

E-ISBN: 978- 605-74046-3-3

5. ULUSLARARASI İSLAMİ FİNANS VE EKONOMİ KONFERANSI BİLDİRİ KİTABI

5 TH INTERNATIONAL CONFERENCES ON ISLAMIC FİNANCE AND ECONOMICS PROCEEDING BOOK

22-23 EKİM 2024
22-23 OCTOBER 2024

HKÜ KAMPÜSÜ, KONGRE VE KÜLTÜR MERKEZİ / GAZİANTEP
HKU, CONGRESS AND CULTURAL CENTER / GAZIANTEP

5. ULUSLARARASI İSLAMİ FİNANS VE EKONOMİ KONFERANSI

5 TH INTERNATIONAL CONFERENCE ON ISLAMIC FINANCE AND ECONOMICS

(22 - 23 Ekim 2024)

Editörler

Doç. Dr. Yıldız ÖZKÖK

Doç. Dr. Zeynep KÖSE

Dr. Öğr. Üyesi Bilal ÇAYIR

İktisadi, İdari ve Sosyal Bilimler Fakültesi

Faculty of Economics, Administrative and Social Sciences

Gaziantep 2024

TAKDİM

Değerli Katılımcılar,

Geleneksel bankacılık ve finans sistemlerine alternatif olan ve faiz duyarlılığı nedeniyle yatırımlarını değerlendirme ve güvence altına alma ihtiyacını karşılama konularında farkındalığı artırmak ve çözümler bulmak amacıyla 5. Uluslararası İslami Finans ve Ekonomi Konferansı'nı (22-23 Ekim 2024) tamamlamış olmanın gururunu hep birlikte yaşadık. Gaziantep'te konferans ve İstanbul'da workshop olmak üzere iki aşamalı olarak etkinliklerimizi tamamladık. Bu yılki konferansımızda İslami Finansın Geleceğini Dijital ekonomi ve sürdürülebilir kalkınma bağlamında tartıştık.

Konferansın planlanma aşamasından sonuçlandırılmasına kadarki bütün süreçlerinde, her türlü desteği ve katkıyı esirgemeyen başta Hasan Kalyoncu Üniversitesi Mütevelli heyet başkanımız Sayın Haluk Kalyoncu'ya, Rektörümüz Sayın Profesör Doktor Türkay Dereli'ye ve geçen yılki düzenleme kurulu başkanımız Prof. Dr. Mazlum Çelik'e teşekkürlerimi sunuyorum. Kitabın hazırlanmasında emeklerini esirgemeyen Doç. Dr. Zeynep Köse, Dr. Öğr. Üyesi Bilal Çayır ve Arş. Gör. Muhammed Talha Şen ile Üniversitenin her kademesindeki çalışanlarına konferansın gerçekleştirilmesi için gösterdikleri gayret ve çabaları için teşekkür ediyorum.

Hasan Kalyoncu Üniversitesi tarafından hibrid olarak düzenlenen 5. Uluslararası İslami Finans ve Ekonomi Konferansı'na (22-23 Ekim 2025) bildiri sunumlarıyla veya dinleyici sıfatıyla destek veren tüm katılımcılara, konferans düzenleme kurulu adına teşekkür ederim. 2016'da başladığımız konferansımıza bu yıl 5 farklı ülkeden 90'a yakın değerli bilim insanı katkı sağlamıştır. Durham Üniversitesi, Sakarya Üniversitesi, Uludağ Üniversitesi, Endonezya Uluslararası İslam Üniversitesi ve Ankara Sosyal Bilimler Üniversitesi'ne paydaş olarak konferansımıza katkılarından dolayı teşekkür ediyorum. Durham Üniversitesi öğretim üyesi Prof. Dr. Mehmet Asutay hocama konferansın başından sonuna kadar planlarken her bir detayında verdiği destek ve emek için çok teşekkür etmek istiyorum. Son olarak, konferansımıza davetimizi kabul ederek gelen ve çok değerli katkı sağlayan Prof. Dr. Murat Çizakça, Dr. Umar A. Oseni, Dr. Farrukh Raza, Dr. Seyfullah Demirlek, Adnan Ünverdi, Dr. Kamran Sherwani ve Dr. Moutaz Abajeib'e katılımları ve destekleri için teşekkür ediyorum.

Etkinliklerimize sponsor olarak destek sağlayan Albaraka Türk, İstanbul Finans Merkezi, Ziraat Katılım ve resmi havayolu olan Türk Hava Yolları'na özel olarak teşekkürlerimi sunuyorum.

ICIFE'24 Düzenleme Kurulu Başkanı

Doç. Dr. Yıldız ÖZKÖK


5th INTERNATIONAL CONFERENCE ON ISLAMIC FINANCE AND ECONOMICS
22-23 October 2024 | 09:00-19:00
Hasan Kalyoncu University
Congress and Culture Center
Keynote Speakers Panel
Moderator: Prof Dr. Ahmet KESER
Hasan Kalyoncu University, Political Science and International Relations
Prof. Dr. Murat Çizakça
İslam İktisadı ve Finans, KTO Karatay Üniversitesi
Prof. Dr. Mehmet ASUTAY
Director, Durham Centre for Islamic Economics and Finance, Durham University, UK
Dr Umar A. Oseni
Secretary-General, OIC (Organization of Islamic Cooperation) Arbitration Centre
Dr. Farrukh Raza
Group CEO, IFAAS; Chairman, Governance and Ethics Board, AAOIFI
Moderator: Assoc. Prof. Dr. Yıldız ÖZKÖK
Hasan Kalyoncu University, Economics
Dr. Seyfullah Demirlek
Investor Relations and Sustainability Manager, Albaraka Türk
Adnan Ünverdi
Chairman of the Board, Gaziantep Chamber of Industry
Kamran Sherwani
Head of Internal Shariah Control and the Secretary to the Internal Shariah Supervision Committee, SDG Academy
Dr. Moutaz Abajeib
Leading position in Islamic fintech projects at ISRA Research Centre, INCEIF, AAOIFI Fintech Working Group.
For detailed information: https://icife2024.hku.edu.tr
Gold Sponsor
alBaraka
ÖNCÜ BANKACILIK
Silver Sponsor
ISTANBUL FINANCIAL CENTER
Resmi Havayolu Official Airlines
TURKISH AIRLINES
Strategic Partners
ISEFAM
HASAN KALYONCU ÜNİVERSİTESİ


WORKSHOP ON ISLAMIC FINANCE
"International Training Programme"
21 October 2024, 09:00-18:00 | Ziraat Towers, Istanbul Financial Center
For registration link: https://icife2024.hku.edu.tr/workshop/
Participants will be given a "Certificate of Participation"
Guest of Honor
Prof. Dr. Mehmet Asutay
Director, Durham Centre for Islamic Economics and Finance, Durham University
Guest of Honor
Workshop 1
Liquidity Management in Islamic Financial Institutions
Dr Umar A. Oseni
Secretary-General, OIC (Organization of Islamic Cooperation) Arbitration Centre
Workshop 2
Product Development: Sukuk Structuring and Pricing
Dr. Kamran Sherwani
Head of Internal Shariah Control and the Secretary to the Internal Shariah Supervision Committee,SDG Academy
Workshop 3
Corporate & Shariah Governance in Islamic Financial Institutions
Dr. Farrukh Raza
Group CEO, IFAAS; Chairman, Governance and Ethics Board, AAOIFI
Workshop 4
Islamic FinTech and Cryptocurrency
Dr. Moutaz Abajeib
Leading position in Islamic fintech projects at ISRA Research Centre, INCEIF,AAOIFI Fintech Working Group
For detailed information: https://icife2024.hku.edu.tr
Main Sponsor
Ziraat Katılım
Silver Sponsor
ISTANBUL FINANCIAL CENTER
Resmi Havayolu Official Airlines
TURKISH AIRLINES
ÇAĞRI MERKEZİ 0342 211 80 80
HASAN KALYONCU ÜNİVERSİTESİ

İÇİNDEKİLER / CONTENTS

KONFERANS KURULLARI (CONFERENCE COMMITTEES) **6**
ONUR KURULU (HONARY COMMITTEE) **6**
DÜZENLEME KURULU (ORGANIZATION COMMITTEE) **6**
BİLİM KURULU (SCIENTIFIC COMMITTEE) **6**
BİLDİRİLER **9**
KATILIM SİGORTACILIĞININ EKONOMİK ETKİLERİ: TÜRKİYE ÖRNEĞİ 10
DİJİTAL ÇAĞ'DA İSLAMİ FİNANS 20
TÜRKİYE'DEKİ GELENEKSEL VE KATILIM BANKACILIĞININ ÇALIŞMA YÖNTEMLERİ ARASINDAKİ FARKLAR 26
COMPARATIVE DEVELOPMENT ANALYSIS OF ISLAMIC BANKING SYSTEMS: INSIGHTS FROM THAILAND AND SOUTHEAST ASIA 31
SÜRDÜRÜLEBİLİR KALKINMA İÇİN İSLAM EKONOMİSİ 43
İSLAMİ FİNANS VE BLOKZİNCİR: ETKİSİ VE GELECEĞİ 51
THE FUTURE OF INTERNATIONAL ENVIRONMENTAL LAW: A REVIEW 58
DİJİTALLEŞMENİN İSLAM EKONOMİSİNE ETKİSİ: ANALİTİK ÇIKARIMLAR VE GELECEK PERSPEKTİFLERİ 65
İSLAMİ FİNANS OKURYAZARLIK DÜZEYLERİN BELİRLENMESİ VE İNCELENMESİ: HASAN KALYONCU ÜNİVERSİTESİ ÜZERİNE BİR ALAN ARAŞTIRMASI 72
KATILIM ENDEKSLERİ ve ARINDIRMA İŞLEMİNİN FAİZ HASSASİYETİNE SAHİP YATIRIMCILAR NEZDİNDE BİLİNİRLİĞİ 83
KATILIM BANKALARININ FİNANSAL PERFORMANSLARININ CRITIC-ROV YÖNTEMİ İLE DEĞERLENDİRİLMESİ 90
İSLAMİ FİNANS YAKLAŞIMIYLA KATILIM BANKALARININ FON KULLANDIRMA YÖNTEMLERİ 100
İSLAM EKONOMİSİ VE FİNANSAL SİSTEMİN YÖNETİMİNE TEORİK YAKLAŞIMLAR 105
FİNTECH VE İSLAMİ FİNANS KURUMLARINDA KULLANILAN GÜNCEL FİNTECH UYGULAMALARI 120
KATILIM BANKALARININ ENTROPİ TEMELLİ COCOSO YÖNTEMİ İLE FİNANSAL PERFORMANSLARININ SIRALANMASI 127
CYBERSECURITY RISKS FOR ISLAMIC FINANCE – A HONG KONG REGULATORY ANALYSIS 147

DİYANET PERSONELİNİN İSLAMİ FİNANS ALGISI (SAKARYA ÖRNEĞİ) ... 160
KATILIM 50'DE YER ALAN ŞİRKETLERİN KATILIM ENDEKSİNE BAKIŞ AÇILARI 170

KONFERANS KURULLARI (CONFERENCE COMMITTEES)

ONUR KURULU (HONARY COMMITTEE)
Prof. Dr. Türkay DERELİ
Hasan Kalyoncu Üniversitesi Rektörü

DÜZENLEME KURULU (ORGANIZATION COMMITTEE)

Düzenleme Kurulu Başkanı (Honorary Board)
Doç. Dr. Yıldız ÖZKÖK, Hasan Kalyoncu Üniversitesi

Düzenleme Kurulu Üyeler (Organizing Committee)
Prof. Dr. Mazlum ÇELİK, Hasan Kalyoncu Üniversitesi
Prof. Dr. Filiz GÖLPEK, Hasan Kalyoncu Üniversitesi
Prof. Dr. İbrahim Halil EKŞİ, Gaziantep Üniversitesi
Prof. Dr. Metin TOPRAK, İstanbul Sabahattin Zaim Üniversitesi
Prof. Dr. Osman OKKA, Karatay Üniversitesi
Prof. Dr. Tuba BÜYÜKBEŞE, Hasan Kalyoncu Üniversitesi
Doç. Dr. Eda DİNERİ, Hasan Kalyoncu Üniversitesi
Doç. Dr. Erhan AKKAŞ, Sakarya Üniversitesi
Doç. Dr. Fatma Gül BİLGİNER ÖZSAATCI, Hasan Kalyoncu Üniversitesi
Doç. Dr. Zeynep KÖSE, Hasan Kalyoncu Üniversitesi
Doç. Dr. Zeynep ÖZGÜNER, Hasan Kalyoncu Üniversitesi

Düzenleme Kurulu Sekretaryası (Organizing Sekretary)
Arş. Gör. Bilal ÇAYIR, Hasan Kalyoncu Üniversitesi
Arş. Gör. M. Talha ŞEN, Hasan Kalyoncu Üniversitesi
Arş. Gör. C. Gökçe ÖZMEN, Hasan Kalyoncu Üniversitesi
Arş. Gör. Sinem KÜÇÜKYILMAZ, Hasan Kalyoncu Üniversitesi

BİLİM KURULU (SCIENTIFIC COMMITTEE)
Prof. Dr. Mehmet ASUTAY / Durham University
Prof. Dr. M. Hanifi ASLAN / Hasan Kalyoncu University
Prof. Dr. Almir ALIHODZIC / Zenica University
Prof. Dr. Ahmet F. AYSAN / Hamad Bİn Khalİfa University
Prof. Dr. İsmail BEKÇİ / Süleyman Demİrel University
Prof. Dr. Abdulkadir BİLEN / Dİcle University
Prof. Dr. Tuba BÜYÜKBEŞE / Hasan Kalyoncu University
Prof. Dr. Filiz GÖLPEK / Hasan Kalyoncu University
Prof. Dr. Ahmet Vecdi CAN / Sakarya University
Prof. Dr. İlhan EGE / MersİN University
Prof. Dr. Yücel EĞRİÇAY / Sütçü İmam University

Prof. Dr. Halil İbrahim EKŞİ / Gazİantep University
Prof. Dr. Seyfettin ERDOĞAN / Medenİyet University
Prof. Dr. Hakan ERKUŞ / İnönü University
Prof. Dr. Mehmet ERSOY / Artvin Çoruh University
Prof. Dr. H Mohammad HUDAİB / University of Glasgow
Prof. Dr. Yoshiaki JINNAI / Keizai University
Prof. Dr. Reşat KARCIOĞLU / Atatürk University
Prof. Dr. Saim KAYADİBİ / Karabük University
Prof. Turalay KENC / International Centre For Education In Islamic Finance
Prof. Dr. Mustafa KISAKÜREK / Kahramanmaraş Sütçü İmam University
Prof. Dr. Osman OKKA / Konya Karatay University
Prof. Dr. Yıldırım Beyazıt ÖNAL / Çukurova University
Prof. Dr. Mehmet Akif ÖNCÜ / Düzce University
Prof. Dr. Turan ÖNDEŞ / Atatürk University
Prof. Dr. Mehmet ÖZBİRECİKLİ / Mustafa Kemal University
Prof. Dr. Salih ÖZTÜRK / Namik Kemal University
Prof. Dr. Raif PARLAKKAYA / Necmettin Erbakan University
Prof. Dr. Şakir SAKARYA / Balikesir University
Prof. Dr. Mehmet Kutluğhan SAVAŞ ÖKTE / İstanbul University
Prof. Dr. Fatih SAVAŞAN / Sakarya University
Prof. Dr. Necdet ŞENSOY / İstanbul Ticaret University
Prof. Dr. Murat ŞİMŞEK / Karabük University
Prof. Dr. Ahmet TABAKOĞLU / Sabahattin Zaim University
Prof. Dr. Cengiz TORAMAN / İnönü University
Prof. Dr. Kemal Burç ÜLENGİN / İstanbul TekniK University
Prof. Dr. Mahmut YARDIMCIOĞLU / Kahraman Maraş Sütçü İmam University
Prof. Dr. İbrahim Güran YUMUŞAK / SabahattİnZaim University
Doç. Dr. Haşim BAĞCI / Aksaray University
Doç. Dr. M. Fatih BUGAN / Gaziantep University
Doç. Dr. Figen BÜYÜKAKIN / Kocaeli University
Doç. Dr. Cuma ERCAN / Gaziantep University
Doç. Dr. Ayfer GEDİKLİ / Medeniyet University
Assoc. Prof. Bojan GEORGIEVSKI / Wittenborg University of Applied Sciences
Doç. Dr. Gülsün İŞSEVEROĞLU / Uludağ University
Doç. Dr. Ali KABLAN / Trakya University
Doç. Dr. Yunus KILIÇ / Akdeniz University
Doç. Dr. Metin KILIÇ / Bandırma University
Doç. Dr. Emrah KOÇAK / Erciyes University
Doç. Dr. Ahmet ÖZ / Kahramanmaraş Sütçü İmam University
Doç. Dr. Fatma ŞENSOY / İstanbul Sağlik ve Teknoloji University
Doç. Dr. Yıldız ÖZKÖK / Hasan Kalyoncu University
Assoc. Prof. Mosab TABASH / Al Ain University
Doç. Dr. Osman ULUYOL / ADIYAMAN University

Dr. Öğr. Üyesi Hakan ASLAN / Sakarya University
Asst. Prof. MUHAMMAD ALI / Ucsi University Graduate Business School
Asst. Prof. Ahmed BOUTESKA / Tunis El Manar University
Dr. Öğr. Üyesi İbrahim ÇEMBERLİTAŞ / Van Yüzüncü Yıl University
Dr. Abdurrahman ÇETİN / BDDK
Dr. Öğr. Üyesi Suna Akten ÇÜRÜK / Necmettin Erbakan UniversitySİ
Dr. Öğr. Üyesi Yavuz DEMİRDÖĞEN / Süleyman Demirel UniversitySİ
Dr. Öğr. Üyesi İsmail DURAK / Düzce University
Dr. Öğr. Üyesi Fatih GÜÇLÜ / Karabük University
Dr. Arif GÜMÜŞ / Turgut Özal University
Asst. Prof. Samed GÜNAY / American University of The Middle East
Dr. Hasan KAZAK / Necmettin Erbakan University
Dr. Öğr. Üyesi Tolga ORAL / İnönü University
Dr. Mücahit ÖZDEMİR / Sakarya University
Dr. Öğr. Üyesi Pınar PEHLİVAN / Celal Bayar University
Dr. Öğr. Üyesi Ömer Nasuhi ŞAHİN / Dumlupınar University
Dr. Öğr. Üyesi Yavuz TÜRKAN / Bingöl UniversitySİ
Dr. Öğr. Üyesi Salih ÜLEV / Sakarya University
Asst. Prof. M. Hersi WARSAME / University of Sharjah
Dr. Ayhan YATBAZ

BİLDİRİLER

PROCEEDINGS

THE FUTURE OF INTERNATIONAL ENVIRONMENTAL LAW: A REVIEW

Rahmi Deniz ÖZBAY
Prof., Istanbul Ticaret University, Faculty of Business, Department of Economics
rdozbay@ticaret.edu.tr
ORCID:0000-0002-3927-8216

Hassan SYED
Dr., BPP University, Islamic Finance Law
h.syed2@my.bpp.com
ORCID: 0000-0003-2114-2473

Sema YILMAZ
Prof., Yildiz Technical University, Faculty of Economics and Administrative Sciences, Department of Economics
sygenc@yildiz.edu.tr
ORCID: 0000-0002-3138-1622

Abstract

The protection of life in all forms is the basis of Islamic values and Islamic law traditions. The International Environmental Law in its present form aligns with the Islamic Law ethics for the protection of the environment. Planet Earth is home to millions of varieties and variabilities of life forms. The scientific community deploys many variants in measuring the biodiversity of the plant. Gravity Recovery and Climate Experiment (GRACE) and Global Land Data Assimilation System (GLDAS) data are among the most common scientific data manipulation systems used by scientists to measure changes in the biodiversity on Earth (Tapley et al., 2004: 504). Biodiversity has been defined in the literature as "Species, genetic, and ecosystem diversity in an area, sometimes including associated abiotic components such as landscape features, drainage systems, and climate (Swingland 2001, 377). In simple words, living organisms that can be seen and not seen by the human eye are omnipresent in the biosphere of the earth at all times, and all these living organisms have a crucial role to play in maintaining the earth's atmosphere healthy and habitable for all life forms, including humans. Human social and scientific thought has evolved to recognize that while humans may be at the top of the food chain, humans cannot survive on the planet without ensuring the survival of the immeasurable life forms that are known or currently unknown within the humanity's collective knowledge base (Brisman and South, 2019: 147). Typically, biodiversity is defined in terms of the global number of species within taxonomic groups. While there are no settled numbers of species, it is estimated that scientists have recognized 12.5 million species, with over 80% of species within the earth's biosphere still unknown (Swingland, 2001: 381).The increasing human awareness of the threats posed to the earth's biodiversity has led to international efforts to protect the earth's environment from present and future harm. International Environmental Law (IEL) has gradually moved from the phases of cure and harm assessment to precautionary prevention. This response paper reviews the evolution of IEL for protecting the Earth's microbial biodiversity and safety.

Keywords: Islamic Law, Environment, Environmental Law, Natural Law, International Environmental Law, Islamic Law on Environment

ULUSLARARASI ÇEVRE HUKUKUNUN GELECEĞİ: BİR İNCELEME

Özet

Her türlü yaşamın korunması İslami değerlerin ve İslam hukuku geleneğinin temelidir. Mevcut haliyle Uluslararası Çevre Hukuku, çevrenin korunmasına yönelik İslam Hukuku etiği ile uyumludur. Dünya gezegeni milyonlarca çeşit ve

değişkenlikte yaşam formuna ev sahipliği yapmaktadır. Bilim camiası, bitkilerin biyolojik çeşitliliğini ölçmek için birçok farklı yöntem kullanmaktadır. Gravity Recovery and Climate Experiment (GRACE) ve Global Land Data Assimilation System (GLDAS) verileri, bilim insanları tarafından yeryüzündeki biyolojik çeşitlilikteki değişiklikleri ölçmek için kullanılan en yaygın bilimsel veri manipülasyon sistemleri arasındadır (Tapley vd., 2004: 504). Biyoçeşitlilik literatürde "bir alandaki tür, genetik ve ekosistem çeşitliliği, bazen peyzaj özellikleri, drenaj sistemleri ve iklim gibi ilişkili abiyotik bileşenler de dahil olmak üzere" olarak tanımlanmıştır (Swingland, 2001: 377). Basit bir ifadeyle, insan gözüyle görülebilen ve görülemeyen canlı organizmalar dünyanın biyosferinde her zaman mevcuttur ve tüm bu canlı organizmalar dünya atmosferinin insanlar da dahil olmak üzere tüm yaşam formları için sağlıklı ve yaşanabilir olmasında önemli bir rol oynamaktadır.İnsanın sosyal ve bilimsel düşüncesi, insanlar besin zincirinin tepesinde olsa da, insanlığın kolektif bilgi tabanında bilinen veya şu anda bilinmeyen ölçülemez yaşam formlarının hayatta kalmasını sağlamadan insanların gezegende hayatta kalamayacağını kabul edecek şekilde gelişmiştir (Brisman ve South, 2019: 147). Tipik olarak biyoçeşitlilik, taksonomi grupları içindeki türlerin küresel sayısı açısından tanımlanır. Türlerin kesin bir sayısı olmamakla birlikte, bilim insanlarının 12,5 milyon türü tanıdığı tahmin edilmektedir ve dünya biyosferindeki türlerin %80'inden fazlası hala bilinmemektedir (Swingland, 2001: 381). Dünyanın biyolojik çeşitliliğine yönelik tehditlere ilişkin artan insan bilinci, dünyanın çevresini şimdiki ve gelecekteki zararlardan korumak için uluslararası çabalara yol açmıştır. Uluslararası Çevre Hukuku (UÇH) tedricen tedavi ve zarar değerlendirme aşamalarından, ihtiyati önleme aşamasına geçmiştir. Bu yanıt makalesi, dünyanın mikrobiyal biyoçeşitliliğini ve güvenliğini korumak için UÇH'nin gelişimini gözden geçirmektedir.

Anahtar Kelimeler: İslam Hukuku, Çevre, Çevre Hukuku, Doğal Hukuk, Uluslararası Çevre Hukuku, İslam Çevre Hukuku

Introductıon

The development of International Environmental Law (IEL) took an unprecedented leap forward after the 1972 Stockholm Conference on Human Environment (Dunoff, 1995: 241). The scholarship started to highlight the importance of sustainability as the earth's population increased exponentially, touching almost eight billion people at the end of the second decade of the 21st century (Kotzé, 2019:213). Kotzé (2019) speaks of IEL's " lack of ambitious and 'unmentionable' ecological norms such as rights of nature" (213). There is also increasing debate about the "unmentionable" normative gaps in IEL that further exacerbate the environmental threats to the planet's ability to sustain life (de Andrade Correa and Venâncio, 2019: 45). In short, legal scholars and environmental scientists are worried that the international consensus for IEL forms does not go far enough to address the imminent threats to the earth's natural environment.

There is consensus within the Academy that environmental law at national, regional, and international levels developed in a quilted manner and as a result of public awareness of topics that were highlighted within the public media domains (Raustiala, 1997: 537). It is also agreed within the academia that IEL is, in most parts, utilitarian in nature and not the result of any well-defined policy guidance within the formal and informal policy-making domains (Carr, 1992: 92). If Carr (1992) is right and the development of IEL is indeed utilitarian in nature, then the resulting legislation may not break free from the cost-benefit analysis of environmental impact, degradation, and any precautionary measures. The IEL, then, is always going to be subservient to the economic outcomes of any legislation that may evolve for the future protection of the plant.

The UN Handbook on the future of IEL is the leading document that captures the essence of what IEL prescribes today (Leary and Pisupati, 2010). It is an interesting collection of articles by various IEL scholars from the Western legal order who present their views on the future development of IEL within the context of its present norms (Leary and Pisupati 2010: 14). The editors Leary and Pisupati (2010) start with a bleak report on the state of the planet's environment within the implementation preview of the contemporary IEL. Leary and Pisupati (2010) state, "given the experience, some might say the failure international environmental law to deal with existing environmental challenges" (Leary and Pisupati, 2010: 16). Leary and Pisupati's (2010) views have been reinforced throughout the 349 pages of the report. The conclusion that jumps out of the international handbook (Leary and Pisupati, 2010) is that new approaches must be adopted

if IEL is to make any substantial impact on slowing down the environmental degradation of our planet.

This paper reviews some of the significant aspects of IEL based on the UN's perspective of IEL, relying on Leary and Pisupati's (2010) work. This paper will also use relevant citations from the emerging literature on the topic.

1. Islamic Law & IEL

Islam is described as a faith that is based on the natural principles governing our life. The Quran states, "There are countless signs on Earth for those with sure faith, as there are within yourselves, can you not see? (Qur'an verse 51: 20-21)".

The Quran is the core and foundational primary source of Islamic Law. Islam requires us to live our lives in harmony with other beings, respecting their right to life and the natural environment. Islam prohibits the destruction of any life form, even in extreme cases of self-defense. The recognition of other life forms and having emotional intelligence to form communities is one of the guiding principles within the Quran. The Quran states, "There is no creature on (or within) the earth or bird that flies with its wing except (that they are) communities like you (Qur'an verse 6:38)". Thus, the foundational teachings of Islamic law for the recognition and compliance are aligned with the contemporary developments of the norms of International Environmental Law (IEL).

2. IEL Challenges

Leary and Pisupati (2010) provide valuable insight into the development of IEL since the 1972 Stockholm declaration. Leary and Pisupati (2010) highlight three important points to elucidate the challenges faced by IEL in addressing the increasing threats to the earth's environment (21). Leary and Pisupati (2010) refer to the three dynamics as the common theme in measuring the 'effectiveness' of the IEL to arrest the continued degradation of the environment (30). The three dynamics are (1) Treaty Congestion (2) Failure to establish links between international law and human rights (3) kaleidoscopic IEL regime that defines relations between government and non-government sectors.

2.1.Treaty Congestion

The number of international treaties, multilateral environmental law agreements (MEAs), and environmental law protocols to support various international environmental conventions has grown exponentially since the 1972 Stockholm Declaration. Leading research on the topic of treaty congestion states, "When the conference was held in 1972, there were approximately three dozen multilateral environmental agreements in existence. In 1989, the United Nations Environmental Programme (UNEP) Register of Environmental Agreements listed a total of 139 treaties (Hicks 1998: 1643)." Hicks (1998) work also referred to over 900 MEAs that are based on the 139 treaties.

Each of the massive numbers of these treaties registered under the UNEP has its own State Assemblies and funding mechanisms and places separate demands on the States and parties to the treaties. Often overlapping provisions in these treaties call into question their effectiveness when the overlap places diverging obligations on the parties to the treaties. The developed countries have the resources to create separate national entities that can support each of these treaties. In the case of developing countries, resource constraints often result in one national body dealing with multiple or all treaties and MEAs, making it virtually impossible to provide adequate support to each of the treaty obligations at the national level. Another study that came out in 2012 about the issue of 'treaty congestion' states,

"Arguably, the number of international instruments has hampered implementation. In particular, the lack of coordination in the face of proliferation and the lack of capacity challenge the operationalizing international environmental obligation by necessary and sufficient laws, policies, programs, and plans (Anton, 2012: 32)."

The studies by Hicks (1998) and Anton (2012) came 14 years apart. Both studies highlight the same factors when it comes to the analysis of the effectiveness of such a large number of treaties with the resources available to developing and developed countries. Both studies confirm the hypothesis that such a large number of treaties raises the issue of the 'effectiveness' of the treaties when it comes to the resource allocation to respond to and manage the treaty obligations at the national levels.

2.2. Links between Environmental & Human Rights Law

The literature points to using the term 'environmental refugees' to describe people forced to leave their homelands to escape the adverse and detrimental damages to their natural environment (Westing 1992, 201). According to Westing (1992), the term started to appear in scholarly literature quite frequently in the late 1980s and early 1990s (202). It was reported in another seminal study in 1993 on the topic that, " there are at least 10 million environmental refugees today (Myers, 1993: 752)." Myers (1993) linked the massive but often not very well-documented environmental migration to global warming (753). Myers (1993) also highlighted that most environmental migration occurred in sub-Saharan Africa compared to the rest of the world (754).

It is often difficult to differentiate between 'economic' migration and 'environmental' migration (Bates, 2002: 465). It is also very difficult when the natural environment is devastated by armed conflicts, and consequently, the natural environment is devastated to such an extent that it is unable to sustain human life. There is limited literature to link all these factors that can directly or indirectly give rise to situations that can result in migration with linkages to the inhabitable natural environment (McNamara, 2007: 24). McNamara (2007) discussed at length the discourse at level of the UN that could lend a precise definition of 'environmental refugees' and any rights arising from such a definition if the status is attained (25).

Various international instruments speak to the indirect linkages between the environment and human rights. The UN Global Compact is a voluntary instrument for the business community to make sustainable choices to support sustainable development. It has been adopted globally by 10,409 companies and signed by 173 countries (UN Global Compact 2020). Leary and Pisupati (2010) state, "In the UN Global Compact, human rights and the environment are highlighted in one and the same instrument, intended for business to follow" (144).

While there is an ongoing international debate on the topic of defining 'environmental refugees', millions are currently displaced due to extensive damage to the natural environment in Iraq, Syria, Yemen, and Libya. The migrant crisis on the US-Mexico border is also being highlighted in the media as a consequence of the deteriorating situation in Venezuela, Honduras, Colombia, and other Latin and Central American States. Challenges remain as IEL evolves to integrate human rights within a comprehensive document. The effectiveness of the IEL remains an issue here. If the IEL were able to address the issues of environmental degradation during conflicts and other man-made catastrophic events, such as the US nuclear test on Bikini Atoll in the Marshall Islands, ecological refugees, and other human rights-related violations would be effectively addressed.

2.3. A Kaleidoscopic Approach to IEL

Professor Francis Cabell Brown introduced the term 'kaleidoscopic world' within international law to refer to the constantly changing landscape of global events that impact international law (Weiss, 2010: 477). The approaches of IEL that include providing a balance between the State's responsibility towards the environment and the monitoring role played by the non-state actors deeply influence the effectiveness of IEL. Leary and Pisupati (2010) referred to the increasingly complex relationship between the State and the non-state actors when it comes to understanding their respective roles in analyzing the effectiveness of IEL at the national level (130).

Weiss offers three fundamental factors that influence the relationship between the State and the non-state actors when it concerns the effectiveness of the IEL (Weiss, 2011: 21). Weiss (2011) states, "There are three fundamental elements that shape the evolution of international law today: globalization and integration; fragmentation and decentralization; and bottom-up empowerment arising among highly diverse peoples and civilizations, in a context of rapid change (22)." Weiss (2011) is not alone in this assertion. The bottom-up approach that has evolved in the implementation of the IEL, especially in the developed world, is in part due to the involvement of civil society in demanding a say in how IEL is implemented at the national level.

The European IEL development is based on this kaleidoscopic approach. EU law under the Aarhus Convention makes public participation through access to information, participation in policy, and access to all judicial forums in all matters related to the environment mandatory (Aarhus Convention, 2020).

While the participation of civil society in the IEL implementation is a step in the right direction, the State obligations may still need to be asserted if the implementation of IEL within the national laws is effective and robust. In the US, IEL obligations within the US national environmental legislation have resulted in compliance costs by various industries to the tune of US$ 500 billion per year (Fogleman, 2017: 81). In the presence of such compliance costs and the trickle-down effect of these costs to the average consumer, the concerns for a robust economy often supersede the concerns for the environment (Tegtmeier and Duffy, 2004: 1). This mostly also true for other developed countries where the news about the state of the economy always tops the agenda as a matter of national priority for its citizens as compared to matters such as national security and environment etc.

3. IEL As Global Stabılızıng Force

We live in an increasingly globalized world. While globalization within its narrowest confines of global business has been diminished due to the rise of nationalist policies in major world economies such as the US and the United Kingdom (UK), its relevance to the effectiveness of IEL remains strong.

One of the challenges faced by IEL within contemporary practices is the question of legitimacy. The IEL development is part of the international law norms that are intrinsically linked with the Westphalian systems (Engle, 2004: 23). The approach towards an effective IEL regime has not been the same within the Global-North and Global-South. Poverty remains one of the biggest challenges for the Global South, where almost 1.2 billion people live on $1.90 per day (Global Poverty Index 2020). It is much easier to speak about the critical need to work towards a cleaner environment in developed countries than in the developing world. Poverty remains one of the most significant challenges to effectively implementing IEL worldwide.

The Year Book of International Organisations 2019 reports, "[there are] 72,500 international organizations from 300 countries and territories. 40,300 of which are active organizations. Coverage includes intergovernmental (IGOs) and international non-governmental organizations (INGOs). Approximately 1,200 new organizations are added yearly (Year Book of IOs, 2020)." The massive number of IOs, IGOs, and INGOs reflects the impact of non-state actors

on international law in general and IEL in particular. It also confirms the bottom-up evolution of IEL.

The development of transnational laws within the international political order also reflects the trans-civilizational diversity within international law (Yasuaki, 2003: 105). Such trans-civilizational laws must be cognisant of the civilizational plurality within the international legal order. Understanding international law within its trans-civilizational nature gives rise to the plurality of environmental issues unique to each society based on its civilizational demands. Including trans-civilizational theory in the development of future IEL would give it greater legitimacy in both the Global North and Global South as it would reflect the peculiar needs of the developed and the developing world.

Weiss (2011) sums up the issue of IEL legitimacy within the context of its future development and effectiveness very neatly. Weiss states, "International law must be viewed as legitimate both by those who create and implement it and by those whom it affects. Legitimacy includes both the process by which international norms are created and the acceptance of these norms (Weiss, 2011: 24).

Conclusion

The IEL's future rests on the subjectivity of its effectiveness worldwide. Due to increasing poverty, food insecurity, and armed conflicts, we are facing unprecedented challenges to counter global socio-economic marginalization. Environmental agendas often take a backseat when issues like terrorism, economic crisis, and political power play center stage.

There is no shortage of international laws for environmental protection. The vast number of treaties, MEAs, and protocols is a testament to this fact. Regardless of the abundance of IEL instruments, the march towards environmental degradation has not slowed down. 2019 and the start of 2020 witnessed unprecedented fires in the Amazon and Australia. Floods in Asia and Europe devastated and impacted millions. The issue remains of the effectiveness of the IEL and perhaps its implementation.

Scholars of IEL and its practitioners have advocated for better enforcement and monitoring mechanisms across the board. Such mechanisms will have a limited impact if challenges like global poverty and environmental migration are not checked. The present and future implementation of IEL can only be relevant to the planet's survival if the States, non-state actors, civil society, and the corporate sector join hands to ensure equitable implementation of the IEL.

References

Aarhus Convention. (2020). "UNECE Homepage." (2020). http://www.unece.org/info/ece-homepage.html.

Andrade Correa, Fabiano de, and Marina Demaria Venâncio. (2019). International Environmental Law in the Anthropocene: Addressing the Gaps Towards 'Sustainable Development Law. In Charting Environmental Law Futures in the Anthropocene, 45–58. Springer.

Anton, Don. (2012). Treaty Congestion'in International Environmental Law, 32.

Bates, Diane C. (2002). "Environmental Refugees? Classifying Human Migrations Caused by Environmental Change." Population and Environment 23 (5): 465–77.

Carr, Indira Mahalingam. (1992). Saving the Environment—Does Utilitarianism Provide a Justification? *Legal Studies,* 12 (1): 92–102.

Dunoff, Jeffrey L. (1995). From Green to Global: Toward the Transformation of International Environmental Law. *Harv. Envtl. L. Rev.* 19: 241.

Engle, Eric Allen. (2004). The Transformation of the International Legal System: The Post-Westphalian Legal Order. *QLR* 23: 23.

Fogleman, Valerie M. (2017). Economic Impacts of Environmental Law: The US Experience and Its International Relevance. *In Sustainable Development and the Energy Industries*, 81–102. Routledge.

Global Poverty Index. (2020). Poverty | Data. https://data.worldbank.org/topic/poverty.

Hicks, Bethany Lukitsch. (1998. Treaty Congestion in International Environmental Law: The Need for Greater International Coordination. *U. Rich. L. Rev.* 32: 1643.

Kotzé, Louis J. (2019). International Environmental Law's Lack of Normative Ambition: An Opportunity for the Global Pact for the Environment? *Journal for European Environmental & Planning Law 16 (3):* 213–36.

Leary, David, and Balakrishna Pisupati. (2010). The Future of International Environmental Law. United Nations University Press.

McNamara, Karen Elizabeth. (2007). Conceptualizing Discourses on Environmental Refugees at the United Nations. *Population and Environment,* 29 (1): 12–24.

Myers, Norman. (1993). "Environmental Refugees in a Globally Warmed World." Bioscience 43 (11): 752–61.

Raustiala, Kal. (1997). The Participatory Revolution in International Environmental Law. *Harv. Envtl. L. Rev.* 21: 537.

Tegtmeier, Erin M., and Michael D. Duffy. (2004). External Costs of Agricultural Production in the United States. *International Journal of Agricultural Sustainability,* 2(1): 1–20.

UN Global Compact. (2020). "Homepage | UN Global Compact." 2020. https://www.unglobalcompact.org/.

Weiss, Edith Brown. (2010). "On Being Accountable in a Kaleidoscopic World." In Proceedings of the ASIL Annual Meeting, 104:477–90. Cambridge University Press.

Weiss, Edith Brown. (2011)."International Law in a Kaleidoscopic World. *Asian Journal of International Law 1* (1): 21–32.

Westing, Arthur H. (1992). Environmental Refugees: A Growing Category of Displaced Persons. *Environmental Conservation,* 1 (3): 201–7.

Yasuaki, Onuma. (2003). International Law in and with International Politics: The Functions of International Law in International Society. *European Journal of International Law,* 14 (1): 105–39.

Year Book of IOs. (2020). The Yearbook of International Organizations | Union of International Associations. 2020. https://uia.org/yearbook.