

2013

PROCEEDINGS

International Seminar on Climate Change & Food Security

October 24th-25th, 2013
Palembang, South Sumatra



FACULTY OF AGRICULTURE
SRIWIJAYA UNIVERSITY



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Estimates on Carbon Stored of Standing Trees as a Climate Change Mitigation Efforts

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Abstract. Mitigation of climate change can be observed through the range of values of carbon stocks in vegetation. A study has been carried out and standing trees in the Punti Kayu Park, Palembang used as the subject of observation of the value of carbon stocks in a vegetation forest tourist. Observations conducted during December 2012 to January 2013. Carbon stocks stored is assumed to be 50% of total biomass of standing trees. Allometric approach is used to calculate the value of biomass. Sampling plots measuring 20mX20m as mean as 16 plots is used to observe the standing trees with diameter more than 5cm (diameter at breast height/dbh). Carbon stocks stored in standing trees in the study site was 2104.35tons/ha and the total potential carbon stored in an area of 40 ha is 131 522 tons. This value decrease compared to the value stored carbon stocks from the previous year observations. Lower rainfall decrease the value of biomass. Diameter affects the biomass and carbon stocks in standing trees. Town forest conversion affects the ability of trees to store carbon.

Keywords: mitigation, standing trees, carbon stock

1. Background

One of the causes of global climate change is the increasing levels of CO₂. The amount of CO₂ increases with decreasing forest cover and low effort to reduce greenhouse gas emissions (Arief 2001:78). If this is allowed, then the estimated concentrations of greenhouse gases, especially CO₂ will reach twice the current concentration at 100 years to come. Global temperatures will rise 1^o-4, 5^oC and sea level rise of up to 60 cm. Rising sea levels will narrow land area and submerge several small islands, as well as the impact on climate change (Boer 2004: 86). Research IPCC (2001: 13) suggests that since the 90's temperatures will rise 1.4^o-5, 8^oC in the late 20th century.

Hadad (2010: 6-7) describes mitigation measures can be done by adding, strengthen or expand the earth system that serves as an absorbent and natural carbon sink, so that CO₂ emissions and greenhouse gases are released in the air can be captured, absorbed and stored back in the trees. Photosynthesis is an important in the process carbon cycle and maintain CO₂ in the atmosphere, also a role in the cycle of oxygen at the same time (Gratimah 2009: 2). Plants obtain CO₂ from the air through photosynthesis, which is then converted into carbohydrates (Hairiah et al. 2011: 4). CO₂ absorbed by plants through photosynthesis and store it in plant tissue (Sutaryo 2009: 3).

Punti Kayu an area of 40 ha of forest tourist who made urban forest in the city of Palembang in accordance with local regulations No.6/2007. Diversity of vegetation in Punti Kayu expected to increase carbon stocks, stabilizing, reducing the amount of CO₂ and other pollutants that can contribute to global warming. Based on these statements conducted this study to estimate the carbon stocks stored in tree stands in Punti Kayu in Palembang related to climate change mitigation.

2. Methods

The experiment was conducted during December 2012 to January 2013 are located in forest nature Punti Kayu in Palembang. Determination of the location of the plot carried out by the method of random sampling

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and based on the observed number of tree stands (MacDicken 1997 in Manuri 2011: 12). Plot measuring 400 m² (Kusmana 1997) as many as 16 plots.

Biomass of all trees found in the sample plots done in a non-destructive, note the type and diameter > 5cm at breast height measured from ground level. Then most of the branch cut along the specified ± 20 cm and density, diameter branches, and wet weight (Pratama, 2013). Followed by drying in an oven with a temperature of 80o C for 48 hours. Each day samples weighing up to obtain constant weight (Hairiah & Rahayu 2007: 21). Heavy tree using allometric equations to convert into biomass value. Biomass estimation was calculated using Hairiah & Rahayu (2007: 35).

branch volume :

$$\text{Volume (cm}^3\text{)} = \pi \times R^2 \times T$$

Specify gravity (g/cm³) :

$$\text{BJ (g/cm}^3\text{)} = \frac{\text{dry weight (g)}}{\text{Volume (cm}^3\text{)}}$$

Allometric equation to convert biomass using methods Ketterings *et al.* 2001 in Hairiah & Rahayu (2007: 35).

$$W = 0,11 \times \rho \times D^{2+c}$$

Estimate the biomass of pine diameter was calculated using the equation in 1995 in Waterloo allomatrik Hairiah & Rahayu (2007: 30).

Dry weight /Biomass (kg/tree) :

$$\text{Dry weight} = 0.0417 D^{2.6576}$$

Large tree biomass per area:

$$\frac{\text{Total biomass (kg)}}{\text{Wide plot (m}^2\text{)}}$$

Carbon stock is calculated using the approach of biomass is 50% carbon stored (Sutaryo 2009: 2; Brown 1997).

$$\text{Carbon stocks (C)} = 0,5 \times W$$

3. Results and discussion

Highest biomass of 547.6 tonnes / ha was found in plot 14, the lowest biomass of 50.8 t / ha was found in plot 12. Biomass affected stem diameter. Highest biomass values also caused the average tree diameter 46.84 cm, while for the lowest biomass had an average diameter of only about 21.15 cm. Asril (2009: 40) describes the diameter of the growth-related increase in tree biomass and the amount of carbon stored in it.

Table 1. Number of trees, average tree diameter and Standing Biomass in Each Plot at Punti Kayu Palembang

Plots	Number of tree	Diameter average (cm)	Biomass (Ton/ha)
1	15	31,35	183,1
2	11	31,41	127,2
3	13	46,49	387,6
4	6	40,39	57,4
5	12	46,60	344,7
6	29	36,71	494,9
7	11	37,57	217,3
8	19	37,41	343,6
9	25	27,52	258,6
10	16	39,33	324,5
11	9	31,63	156
12	18	21,15	50,8
13	14	40,62	459,1
14	12	46,84	547,6
15	6	38,32	93,5
16	13	35,75	189,5

Value of biomass on plots 5 and 8 tend to be similar because the diameter of the trunk at 5 plots tend to be smaller than the plot 8, although the number of trees in plot 5 more. This causes the biomass plot 5 (344.7 tonnes/ha) higher than plot 8 (343.6 tonnes/ha). According Asril (2009:40), the amount of biomass does not depend on the number of trees but influenced the size of the diameter of the tree. The larger the diameter of the tree, the greater the tree biomass. Total carbon content of tree stands on each plot is obtained based on the assumption that 50% of biomass is carbon stored (Sutaryo 2009:2). Biomass was calculated by measuring the diameter of the tree trunk 1.3 m above ground level.

Highest carbon stocks at 273.8 tonC / ha was found in plot 14 and the lowest was 25.4 tonC / ha was found in plot 12. Value of the second largest carbon reserves (247.5 tonC / ha) was found in plot 6. Dominance of certain species populations in each plot affects the value of the observed carbon stocks. *Acacia mangium* Willd dominate the plot 14, plot 12 *Swietenia mahogany* dominate, whereas *Pinus Jungk.* & *De Vr* dominate the plot 6. Suin (2003 in Asril, 2009: 35) explains the dominance of a species demonstrate the ability of species to adapt to its environment and competitiveness against other types

Results also showed that the total carbon stock of tree stands all plots in the study area of 2104.35 tons / ha, the potential of the carbon stored in the area is 5260.88 tons (Windusari *et al.*, 2013). Carbon potential value decreased compared with observational data in some previous years. Total carbon stock and carbon potential in the area Punti Kayu year 2009 (Hidayah, 2010) is 195.76 tons / ha and 7595.49 tons / ha, then decreased whereas in 2010 (Anfibi, 2011) note that the total carbon stocks and potential carbon in the area is 666.92 tonnes / ha and 6609.31 tons / ha. Dynamics of carbon stocks stored in the observation area associated with the process of growing, evolving, or a reduction in the total area of green in the city of Palembang. Value of carbon reserves in line with the ongoing process of revegetation.

Satoo & Madgwick (1982 in Onrizal, 2004: 8) states climatic factors (rainfall and temperature) affect the rate of increase in tree biomass, in addition to the climate differences also lead to differences in the rate of production of organic matter. Onrizal Soerianegara in 1965 (2004: 69) has reviewed between rainfall and biomass of forest stands in Indonesian couple whose results include reduced stem biomass of 292.6 tonnes / ha to 170.158 tonnes / ha following the annual rainfall of 3,874 mm fell to 1,625 mm in the lowland forest, East Kalimantan.

Table 2. Carbon stocks in each plots

Plots	Carbon store (tonC/ha)
1	91,55
2	63,6
3	193,8
4	28,75
5	172,4
6	247,5
7	108,7
8	171,8
9	129,3
10	162,25
11	78
12	25,4
13	229,5
14	273,8
15	46,75
16	94,75
Total	2104,35 TonC/ha.
average	131,522 tonC/ha

The results that have been obtained in the study show areas Punti Kayu role as a carbon sink and mitigate against climate change. Biomass of tree stands 264,71 tons / ha were obtained during the investigation allegedly associated with a decrease in rainfall is only 257 mm per month or 3,084 mm per year.

Town forest conversion affects the ability of trees to store carbon is assumed to be in the form of tree biomass. The impact of climate change through changes in precipitation / temperature which can affect tree biomass, and loss of carbon storage areas make free carbon in the atmosphere to form greenhouse gases and affect the Earth's climate. City parks is important to be protected.

4. Conclusion

Estimates of carbon stocks stored in tree stands in the area of Palembang Punti Kayu 2104,35 tonnes / ha with a total of 5260,88 tons of carbon potential indicates the role of forests as carbon sinks and travel can be used as mitigation against climate change in the South Sumatra, especially Palembang city.

5. Acknowledgement

Thanks for Competitive Grant Funds Research Directorate General of Higher DP2M Kemendikbud and our students Yuniar Pratama, Dian, Agus, Lusshi.

6. References

- [1] Anfibi, R. 2011. Estimasi Stok karbon pada Biomassa Tegakan Atas di Taman Wisata Alam Punti Kayu Kota Palembang. Skripsi. Fakultas Matematika dan Pengetahuan Alam Universitas Sriwijaya, Sumatera Selatan vii + 40 hlm (Tidak Dipublikasikan)
- [2] Arief, A. 2001. Hutan dan Kehutanan. Kanisius, Yogyakarta x + 178 hlm.
- [3] Asril. 2009. Pendugaan Cadangan karbon di Atas Permukaan Tanah Rawa gambut di Stasiun Penelitian SUAQ Balimbing Kabupaten Aceh Selatan Provinsi Nanggroe Aceh Darussalam. Tesis Program Studi Biologi. Fakultas Matematika dan Ilmu Pengetahuan Alam, Sekolah Pascasarjana Universitas Sumatera Utara. xi + 105 hlm.
- [4] Boer, R. 2004. Penambatan Karbon pada berbagai Bentuk Sistem Usaha Tani Sebagai Salah Satu Bentuk Multifungsi. Prosiding Seminar Nasional Multifungsi dan Konversi lahan Pertanian. Laboratorium Klimatologi Jurusan Geofisika dan Meteorologi IPB. 85-97 hlm.

- [5] Gratimah, G. 2009. Analisis Kebutuhan Hutan Kota Sebagai Penyerap Gas CO₂ Antropogenik Di Pusat Kota Medan. Tesis. Fakultas Matematika Dan Pengetahuan Alam Universitas Sumatera Utara xiii + 56 hlm.
- [6] Hadad, I. 2010. Perubahan Iklim dan Pembangunan Berkelanjutan. Majalah Pemikiran Sosial Ekonomi. Lembaga penelitian, Pendidikan dan Penerangan Ekonomi Sosial. Prisma Vol. 29. No 2 : 3-22 hlm.
- [7] Hidayah, N. 2010. Cadangan Karbon Hutan Kota Palembang. Tesis. Program Studi Pengelolaan Lingkungan Program Pasca Sarjana. Universitas Sriwijaya. Palembang. xvii + 73 hlm. (Tidak dipublikasi).
- [8] Hairiah, K & S. Rahayu. 2007. Pengukuran Karbon Tersimpan di Berbagai Macam Penggunaan Lahan. World Agroforestry Centre. Bogor.
- [9] Hairiah, K., A. Ekadinata, R.R. Sari & S. Rahayu. 2011. Cadangan Karbon dari Tingkat Lahan Ke Bentang Lahan Petunjuk Praktis Edisi ke-2. World Agroforestry Centre. Bogor xii + 88 hlm.
- [10] IPCC. 2001. Climate change 2001: The scientific basis. Contribution of Working Group I to the Third Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge Univ. Press, UK x + 83
- [11] Kusmana, C. 1997. Metode Survey Vegetasi. Institut Pertanian Bogor.
- [12] Manuri, S., C.A.S. Putra, & A.D. Saputra. 2011. Teknik Pendugaan Cadangan Karbon Hutan. Merang REDD Pilot Project, German International Cooperation – GIZ. Palembang x + 91 hlm.
- [13] PERDA Kota Palembang. 2006. Hutan Kota. Palembang. 16 hlm.
- [14] Sutaryo, D. 2009. Perhitungan Biomassa Sebuah Pengantar untuk Studi Karbon dan Perdagangan Karbon. Wetlands International Indonesia Programme. vi + 39 hlm.
- [15] Onrizal. 2004. Model Penduga Biomassa dan Karbon Tegakan Hutan Kerangas di Taman Nasional Danau Sentarum, Kalimantan Barat. Tesis. Sekolah Pascasarjana Institut Pertanian Bogor. xv + 97 hlm.
- [16] Windusari, Y. Zulkifli Dahlan, Hilda Zulkifli, & Harmida. 2012. Karakteristik Hutan Kota dan Estimasi Cadangan Karbon Tersimpan: Studi kasus pada hutan kota Palembang. Penelitian Hibah Bersaing Tahun II. DP2M.

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**International Seminar on Climate Change and Food Security
(ISCCFS 2013)
Palembang, South Sumatra-Indonesia
Thursday 24-Friday 25, October 2013**

	CONFERENCE VENUE Emilia Hotel Jl. Letkol Iskandar No. 18, Palembang, Palembang Phone Number: +62711 5630099 http://www.emiliahotelpalembang.com
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October 24, 2013 (Thursday) Lobby Level-1

13:00 am-05:00 pm	Arrival and Hotel Registration
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Friday, October 25, 2013

Venue: "Main Conference Hall" Level – 1

Time	Agenda	Committee
08.00 -08.45 am	ISCCFS 2013 Registration	Dwi Wulan Sari, M.Si.
08.45 -09.15 am	Opening Ceremony ISCCFS 2013-Chair	Prof. Andy Mulyana
09.15- 09.30 am	Coffee Break	Emilia Hotel
09.30-10.10 am	Keynote Speech 1 Mad Nasir Shamsudin Faculty of Agriculture, Universiti Putra Malaysia 43400 UPM Serdang, Selangor Topic: "Food Security and Climate Change in Developing Economies:Evidences and Policy Responses"	Session Chair: Prof. Fachrurozie Sjarkowi, Ph.D.
	Keynote Speech 2 Negin Vaghefi Faculty of Agriculture Mazandaran University Iran Topic: "Economic Impact Of Climate Change On Rice Production"	
10.10-10.30 am	Session for Discussion Session Chair: Prof. Fachrurozie Sjarkowi, Ph.D.	

10.30-11.00 am	Keynote Speech 3 Rizaldi Boer <i>Topic: "Innovation to Address Climate Change"</i>	Session Chair: Dr. Ir. Sabaruddin, M.Sc.
	Keynote Speech 4 Olaf de Jongh Netherlands Senior Expert <i>Topic: "Climate Change and Food Security"</i>	
11.00-11.30 am	Session for Discussion Session Chair: Dr. Ir. Sabaruddin, M.Sc.	
11.30am -01.00 pm	Lunch and Prayer Time	Emilia Hotel
01.00-03.30 pm	Supporting Paper Presentation	Session Chair: (1) Dr. Ir. Kiki Yuliati, M.sc. (2) Dr. Arinafril

October 25, 2013 (Friday)

SESSION-I

Venue: "Main Conference Hall" Level-1

Session Chair: Dr. Kiki Yuliati, M.Sc.

Time: 01:00 pm-3:30 pm

No	Name	Paper Title	Institution
1	Nandika Pratiwi	Rice Supply On Climate Anomaly Condition In Central Java Province	IPB (Student)
2	Harmi Andrianyta & Titim Rachmawati	Farming System In The Region As A Dry Climate Impacts Of Climate Change Adaptation In Southeast East Nusa	Indonesian Center For Agriculture Technology Assesment And Development, Indonesia
3	D.P. Priadi, N. Abuchatam, And J. Simangunsong	Oilpalm Yield Fluctuation Between Dry And Rainy Season In Dry- And Wetland	Faculty Of Agriculture, Sriwijaya University, Indonesia
4	Maman Rahmansyah, Arwan Sugiharto & I Made Sudiana	Pro-Poor Technology In Small Scale Farming For Adaptation To Climate Anomalies	Research Center For Biology, Indonesian Institute Of Sciences, Cibinong Science Center, Indonesia
5	Sriati	Potency and Intitutional Performance on Integration System of Beef Cattle and Oil Palm (SISKA) For Increasing the Beff Cattle Population	Faculty of Agriculture, Sriwijaya University

6	Edison	Dynamic Supply Response Of Rice In Jambi Province	Department of Agricultural Economics, Jambi University, Indonesia E-Mail: ediedison950@yahoo.co.id
7	Supli Effendi Rahim	Anticipation And Adaptation Of Climate Change For Food Crops In Indonesia	Study Program of Agrotechnology, Agriculture Faculty, University of Palembang, South Sumatra, Indonesia Email: sup_effendi@yahoo.co.id
8	Lazarus Dawa	Impact of climate change on soybean production: A nutrition and food security perspective in Indonesia	Papua New Guinea
9	Najib Asmani, Armaizal, and Iwan Setiawan	Rice Production Enhancement through Spatial Utilization "Land for Plant Life " in Industrial Crop Forest (ICF) Zone for Avoiding of Peat Fire	Agriculture Faculty and Post Graduate Program Sriwijaya University PT. Sebangun Bumi Andalas Industries, Palembang Indonesia
10	Yunita	Diversification Of Staple Foods As A Solution To Overcome Food Vulnerability Caused By Global Climate Change	Agriculture Faculty, Sriwijaya University
11	Dessy Adriani, Andy Mulyana	Are There Any Relationship Between Rice Barns Development And Welfare Of Farmers In South Sumatra, Indonesia ?	Agriculture Faculty, Sriwijaya University
12	Faharuddin1, Andy Mulyana2	Diversification of Food Consumption in South Sumatera: An Analysis Based-on Desirable Dietary Pattern	Doctoral Program Student at Graduate School Program of Sriwijaya University
13	Nina Lisanty	Food Insecurity and Global Food System: Political Decision?	Laboratory of Sustainable Resource Economics, Department of Sustainable Resource Science, Graduate School of Bioresources, Mie University, Japan

14	Faharuddin	Diversification Of Food Consumption In South Sumatera: An Analysis Based on Desirable Dietary Pattern	Student Post Graduate Program, of Agriculture Faculty, Sriwijaya University
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October 25, 2013 (Friday)

SESSION-II

Venue: "Main Conference Hall" Level-2

Session Chair: Dr. Arinafril, M.Sc.

Time: 01:00 pm-3:30 pm

No	Name	Paper Title	Institution
1	Iskhaq Iskandar, Muhammad Irfan, Fadli Syamsuddin, Akmal Johan, And Pradanto Poerwono	Imprint Of The Climate Change In The Palembang City: <i>Long-Term Trends Of Palembang Rainfall And Its Impacts On Agriculture</i>	Department Of Physics, Faculty Of Mathematics And Natural Sciences, University Of Sriwijaya, Indonesia
2	H.M. Edi Armanto, Adzemi Bin Mat Arshad, Elisa Wildayana And Usman M. Ishaq	Coastal Sand Soils And Their Assessment For Upland Rice Cultivation In Terengganu, Malaysia	Faculty Of Agriculture, Sriwijaya University, Indonesia/ Faculty Of Agrotechnology And Food Science, Universiti Malaysia Terengganu, Malaysia
3	Suwandi, Muhammad Amar, and Chandra Irsan	Application Of Compost Extract Containing Beneficial Bacterial Community Improved Yield Of Ratoon Rice Crop In Tidal Swamp Area	Faculty of Agriculture, Sriwijaya University/ Researcher at Research Center for Suboptimal Lands (PUR-PLSO), Sriwijaya University, Indonesia
4	Thamrin	The System Of Biological-Environment Adaptive Control As Alternative Technology To Address Climate Change	Faculty of Agriculture, Sriwijaya University
5	Mohd. Ghazali, H*., Ahmad Azarudin, M. N., Marryanna, L., Siti Aisah, S., Saiful Iskandar, K., Abd Rahman, K. and Mohamad, M.S.	The Effect Of <i>Eco</i> -Microbe Application For Water Quality Bioremediation At Frim's Pond	Forest Research Institute Malaysia (FRIM), 52109 Kepong, Selangor, Malaysia Corresponding author: Tel: 603-62797191; Fax: +603-62729852 *E-mail: ghazali@frim.gov.my

6	Filli Pratama	The Quality Assessment Of Delayed-Drying Rice	Program Study Of Agricultural Product Technology, Fac. Of Agric., Sriwijaya University
7	Agus Hermawan, Sabaruddin, Marsi, dan Renih Hayati	The Point of Zero Charge of Coal Fly Ash due to Chicken Manures Addition and Incubation Time	1) Graduate Student, Agricultural Sciences, Sriwijaya University. 2) Lecturer of Graduate Program, Sriwijaya University. E-mail: agush_unsri@yahoo.co.id. Mobile Phone: 08127824414.
8	Railia Karneta ¹), Amin Rejo ²), Gatot Priyanto ²), Rindit Pambayun ²)	The Decrease Of Pempek Lenjer Quality During Storage At Room Temperature	1) Doctoral Program Student at Graduate School Program of Sriwijaya University and Lecturer at Stiper Sriwigama. Email : railiakarneta@yahoo.com 2) Lecturers at Agricultural Faculty of Sriwijaya University
9	Nurhayati Damiri	The Effects Of Climate Change On Plant Diseases And Possible Means For Their Mitigation	Department of Plant Pest and Disease, Agriculture Faculty, University of Sriwijaya, Indralaya, South Sumatra, Indonesia Email: nurhayatidamiri@yahoo.co.id
10	Arfan Abrar ¹ , Takamitsu Tsukahara ² , Noriko Matsukawa ² , Tomomi Ban-Tokuda ¹ , Makoto Kondo ¹ , Wang Chau ¹ and Hiroki Matsui ¹	Monensin Clearance Trait and Its Effect on Methanogenesis in The Rumen	¹ Graduate School of Bioresource, Mie University, Mie Prefecture, Japan ² Kyoto Institute of Nutrition and Pathology, Inc., Kyoto Prefecture, Japan
11	Zaid Subrata, Kurniawan Subatra, and Imelda Marpaung	Climate Change Impacts on the walang rice pest - (Leptocorisa oratorius F.) in Tidal Rice Field on CI 200	Program Magister Ilmu Tanaman PPS Universitas Sriwijaya
12	Yuanita Windusari ¹ , Zulkifli Dahlan ² , Yuniar Pratiwi	Estimates On Carbon Stored Of Standing Trees As A Climate Change Mitigation Efforts	1,2 Biology Department of Mathematic and Sciences Faculty, Sriwijaya University and researchers from leading research center sub-optimal land development 3 Biology Student of Mathematic and Sciences Faculty, Sriwijaya University

13	Lazarus Dawa	Impact of climate change on soybean production: A nutrition and food security perspective in Indonesia	Papua New Guinea
14	Chandra Irsan	Climate Change Influences The Distribution Of Parasitic Plants On Duku Tree (<i>Lansium Domesticum</i> Coor.)	Department Of Plant Pests And Diseases, Faculty Of Agriculture, Sriwijaya University
15	Riya Liuhartana ¹ , Gatot Priyanto ² , Basuni Hamzah ²	Minimal Cooking Time Determination of Pepes Nile Tilapia Processed by Microwave Oven	1) Graduate Student, Agricultural Sciences, Sriwijaya University. 2) Lecturer of Graduate Program, Sriwijaya University.

Instructions for Oral presentation

Devices Provided by the Conference Organizer: Laptops (with MS-OFFICE & Adobe Reader), Projectors & Screen

Materials Provided by the Presenter: PowerPoint or PDF Files

Duration of Each Presentation (Tentatively):

Regular Oral Session: About 7 minutes of Presentation & 3 minutes of Q & A.

Conference Venue

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