

# **CADEFEST News**

The Project for Capacity Development of the Faculty of Engineering Science Technology, the National University Timor Lorosa'e (CADEFEST Project Phase II)



Newsletter

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## Hera, August 2021

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## **UP COMING Event:**

- Research Online Discussion
- Seminars
- Special Lectures
- Report Presentation From JICA Long-Term Trainees



# **Message from CADEFEST Project Manager**

Welcome to the seventh edition of our project newsletter!

My warmest regards to our readers and hope you all stay calm and safe under this situation due to pandemic Covid-19. During the lockdown due to pandemic of Covid-19, our educational activities and some programs have been suspended. Furthermore, the country faced flood disaster in 4th April 2021 by hitting cyclone Seroja. However, I am proud of our lectures and students that they did huge contributions through flood research survey activities. The Government Authorities appreciated our contributions and re-recognized the importance of our academic roles in the country development.

To let our readers keep update, various activities which conducted in first half of 2021 are on this newsletter. As the project manager and the Interim Dean of FoEST, I am proud of the progress we have done and looking forward to hearing your feed back to improve our activities and have more collaborations.



With the collaborations of our readers, I hope that we will go forward and get through this difficult situation together.

Please enjoy reading our seventh edition!

Dr. Eng. Junior Raimundo da Cruz Project Manager, CADEFEST Project Phase II Interim Dean, Faculty of Engineering Science and Technology-UNTL

## **Message From Chairman of Japanese Supporting Universities**



Prof.Dr. Ikuo Tanabe Chairman of Japanese Supporting Universities Committee

On behalf of Japanese Supporting Universities, I congratulate JICA CADEFEST Project Phase II and Faculty of Engineering, Science and Technology, UNTL for launching seventh Project Newsletter.

Although we all facing the difficulties to implement the activities in this hard time due to Pandemic Covid-19, this newsletter still can show the progress of activities with stakeholders. Especially, I am very glad that some lecturers in the faculty have continued research discussions with professors in Japanese Supporting Universities to improve their research skills and knowledge.

As the project started in August 2016, we will now go into project sixth years. We hope that the situation returns to normal and re-start to dispatch professors from Japanese university and conduct training for the lecturers to achieve our project targets in CADEFEST project phase II. Until then, stay healthy and stay safe.

## **Message From Chief of Cooperation Unit**



Câncio Monteiro, Ph.D.
Chief of Cooperation Unit, Vice
Dean Cooperation and Research
Affairs-FoEST

Under the Covid-19 restriction, the Cooperation Units (CU) still has done many activities in the first half of 2021. Specially, we are proud to inform that we organized flood survey related activities are such as symposium and seminars to attract social awareness of our contribution to the society.

We also now working on editing the fourth issues on Timorese Academic Journal of Science and Technology (TAJST). For the flood survey, Special Edition of TAJST for flood is also being prepared. Other than that, we have collaborated with external partners such as private institutions international NGOs and UN agencies.

As a chairman of CU, I appreciate those who have contributed to all of the social contribution activities related to CU.

We believe that if we unite our efforts, we will be able to get over this predicament due to COVID-19. Let's go for it! Enjoy this news letters and STAY SAFE to ALL!

# Signing of Project Period Extension



The Signing Ceremony at Rector Office in UNTL

On 15<sup>th</sup> September 2021, the Rector Professor Dr. João Soares Martins, UNTL signed the agreement between the JICA CADEFEST Project Phase II and UNTL to make one year project extention due to the current conditions of the Covid-19 pandemic. Therefore, the project period will be extended until March 2023.

Priore to the signing, the long history of cooperation from JICA and Japanese Governments were reviewed and the current targert and obstacles were disscussed by the Rector and Interim Dean of The Faculty of Engineering, Sicence and Technology. In addition, possible future strategic plans and the views were exchanged. Now, the project is ready for going forward to the completion of project phase II.

## **Online discussions**



From January to September 2021, lecturers of the Faculty of Engineering, Science and Technology (FoEST) - UNTL participated in online research discussion with professors in Japanese supporting universities. So far, 13 professors attended and 21 lecturers participated in this online activities. The total online discussion hour is now more than 400 hours.

The research papers and lecturers' notes were prepared through this online discutions. Since the international flights are still limited, the project continue to support these activities to build up the lecturers' research capacities. The project found the effectiveness and efficiency of this online activities. Even, after the situation become normal, this online communications should be continued to strengthen the relationship between Professors and Lecturers of the FoEST.

## The 13th Steering Committee Meeting



The 13th Steering Committee Meeting

The 13<sup>th</sup> Steering Committee Meeting was held on 10<sup>th</sup> March 2021 at meeting room in new building, Hera Campus. The participants were Dr. Ruben Jerónimo Freitas, Dean of Faculty of Engineering Science and Technology, UNTL, Prof. Dr. Koichi Shimakawa, Chief Advisor of JICA CADEFEST Project, Vice Deans and Directors of

Departments. The meeting was started by introduced the new structures of Department to Prof. Shimakawa in Japan through online.

The aims of this meeting were to monitor, evaluate and review the project activities in last three months and to plan and confirm the project activities for next three month. Participants exchanged their views and discussed countermeasures to solve issues for implementing the Project.

## **The Cooperation Unit Meeting**



The CU Meeting

On 2<sup>nd</sup> June 2021, the Cooperation Unit held meeting in meeting room of the Faculty of Engineering, Science and Technology, UNTL, Hera Campus. The meeting were conducted to discuss the Special Edition of "Timorese Academic Journal of Science and Technology" (TAJST).

Dr. Cancio Monteiro, Chief of Cooper-

ation Unit, Vice-Dean Cooperation and Research Affairs-FoEST, UNTL announced that Dr. Benjamim Hopffer Martins is a Chef editor of the TAJST Special Edition on "Recent Natural Disaster Assessment for Mitigation and Prevention and risk Management". Dr. Benjamim was chosen by lecturers of Civil Engineering Department, lecturers of Geology and Petroleum Department, lecturers Civil Engineering Department and CU's members. In the meeting they decided to receive manuscript in Tetum, Portugues, English and Indonesia languages for the TAJST special edition to get the knowledge and experience any research that focusing in natural disaster in Timor-Leste.

## **International Conference**

On 30<sup>th</sup> March 2021, His Excellency Dr. Victor da Conceição Soares, Minister of Petroleum and Minerals, Senior Lecturer, Faculty of Engineering, Science and Technology, UNTL was invited in the International Symposium on Renewable Energy Systems which took place with organization of Gifu Renewable Energy System Research Center (G-RESRC), Gifu University, Japan.

The conference was held via online and the honorable Minister delivered his research presentation "Wind Characterization of Baucau High Land in the Period of Six Months: May too October 2019". His presentation introduced the characteristics of wind in Timor-Leste and emphasized the importance of development of renewable energy sector in Timor-Leste in the coming future.



Dr. Victor C. Soares, presented in International Conference

## **Lecture Note**



Mr. Nicolau handed over his lecturer's note to Mr. Joao Guterres, Director of Electronics and Electrical Engineering.

The Lecturer's note of "Electromagnetic Theory for Electrical Engineering" were handed over by Mr. Nicolau da Costa, M. Eng. from Electronics and Electrical Engineering to head of Department, Mr. João Guterres M. Eng. The lecturer's note will be utilize to teach their students in Electronics and Electrical department.

This lecturer's note development was supported by Prof. Koichi Shimakawa, Chief Advisor of JICA CADEFEST Phase 2. Mr. Nicolau developed two lecturer's notes. Another is "Electronics Materials".

## **Equipment Handover**

The JICA CADEFEST Project Phase II handed over the equipment to Mechanical Engineering Department and Civil Engineering Department, Faculty of Engineering Science and Technology, UNTL. The equipment was provided for utilizing research and education activities such as CAD/CAM in Mechanical and drone survey in Civil field.







# Meeting with IPG





Meeting with IPG and checked the Resistivity Survey System

On 23<sup>th</sup> February 2021, Mr. Atshushi Takahashi, Coordinator of JICA CADEFEST Project Phase 2 had meeting with Mr. Gabriel G. Aparicio de Oliveira, President of IPG and Mr. Mr. Juvencio do Rosario, Chief of Task Force Group of the Geophysics and Regional Petroleum.

The purposed of the meeting was to discuss the collaboration of Geology and Petroleum Department of FoEST-UNTL under support of the JICA CADEFEST Project 2. After the meeting, Mr. Takahashi also checked and repaired the Resistivity Survey System that IPG and UNTL jointly doing the research for identifying underground water resource.

# **Graduate Tracer Survey**

On June 2021, the graduate tracer survey has been conducted and the result is shown as the table below

Graduation	Total	Responded	No Response	Employed	Unemployed	Employment Rate
Month / Year		(A)		(B)		B/A X 100
November 2016	101	45	56	42	3	93%
May 2017	67	55	12	46	9	84%
November 2017	95	66	28	51	15	77%
May 2018	87	57	30	48	9	84%
November 2018	80	50	30	38	12	76%
June 2019	92	71	21	44	27	62%
December 2019	87	64	23	43	21	67%
September 2020	61	43	18	16	27	37%
May 2021	33	22	11	5	17	23%



The employment rates for those who graduated few months ago (May 2021) a year ago (September 2020) one and half year ago (December 2019), two year ago (June 2019), two and half year (November 2018), three years ago (May 2018), three and half years ago (November 2017), four years ago (May 2017) and four and half years ago could achieve 93%, 84%, 77%, 84%, 76%, 62%, 67%, 37% and 23% respectively. The current students in Hera Campus are expected to prepare well to get job after the graduation to improve this situation. We here express our appreciation towards to the graduates who responded this tracer survey.

## **Flood Survey Activity**

# **Civil Engineering**

From April to May 2021, Lecturers from Civil Engineering Department, The Faculty of Engineering, Science and Technology – UNTL, conducted a survey in Dili to observe and collect data for the rivers, bridges and roads which were damaged by Seroja Cyclone on 4<sup>th</sup> April 2021.

The purpose of this survey is to analyze the aspect of the flood scientifically though the collected fields data and investigate effective countermeasures to prevent the similar natural disaster in the future. This survey activity is led by the Director of Civil Engineering Department Mr. Alfredo Ferreira, ST, M. Eng. with lecturers and students from Civil Engineering Department.



## Flood Survey by Geology and Petroleum Department

From April to May 2021– Lecturers from Geology and Petroleum Department, the Faculty of Engineering, Science and Technology-UNTL, conducted a survey in Dili city to observe and collect data for the landslides and water level of flood that caused by Seroja Cyclone on 4<sup>th</sup> April 2021.

The purpose of this survey is to analyze and identify critical flood points though the collected fields data and investigate effective countermeasures to prevent the similar natural disaster in the future.

This survey activity is led by the Vice Director of Geology and Petroleum Department Mr. Apolinario Eusebio Alves, ST, M.Sc with lecturers and students from the Geology and Petroleum Department.



## Flood Research Activities

## **Civil Engineering Department**





Professors from Yamaguchi University Meetings with Lecturers of Civil Engineering Department, FoEST.

From April to June, Lecturers from Civil Engineering Department, the Faculty of Engineering Science and Technology—UNTL, had online meeting with Japanese Professors from Yamaguchi University at JICA Office Meeting Room, Dili.

The purpose of the meeting was to discuss research activities in the field and the results of flood survey in Dili area. The professors supported Civil Engineering department to analyze the collecting data and exchanging ideas.

They both prepared the seminar and symposium for sharing the research results to public.

# **Geology and Petroleum Department**

From April to May 2021, Lecturers of Geology and Petroleum Department, the Faculty of Engineering, Science and Technology-UNTL had meetings at the Faculty of Engineering, Science and Technology, Hera Campus.

The purpose of the Geology and Petroleum Lecturers meeting were to discuss regarding research activities and managed the flood survey data of the flood disaster that occurred on 4th April 2021 in Dili.

The research activities were supported by Prof. Kiichiro Kawamura from Yamaguchi University, Japan.



Lecturers of Geology and Petroleum Department Meeting.

## **Long Term Training**

## Mr. Vital Cruz M. A. Vilanova





On 17<sup>th</sup> June 2021— Mr. Vital Cruz Malai A. Vilanova lecturer from Geology and Petroleum Department the Faculty of Engineering, Science and Technology—UNTL, departed for Japan, to continue his doctoral studies at the Gifu University in the field of Geology especially in Inorganic Geochemistry.

The long term training program is named "JICA Development Studies program, Human Resource Development in science and Technology innovation". He is now trying to pursue his degree by 2023.

# **Cooperation Units Meeting with ADN**





Dr. Cancio Monteiro had meeting with ADN executive Director and his staff.

On 8th April 2021, Dr. Cancio Monteiro, Chairperson of Cooperation Unit, Vice Dean Cooperation and Research Affairs-FoEST, visited National Agency of Development (ADN) and had Meeting with Mr. Mariano Renato M. da Cruz, Executive Director of ADN and his Directors in ADN's Office, Dili.

The purpose of the meeting was to discuss research activities and collaboration between Faculty of Engineering, Science and Technology, UNTL and ADN. In the meeting they planed to design Memory of Understanding (MoU) between FoEST and AND to facilitate the activities collaboration in the future.

## **Flood Survey Result Presentation**

## **Geology and Petroleum Department**





On 24<sup>th</sup> June 24, 2021, Geology and Petroleum Department the Faculty of Engineering, Science and Technology-UNTL, presented their flood survey result in Ministry of Public Works in Raikotu, Dili.

The participants in the presentation were Mr. Mariano Renato da Cruz, Executive Director of Agencia Dezenvolvimento Nacional (ADN), Mr. Gabriel Gaspar A. de Oliveira, President of Institute Petroleum and Geology (IPG) and Directors of Minister of Public Works. The participants appreciated the presentation and expressed the expectation that the result can be well utilized to prevent flood disaster in Timor-Leste.

## **Geology and Petroleum Engineering**

On 20th July 2021, Geology and Petroleum Engineering Department the Faculty of Engineering, Science and Technology-UNTL, presented their flood survey result to H.E. Mr. Jose Maria Reis, Vice Primer in Meeting room Minister of Urban Planning, Dili.

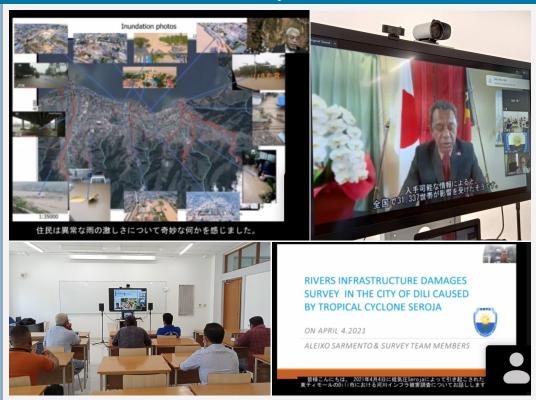
Mr. Ko Goto, Chief Representative of JICA Timor-Leste also attended in the presentation.

The Vice Primer Minister showed his gratitude for the presentation and suggested to Geology and Petroleum Department to continue to collaborate the related infrastructure institutions and agencies.





## **Flood Survey Seminar**



Yamaguchi University Seminar

On 29<sup>th</sup>May 2021, Lecturers from Civil Engineering Department the Faculty of Engineering, Science and Technology-UNTL, participated international symposium on "East Timor Flood Emergency Report Meeting" which took place in Yamaguchi University Regional Disaster Prevention and Mitigation Center, Yamaguchi University, Japan. The conference was held via online and Dr. Benjamim Hopffer Martins delivered a presentation of his research results entitled "Dili City Inundation Extension Assessment and Causes Identification" and Mr. Aleixo Sarmento also delivered his research result "Rivers Infrastructures Damages Survey in the City of Dili Caused by Tropical Cyclone Seroja". The conference was participated by Ambassador of Timor – Leste to Japan, Mr. Ilídio Ximenes da Costa, several staff from National Authority for Development and Ministry of Public Works and Lecturers from Civil Engineering Department. They exchanged their views and comments on the research outcomes to consider the cause of flooding and countermeasures the flood in Timor-Leste.

## **Flood Symposium**



On 29<sup>th</sup>July 2021, Civil Engineering Department and Geology and Petroleum Department, the Faculty of Engineering, Science and Technology-UNTL held National Symposium on "Hamutuk Rona No Haree Hodi Fo Solusaun Ba Prevensaun No Mitigasaun Dezastre Inundasaun Iha Futuro".

The Participant in the symposium were Exc. Mr. Jose Maria Reis, Vise Primer Minister and Minister of Planning and Territory, Mr. Ko GoTo, Chief Representative of JICA Timor-Leste, Mr. Carlos Peloi dos Reis, President of BTL.EP, Dr. Samuel Venancio de Sousa Freitas, Vice-Rector of Academic Affairs and Quality Guaranty, Mr. Gabriel Gaspar Aparicio de Oliveira, President of Institute of Petroleum and Geology (IPG) and Dr. Domingos Pinto, President of National Authority of Water and Sanitary (ANAS).

The objective of the symposium was to present the result of the flood research survey that conducted by Civil Engineering and Geology and Petroleum Department. Other than that, government institutions also presented their activities and analysis to the flood that happened in 4th April 2021.

In the symposium, all participants exchanged their ideas and views for possible solutions to prevent or mitigate the flood disaster in the future.

## **Government Assignment**

Our congratulations to lecturers of Faculty of Engineering, Science and Technology, UNTL that got assignments from Government Institutions of Timor-Leste to contribute in development of the country.



Dr. Victor da C. Soares, The Minister of Petroleum and Mineral Resources and Senior Lecturer of Mechanical Engineering Department, FoEST-UNTL. He obtained his Master's degree from Nagaoka University of Technology, Japan under JICA Long-Term Training.



Mr. Mariano Renato M. da Cruz, Executive Director of the Agencia Desenvolvimento Nacional (ADN) and Senior Lecturer of Civil Engineering Department, FoEST-UNTL. He gained his master's degree from Hiroshima University, Japan under JICA Long-Term Training.



Dr. Benjamim Hopffer O. Martins, "Kordenador Grupu Trabalhu Tekniku ba Identifikasaun Infrastutura no Ekipamentu Pubkliku Kolektivu" and Senior Lecturer of Civil Engineering Department, FoEST-UNTL. He graduated from Yamaguchi University and gained his Ph.D under JICA Long-Term Training.



Dr. Paulo da Silva, President of the Electricidade de Timor-Leste (EDTL) and Senior Lecturer of Mechanical Engineering Department, FoEST-UNTL. He obtained his Doctoral degree from Nagaoka University of Technology, Japan under JICA Long Term Training.



Dr. Ruben Jeronimo Freitas, President of the Autoridade Nacional para a Electricidade (ANE) and Senior Lecturer of Electronics and Electrical Engineering Department, FoEST-UNTL. He gained his Doctoral degree from Gifu University, Japan under support of JICA CADEFEST Project.



Mr. Gabriel Gaspar Aparicio de Oliveira, President of the Instituto do Petroleo e Geologia (IPG) and Senior Lecturer of Geology and Petroleum Engineering Department, FoEST-UNTL. He participated in JICA short-term training in Kyushu University, Japan.

Mr. Afonso Clonildo is a staff of CADEFEST Project Phase 2, will end his service on the 31st of August 2021 and his responsibilities have been handed over to the successor, Mr. Felisberto de A. J. Fernandes.



## JICA CADEFEST PROJECT PHASE II

### **Editors:**

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## **Up Coming Event**

- **♦** Research Online Discussion
- **♦** Seminars
- **♦** Special Lecturers
- ♦ Report Presentation from JICA Long-Term Trainees

# **Sense of Condolence**



REST IN PEACE
DR. GABRIEL ANTÓNIO DE SÁ
28/2/1965 – 3/3/2021

The CADEFEST Project Phase II, would like to express our deepest condolences to the families of Dr. Gabriel António De Sá Vice-Rector of Post-Graduate and Research Affairs.

On 3<sup>rd</sup>March 2021 we have lost our irreplaceable counterpart,

Professor Doctor Gabriel António De Sá as Vice-Rector of Post-Graduate and Research Affairs, senior lecturer from Mechanical Engineering Department, who has made huge contributions to CADEFST Project Phase I as the Project Manager. Again, in response to the sadness on this occasion, our heartfelt condolences.

His posthumous work will be on the Timorese Academic Journal of Science and Technology (TAJST) volume 4.



REST IN PEACE

MR. FELIX DE OLIVEIRA, ST., M. ENG
2/8/1973 – 22/3/2021

The CADEFEST Project Phase II, would like to express our deepest condolences to the families of Mr. Felix de Oliveira, ST., M. Eng.

On 22<sup>nd</sup> March 2021 we have lost our precious counterpart, Mr. Felix de Oliveira, ST., M. Eng. as senior lecturer from Mechanical Engineering Department, who

has made huge support to CADEFEST Project by participating in JICA Osaka Gas Foundation joint Training Program in Japan.

Again, our thoughts and prayers are with you.

Editor are happy to receive suggestion and comments to improve this news.