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HASIL PENILAIAN SEJAWAT SEBIDANG ATAU *PEER REVIEW*
KARYA ILMIAH : PROSIDING

Judul karya ilmiah (paper) : Climate Change Adaptation in Tanjung Mas - Semarang: A Comparison Between Male- and Female-Headed Households

Jumlah Penulis : 4 orang

Status Pengusul : **W Handayani**, M R Ananda, L Esariti, M Anggraeni

Identitas prosiding :

- a. Judul Prosiding : IOP Conference Series:Earth and Environmental Science
- b. ISBN/ISSN : 1755-1315
- c. Tahun Terbit/tempat pelaksanaan : 2018
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- e. Alamat repository PT/web : <https://iopscience.iop.org/article/10.1088/1755-1315/129/1/012025>
- f. Terindeks di (jika ada) : SJR 0,17 (2018) dan SNIP 0,54 (2018)

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a. Kelengkapan unsur isi paper (10%)	3		2,5
b. Ruang lingkup dan kedalaman pembahasan (30%)	9		7
c. Kecukupan dan kemutakhiran data/informasi dan metodologi (30%)	9		7,5
d. Kelengkapan unsur dan kualitas terbitan/prosiding (30%)	9		8
Total = (100%)	30		25
Nilai = (60% x 25)			15

Catatan Penilaian paper oleh Reviewer :

- a. Unsur isi paper cukup dan sudah merujuk kepada petunjuk penulisan paper dari IOP Science, tidak ada *acknowledgement*. Judul dan isi paper sudah sesuai yang membahas tentang adaptasi terhadap perubahan iklim.
- b. Pembahasan cukup mendalam tentang adaptasi yang dihubungkan isu gender dalam pembangunan. Artikel sesuai dengan bidang ilmu penulis terutama terkait dengan ketahanan */resilience*. Pembahasan cukup baik; didukung 20 pustaka, sebagian besar jurnal; kesimpulan kurang tajam.
- c. Metode dan data dijelaskan dengan cukup baik. Data bersumber dari data primer melalui penyebaran kuesioner yang kemudian dianalisis dengan menggunakan metode *scoring*. Referensi yang digunakan ada 20 dan 16 terbitan ≤ 10 tahun terakhir

- d. Prosiding terindeks *Scopus* (IOP Series) dengan SJR 0,17 tersedia *online* dan *open access*. Prosiding dilengkapi dengan ISBN, DOI, dan terkategori internasional.

Semarang, 12-04-2020
Reviewer 1,



Prof. Dr.rer.nat. Imam Buchori, ST
NIP. 197011231995121001
Departemen PWK, FT. Undip

LEMBAR
HASIL PENILAIAN SEJAWAT SEBIDANG ATAU *PEER REVIEW*
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	Internasional 30	Nasional 	
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b. Ruang lingkup dan kedalaman pembahasan (30%)	9		7,5
c. Kecukupan dan kemutakhiran data/informasi dan metodologi (30%)	9		6,5
d. Kelengkapan unsur dan kualitas terbitan/prosiding (30%)	9		7
Total = (100%)	30		23,5
Nilai = (60% x 23,5)			14,1

Catatan Penilaian paper oleh Reviewer :

- a. Isi tulisan cukup lengkap dan merujuk pada *author guidelines* yang disediakan secara online. Benang merah judul dan IMRaD pada pembahasan adaptasi perubahan iklim.
- b. Substansi sesuai ruang lingkup seminar terkait dan bidang ilmu penulis khususnya penulis pertama yaitu perencanaan wilayah dan ketahanan dalam konteks adaptasi perubahan iklim. Substansi artikel terkait *Climate Change* telah dibahas dengan cukup baik. Pembahasan cukup komprehensif.
- c. Artikel memiliki nilai kebaruan cukup baik. Metode dijelaskan dengan cukup baik dan terstruktur. Referensi yang digunakan ada 20 dan 16 terbitan ≤ 10 tahun terakhir. Turnitin Similarity Index = 10%.

- d. Prosiding diterbitkan oleh IOP Publishing dan terindeks scopus dengan SJR 0,17, SNIP 0,54 , dan ber-ISBN. Prosiding internasional dan tersedia *online* dengan system *open access* yang dilengkapi dengan tautan DOI. Prosiding diterbitkan oleh IOP Publishing.

Semarang, 09-07-2020

Reviewer 2,



Prof. Dr. Ir. Nany Yulastuti, MSP

NIP. 195407171982032001

Departemen PWK, FT. Undip

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Hasil Penilaian *Peer Review* :

Komponen Yang Dinilai	Nilai Reviewer		Nilai Rata-rata
	Reviewer I	Reviewer II	
a.Kelengkapan unsur isi paper (10%)	2,5	2,5	2,5
b.Ruang lingkup dan kedalaman pembahasan (30%)	7	7,5	7,25
c.Kecukupan dan kemutakhiran data/informasi dan metodologi (30%)	7,5	6,5	7
d.Kelengkapan unsur dan kualitas terbitan/prosiding (30%)	8	7	7,5
Total = (100%)	25	23,5	24,25
Nilai = (60% x 24,25)			14,55

Reviewer 1,



Prof. Dr. rer. nat. Imam Buchori, ST
NIP. 197011231995121001
Departemen PWK FT.Undip







Semarang, 17-07-2020
Reviewer 2,



Prof. Dr. Ir. Nany Yulastuti, MSP
NIP. 195407171982032001
Departemen PWK FT.Undip



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Volume 129, Issue 1, 19 March 2018, Article number 012025
International Conference on Climate Change 2017: Challenges and Opportunity on Environment Degradation Researches, ICCO 2017; Best Western Premier HotelSurakarta; Indonesia; 24 October 2017 through 26 October 2017; Code 135643

Climate change adaptation in Tanjung Mas - Semarang: A comparison between male- and female-headed households (Conference Paper) [\(Open Access\)](#)

Handayani, W.^a , Ananda, M.R.^b, Esariti, L.^a, Anggraeni, M.^c 

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^aDepartment of Urban and Regional Planning, Diponegoro University, Jl. Prof. Sudharto, SH Tembalang, Semarang, Central Java, 50275, Indonesia
^bInitiative for Regional Development and Environmental Management (IRDEM), Diponegoro University, Tembalang, Semarang, Central Java, 50275, Indonesia
^cInitiative for Urban Climate Change and Environment (IUCCE), Jl. Tirta Agung Barat V/21 Pedalangan, Banyumanik, Semarang, Central Java, 50268, Indonesia

Abstract

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Mainly due to its complexity, the effort to mainstream gender in addressing climate change issues has been far from the satisfying result. However, there is an urgent call to accommodate gender lens issues and to become more gender sensitive in an attempt to have an effective intervention in responding climate change impact. To enrich the reports on gender and climate change adaptation in city-based case, this paper aims to elaborate climate change adaptation in Tanjung Mas - Semarang city focusing on the gender perspective analysis in male- and female-headed households. The quantitative descriptive method is applied to carry out the analyses, including adaptive strategy and gender role analyses. The research result indicates there are not any significant differences in the climate change adaptation strategies applied in male- and female-headed households. This shows that women in the female-headed households, with their double burden, performed well in managing their roles. Therefore, in particular perspective, it may not be relevant to state that woman and female-headed households are likely to be more vulnerable compared with their counterparts. © Published under licence by IOP Publishing Ltd.

SciVal Topic Prominence ⓘ

Topic: Female-headed Households | Headship | Conditional Cash Transfers

Prominence percentile: 72.984 ⓘ

Indexed keywords

Engineering uncontrolled terms Adaptive strategy Climate change adaptation Climate change impact Gender roles Research results

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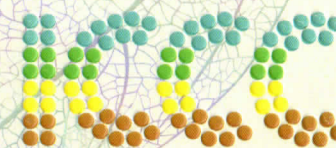
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PRESENTED TO

**Dr-Ing Wiwandari
Handayani, ST., MT.,**

As a **PRESENTER**

**in The International Conference on Climate Change
“Challenges and Opportunity on Environment Degradation Research”
Surakarta, 24 - 26 October 2017**



Dwi Priyo Ariyanto, SP., MSc. PhD.
Chairman Committee
International Conference



Prof. Dr. M. Furqon Hidayatullah, MPd.
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Preface

The International Climate Change Conference 2017 (ICCC 2017) is an event organized by Graduate School of Universitas Sebelas Maret (UNS), Indonesia to mediate the experts, researchers, practitioners, students, and societies to discuss the findings, problems, and solution about climate change. ICCC 2017 addressing the researches relate with climate change to the adaptation and mitigation strategy and the implementation to the societies. ICCC 2017 was carried out at Best Western Premier Hotel, Surakarta city, Indonesia from 24 to 26 October 2017.

ICCC 2017 develops new partnerships and associations with key decision makers across all sectors of climate, and accomodates the latest research findings, as well as the future impacts. The scope of subjects discussed in this conference are: Impact of depletion or enhance of capability of resources of air, water, soil, and vegetation; ecosystem and habitat destruction research; strategy for environmental disaster reduction research; thermal expansion research; climate model and uneven precipitation distribution; pollution and contamination of land surface and atmosphere; carbon footprint, greenhouse gas emission, recycle and reuse energy research; involuntary migration and forced displacement; direct and indirect risks to wellbeing; implication of climate adaptation and mitigation research; infrastructures risks and planning on climate adaptation; policy and legal aspect of climate change; and the economic and social elements of climate change.

The following are the pictures of the ICCC 2017.



Figure 1. Opening by Vice Rector of Sebelas Maret University, Indonesia

INTERNATIONAL CONFERENCE ON CLIMATE CHANGE 2017

“International Conference on Climate Change: Challenges and Opportunity on Environment Degradation Research”

Environmental degradation is essentially caused by the presence of intervention or excessive human intervention to the existence of the environment naturally. Ruled out this problem and environmental impact in the development of a major factor environmental degradation which has the influence of the social and economic quality. This condition means the climate change will encourage and accelerate disaster and environmental damage.

This Conference aims to accommodate the new related inspiration about how to minimize the climate change and environmental degradation that occurred at this time. Attendees can access practical and valuable information to help them provide an excellent international forum for sharing knowledge and research results in theoretical and practical aspects of climate change and global warming as well as their industrial applications.

Time & Venue

24 – 26 October 2017 at Best Western Premiere Hotel, Solo City, Indonesia.

Keynote Speaker

Dr. David Grimes* President of World Meteorology Organization Geneva, Switzerland	Prof. Bambang Brodjonegoro* Ministry of National Development Planning (BAPPENAS), Indonesia
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Invited Main Speakers

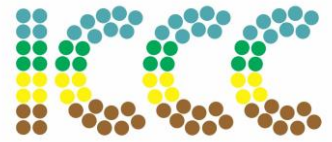
Speakers	Speech Topic
Prof. Dr. Sutarno Universitas Sebelas Maret, Indonesia [download]	Climate Change and Biodiversity
Dr. Dodo Gunawan BMKG, Indonesia [download]	NATIONAL FRAMEWORK ON CLIMATE SERVICES: The Research-based and Scientific-sound Services
Assist. Prof. Takeo Onishi UGSAS Gifu University, Japan [download]	Evaluation of climate change and land cover change impacts on water quality of the Ise Bay and its watershed
Assist. Prof. Dr. Keigo Noda UGSAS Gifu University, Japan [download]	Effects of Climate Change and Socio-economic change to sediment yield – A case of Upper Citarum River Basin-
Prof. Dr. Ir. Patrick Van Damme Ghent University, Belgium [download]	How can (tropical forest) biodiversity help humanity cope with growing climate change challenges - examples from the field

Dr. Anwar Fitrianto UPM, Malaysia [download]	Climate Change in Number: Statistical Point of View
Dr. Anthony Kent Victoria University, Australia [download]	CHALLENGES AND OPPORTUNITIES -ENVIRONMENTALDEGRADATION RESEARCH: CLIMATE CHANGE INFLUENCES ON RURAL COMMUNITIES IN AUSTRALIA
Dr. James Mac. Gregor Eco-Tourism, Canada [download]	Responding to Global warming impacts (2018-2050) ADOPTION + MITIGATION
Assoc. Prof. Dr. Avishek Datta Asian Institute of Technology (AIT), Thailand [download]	Weed and Agricultural Water Management Strategy to Cope with Climate Change
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Climate Change 2017 Event Series

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Jl. Ir. Sutami No. 36A Kentingan, Surakarta, INDONESIA, 57126 Website: <https://iccc.uns.ac.id/>

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Best Western Hotel Premier, Surakarta, Indonesia, 24-26 October 2017

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Affiliation: Sebelas Maret University, Indonesia

IOP Conference Series: Earth and Environmental Science

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Published online: 19 March 2018

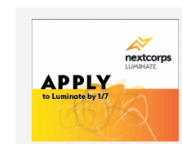
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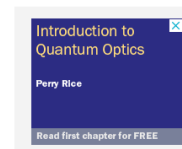
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Y Hamdani

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Mycorrhizal diversity of stevia (*Stevia rebaudiana* Bertoni) rhizosphere in Tawangmangu, Indonesia

D Y Astuti, Parjanto and V R Cahyani

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Land use, climate parameters and water quality changes at surroundings of Code River, Indonesia

Muryanto, Suntoro, T Gunawan and P Setyono

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The effect of nano-silica fertilizer concentration and rice hull ash doses on soybean (*Glycine max* (L.) Merrill) growth and yield

T Suciati, D Purnomo, A T Sakya and Supriyadi

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Soil degradation level under particular annual rainfall at Jenawi District– Karanganyar, Indonesia

A Herawati, Suntoro, H Widjanto, I Pusponegoro, N R Sutopo and Mujiyo

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Study on rhizobium interaction with osmoprotectant rhizobacteria for improving mung bean yield

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Graphical approach to assess the soil fertility evaluation model validity for rice (case study: southern area of Merapi Mountain, Indonesia)

E A Julianto, W A Suntoro, W S Dewi and Partoyo

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The effect of pricing level to the loss of welfare costs (case study: Indonesia region II water company)

B Rosalina E W K, E Gravitiani, M Raharjo and T Mulyaningsih

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Study on osmoprotectant rhizobacteria to improve mung bean growth under drought stress

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Strategy for environmental disaster reduction research

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Local adaptive capacity as an alternative approach in dealing with hydrometeorological risk at Depok Peri-Urban City

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Mapping the rainfall distribution for irrigation planning in dry season at pineapple plantation, Lampung Province, Indonesia
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The diplomacy of scientific research in the South China Sea: the case of joint oceanographic marine scientific research expedition between Vietnam and the Philippines
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High-zinc rice as a breakthrough for high nutritional rice breeding program

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Abstract. WHO reported climate change already takes 150,000 casualties annually, due to the emergence of various diseases and malnutrition caused by food shortages and disasters. Rice is the staple food for almost all of Indonesian citizens, therefore Zn *biofortification* on rice is expected to be effective, efficient, massive, and sustainable to overcome the Zn nutritional deficiency. This study aims to identify rice with high Zn content and yield for further effort in releasing this variety. Ten lines along with two varieties as a comparison (*Ciherang* and *Inpari 5 Merawu*) were tested in Plumbon Village, Mojolaban Subdistrict, Sukoharjo Regency during February-May 2017. The experiment was designed in a Randomized Completely Block Design with four replications on a 4 m x 5 m area, with 25 cm x 25 cm plant spacing using seedling transplanting techniques of 21 days old seeds. The results showed that the plant genotypes treated had differences in yield characteristics, heading date, harvest age, panicle number, filled and un-filled grain per panicle, seed set, 1000 grains weight, Zn and Iron (Fe) content in rice grain. *B13884-MR-29-1-1* line (30.94 ppm Zn, 15.84 ppm Fe, 4.11 ton/ha yield) and *IR 97477-115-1-CRB-0-SKI-1-SKI-0-2* (29.61 ppm Zn, 13.49 ppm Zn, 4.4 ton/ha yield) are prospective variety to be released. *Ciherang* had Zn content of 23.04 ppm, 11.93 ppm Fe, and yield of 4.07 t/ha.

1. Introduction

Climate changes characterized by rising air temperatures and changes in the magnitude and distribution of rainfall have had a wide impact on many aspects of human life [1]. Increased air temperature directly affect the production of cereals including rice, the staple food of the Indonesian population. Indonesia Country Study on Climate Change 1998 [2] reported the vulnerability of agricultural production systems by climate change, as in 1991 and 1994, climate anomaly caused Indonesia to import rice (600,000 tons in 1991 and more than one million tons in 1994). Rice and other cereals are very sensitive to temperature change even in small degree rise. Rice reproductive part called spikelet will become sterile if the air temperature increase, which will affect its productivity [3]. FAO states that climate change, as well as changes in disease patterns and pests, will affect how food production systems will be done in the future. It will also have a direct impact on food security, and poverty levels, especially in countries with dependence on the agricultural sector. WHO reports that



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Assessment of the Standardized Precipitation Index (SPI) in Tegal City, Central Java, Indonesia

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Abstract. One of the adverse impacts of climate change is drought, which occurs more frequently in Tegal city, Indonesia. The application of drought index analysis is useful for drought assessment to consider adaptation and mitigation method in order to deal with climate change. By figuring out the level and duration of the drought. In order to analyze drought in the specific area, Standardized Precipitation Index (SPI) is an index to quantify the rainfall deficit for multiple timescales. In 2015, Indonesia experienced severe drought, which has not been analyzed, yet. Thus, it is important to assess a quantitative evaluation of the drought condition. The study shows that from all deficit periods, the most severe drought in duration and peak took place in 2015, with each drought index as follows: 1 month deficit or SPI-1 (-3.11) in 1985 (-2.51) in 2015, 3 month deficit or SPI-3 (-2.291) in 1995 (-1.82) in 2015, 6 month deficit or SPI-6 (-2.40) in 1997 and (-1.84) in 2015, 9 month deficit or SPI-9 (-1.12) in 2015, 12 month deficit or SPI-12 (-1.19) in 2015. The result underlines the potential that SPI exhibits in drought identification and the use of the rainfall strongly linked to drought relief policy and measure implementation in Tegal city.

1. Introduction

Indonesia, both the rainy and the dry seasons, become the causes of flood and drought in the country. Drought is a characteristic deficiency of the water availability or water supply which results in prolonged shortages in surface or groundwater. It sometimes declared after as few as fifteen days. El-Nino phenomenon affects the drought frequencies, but it is not always referred to a severe drought because there are other factors which generate drought in Indonesia. Such as land use land cover change and rainfall anomaly.

A research Pramudya et al [1] has reported about the conversion rate of wetland into settlements and other land use in Tegal city, Indonesia. It was reported that the recent wetland conversion rate-is rather high than in the last two decades. It was also reported that rainfall anomalies, tidal flooding occurrence before the 1990s, and water insufficiency for agriculture after 2000s are the factors of land use conversion in Tegal city which resulted by the major human impact on urban activities which had related to climate change. So that, the development and improvements method on meteorological and agricultural drought condition is still an interesting topic to discuss.

The Meteorology, Climatology, and Geophysics Agency in Indonesia or usually known as BMKG uses SPI (Standardized Precipitation Index) method in order to express the analyze the meteorological



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Stakeholders' perspectives towards effective climate change adaptation on the Mongolian livestock sector

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Abstract. Climate change is one of the greatest threats that world is facing today, and having significant deleterious effects on natural and human systems. Recent climate-induced extreme events and their impacts demand timely adaptation actions to the changing odds of their occurrence. The great phenomenon is already being felt in the Mongolian plateau, especially on the livestock sector. The sector provides the main income and livelihood for one-third of the population of about three million people. A high number of livestock is lost due to a unique phenomenon is known as a “dzud”. This paper examines the key stakeholders’ perspectives in the implementation of climate change adaptation and identifies its barriers, with a focus on the livestock sector. In order to meet the objectives, this research used a semi-structured interview with organizations related to the livestock sector and climate change. The extent of stakeholders’ perspectives might be depending on the way they share information, stakeholder engagement, and their experiences with extreme events, as well as their location and level in government. The research findings will indicate an understanding of climate change perspectives, adaptation, and level of capacity of organizations, which can be used as a guideline for organizations to develop climate change adaptation policies related to the livestock sector in Mongolia.

1. Introduction

The Earth’s climate is changing in profound ways, while there has been growing debates on, that have addressed the risk and vulnerability of affected systems, and have issued Declarations that have been endorsed by most countries. Among the climate science community, there is a growing consensus that climate change is not just an unfortunate phenomenon, but indeed it is an anthropogenic tragedy by emitting greenhouse gas (GHG) into the atmosphere. Nevertheless, this trend is still not completely approved [1]. However, it is certain that the phenomenon has created uncertainty in, and a threat to, the future of sustainable development. The increasing number of extreme events has gained massive attention from a scientist, questioning how and what is the connection of those events to climate change. The following are several extreme events occurred over the past few years; 1) the 2013 typhoon Haiyan in Southeast Asia (especially in the Philippines), considered as one of the deadliest cyclones ever recorded [2], 2) the disastrous flooding in 2011 in Thailand [3], and countries bounding the Bay of Bengal is the most exposed to cyclones and flooding that have resulted in the loss of thousands of lives, displacement, damaged infrastructures and economic crisis, and 3) the 2008



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Improving Indonesian cinnamon (*c. burmannii* (Nees & t. nees) Blume) value chains for Greater Farmers Incomes

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Abstract. Genus *Cinnamomum* (*Lauraceae*) regroups some species whose stem bark are harvested, conditioned and traded as cinnamon in an international market. Over the centuries, the species have been domesticated so that now at least six different ones are grown in Southeast Asia countries. One of the species is *Cinnamomum burmannii*, also known as Korintje Cinnamon, which generates income for most smallholder farmers in Kerinci district, Jambi, Indonesia. Most cinnamon consumed in the world originates from this Korintje Cinnamon products. It is recognized for its unparalleled quality that comes with its sharp and sweet flavor, with a slightly bitter edge. However, international market requirements for product certification and quality standards make it difficult for a farmer to comply. Our research will address issues related to (improvement of) productivity, sustainability and value chains faced by cinnamon producers in Kerinci, to strengthen their product's value chains. Smallholder farmers are very vulnerable to climate change impacts, and thus empowering the value chains of agricultural products will increase farmers resilience to climate change. The research will analyze the development of agricultural value chains, certification & standards on trade mechanism to help farmers earn a better income and future prospects.

1. Introduction

Indonesia is a tropical country crossed by the equator. It has the second largest biodiversity and the third largest natural resource reserves for oil, natural gas, gold, copper and other minerals in the world. The country is also rich in various types of ecosystems: aquatic ecosystems, freshwater ecosystems, tropical rainforests, peat swamps, mangroves, coral reefs and coastal ecosystems. The highest biodiversity in Indonesia is to be found in the tropical forest environment. Not only serving as a source of commercial and industrial wood products, it also provides people's daily necessities, such as lumber, pulp, and paper. However, Indonesia is now facing multiple problems such as illegal logging, chaotic urbanization, unsustainable agriculture, and forest conversion (converting forests into large-scale plantations). As a result, Indonesia faces the great challenge of combining poverty alleviation and economic growth with sustainable use and conservation of biodiversity. For this reason, Indonesia needs to find solutions for the long-term sustainable use of biodiversity that will improve the social welfare of local communities.

Indonesia has several native natural products that have a potential value in local and global markets, such as *Cinnamomum burmannii* Nees ex Blume. This is one of the four types of cinnamon categorized as high economic value cinnamon besides *Cinnamomum verum*, *Cinnamomum cassia* (*C. aromaticum*, also called Chinese cinnamon), and *Cinnamomum loureiroi* (also known as Vietnamese or Saigon cinnamon) [1]. Genus *Cinnamomum* (*Lauraceae*) regroups some species whose stem bark

