAH

Kita berkembang bersama



PROCEEDINGS International Seminar on Agro-tourism Development (ISAD)

AGRO-TOURISM:
EDUCATING, CONSERVING,
AND EMPOWERING

Hosted by:



Faculty of Agriculture
Universitas Pembangunan Nasional "Veteran" Yogyakarta
Indonesia

Held on:
December 6th - 8th, 2011

ISBN : 978-979-18768-1-0

Supported by:



<http://isad.upnyk.ac.id>

Proceedings

**International Seminar on Agro-tourism
Development (ISAD 2011)**

**AGRO-TOURISM:
EDUCATING, CONSERVING AND EMPOWERING**



Field Trip held on 6 December 2011

Seminar held on 7 - 8 December 2011
in Faculty of Agriculture, UPN "Veteran" Yogyakarta
Indonesia

ISBN: 978-979-18768-1-0

Proceedings

**International Seminar on Agro-tourism Development
(ISAD 2011)**

Editors

Rukmowati Brotodjojo

Paul Holford

Ahmad Shuib

Ratna Roostika

Azahar Hussain Ismail

M. Baiquni

Haruo Kuroyanagi

Ani Andayani

Mofit Eko Poerwanto

Technical Editors

Oktavia S. Padmini

Sari Virgawati

Vini Arumsari

Chairperson

Siti Syamsiar

**FACULTY OF AGRICULTURE
UNIVERSITAS PEMBANGUNAN NASIONAL “VETERAN”
YOGYAKARTA**

Preface

Agro-tourism has become increasingly popular among domestic and foreign travellers. This is because Agro-tourism manages to utilize the natural beauty of agricultural landscapes and the cultural diversity of each region. The goal of Agro-tourism is not only for natural conservation, but also for empowering local communities socially and economically. Simply, by developing Agro-tourism, local economies grow. However, to further empower the local communities, it is imperative that they are involved in the planning, decision making and management of the Agro-tourism. Thus, education plays an important role in this matter. The theme of the seminar is Agro-tourism development based on local resources. Topics of interest for the seminar include: Services on Agro-tourism, Socio-culture, Economics and business, Regional development, Land management, Processing of agricultural products, Agronomy, Forestry, Livestock, and Fishery.

The objectives of the seminar are sharing research information and empirical experiences, as well as innovative ideas that will open new perspectives on agriculture related to tourism issues. It also aims to establish interaction and communication among researchers, observers and practitioners in finding solutions of the problems regarding agriculture and tourism to improve welfare of the rural areas.

On behalf of the international seminar organizers, we are pleased to present the Proceedings of the International Seminar on Agro-tourism Development (ISAD 2011). ISAD is an event held in cooperation between the Faculty of Agriculture Universitas Pembangunan Nasional "Veteran" (UPN "Veteran"), Yogyakarta, Indonesia and the Faculty of Resource Science and Technology and Faculty of Economics and Business Universiti Malaysia Sarawak, Malaysia.

Finally, we would like to express our gratitude to the Rector UPN "Veteran", Yogyakarta for the financial support, the Dean of the Faculty of Agriculture for hosting, and the Scientific and Steering Committee. We wish to thank the keynote speaker Sultan Hamengku Buwana X, and invited speakers Syukur Iwantoro, MS., MBA, the Head of Agro-tourism Commissions, Ministry of Agriculture Indonesia; Prof. Shuib Ahmad, Institute of Agricultural and Food Policy Studies, Putra Infoport, Universiti Putra Malaysia; Prof. Haruo Kuroyanagi, Jogakuen Sugiyama University; Prof. Jesusa D. Ortuoste, Sultan Kudarat State University The Philippines; Marc Vanacht, President of AG Business Consultant, USA; and Dr. M. Reza, Expert of Taman Buah Mekarsari, Indonesia; as well as participants for their contribution in making the seminar a success. We wish to thank the Regency and Local Government of Bantul Yogyakarta as the major sponsor and all other sponsors for their contribution in making this seminar possible. As a Chairperson, I highly appreciate the great efforts of the members of the organizing committee whose hard work made this seminar a great success.

Yogyakarta, December 8, 2011
Siti Syamsiar
Chairperson, ISAD 2011

2011 ISAD Committee

Organizing Committee Members

| | |
|----------------------------------|---|
| Chair Person | : Dr.Siti Syamsiar |
| Vice Chair Person | : Dr. Mustadjab HK, Sri Sumarsih, MP |
| Secretary | : Dr. Mofit Eko Poerwanto, Dwi Aulia Puspitaningrum, MP. Sari Virgawati,M.Eng., Siti Amini |
| Treasurer | : Chimayatus Solichah, MP., Wulandari DER, MP |
| Proceeding and Paper | : Dr. O.S. Padmini, Vini Arumsari,MP., Maryana, MP., Eko Amiaji Julianto, MP., Rina Sri Lestari, MP., Tuti Setyaningrum, MSi. |
| Program Section | : Ari Wijayani, MP., Alif Waluyo, MP. |
| Presentation | : AZ. Purwono Budi S, MP., Vandrias Dewantoro., MSi., Daru Retnowati, MSi. Heni Handri Utami, MM. |
| Food and Beverage | : Indah Widowati, MP., Nurgaini, MP., Tutut Wirawati, MSi., Lelanti Peniwiratri, MP. |
| Sponsorship | : Susila Herlambang, MSi., M. Husain Kasim, MP., Heti Herastuti, MP., Antik Suprihanti, MSi. |
| Accommodation and Publication | : Lanjar Sudarto, MT., Darban H., MP., Suwardi, MP. |

Steering / Scientific Committee Members

- Prof. Haruo Kuroyanagi (Sugiyama Jogakuen University, Nagoya, Japan)
- Prof. Soeharto (UPN “Veteran” Yogyakarta, Indonesia).
- Assoc. Prof. Paul Holford (The University of Western, Sydney, Australia)
- Dr. Abdul Rizal AZ. (UPN “Veteran” Yogyakarta, Indonesia)
- Dr. Ani Andayani (Directorate General of Horticulture, Ministry of Agriculture Indonesia)
- Dr. Azahar Hussain Ismail (UNIMAS Malaysia)
- Dr. Basuki (UPN “Veteran” Yogyakarta, Indonesia)
- Dr. Budiarto (UPN “Veteran” Yogyakarta, Indonesia)
- Dr. Juarini (UPN “Veteran” Yogyakarta, Indonesia)
- Dr. M. Baiquni (Study Center of Tourism, Universitas Gadjah Mada, Indonesia)
- Dr. Nanik Dara Senjawati (UPN “Veteran” Yogyakarta, Indonesia)
- Dr. Ratna Roostika (UPN “Veteran” Yogyakarta, Indonesia)
- Dr. Rukmowati Brotodjojo (UPN “Veteran” Yogyakarta, Indonesia)
- Dr. Sri Wuryani (UPN “Veteran” Yogyakarta, Indonesia).
- Dr. S. Setyo Wardoyo (UPN “Veteran” Yogyakarta, Indonesia)
- Dr. Sumarwoto, PS (UPN “Veteran” Yogyakarta, Indonesia)
- Agus Santosa, M.Si (UPN “Veteran” Yogyakarta, Indonesia)
- Budi Widayanto, M.Si (UPN “Veteran” Yogyakarta, Indonesia)
- Didi Saidi, M.Si (UPN “Veteran” Yogyakarta, Indonesia)
- Ellen Rosyelina Sasmita, MP (UPN “Veteran” Yogyakarta, Indonesia)
- Lagiman, M.Si, (UPN “Veteran” Yogyakarta, Indonesia)
- Rati Riyati, MP (UPN “Veteran” Yogyakarta, Indonesia)
- Siwi Hardiastuti EK, SH., MP. (UPN “Veteran” Yogyakarta, Indonesia)

Contents

Table of Contents

Committees

Preface

Sponsors

Keynote Speaker

Agro-tourism Development Policy in Yogyakarta Special Region, Indonesia. **Sultan of Yogyakarta.** 1

Plenary Speakers

- 1 Policy and Program of Agro-tourism Development in Indonesia. **Syukur Iwantoro.** Head of Agro-tourism Commissions, Ministry of Agriculture Indonesia. 2
- 2 The Role of Education in Developing Best Service Management in Agro-tourism **Ahmad Shuib.** Institute of Agricultural and Food Policy Studies, Putra Infoport, Universiti Putra Malaysia. 3
- 3 Development and Problem of Green Tourism in Rural Japan: A Possible Model for Green (Agro) in Bantul Regency, Yogyakarta Special Region. **Haruo Kuroyanagi.** Jogakuen Sugiyama University, Japan. 12
- 4 Developing Agro-tourism Region Based on Local Resources for Sustainable Development (A Study in Bantul Regency, Yogyakarta Special Region Province). **Siti Syamsiar.** UPN "Veteran" Yogyakarta. 18
- 5 Harnessing Agri-Tourism Opportunities through Public and Private Partnerships. **Jesusa D. Ortuoste.** Sultan Kudarat State University Philippines. 25
- 6 Business Strategy for Developing Sustainable Agro-tourism. **Marc Vanacht.** AG Business Consultants, USA. 27
- 7 Agro-tourism Development for Community Empowerment. **M. Reza.** Taman Buah Mekarsari, Indonesia. 32
- 8 Ecotourism Program in Oil Palm Plantation. **Barakala, SSi., MEEM.** PT. Bisma Dharma Kencana, Indonesia 37

Category : Oral Presentation

Services

- 9 Visitors Satisfaction Analysis on Salak Pondoh Agrotourism in Turi, Sleman Yogyakarta. **Budiarto.** 43

Socio-culture

- 10 Access to Land and Changes in Agrarian Structure. **Mustapit.** 54

| | | |
|----|---|----|
| 11 | Sinamay Women Weavers in Argao and Carmen, Central Philippines. Wilma C. Giango, Rebecca dC. Manalastas, Adora A. Villaganas, Cynthia Z. Sy, Carmelina C. Aguirre, Elvisa O. Basubas, Arwin Z. Visitacion. | 65 |
| 12 | The Women Trisikad Drivers of Cebu City, Central Philippines: Their Fantasies and Aspirations. Rebecca dC. Manalastas, Ponciano C. Bontia, Adora A. Villaganas, Wilma C. Giango, Cynthia Z. Sy, Carmelina C. Aguirre, Elvisa O. Basubas. | 68 |
| 13 | The Role of Natural Resources and Socio-Cultural Aspects as The Basic Components in The Tourism Village Development in Administrative Territory of Yogyakarta (DIY) Province. Budi Widayanto, Heni Handri Utami. | 72 |
| 14 | Community Development Based on Tourism Village : An Exploratory Review of Alternative Development Approaches. Eko Murdiyanto. | 82 |

Economics and business

| | | |
|----|---|-----|
| 15 | The Flourishing Small-Scale Entrepreneurial Activities in Station 3, Barangay Manok-Manok, Boracay, Aklan, Western Philippines. Marde T. Ponce, Rodolfo B. Burgos, Rebecca Dc. Manalastas, Adoracion A. Lawas, Adora A. Villaganas, Wilma C. Giango, Cynthia Z. Sy, Carmelita C. Aguirre, Arwin Z. Visitacion. | 90 |
| 16 | The Role of Women in Small-Scale Informal Trade Centers of Handicraft Industry in Cebu, Philippines. Adora A. Villaganas, Victor D. Villaganas, Rebecca dC. Manalastas, Wilma C. Giango, Cynthia Z. Sy, Carmelina C. Aguirre, Elvisa O. Basubas. | 94 |
| 17 | Competitiveness Acceleration Strategy on Agribusiness “Three-Five Model”. Soetrio. | 98 |
| 18 | Strategic Analysis on Development of Value Chain for Ecotourism Village Gamplong Sleman Yogyakarta. Dwi Aulia Puspitaningrum. | 105 |
| 19 | Assessment of Women in Secondhand Retail (Ukay-Ukay) Trade: in Cebu, Central Philippines. Ponciano C. Bontia, Rebecca dC. Manalastas, Adora A. Villaganas, Wilma C. Giango, Cynthia Z. Sy, Carmelina C. Aguirre, Elvisa O. Basubas, Arwin Z. Visitacion. | 111 |
| 20 | An Exploratory Analysis of Economic Viability of Maize Farming in the Province of East Nusa Tenggara. Yusuf, Masniah, and Jangkung Handoyo Mulyo. | 115 |
| 21 | Impact of Agropolitan Development on Socio Economics of Farmers in Sleman Agro-tourism District, Yogyakarta. Antik Suprihanti. | 128 |
| 22 | The Assessment of Supply Chain Management on Tangerine cv Pontianak in West Kalimantan, Indonesia. Supriyanto, A, A. Musyafak, L. Zamzami. | 141 |
| 23 | The Flourishing Bakasi (<i>gymnothoraxrichardsoni</i>) Livelihood in Cordova, Cebu, Philippines. Cynthia Z. Sy, Wilma C. Giango, Rebecca Dc. Manalastas, Adora A. Villaganas, Carmelina C. Aguirre, Elvisa O. Basubas, Arwin Z. Visitacion, Marde T. Ponce, Nerissa Bontia. | 153 |
| 24 | Feasibility Study of Dragon Fruit-Based Agrotourism Development in Yogyakarta Province. Agus Santosa. | 157 |

- 25 The Influence of Tea Plucking Technology Implementation to The Product, Job Opportunity for Woman and Study of Agro-tourism at PT. Perkebunan Nusantara VII (Persero) Pagar Alam Business Unit, South Sumatera Province. **Siti Hamidah, Juarini.** 166

Regional development

- 26 Agro Tourism and Rural Development in Sri Lanka (With Special Reference to Nuwara Eliya District). **Wijitapure Wimalaratana, S.M.P Senanayke.** 174
- 27 Agro-tourism Development in Timor Tengah Selatan: Limitations and Advantages. **Dina Viktoria Sinlae.** 189
- 28 Opportunities of Agro-tourism Development in Nepal. **Dhruba Raj Bhattarai, Shanta Pokhrel.** 201
- 29 Agro-tourism Planning in Kedungkayang, Wonolelo, Sawangan, Magelang. **Lis Noer Aini, Bambang Heri Isnawan, Arif Suwatno.** 208
- 30 Development of Agro-tourism at The Orchard Mangunan at Bantul Yogyakarta Special Region Province. **M. Nurcholis.** 216
- 31 Agro-tourism Rehabilitation by using Local Resources as an Effort of the Community Welfare Improvement at the Southern Slope of Mount Merapi, Yogyakarta, Indonesia. **Alif Waluyo, Sari Virgawati.** 227
- 32 Community-Based Agri-ecotourism in Kulon Progo and Bantul Regency. **Teguh Kismantoroadji.** 234
- 33 Potentials of the Tourist Village of Karangtengah Imogiri Bantul. **Indah Widowati.** 241

Land management

- 34 Water Utilization Efficiency Against the Growth and Yield of Rice (*Oryza sativa*) in Watershed Yeh Ho Tabanan-Bali. **IGK. Dana Arsana, Djoko Prajitno, Abdul Syukur, Heru Hendrayana.** 248
- 35 Substitution of Ammonium Sulphate Fertilizer to Increase The Productivity of Sugarcane Cultivation on Low-Land and Up-Land for Supporting The Development of Agro-tourism Economically. **Nurhidayati, Abdul Basit Sunawan.** 258
- 36 Agro-tourism Base of Good Agriculture Practices. **Endah Budi Irawati.** 270
- 37 Development of Agriculture and Tourism on The Land of Sand, Opportunities and Challenges. **Muryanti.** 278
- 38 Influence of Aggregate Stability on Infiltration. **Subroto Padmosudarso.** 285
- 39 Soil Characteristic That is Overgrown with Mangroves Api-Api (*Avicennia sp*) and Nipah (*Nypa fruticans*) in Estuary Area, Cijulang, Ciarnis, West Java. **Dyah Arbiwati, Ajeng Angguni P, Partoyo.** 295
- 40 Determination of Classification Land Suitability for Tourism Areas in Jonggol, Bogor District. **S. Setyo Wardoyo.** 301
- 41 The Essential of Precision Agriculture to Minimize The Environmental Impact of Agro-tourism Development. **Sari Virgawati, Sri Sumarsih, Herwin Lukito.** 306

- 42 The Decrease of Water Quality in Lake Rawa Pening The City of Semarang. 315
Eko Amiadji Julianto, Lanjar Sudarto, Lalu Agus Wirawan.
- 43 Potential and Development of Coastal Sandy Land for Agriculture and Tourism. 322
Didi Saidi, Tuti Setyaningrum, A.Z. Purwono Budi Santoso.

Processing of agricultural products

- 44 Forest Conservation and Food Security Based on Local Food Resources of 331
Iles-Iles (Amorphophallus muelleri Blume) in Supporting Ecotourism.
Sumarwoto and Budiadi.

Agronomy

- 45 Agro-tourism Potential and Sustainable Agriculture in Lampung. **Rusdi Evizal,** 339
Fembriarti Erry Prasmatiwi.
- 46 An Inventory of Pests and Disease Attacking *Jatropha* at Potorono Village, 349
Yogyakarta, Indonesia to Support The Development of Agro-tourism.
R.R. Rukmowati Brotodjojo, Sri Sumarsih.
- 47 Integrated Farming Systems to Support Agro-tourism at Kerta Village, 359
Payangan Subdistrict of Gianyar-Bali. **I Ketut Kariada, I. G. K. Dana.**
- 48 Management of CVPD by Controlling *Diaphorina citri* for Developing Agro- 372
tourism on Citrus. **Mofit Eko Poerwanto.**
- 49 Environmentally Friendly Rice Production Increased By Plant Growth Promoting 383
Rhizobacteria to Develop Agro-tourism. **Oktavia S. Padmini.**
- 50 The Potential of Plant Tissue Culture in The Agro-tourism Development. 393
Endah Wahyurini.
- 51 Sustainable Durian Production for Rural Agro-tourism Development in 402
Alasmalang, Banyumas, Central Java. **Sakhidin.**
- 52 Performance of Three Dahlia Cultivars with Respect to Foliar Fertilizer 406
Applications to Support Agro-tourism Around Mount Merapi. **Heti Herastuti.**
- 53 *Aloe Vera* Organic Cultivation for Supporting Tourism Industry in Yogyakarta. 411
Ellen Rosyelina Sasmita, Supono Budi Sutoto.
- 54 Increasing Rice Production By Legumes Substituting on Crop Rotation and 420
Organic Fertilizer to Develop Agro-tourism. **Oktavia S. Padmini.**
- 55 The Harvesting Moment is an Agro-tourism on The Winged Bean Cultivation. 429
Sugeng Priyanto, Maryana.
- 56 Quality Improvement *Phalaenopsis amabilis* Bl. to Beauty of Agro-tourism 432
Area. **Retno Suryati, H. Mustadjab HK, Ika Septiningsih.**
- 57 Oviposition Preference Determination of *Diaphorina citri* Kuwayama to The 440
Symtomatic and Asymtomatic Citrus Plant of CVPD for Supporting Agro-tourism
on Citrus. **Mofit Eko Poerwanto, Chimayatus Solichah.**
- 58 The Effect of Gibberellin Concentration and Composition of Media on The 448
Growth of Kawista. **Aisyah Fatwa Sari, Lagiman, Ami Suryawati.**

| | | |
|----|---|-----|
| 59 | Assessment Types of Extracts and Length of Soaking Time on the Growth of Pepper (<i>Piper nigrum</i> L.) Plant Cutting. Darban Haryanto, Suwitno, Daisy Prapto Sriyani. | 454 |
| 60 | Callus Regeneration Post Gamma Ray Irradiation for Producing Seeds That Were Expected Resistant to Fusarium Wilt Disease to Support Agro-tourism. Ari Wijayani, Mofit Eko Poerwanto. | 460 |

Other topics related to Agro-tourism

| | | |
|----|--|-----|
| 61 | Increasing Household Food Security through The Role of Traditional Local Staple Food. Rita Hanafie. | 466 |
| 62 | Strategy Analysis of Creative Industries Development in Bantul District, Province of Yogyakarta. Dyah Rachmawati, Ahmad Muhsin. | 473 |
| 63 | Agriculture Biodiversity to Support Food Sovereignty. Lagiman. | 482 |

Category : Poster

| | | |
|----|--|-----|
| 64 | Pine for Forest Conservation to Support Agro-tourism. Rina Srilestari. | 489 |
| 65 | Selection of Soybean Variety for Leaf-Use Only and Its Characteristics Survey. Yong Duk Kim, In Kwan Song, Kwang Ju Lee, Young Taek Yang, Sung Taek Kim, Won Young Han, Bong Chan Kim. | 494 |
| 66 | The Influence of Jasmine Bush Stalks and Plant Growth Regulators on Growth and Development of Young Plants to Supply The Demand of Flowers as a Support for Agro-tourism. Rati Riyati, Sugeng Priyanto, Istu Ragil Murni. | 505 |
| 67 | Paket Diversity in Sleman Regency for Agro-tourism Development in Administrative Territory of Yogyakarta (DIY). Basuki, Suyanto Zaenal Arifin. | 512 |
| 68 | Restructuring of Kinahrejo Area Based on Agro-Ecotourism After The Eruption of Merapi Using Ornamental Plants. Ari Wijayani, Irhas Effendi, Gunawan Nusanto, Hendri Gusaptono, Susilastuti, Eko Amiadji. | 522 |
| 69 | Natural Laboratory as a Society Learning Center. Bargumono, Subroto Padmosudarso. | 530 |
| 70 | Evaluation of Grading Tool on <i>Arumanis</i> Mango Plantations. Wahyunindyawati, Sri Harwanti. | 541 |

COMPETITIVENESS ACCELERATION STRATEGY ON AGRIBUSINESS “THREE-FIVE MODEL”

Soetriono

Agribusiness Study Program Post Graduate Program
Agriculture Faculty University of Jember

Email: irtusss@yahoo.com

ABSTRACT

This research has aimed to study, to predict, and to formulate the competitiveness of Robusta coffee bean, soybean, paddy, sugar, and tobacco. The methods of Three-Five Competitiveness. The results of the research showed that: from the side of supply, the production should consider some factors, such as the number of production in Indonesia, the price of fertilizer in the country, the government policy of protection that were less support to the competitiveness acceleration; from the demand perspective, there is a significant opportunity in coffee post harvest processing demand in the domestic and world market; from the environment and farming business perspective, it is considered as monoculture and has not yet applied suggested technical culture, the awareness of smallholders about genuine seed variety is low, infected by plant diseases. Also, is just processed in the primary level meanwhile downstream product processing has not yet been conducted significantly; from the policy perspective, it is concluded that the government support in the domestic policy is lacking (shown by the coefficient of Domestic Resource Cost Ratio (DRC) is better than Private Cost Ratio (PCR), the coefficient of Nominal Protection Coefficient on Tradable Output (NPCO) and Subsidy Ratio to Producers (SRP) is not supporting the competitiveness acceleration if they are compared to the world price). But, the coefficient of Nominal Protection Coefficient on Tradable Inputs (NPCI) of the government policy has contributed a significant support for the competitiveness acceleration and; from the social perspective, it is shown that the smallholders is dominantly risk neutral or safety first.

KEY WORDS: competitiveness, three-five

INTRODUCTION

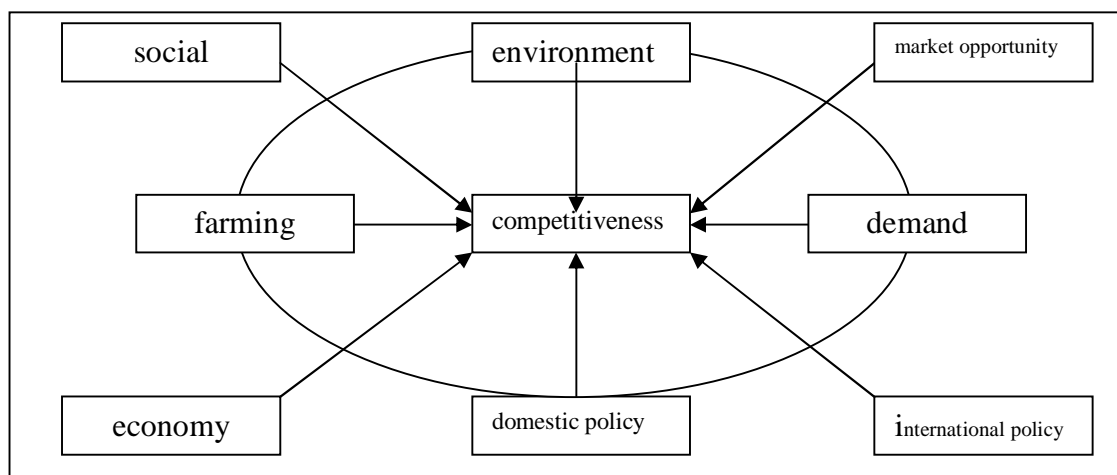
It has been discussed a lot by many people, including farmers, college students, practitioners, and the policy made official about the competitiveness on agribusiness. Based on the basic mindset on agribusiness concept which has domestic and international competitiveness, the acceleration of both product and productivity is badly needed. For that reason, the relevance between supporting substances is needed. The substances are the government policy, the farmer technology adopt level, the farmer's internal factor such as risk-taking unwillingness, and the availability of means and infrastructure for developing certain commodity.

Aimed to support the continuity of strong national agribusiness at future, so examination and development which enable to produce the competitiveness acceleration strategy on agribusiness in both domestic and world market are needed. That competitiveness does not

ISAD, Yogyakarta, INDONESIA, December 6-8, 2011

only rely on the inclusive comparative strength aspects available in the commodity intended, but it should be viewed as whole comparative strength, competitive strength, and government policy in agribusiness effort by the application of “three five” competitiveness.

The concept of three five competitiveness (Soetriono, 2004), the base of this paper, which is three five is the completing and combination from old theories about competitiveness, such as Pre-Classic Theory (Mercantilism), Classic Theory of Adam Smith and David Ricardo, Modern Theory of Hecksher-Ohlin, Alternative Theory by M. Porter (Competitive Advantage) and R. D. Aveni (Hyper Competitive). The three five competitiveness can be illustrated at Picture 1.



Picture 1. The Three-Five Competitiveness

not only caused by internal factor but also by external factor. The internal factors are: 1) farming effort which consists of share holder of labor, seed, fertilizer, agro chemical, capital, risk, competitor in agribusiness effort, natural resource, and technology used. 2) direct consumer demand and agro industry which can give additional value and continuity comparative strength (SCA) as D’Aveni, 1992 said. 3) Agro ecology environment, means and infrastructure, transportation, and type of market faced. Then, the external factors that may cause agribusiness competitiveness are: 1) international policy which consists of economic condition, international market, international convention, and market politic from supplier country. 2) social-economic condition of local and international farmers. 3) opportunity of domestic and international market and 4) domestic policy (politic, condition of the economy of country and taking side on farmers and agro industry craftsman) and 5) the condition of domestic economy. The purpose of this study is to learn, predict, and formulate agribusiness competitiveness, so the model of competitiveness can be gained by applying three five competitiveness.

METHODS

Study area is determined purposively (Nasir, 1989 and Soetriono and Hanafie, 2007) based on the consideration that the chosen area is central production, in this case is East Java. This study consists of some analysis; they are: analysis of production function, feasibility effort, analysis of risk based on utility function through Certainty Equivalent Approach (Soetriono,

2004) Policy Analysis Matrix (PAM) (Monke and Pearson, 1989) Function of Profit (Yotopaulus and Lau, 1973), Additional Value (Soetriono, 2004) and Sensitivity (Soetriono, 2006). The commodities examined are coffee, tobacco, sugar cane, paddy, and soybean.

RESULTS AND DISCUSSION

Based on the analysis result, it is known that some of agribusiness commodities which are held by the farmer are financially and economically feasible to manage. The criteria used for feasibility investment are Net Present Value (NPV), Net Benefit Cost Ratio (B/C), Gross Benefit Cost Ratio B/C, Internal Rate of Return (IRR), and Payback Periods (PP). Those five criteria all together are feasible, but every commodity has its different feasibility. Besides, the divergence value between financial and economic feasibility that has positive and or negative value is still exist. It shows that there is still government policy that can prevent the competitiveness.

The agribusiness risk analysis states that it cannot take the risk. It is proven by capital outpouring that is given for farming effort especially the capital for fertilizer cost. Most of farmers are not able to take risk in farming, so the output resulted it is not good if it is compared with the potential productivity level.

The policy matrix analysis is used for measuring competitiveness, government policy effort at agriculture production system profitability and the efficiency of resource used. Based on Table 1, it is showed that the agribusiness system of five commodities show that there is competitiveness (competitive strength and comparative strength). It is showed by the coefficient of Private Cost Ratio (PCR) and Domestic Resource Cost (DRC). The illustration of five commodities competitiveness is explained on Table 1. The competitive strength is presented by PCR ratio which means that the commodity analyzed has competitive strength. It means that in delivering the units of additional value of output on private price, the sacrifice of domestic resource factor in certain unit is needed. Besides, PRC is a comparative strength which describes that analyzed commodity has economical strength/economical efficiency. The economical efficiency level that can reflect by agribusiness comparative strength is showed by PRC coefficient, which economically products the domestic commodity more efficient and useful than makes import. The agribusiness competitiveness ratio is more and more close by, so the competitiveness will decrease, and vice versa.

Table 1. Value of competitiveness coefficient and effect of government commodity policy on coffee, tobacco, sugar cane, paddy, and soybean

| Commodity | PCR | DRC | NPCO | NPCI | EPC | PC | SRP |
|------------|-------|-------|-------|-------|-------|-------|--------|
| Coffee | 0.417 | 0.284 | 0.792 | 0.806 | 0.910 | 0.642 | 0.233 |
| Tobacco | 0.804 | 0.739 | 0.944 | 0.553 | 0.960 | 0.713 | -0.071 |
| Sugar cane | 0.668 | 0.581 | 1.092 | 0.879 | 1.147 | 0.907 | -0.031 |
| Paddy | 0.446 | 0.300 | 0.680 | 0.670 | 0.370 | 0.540 | -0.283 |
| Soybean | 0.574 | 0.438 | 0.920 | 0.948 | 0.918 | 0.696 | -0.159 |

Source: Various Sources Soetriono, 2008, 2009, 2010, 2011

For example the following part is explained about robusta coffee commodity. The other government policy can be seen from Nominal Protection Coefficient on Tradable Inputs (NPCI) which shows that producer gains protection for input tradable from the government in

the buying price of fertilizer input and agro chemical are lower than the real price. In contrast with input non tradable this declares that there has not been government policy which supported yet, there is no divergence for compost input, embroidery, and labor. In this way, the government role affects the farmer in the aspect of buying price of fertilizer and agro chemical are about 8% to 27% lower (coffee). However, if we look from the government policy's point of view that decides fertilizer subsidy about 40% for farmer and gardener, it can be said that it is less effective. It is because of the existence of divergence between the policy and the real condition. The farmer gains unexpected value from Nominal Protection Coefficient on Tradable Output (NPCO). It is because of the domestic output value is lower than the international output value which is around 17.6% to 23.5% lower. It is not in line with tradable input price gained by the farmer which is cheaper, but the output price is also lower than the real price. So it can be illustrated that the input tradable policy does not affect the farmer because the output price that the farmer got is 6.6% lower than the real price (illustration for coffee).

The statement above supported by the policy to input and output at the same time that is showed by Profitability Coefficient (PC) that is 16.5% to 34.9% lower compared with the real price. In other word, there is a policy that prevents additional value that the farmer gained. This is in line with the Profitability Coefficient (PC) value which indicates that the whole government policy has not supported the development of agribusiness yet which is managed by people. It is showed by private profit that is lower than social profit about 25% to 44.8%. It is supported by Subsidy Ratio to Producer (SRP) value which shows the government protection improves production cost about 18% to 28.2% more expensive.

Sensitivity analysis held to know how big the sensitivity of production cost if there is increment. From the analysis result gained that when the employer wages production cost sensitivity increase up to 60%, the coffee productivity decreases 5%, price of fertilizer and pesticide increase 25%, the value got from each policy does not affect significantly competitive strength, comparative strength, government protection, both of input and output, and also the whole policy stays at the beginning condition, that is the government policy is not yet or even prevent the development of acceleration of agribusiness competitiveness which is managed by farmer and gardener.

From the framework of the research above, however the government should give a better situation to encourage the activities of farming business and agribusiness perspective by the smallholders and the citizen. For example, the government should alleviate the access of the region openness as well as the development of technical employee in the side of the supply, so that the estimation for the salary for the employee is equivalent to the marginal productivity. On a macro scale, a motivation for the efficiency for the economic for the demand perspective should be given continuously, so that the incentive for the producers is more realistic. On the other hand, it will also encourage the development of the demand perspective activities.

The result of the simulation shows that the competitiveness and the economic efficiency for the farming business is less sensitive to the change of the price of the medicine, in fact that the price is increased up to 25%, and the productiveness decrease up to 5% and the employee's salary is rise up to 60%. In short, it can be concluded that the problem of the investment and financial are the key factor to the development of the activity of a farming business and the agribusiness. According to the explanation above, it gives an illustration that a farming business done by the farmers and the smallholders still have a chance to be

developed. It is proved by the condition of farmer business commodity produced by the farmers that still have competitiveness. Nevertheless, the domestic market place is still big enough, and the area of farming is still wide open, especially at outside the java island. Manufacture industry is developed to the small village, as well as the availability of the seed with good variety and genetic potential. On the other hand, the weak side of the development of the production and the productivity still cannot work properly, especially in marketing, it is still through some channels, they are the first collector, the second collector, the third collector and the exporter.

As it can be seen from the weak point, the government should make a policy for the export things that participate in the development of small farming business and have a relation to a big farming business. Beside, the macro government policy is needed to protect the smallholders. It must be realized, even the global market is developed with all of the protection to be erased but the truth is other countries even the country that has high export activity protect the smallholders by using a certain label.

It depends on the political will of the government, whether its consistency make the farming business especially the commodity of small farming business as a commodity that can raise the standard and status of the domestic smallholder.

CONCLUSIONS

It can be concluded from the study of three-five methods as an effort in developing the competitiveness of farming business that:

- a. A farming business or production of farming business bargaining should consider some aspects, such as: the amount of the production, the price of the local fertilizer, the government protection policy of competitiveness. It is proven by NPCO and SRP that have less value of the economic value, and it is also supported by the value of the comparative than competitiveness.
- b. The demand, there is a big chance to the basic commodity at the local market to be processed, yet the maintenance of the marketing should be considered. It is still can be fixed by the marketing system and the channel of the marketing.
- c. The environment and the chance of the farming business is considered as monoculture and has not yet applied suggested technical culture, the awareness of the smallholders about the genuine seed variety is low, infected by plant diseases. On the other hand, the upper coarse products processing first, yet the process of the downstream product has not yet been conducted significantly by the farmer. Otherwise these products can give some additions to the value and can create a work field. And the horizontal diversifications have not done yet by the smallholders.
- d. It can be concluded that the international and the domestic policy have not had a support from the government. It can be seen from the DRC, which is better than PCR, the efficiency of NPCO and SRP has not given a support yet to the increasing of the competitiveness compared to the economical price. But from the NPCI policy co efficiency of the government has given the support for the competitiveness.
- e. Social value can be seen from the smallholders' behavior, which is neutral risk domination on this study, it is considered as the farmers or smallholders still applying safety first so that the productivity of the farming business can not obtain optimize value.

REFERENCES

- Cho, Dong Sung. 1994. From Adam Smith to Michael Porter (Evolusi Teori Daya Saing). Salemba Empat. Jakarta
- D'Aveni, Richard A. 1992. Hyper Competition: Managing The Dynamics of Strategic Maneuvering. New York. The Free Press.
- Direktorat Jendral Perkebunan, Deptan RI. 2006. Arah Kebijakan Pengembangan Kopi di Indonesia. Simposium Kopi. Surabaya.
- Evita and Soetriono, 2009. 2010. Pemodelan Dan Strategi Competitiveness Agribisnis Tembakau Besuki Na Oogst di Jawa Timur, Laporan Penelitian Hibah Pasca DP2M. Lembaga Penelitian Universitas Jember. Jember.
- Yotopoulos and Lau. 1973. A Test For Relative Economic Efficiency Some Further Result, American Economic Review, 63 (1) : 214 – 223
- M. Nasir. 1989. Metode Penelitian. Ghalia Indonesia. Jakarta
- Monke, Eric A and Scott R Person. 1989. The Policy Analysis Matrix for Agricultural Development. Cornell University Press.
- Moon, H, Chang, Alan M. Rugman and Alain Verbeke. 1998. A Generalized Double Diamond Approach to the Global Competitiveness of Korea and Singapore. International Business Review. 7 : 135-150
- Suryana, Acmad. 2006. Arah Penelitian dan Pengembangan Pertanian Dalam Mendorong Perkopian Nasional yang Tangguh, Simposium Kopi. Surabaya.
- Soetriono. 2004. Studi Daya Saing Komoditas Kedelai Dalam Mendukung Agroindustri. Disertasi Universitas Brawijaya, Malang
- Soetriono. (2005). Daya Saing Pertanian Tinjauan Analisis. Bayu Media. Malang
- Soetriono. (2006) . Daya Saing Agribisnis Tinjauan Makro Mikro Ekonomi Pertanian, Pidato Pengukuhan Guru Besar, 31 Mei 2006. Universitas Jember: Jember
- Soetriono dkk. (2007). Dampak Kebijakan Pemerintah dan Strategi Percepatan Daya Saing Agribisnis Kopi Robusta. Lembaga Penelitian Universitas Jember: Sekretariat Badan Penelitian Dan Pengembangan Pertanian
- Soetriono dkk. 2007. Dampak Kebijakan Pemerintah dan Strategi Percepatan Daya Saing Agribisnis Kopi Robusta. Lembaga Penelitian Universitas Jember: Sekretariat Badan Penelitian Dan Pengembangan Pertanian

Soetriono dan Hanafie. 2007. Filsafat Ilmu dan Metodologi Penelitian. Andi Offset. Yogyakarta.

Soetriono, 2007,2008,2009. Rancang Bangun Hulu Hilir, Pemodelan dan Kebijakan Pemerintah Pada Agribisnis Kedelai, Laporan Penelitian Hibah Pasca DP2M, Lembaga Penelitian Universitas Jember: Jember

Soetriono, 2010. Dampak Kebijakan Pemerintah dan Strategi Percepatan Daya Saing Agribisnis Kopi Robusta. Makalah Simposium Nasional, Bali , 4-5 Oktober 2010

Soetriono, (2010). Daya Saing Agribisnis Kopi Robusta, Perspektif Ekonomi. Surya Pena Gemilang: Malang

Soetriono, 2010. Pemodelan Dan Pengukuran Daya Saing Komoditas Kopi Robusta Dengan Pendekatan “Three Five”. Naskah Seminar Nasional PSE Bogor, Bogor