FISH PROTEIN PROFILE SUBMERGE ALUM SOLUTIONBASED ON SDS-PAGE

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Euthynnus affinis and other fish product is perishable food because have protein and water more in order to long savings and high quality so food additive one of alum solution. Alum used for high quality contents is heavy metal is Aluminium negative effect for health in particular enzymatic system and tissue. Liver and kidney first tissue impact because detoksification organ. This study aims for analysis protein profile Euthnnus Affinis fish submerge alum solution 0%, 10%, 20% dan 30% by SDS-PAGE method. Study object use ...

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Proceedings of the 1st International Conference Postgraduate School Universitas Airlangga : "Implementation of Climate Change Agreement to Meet Sustainable Development Goals" (ICPSUAS 2017)

PREFACE

Assalamualaikumwarahmatullahiwabarakatuh

May Allah's blessings be upon us all and peace and prosperity granted to all of you who attend here.

At this precious moment,let us first forward our grateful to GOD Almighty for His blessings which allow us to attend this precious conference. I also would like to express the warmest and heartfelt welcome to Keynote speakers, Plenaryspeakers, presenters, guests and participants to the opening of the 1st International Conference held by Postgraduate School of Universitas Airlangga with the following theme "Implementation of Climate Change Agreement to Meet Sustainable Development Goals".

Distinguished Guests, Ladies and Gentlemen,

Universitas Airlangga along with its long history in higher education particularly in science' and social science, has dedicated itself and has a strong commitment to boost the development in Indonesia in all sectors to enhance the awareness in environment, economy, and benefit the society.By carrying out the task, UniversitasAirlangga invites environmental experts, academics and researchers in this environmental conference with a main theme on climate change.

Through this forum, all issues with respect to climate change in the worldand its challenges will be explored and discussed to offer solutions to meet the global and future challenges with the spirit of education for all.

Ladies and gentlemen,

As we all know since the beginning of the 20th century the world has experienced global warming with a widespread impact on the environment. Disasters such as droughts, floods, landslides, and crop failures are instances the impact of global warming. Global Warming is the increase in air temperatures on the surface of the Earth and in the oceans that began in the 20th century and is predicted to continue to increase. Surprisingly, the global average

Q

temperature on Earth's surface has increased by 0.74 ± 0.18 ° C (1.33 ± 0.32 ° F) over the last hundred years. This is the fact.

According to the Intergovernmental Panel on Climate Change (IPCC) that much of the increase in global average temperatures since the mid-20th century is most likely due to increased concentrations of greenhouse gases due to human activities. This basic conclusion has been

expressed by at least 30 scientific and academic bodies, including all the national science academies of the G8 nations. However, there are still some scientists who disagree with some of the conclusions put forward by the IPCC. Scientists use computer models of temperature, precipitation patterns, and atmospheric circulation to study global warming. Based on the model, scientists have made some forecasts about the impact of global warming on weather, sea level, beaches, agriculture, wildlife life and human health. NASA states that global warming is impacting the increasingly extreme changes in weather and climate of the earth. The pattern of rainfall varies unpredictably, causing flooding in one place, but drought elsewhere. New tropical cyclones and storms will emerge with a growing trend of strength. We realize how hot the temperature around us lately. We can also see how unpredictable the arrival of the rainy season or drought that resulted in losses for farmers because the planting season should be done in the dry season which actually should be in rainy season. We can also look at cases of extreme storms that have never hit certain regions in Indonesia. In recent years we are increasingly hit by storms that interfere with the voyages and transport of both via sea and air. To add more examples on the impact of global warming, we can also look at international news look at international news about natural disasters. Typhoon storms in Japan and the United States continue to break the record of wind speed, scale, and hurricane strength from year to year, rainfall and snow storms in China are also continuing to break new records year after year.

Those extreme changes in weather and climate in the earth have already happened, therefore the important thing we must do is the intensity of the occurrence should be reduced in as it is stated in Kyoto Protocol.It is an emission reduction mechanism whereby Annex I countries can divert emissions reductions through joint projects with the objective of reducing emissions due to human activities or that increase the greenhouse gas impregnation. This can be done with some requirements, most importantly that the activities are only additional to the steps taken at the national level to meet the emission reduction targets. The concept underlying this Kyoto mechanism is the classical economic theory that with the smallest possible input expected to obtain the greatest possible output, therefore joint implementation will prioritize the least costly or most profitable ways for those who invest their capital. Joint implementation activities will be funded by private sectors to produce ERU (Emission Reduction Unit). Therefore, along with Kyoto Protocol, all parties are no exception, should support to reduce the growth of climate change in order to decrease the impact on the environment. Whatever our profession as a citizen of the world, to reduce the growth of climate change needs actions which refers to sustain the environment. This is a form of our awareness to our environment, actions in a very common way such as planting trees, sparing green open space, reducing plastic waste, not all the land must be concretized/cemented must be done immediately without having to wait another time.

I nose actions are actually part of the transformation of the agenda of Sustainable Development 2030 by United Nations. In this conference forum, it is expected to come up idea and concepts that become the basis of the implementation of environmental awareness. Implementation of environmentally consciousness, particularly climate change, is expected to be practiced in the interconnected field which then targeting to the three dimensions of Sustainable Development: the economic, social and environment.

Distinguished Guests, Ladies and Gentlemen,

This first international conference on global warming held by UniversitasAirlangga will not be successful without the support from all parties which f mention earlier. Therefore, at this opportunity, I would liketo extend my deepest appreciation to the colleagues from Thailand, Japan, Malaysia, and Indonesia for collaboration to share their valuable thoughts and concepts in plenary forum, group discussions forum, and workshops, and scientific publications. At the same time, I would like also to express thankfulness to the presenters and participants who have spent their valuable time for great participation to this conference. And certainly my gratitude goes to sponsors for valuable contributions and the organizing committee for painstaking and hardworking to make this conference success. Thank you very much for your kind attention.

Wassalamualaikumwarahmatullahiwabarakatu.

Surabaya, August 1st, 2017

Rector Prof. Dr. Mochammad Nasich, S.E., MT., Ak, CA

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Poverty Alleviation: An Economic Practice Study of Islam in Culture Renny Oktafia

Indonesias wealth can be seen from the natural resources owned, contained in the earth, in the sea and in the air of this country. In addition, there is another great wealth, the cultural richness. Similarly, the culture contained in Indonesia, a variety of forms, ranging from dance, handicrafts, art...

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Advances in Social Science, Education and Humanities Research (ASSEHR), volume 98

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Obesity in Pets – One Health and Animal Welfare Considerations

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Abstract Companion animals – particularly and most commonly dogs and cats – share the lifestyles and the environments of their human counterparts. Similarly, they may also share both the positive and negative implications of this "intimate relationship" with humans. Improved access to resources such as food supplies, shelter, security & veterinary care may be considered positive aspects of this relationship. Negative implications can include, for example, a sedentary lifestyle with limited exercise opportunities that may cause increased rates of metabolic or degenerative diseases such as Type 2 diabetes, cardiovascular disease, osteoarthritis as well as certain neoplasias.

One of the most significant human healthcare issues, and one often shared by companion animals is the growing problem of obesity. The presentation offers an overview of interaction of environmental & social factors that can have adverse influence on the health and welfare - especially in relation to the "the rising pandemic of obesity" - of humans and companion animals.

Keywords - cat; dog; human; obesity; One Health; animal welfare

One Health

One Health is the intersection of veterinary medicine, human health and environmental science. It is interdisciplinary, promoting collaboration - and potentially further, integration - of all aspects of the health care for humans and animals. This necessarily includes the medical, veterinary and allied health professions, epidemiologists and public health experts, ecosystem and climate scientists, researchers and others.

One Health is not a new concept. **Rudolf Virchow**, the German physician known as the "father of

comparative medicine and modern pathology"¹ declared in the mid-19th century that

"Between animal and human medicine there are no dividing lines—nor should there be"

This was built on still earlier approaches. For example, **Claude Bourgelat**, who, when establishing the world's first veterinary school in Lyon in the 18th century, recommended a comparative approach to human and animal medical science.² Following on from Virchow, the Canadian physician **Sir William Osler** espoused modern One Health collaborative principles during the late 19th and early 20th centuries.³

However, during the early years of the 20th century, interest in the concept of One Health has been declined. This has, in part, been attributed to the end of the reliance on animals for transport (replaced by the internal combustion engine)⁴ and possibly to increased urbanisation and the rapid improvements in human medical science.

The modern re-emergence of "One Health" in the mid-1960s followed the recognition of the close association between animal and human health and medicine by the American veterinarian **Calvin W. Schwabe**, who then formalised the concept as "One Medicine" in the 1984 3rd edition of the textbook "Veterinary Medicine and Human Health." ¹, 4, 5, 6

Following the response to potential global pandemics, including the Highly Pathogenic Avian Influenza (HPAI H5N1) outbreak during the first decade of the 21st century, and recognising the risks of other emerging zoonotic diseases, "One Medicine" evolved via a tripartite agreement between the FAO, WHO and OIE into the present "One Health" framework.³ Subsequently, the first international One Health scientific congress was held in Melbourne, Australia in February 2011.⁷



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AN OVERVIEW OF THE SEAWEED CULTIVATION IN SEVERAL COUNTRIES: TECHNOLOGY AND CHALLENGE

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Abstract - Economic development, low carbon development, green economy. millennium development goals (MDGs), blue economy and sustainable development goals (SDGs) have become a strategy to develop human resources, health, carrying capacity for the environment, income per capita, competency, skills, and to eradicate poverty. Various development strategies applied give results related to the significant development focus that has been done. Furthermore, the success of the increase in the commodity of seaweed also hangs from the direction of the economic development policy conducted by the country. Some countries apply seaweed cultivation by using biotechnology to improve the quantity and quality of the seaweed produced. However, the capacity of the processing industry in Indonesia is still not sufficient enough to be able to absorb the domestic raw materials so that the seaweed processing industry is only able to absorb 20-25% of the domestic production of Indonesia's seaweed. A strategy to increase the capacity for the cultivation and processing of seaweed can be formulated in several steps, such as the transfer of technology, incorporating technology in existing industries, business development, the attraction of foreign investment, the investigation of critical mass, and social and environment improvements.

Keywords: seaweed, cultivation, processing, strategy, development

Introduction

The economy development approach that has performed is based on several strategies, such as economic development, low carbon development, green economy, millennium development goals (MDGs), blue economy and sustainable development goals (SDGs). In general, these strategies have several aims to increase the economy level and are influenced by government policy, capital, level of public prosperity, and the competency of human resources. Economic development usually refers to

the adoption of new technologies. This also includes transitioning from agriculture-based to an industrybased economy, and general improvements in living standards. O'Sullivan and Sheffrin (2003) stated that the scope of economic development includes the process and policies by which a nation improves the economic, political, and social well-being of its people. The concept of low carbon development has its roots in the UNFCCC adopted in Rio in 1992 (UNEP, 2008). In the context of this convention, low carbon development is now generally expressed using the term low-emission development strategies (LEDS - also known as low-carbon development strategies, or low-carbon growth plans). Though no formally agreed definition exists, LEDS are generally used to describe forward-looking national economic development plans or strategies that encompass lowemission and/or climate-resilient economic growth (IEA 2010). UNEP defines the green economy as: "one that results in improved human well-being and while significantly social equity, reducing environmental risks and ecological scarcities. In its simplest expression, a green economy can be thought of as one which is low carbon, resource efficient and socially inclusive". The Millennium Development Goals (MDGs) are the world's time-bound and quantified targets for addressing extreme poverty in its many dimensions: income poverty, hunger, disease, lack of adequate shelter, and exclusion-while promoting gender equality, education, and environmental sustainability. They are also basic human rights; the rights of each person on the planet to health, education, shelter, and security. MDGs has 8 goals, that is Goal 1: Eradicate Extreme Hunger and Poverty, Goal 2: Achieve Universal Primary Education, Goal 3: Promote Gender Equality and Empower Women, Goal 4: Reduce Child Mortality, Goal 5: Improve Maternal Health, Goal 6: Combat HIV/AIDS, Malaria and other diseases, Goal 7: Ensure Environmental Sustainability, and Goal 8: Develop a Global Partnership for Development. The blue economy concept has been presented subsequently in many fora and is viewed as an alternative economic model for sustainable development that puts the oceans at the centre of this approach (Lesperance, 2016). UNDP (2017) stated

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Enzootic Bovine Leukosis: how to prevent the disease and control the spread of BLV infection.

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Abstract-Threat of animal infectious diseases, as well as that of vector-bone disease is increased in the globalized world under global warming. Enzootic Bovine Leukosis (EBL) is caused by the infection of Bovine Leukemia Virus (BLV) which belong to the family of Retiroviridae. Only a few percentages of BLV infected cattle develop fatal EBL after long incubation period from months to years. Majority of the BLV-infected animals show no apparent symptoms (asymptomatic), although they have a potential for transmissing BLV to the other cattle. BLV is mainly transmitted with the infected lymphocytes. The blood-suckling insect carrying the live blood cells from BLV-infected cattle can be a mechanical vector of BLV transmission. In contrast with acute infection, BLV can spread silently unless the proper control measure is conducted. Surveillance is critical for understanding BLV positivity, and suitable management plan of BLV-infection for the region is to be carried out for sustainable development of livestock industries.

Keywords—*EBL*; *BLV*; *Asymptomtic*, *blood-suckiling insect*; *management plan*

Animal infectious diseases make an impact on the society and food security in a globalized world. Along with Gross Domestic Production (GDP), meat consumption increased in many countries [1]. Production of animal protein, and trade of meat also increased. The scale of livestock production becomes larger. In addition, global warming affects distribution of bloodsuckling insects, which may transmit infectious diseases. More than 20% of livestock product in the world is lost by animal diseases. Threat of animal infectious diseases, as well as that of vector-bone disease is increased.

Enzootic Bovine Leukosis (EBL) is one of fatal bovine infectious diseases cause by Bovine Leukemia Virus (BLV), which belongs to a family of *Retroviridae*. In contrast with acute disease whose onset is sudden in the order of several days after the infection of the pathogen, the appearance of EBL is very slow, which takes months to years after BLV infection. In addition, the majority of BLV-infected animals shows no clinical symptoms. A proportion (~30%) of adult cattle infected with BLV develop persistent lymphocytosis, and only a small portion (0.5-10%) of BLV-infected animals develops EBL [2]. Asymptomatic carrier of BLV-infected animals can be a source of infection. Therefore, EBL is a kind of hidden disease; Once EBL case was found, there may be many asymptomatic BLV- infected cattle around the case, which can spread silently without showing any clinical symptoms.

Historically, EBL was reported in 1871 in German medical literature. Early in the 20th century, it attracted attention in Eastern Europe, especially in Denmark and Germany, where a high incidence of a similar disease observed. EBL was supposed to be imported from Europe to USA at the end of 19th Century [3]. In Japan, the first EBL was described in 1926 in Iwate, a northern part of Japan. In 1969, BLV, the causative agent of EBL, was isolated in the USA from cattle with persistent lymphocytosis.

Retrovirus including BLV shows a unique replication cycle, i.e., the viral genome is integrated into the host chromosome. As a character of retrovirus infection, once the virus infects, the infection lasts as far as the host lives (life-long infection). Regarding the BLV transmission route, living lymphocytes carrying BLV are thought to be required for establishing new infection. Vertical infection including in uterus, birth canal and colostrum from BLV infected mother is known. Horizontal transmission includes iatrogenic/artificial contaminated blood exposure, direct contact and blood-siphoning insects. Mechanical transmission of BLV-infected lymphocytes by blood-siphoning insects such as biting flies are known. The incidence increase in summer or fall when those insects become active. Higher incidence in warmer climate and in wetter areas is also known. BLV-infected lymphocytes on the mouth-pad of insects can be transferred into the new cattle.

Although EBL is widely distributed in the world, eradication was succeeded in some countries, where test and cull policy was conducted. High prevalence of BLV infection is reported in Japan as well as USA. However, the prevalence of BLVinfection is not known regarding the countries where no surveillance was conducted.

In Japan, Bovine Leukosis (BL) became reportable disease in the year of 1998, because the government noticed the increased number of EBL cases. BL includes EBL and sporadic BL (SBL). EBL is caused by BLV, but the etiology of SBL is unknown. More than 90% of BL cases in Japan is thought to be EBL, although the precise diagnosis may be difficult in some cases. Traditionally, EBL is observed in the cattle more than 3 years old, but recently young animal below 2 years old are sometimes diagnosed as EBL [4].



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Development of legal theory for environment protection and remedy for victims in Japan

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Abstract— This paper argues how Japanese law and jurisprudence contributed to relieve grievance of victims in environmental pollution caused by economic activities. Japan has experienced severe environmental pollution along with its economic growth since the 19th century. However, the grievance of pollution victims had been almost ignored. In the late 1960s, victims began court struggle to recover their right to life. Also, the court and the government addressed this problem seriously. Remarkable progress is the series of judicial decision regarding the most serious pollution cases, and those decisions devised several significant legal theories which mitigate the difficulty of pollution victims in challenging against polluting companies. Now, economic activities of the industrial company are strictly regulated by law which put a priority on people's life and health to companies' economic rights. Even though it, "public interest" are still used as a reason to limit peoples' rights to healthy life.

Keywords—pollution; environment; Japan; legal aid

1. Introduction

Environmental pollution caused by industry is a dark side of the economic success of modern Japan. Since Japan began its modernization and economic development in late 19th century ¹, pollution problem became visible. Since *Meiji* restoration in 1867 and state led industrialization after the restoration, environmental pollution had been an adverse-effect of rapid modernization of Japan. The government, however, had never paid due attention to the victims of pollution. Even though victims had made several efforts to recover their right, until the 1970s, the judicial measure did not offer a satisfactory way for relieving their human rights. It was the late 1960s and 1970s that Japan addressed grievance of pollution victims, especially, regarding law and judiciary.

It was so called the four big pollution trials that made Japanese society take pollution as serious social and environmental problem. The four big pollution trials are Niigata Minamata disease trial, Kumamoto Minamata disease trial, Itaiitai disease trial and Yokkaichi asthma trial. In those trials, plaintiffs not only claimed compensation for damages against companies but also demanded all or partial suspension of factory plant operation and administrative responsibility that failed to prevent pollution. Besides the major pollutions above, a wide range of pollutions, such as water and air pollution and noise, had been serious problems, and many lawsuits have been filed.

The turning point of environmental law of Japan is an amendment to the Basic Act on the Pollution Control in 1970. Though the basic act was enacted in 1967, this law included a provision of harmonization of "pollution control" and "healthy development of the industry." This so-called "harmonization" clause implied that industrial development could prior to life and health of people suffering pollution. However, in 1970, amid of court struggles by pollution victims, the National Diet which was convened to discuss pollution problem specifically, resolved to abolish the "harmonization" clause. Here, the National Diet declared the supremacy of human life and health over the economy in the pollution control.

The judicial remedy for the damage of pollution takes various forms and invokes various legal theory. This paper reviews the way in which the victims recover their rights in civil procedure, and what is the limitation of civil procedure in pollution problem through examining several important cases.

2. Legal problems of the pollution

Pollution is external diseconomies of industrial activities of companies and causing damage to life or health of people living near by the industrial plant. Because pollution is a negative impact to the environment, the number of victims are usually large. As a company does not suffer any direct loss from its product activity which causes extra diseconomy, there should be outside intervention to relief the people affected. Because a company discharge energy or materials in its production activities, the company should be responsible for proving that its activity is innocent. However, in case victims seeking to compensation for damage by civil procedure, the burden of proof is on the victims. Therefore, it is necessary to have a different legal theory to reduce burden of victims.

¹ Industrialization of Japan had begun in the late period of Edo government, then it accelerated after *Meiji* restoration in 1879. Because the *Meiji* restoration established centralized state under

the Emperor, it became possible to invest in large scale heavy industries.