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Customary Law Associated with Five Integrated Aspects in Developing Traditional Coastal and Marine Protections for Improving Social People Life and Natural Products in Aru Islands Region of Maluku Province, Indonesia

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Abstract

In present on going work, we report the frontier interdisciplinary findings about customary law associated with five integrated aspects such as (1). History, (2). Laws, (3). Culture, (4). Science, and (5). Geoscience (or earth and space science) connected directly to the development of traditional coastal and marine protection to improve social people life in Aru region of ~804 small islands with its highest average hills of ~ 50 meter, south east part of Maluku province, Indonesia. The 5 integrated aspects were then investigated to be associated with a system of 6 customary actions as follows: (1). Features, (2). Characters, (3). Connectivity, (4). Sustainable development, (5). Similarity, and (6). Attitudes. Each of these 6 customary actions was very close to an indicator of social people daily lives such as (1) novel idea, (2) services, (3) tradition, (4) social interactions and (5) protections, except for the sustainable development which has been in conjunction with 2 indicators of economy impacts and building strength. The data was collected, identified, and then analyzed by using direct questioner consisted of 50 questions each in 2 different villages of Wokam and Karang Guli. These findings suggest that customary laws practiced traditionally in Aru region are rich or benefits to improve the local people income in order to sustain their traditional coastal and marine life. The research discovery in this simple paper may be applicable to many different fields of study such as in (1) science, (2) engineering and (3) medical practice based on its significant finding of the different between international customary law and the basic principle and essential of customary law.

Keywords: History, Customary Law, Culture, Science, Geoscience, Interdisciplinary.

ARTICLES

I. Introduction

Conducting a breakthrough research work in social sciences associated with interdisciplinary fields [1-4] was very tough due to the compulsory needs of many different types of scientists to sit down together discussing a novel idea for improving social, customary, economy, and politics (SCEP) status of ordinary society [5] especially those who leave in complex small islands areas like Indonesia country in general with about 14,480 islands, and Maluku province in a particular as a prototype of it with ~1340 small physical beauty islands associated obviously with **realism, idealism, dualism, and logical positivism** in natural conservation laws [6-8]. In addition, a serious critics of the implementation of customary law (CL) in society, for example in the south part of Africa [9], as well as a complex debate of the understanding related to conceptual confusion and methodological deficiencies into CL in the international knowledge currently has received attentions among social scientists [10-12], for instance between J.L. Blutman [10], and A.T. Guzman and J. Hsiang [11]. In addition, the differences of different country with different regulations of the customary laws were also found in Indonesia and Malaysia, even though their geography are like a very close neighbor [14,15].

In this paper, the researchers provide the best thought on how CL Associated with 5 integrated aspects consisted of (1). History, (2). Laws, (3). Culture, (4). Science, and (5). Geoscience (or earth and space science) in developing traditional coastal and marine protections for improving social people life and natural products in Aru Islands Region of Maluku Province, Indonesia.

Furthermore, such interdisciplinary collaborative contributions can distinguish the significant difference between the position of **customary international law (CIL)** and their findings on a **local wisdom traditional customary law (LWT-CL)**. The detail explanations and its implementation are explained in this letter.

II. Research Method

The technique carried out in this multidisciplinary research work was based on direct survey via a **hybrid research method consisted of scientific observation by public airplane trip and satellite images as well as direct observation in the fields to Aru islands region** conducted by Pattimura physicist and agriculture scientist as depicted in Fig. 1, and **knowledgeable questioner derived by Pattimura university law experts to the village leaders**. There were **50 questions in our direct questioner survey among 2 suggested villages of Wokam and Karang Guli from the district leader (Camat), Mr. Roby** in the region of Aru islands consisted of **three general parts of natural logic** as follows:

- (i). The first 14 questions were about **the customary laws of local people**
- (ii). The second 18 next questions were about **rejections of local people voices** due to certain people business policies related to local government improvement aims, and
- (iii). The last 18 last questions were about **Monitoring and Evaluation (ME) and Novel Findings for solution**.

Figure 2 and Fig. 3 show how the interdisciplinary researchers were taking the research data directly to the target by following a **systematic research procedure and techniques, respectively**. **Figure 2 indicates that there were 8 initial steps**

research procedures embedded on the figure to get permission from local government for research purposes so that the data collections in the target fields will have no any misunderstanding of local leaders.

On the other hand, **Fig. 3** shows **9 steps of research technique** depicted inside the picture to collect specific data on correct targets based on the prepared 50 questions in the questioner for the village leaders of Wokam and Karang Guli (meaning *Head Crown* of local language) areas, respectively.

Based on the interdisciplinary systematic works mentioned above, the researchers have obtained the results and its discussion in session 3 of this paper.

Figure 1. Aru islands region with her 17 important bays taken from the skies using airplane, and visited with local boat particularly in two important villages of Wokam and Karang Guli located very close to the main Dobo city, as well as its high of hills were no higher than 50 meter measured from satellite and recorded in geospatial center (**BIG-Maluku**) of Pattimura university.

Figure 2. The 8 initial steps research procedures to get permission from local government for research purposes for further data collection in the target fields of local areas.

Figure 3. Research technique with 9 steps to collect specific data on target based on the 50 questions in the prepared questionnaire for **Wokam** and **Karang Guli** (meaning *Head Crown* of local language) villages, respectively. The observed *Head Crown* in the cloud before our investigation taken from the airplane was shown in the inset

III. Results and Discussion

Figure 4 shows an ongoing work in conjunction with customary law associated with five integrated aspects observed in local society of **Aru islands region** in particular from 2 closest villages of **Wokam** and **Karang Guli** from her main city of **Dobo** as follows: (1). **History**, (2). **Laws**, (3). **Culture**, (4). **Science**, and

(5). **Geoscience** (or earth and space science). These 5 significant aspects are clearly linked with the development of traditional coastal and marine protection to improve social people life in Aru region of ~804 small islands with its highest average hills of ~50 meter, south east part of Maluku province, Indonesia. Moreover, such 5 integrated aspects were then investigated and extracted to be mainly connected to a compact system consisted of 6 customary actions such as: (1). **Features**, (2). **Characters**, (3). **Connectivity**, (4). **Sustainable development**, (5). **Similarity**, and (6). **Attitudes**. While each of these 6 customary actions was very closely to an indicator of social people daily lives involving their contributions in: (1) **novel idea**, (2) **services**, (3) **tradition**, (4) **social interactions** and (5) **protections**, except for the **sustainable development** which has been in conjunction with 2 indicators of (1) **economy impacts** and (2) **building strength**. The researchers called this finding as a **local wisdom traditional customary law (LWT-CL)**, which must be protected by Indonesia government law.

Figure 4. Customary law associated with five integrated aspects of (1). **History**, (2). **Laws**, (3). **Culture**, (4). **Science**, and (5). **Geoscience** (or earth and space science) in developing traditional coastal and marine protections for improving social people life and natural products in Aru islands district of about 804 islands in Maluku province, Indonesia.

Figure 5 describes a systematic local wisdom based on their language of the first 10 numbers. Number 5 was called as *Ur-Lima*, while number 10 as *Ur* in which the word “*lima*” meaning no. 5 in Indonesia language was deleted. Such logic may be translated that there was 5 inside an empty 10 space so that when *Ur-Lima* become *Ur*, there was only pure 10. It is an interesting idea, isn't it?. Another origin of the other numbers shall be in needs of further investigations.

Figure 5. The first 10 numbers found in local language during a direct interview of local leaders when there was a closing ceremony of official customary social meeting in **Dobo city, Aru islands region**.

The data depicted in **Fig. 6** shows how the interdisciplinary researchers of a combination between scientist (physicist) and law social scientists on their contributed duty during their research time in Dobo city

sharing particularly to the local scholars who are pursuing their higher degree in the branch of Pattimura university inside Dobo city, the capital city of Aru islands region. The sharing was aimed to educate the young local scholars in order to open their mind and insight based on the data collected, identified, and then analyzed by using direct questioner consisted of 50 questions each in 2 different villages of Wokam and Karang Guli. **These findings suggest that customary laws practiced traditionally in Aru region were rich both supranatural and natural resources which are benefits to improve the local people income in order to sustain their traditional coastal and marine life especially to their customary law (*sasi*) of high quality and value lobsters and sea cucumbers, respectively.** The research discovery in this simple finding may be applicable to many different fields of study such as in **(1) science, (2) engineering and (3) medical practice** based on its significant finding of the different between **CIL** and the basic principle and essential of customary law obtained in **LWT-CL**.

Figure 6. Research sharing based on the facts and data evident in Wokam and Karang Guli villages mostly extracted from both supranatural (the presence of GOD) and applicable **LWT-CL** found in the villages.

Finally, **Fig. 7** explains the differences between **CIL** and **LWT-CL**. The ongoing debates about **CIL** as described in Ref. [9-12] was actually having its core as depicted in **Fig. 4** in which this paper called as **LWT-CL**. It was too hard for a social scientist to do such work, but it is well understandable for a scientist (physicist) to identify a conservation law in nature which is acceptable like *"in heaven is the same as on earth"*. Such thought was based on unchanging rules in both interval time and space for example stated and explained shortly in **Ref. [16-22]**, for instance: 34 in an alien galaxy is equal to 34 on earth of Milky Way galaxy.

Figure 7. The thought of general picture of the relationship between **CIL** [10-12] and **LWT-CL** in this study.

IV. Conclusion

In summary, this work based on the frontier interdisciplinary studies associated with **customary law** has obtained **5 significant integrated aspects** of (1). **History**, (2). **Laws**, (3). **Culture**, (4). **Science**, and (5). **Geoscience (or earth and space science)** related obviously to **the traditional development for coastal and marine protection in order to improve social-economy people life in Aru islands region**. Moreover, the 5 integrated aspects were found to be in conjunction with an integrated system of **6 customary actions** such as: (1). **Features**, (2). **Characters**, (3).

Connectivity, (4). **Sustainable development**, (5). **Similarity**, and (6). **Attitudes**. Such **6 customary actions were prominent indicators of social ordinary people life** which were in direct link with **local people's (1) novel idea, (2) services, (3) tradition, (4) social interactions and (5) protections**. While the sustainable development was observed to be closely related to **another 2 indicators of (1) economy impacts and (2) building strength**. According to the intensive and careful data collection extracted directly from the answers of 50 questions of the questioner in the 2 different villages of Wokam and Karang Guli, the above mentioned findings **suggest that customary laws practiced traditionally in Aru islands region were very fruitful to enhance the local people income for sustaining their traditional coastal and marine life particularly on the harvest of lobsters and sea cucumbers**. Such interesting research discovery may be useful and widely applicable to many different fields of study in science, engineering and medical practice as well as theology and special suggestions to improve the knowledge and understanding of the core source of customary law.

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Conflict of Interest

All the interdisciplinary authors ranging from law, agriculture and physics declare that their collaborative works have no conflict of purposes both financial and inventing results.

References and Notes

- [1]. W. Lawrence Neuman, *Social Research Methods: Qualitative and Quantitative Approaches*, Pearson Education Limited, Seventh Edition, Edinburgh Gate, Harlow Essex, England, pp. 3-599 (2014).
- [2]. A. M. Novikov, and D.A. Novikov, *Research Methodology: From Philosophy of Science to Research*, CRC Press, Taylor & Francis Group, Broken Sound Parkway NW, pp. 5-130 (2013).
- [3]. Adil E. Shamoo and David B. Resnik, *Responsible Conduct of Research*, third edition, oxford university press, UK, pp. 4-359 (2015).
- [4]. W. Paul Vogt, Elaine R. Vogt, Dianne C. Gardner, and Lynne M. Haeffele, *Selecting the Right Analyses for your Data: Quantitative, Qualitative, and Mixed Methods*, THE GUILFORD PRESS, New York London, pp. 6-522 (2014).
- [5]. AMANDA PERREAU-SAUSSINE And JAMES BERNARD MURPHY (Editors), *THE NATURE OF CUSTOMARY LAW: legal, Historical and Philosophical perspectives*, Cambridge university press, pp. 9- 350 (2007).
- [6]. H.I. Elim, International Proceeding, FORKOM-FKIP Indonesia, 13-14 Nov. 2015 (As Plenary Speaker from 4 of them), *"Building Science and Technology through The Building of Human Integrity"*, FKIP, UNPATTI and the national meeting of all FKIP 30 deans in the whole Indonesia, *the international proceeding* on pp. 27-36 (2015). ISBN: 978-602-73668-0-0
- [7]. Holy Bible (e-Sword version), for example in Acts 4:11 Note: "This^{G3778} is^{G2076} the^{G3588} stone^{G3037} which was set at nought^{G1848} of^{G5259} you^{G5216} builders,^{G3618} which is become^{G1096} the^{G1519} head^{G2776} of the corner. ^{G1137},".
- [8]. A. Goswami, *Quantum mechanics*, Wm.C. Brown Publishers, USA, pp. 193-194 (1992).
- [9]. A.C. Diala, The concept of living customary law: a critique, *J. Legal Plur. & Unoff. Law* 49(2), pp. 143-165 (2017).
- [10]. L. Blutman, Conceptual Confusion and Methodological Deficiencies: Some Ways that Theories on Customary International Law Fail, *Euro. J. Inter. Law* 25(2), pp. 529-552 (2014).
- [11]. A.T. Guzman and J. Hsiang, Some Ways that Theories on Customary International Law Fail: A Reply to László Blutman, *Euro. J. Inter. Law* 25(2), pp. 553-559 (2014).
- [12]. S. Talmon, Determining Customary International Law: The ICJ's Methodology between Induction, Deduction and Assertion, *Euro. J. Inter. Law* 26(2), pp. 417-443 (2015).
- [13]. D.B. Napoh, RECOGNITION OF THE CUSTOMARY LAND LAW IN THE CONSTITUTION OF INDONESIA AND MALAYSIA, *Brawijaya Law J.: Journal of Legal Studies* 2(2), pp. 1-109 (2015). DOI: <http://dx.doi.org/10.21776/ub.bli.2015.002.02.01>
- [14]. D. Sukarti, Customary Law of Inheritance and Migration: Adoption of the Old Regime or Adaptation to the New One?, *AHKAM* 17 (2), pp. 301-320 (2017).
- [15]. Sukarti, Dewi. "Undang-undang Simbur Cahaya: Potret Politik Hukum Kolonial Belanda pada Masyarakat Palembang, dalam *Ahkam: Jurnal Syari'ah-Hukum dan Pranata Sosial*, no. 16/VII/2005.
- [16]. H.I. Elim, *Nonlinear Optics and The Frontier of Nanoscience and Nanotechnology*, Pattimura University Press, pp. 1-144 (2018). ISBN: 987-602-61906-9-7.
- [17]. H.I. Elim, *METODE FISIKA EKSPERIMEN: PELENGKAP TEORI FISIKA*: "To be Perfect like The 1 Who Created Our Incredible Universe", Pattimura university press, Indonesia, pp. 1-155 (2018). ISBN : 978-602-5943-05-8
- [18]. H.I. Elim, Scientific Breakthrough Based on Natural Creation: "1 Diamond with 7 Eyes", *COJ Reviews and Research* Vol. 1(1), pp.1-4 (2018).
- [19]. H.I. Elim, Multitasking Herbal Nanomedicine: A Frontier Report, *Nanoscale Reports* Vol. 2(1), pp. 22-30 (2019).
- [20]. H.I. Elim, Theory, Implementation and the Nature of Truth (TIN) in Nanoscience, Nanotechnology, and Nanomedicine (NNN): From the Beginning of Universe to nm Scale Behavior, *Kenkyu Journal of Nanotechnology & Nanoscience* 5:33-36 (2019)
- [21]. H.I. Elim, The First 1000 Atoms in Healing Process: From Nanotechnology to Nanomedicine, *International Journal of Health Medicine and Current Research* Vol. 3, Issue 04, pp.1044-1046, December, 2018. DOI: 10.22301/IJHMC.R.2528-3189.1044

- [22]. H.I. Elim (*Elim Heaven*), A.L. Mapanawang, and M.V. Reddy, A Creative Proposal to Improve Woman and Child Health: from the Knowledge of Physical Nanoscience to Nanotechnology Implementation and Products, *CPQ Women and Child Health*, **1(6)**, 01-11 (2019).

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***Prof.Dr. M.J. Saptenno, S.H, M.Hum** is a senior professor in law faculty of Pattimura university as well as rector of the university. He has published many books and articles in various publishing companies. Prof. Nus (his nick name) has also contributed many invited talks in a lot of different conferences and seminars. He has currently established Pattimura university as a *BLU* university (half private university) starting from year 2019.

#Assoc.Prof. H.I. Elim, Ph.D is a talented young scientist at Pattimura university who has pioneered the first nanotechnology research center and innovative creation in the eastern part of Indonesia at Pattimura university since 24th April 2015 with various scientific contributions such as over 18 international publications in the last 5 years and more than 3 international invited talks in his field in many different countries such as USA, Singapore and Indonesia. Dr. Elim is now the 3rd best physicist in Indonesia with h index of 23 and citations of 2300 based on **Scopus, WoS dan Sinta data**, respectively.

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