

Project Group A  
(Environmental Processes)

Project Group B  
(Biota and Ecosystems Services)

Project Group C  
(Human Dimension)

Z and INF (Z01= Central Tasks,  
Z02= Central Scientific Service  
Project and INF)

# Happy New Year 2018



Collaboration Partners :



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CRC 990/ EFForTS Kampus IPB Dramaga Bogor Tel : +62251 8624469  
CRC 990/ EFForTS Kampus UNJA Mendalo Jambi Tel : +62741 582893  
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Prof. Dr. Anas Fauzi, Speaker of the Indonesian University Consortium



Prof. Dr. Stefan Scheu, Speaker of EFForTS



Dr. Surya Darma Tarigan, member of the Data Management Board



Prof. Dr. Edzo Veldkamp, Chair of the Publication Policy Board



Prof. Dr. Kerstin Wiegand, member of the Management Board and the Data Management Board



Prof. Dr. Iskandar Siregar, member of the JMB and chair of the Publication Policy Board



### Data Management Board

CRC990/EFForTS is a research collaboration between the Georg-August-Universität Göttingen and the Indonesian University Consortium (Bogor Agricultural University / IPB, Jambi University / UNJA, Tadulako University / UNTAD). Speaker of EFForTS is Prof. Dr. Stefan Scheu, and speaker of the Indonesian University Consortium is Prof. Dr. Anas Fauzi. Management decisions for achieving the project's goals are made by the Joint Management Board (JMB), its members are chosen among the 4 collaborating universities. Apart from the Management Boards, there are three other boards that guide the project, namely the Publication Policy Board, the Data Management Board and the Board on Convention on Biological Diversity (CBD).

# 2018

# JANUARY

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
31	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31	1	2	3

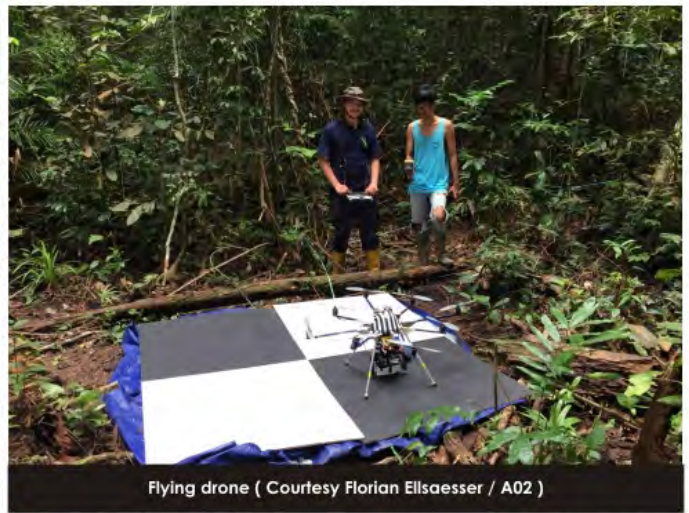
January 1: New Year







Team of A03 downloading climate data ( Courtesy Christian Stiegler / A03 )



Flying drone ( Courtesy Florian Ellsaesser / A02 )



Taking sample ( Courtesy Siria Biagioni / A01 )



**Project Group A  
(Environmental Processes)**

Project Group A examines environmental changes caused by land use transformation especially in Jambi province. Environmental factors which are under investigation such as soil, water and air factors. Technical focus of the research is on carbon and nitrogen cycle, greenhouse gasses, nutrition cycles, water and also biogeochemistry models.

2018

**FEBRUARY**

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
28	29	30	31	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	1	2	3

February 16: Chinese New Year







Field activities ( Courtesy Katja Rembold / B06 )



Collecting sample ( Courtesy Valentyna Krashevs'ka / B08 )



Collecting sample ( Courtesy Clara Zemp / B11 )



Field assistant Juliandi using 3D scanner ( Courtesy Clara Zemp / B11 )



### Project Group B (Biota and Ecosystem Services)

Focus of project group B is on biota and ecosystem services. The main research foci are flora (B04 and B06), fauna (B08, B09 and B13), microorganisms (B02 and B07), vegetation monitoring (B05) and economic and ecology (B10) to ecosystems modeling (B10). The B11 biodiversity enrichment experiment studies the effect of planted tree islands with petai, durian, jengkol, sungkai, meranti, tembaga, jelutung) in an oil palm plantation on biodiversity and ecological functioning.

2018

# MARCH

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
25	26	27	28	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

March 17 : Nyepi Day (New Year's Saka)  
 March 30 : Good Friday







With villagers ( Courtesy Fenna Offen / C02 )



Field research ( Courtesy Kristoph Kubitza / C07 )



Dilemma experiment in Giriwinangun village ( Courtesy Arieska Wening / C06 )



With villagers ( Courtesy Katrin Rudolf / C08 )



### Project Group C (Human Dimensions)

Project group C studies the social and economic benefit caused by transformation from forest to other land uses. Effects that are studied include international market, national and local policies, social demography and cultural factors. Project group C conducts its research on various scales, spanning from villages to regional and national up to international level.

# 2018

# APRIL

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	1	2	3	4	5

14 April: Isra Mi'raj Prophet Muhammad SAW 1439 H







Car going into the forest ( Courtesy Jochen Drescher / Z02 )



Kick off workshop in May 2016



Team picture ( Courtesy Jochen Drescher / Z02 )



Fogging process ( Courtesy Jochen Drescher / Z02 )



### Z01 (Central Tasks) and Z02 (Central Scientific Service Project)

Z01 is responsible for the administrative management and for establishing networks with stakeholders: collaboration, permits, finances, research infrastructure, and for public relation activities. Z02 is responsible for the organization and collection of background data on biota and climate : monitoring of meteorological variables, barcoding the vascular plants and their roots of the study sites, and for the monitoring of aboveground animal biodiversity.

# 2018 MAY

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
29	30	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31	1	2

May 1 : International Labor Day  
 May 10 : Ascension of Jesus Christ  
 May 29 : Waisak Day







Basecamp at PT. REKI ( Courtesy Yuking Linatra )



Basecamp at PT. REKI ( Courtesy Yuking Linatra )



Ecosystem Restoration Resource Center ( Courtesy Yuking Linatra )



**PT. Restorasi Ekosistem Indonesia (PT. REKI)**

EFForTS collaborates with PT. Restorasi Ekosistem Indonesia in studying forest to oil palm and rubber agroforestry. PT.REKI which is known as Hutan Harapan, it is the first restoration forest in Indonesia, located in Batanghari region and Sarolangun region (Jambi province) and Musi Banyuasin region (South Sumatra province). EFForTS works on 8 plots in total, 4 plots in riparian areas and 4 plots on upper mineral soils. Research activities conducted in Hutan Harapan such as identification of fauna, microorganism, water and carbon cycles, greenhouse gasses, and collected data are compared to the oil palm and rubber plots.

2018  
**JUNE**

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
27	28	29	30	31	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

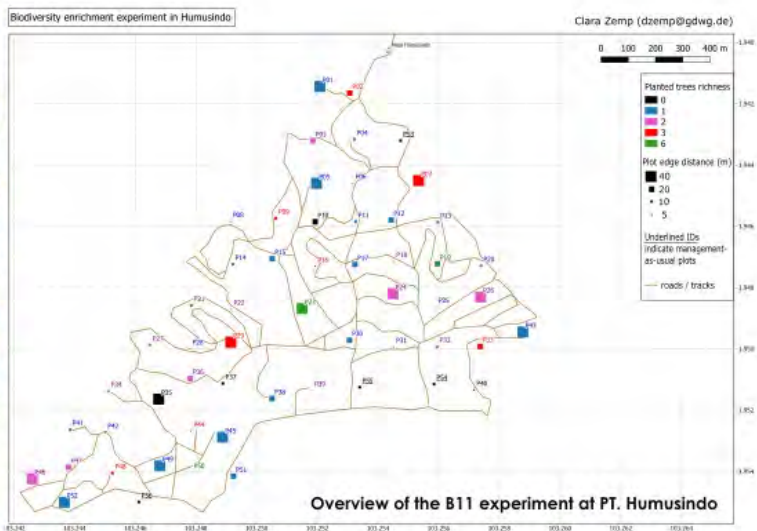
June 1 : Pancasila Day  
15-16 June : Ied ul-Fitri 1439 H







Sungkai tree among oil palm ( Courtesy Yukung Linatra )



Visit of PT. REKI team to Biodiversity Enrichment sites ( Courtesy Yukung Linatra )



**PT. Humusindo Makmur Sejati**

The B11 experiment is located in the privately held oil palm plantation PT. Humusindo Makmur Sejati. The oil palm was enriched with several trees such as petai, durian, jengkol, sungkai, meranti tembaga and jelutung. There are 52 research plots in Humusindo with different plot sizes. The research aims at investigating the effect of a tree enriched oil palm plantation on biodiversity, ecology and oil palm productivity.

# 2018 JULY

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	1	2	3	4







Climate tower of A03 at PTPN VI ( Courtesy Yuking Linatra )



Oil palm - livestock integration at PTPN VI ( Courtesy Yuking Linatra )



**PT. Perkebunan Nusantara VI (PTPN VI)**

PTPN VI is a state owned company. EFForTS and PTPN VI work together in several areas: (1) a 21 m high climate tower was established by A03 to measure climate data within an oil palm plantation. (2) An oil palm management experiment was set differing in fertilizer and weeding intensities. This experiment takes place in 16 plots (4 hectare areas), plots are located majority at Afdeling 1 and less number at Afdeling 2 of PTPN VI Batanghari Unit.

2018

**AUGUST**

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
29	30	31	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	1

17 August : Indonesia Independence Day  
22 August : Idul Adha 1439 H







Resort Pematang Kabau ( Courtesy Yukung Linatra )



Head office of TNBD at Sarolangun ( Courtesy Yukung Linatra )



Suku Anak Dalam ( Courtesy Yukung Linatra )



### Taman Nasional Bukit Duabelas (TNBD)

Bukit Duabelas National Park (TNBD) is the habitat of the indigenous people in Jambi, the Orang Rimba or Suku Anak Dalam. It is located in Sarolangun region, Bungo Tebo region and Batanghari region. EFForTS established 4 research plots at TNBD which serve as control plots for the oil palm and rubber management sites. Research activities in the TNBD plots are basically in the same manners like the oil palm, rubber and in PT.REKI which are investigating on environmental and biota factors.

2018

# SEPTEMBER

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
26	27	28	29	30	31	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	1	2	3	4	5	6

September 11: Islamic New Year 1440 H







Signing contract of research plots with farmers, 2016



Villagers demoplot ( Courtesy Fenna Otten / C02 )



Desa Mekar Jaya



Farmer's house in Lubuk Beringin Village ( Arieska Wening / C06 )



The oil palm and rubber research plots of EFForTS are privately held / owned by local farmers. The sites are located in Batanghari, Muara Jambi, Tebo, Sarolangun, and Bungo regions. Overall, EFForTS conducts research on 32 plots which owned by farmers; on 12 oil palm plots, 12 rubber plots and 8 jungle rubber plots. The on-site survey / research of project group C is carried out with the support of the farmers. After 6 years of working in the region, EFForTS has established a trustful partnership with the villagers.

2018

# OCTOBER

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
31	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31	1	2	3







Head office of EFForTS at UNJA



House Cemara in Jambi city



Mitsubishi Strada Triton



Climate tower of A03 at PTPN VI



Motorbikes for field work



Field house in Batu Kucing



Field house in Muara Bulian



Toyota Innova



Jelutung house 2



Field house at PT Humusindo



House Mess Barat, UNJA campus, Jambi city



Office building of EFForTS at UNJA



### Research infrastructure (offices, housing, vehicles)

The research infrastructure and logistics of EFForTS consists of:

1. Two head offices at Bogor Agricultural University and Jambi University
2. A climate tower of A03 at PTPN VI, Batanghari region - Jambi
3. Several houses in the city and in the field: Mess Jelutung, Mess EKRI, Mess Cemara (till July 2017 only), Mess Batu Kucing, Mess Bulian, Mess Humusindo, guest room in IPB, and Mess Barat and Mess F
4. Four cars and 24 motorbikes to support operational and research activities.

2018

# NOVEMBER

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
28	29	30	31	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	1

November 20 : Maulid Prophet Muhammad SAW 1440 H







Tropical plant identification workshop organized by B06 & Kew gardens, UK at SEAMEO BIOTROP in September 2017



Jernang ( dragonblood ) training for Suku Anak Dalam in April 2014



Visit of the delegates of Ministry of Foreign Affairs at B11 Enrichment Experiment



The delivery of fruit seedlings to suku anak dalam in March 2014



Half day workshop of EFForTS at UNJA in June 2017 - Dr. Siria Blagioni (A01) presents her research activities



**Public relation activities: seminar series, workshops, socialization and dissemination**

Doctoral and postdoctoral researchers as well as PIs of the University of Göttingen regularly present their research work to counterparts, stakeholders and academic scholars at IPB, UNJA and UNTAD. Similarly, thematic workshops are regularly held by representatives of ministries and agencies to inform the researchers about permit regulations. In order to maintain good relations with the project's stakeholders and to engage in a constructive dialogue with them, regular socialization events are being held to (i) raise the awareness of the village authorities and to build trust with the village head, the plot owners, the villagers, (ii) to popularize the project's activities in the village in order to secure tools and equipment, and (iii) to participate in human capacity development in the partner villages. The socialization normally is followed by agricultural dissemination activities to increase the knowledge of farmers to manage their plantation.

2018

DECEMBER

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
25	26	27	28	29	30	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31	1	2	3	4	5

December 24 : Christmas Day Leave  
December 25 : Christmas Day

