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Covid-19 Pandemic Impacts on Income of Environmental Enterprises in Myanmar*

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Abstract

Environmental Enterprise is one of the most vulnerable enterprises affected by the global pandemic of Covid-19. This research is an attempt to explore the impact of Covid-19 pandemic on Environmental enterprises' income generation between the first and third wave and to indicate the way they manage their enterprise while sustaining their dedication to the environment. Four Environmental Enterprises in Myanmar were interviewed during the junction of Covid-19 third wave and military coup in 2021. This

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research is analyzed by using grounded theory. After analyzing the interviewed data with line by line coding, the author identified the struggles faced during the pandemic, how Environmental Enterprise owners planned on sustaining the business throughout the crisis of Covid-19 and military coup. While the severity of the situation depended on the type of business, the confluence of the Covid-19 third wave and political instability has led to almost all the enterprises falling into recession. This study outlines the struggles of these enterprises and to make people more aware of them and supportive in the future.

Keywords: Environmental Enterprise, Covid-19, pandemic, income, crisis, political instability, coup, struggles, sustainability, management

JEL Classification: Q50; Q54; Q56

စာတမ်းအကျဉ်း

သဘာဝပတ်ဝန်းကျင်ဆိုင်ရာအကျိုးပြုစီးပွားရေးလုပ်ငန်းစုများသည် ကိုဗစ်-၁၉ ကူးစက်ကပ်ရောဂါ၏ သက်ရောက်မှုများကြောင့် ထိခိုက်အလွယ်ဆုံးသော စီးပွားရေးလုပ်ငန်းများထဲမှတစ်ခုဖြစ်သည်။ ဤသုတေသနစာတမ်းသည် ကိုဗစ်ပထမလှိုင်းနှင့် ကိုဗစ်တတိယလှိုင်း ကာလတို့တွင် သဘာဝပတ်ဝန်းကျင်ဆိုင်ရာအကျိုးပြု စီးပွားရေး လုပ်ငန်းစုများ၏ ဝင်ငွေကဏ္ဍနှင့် လုပ်ငန်းလည်ပတ်မှုအပေါ် ကိုဗစ်ကပ်ရောဂါ၏သက်ရောက်မှုများကို လေ့လာထားသည့် စာတမ်းဖြစ်သည်။ ကိုဗစ်ကပ်ရောဂါအကျပ်အတည်းကာလအတွင်း ယင်းလုပ်ငန်းစုများသည်

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သဘာဝပတ်ဝန်းကျင်အပေါ် ဆက်လက် အကျိုးပြုနိုင်ရန်တောင့်ခံနေစဉ်တွင် ၎င်းတို့၏ လုပ်ငန်းအား ကိုင်တွယ်စီမံခန့်ခွဲပုံကို လေ့လာတင်ပြထားသည်။ ဤစာတမ်း အချက်အလက်များအတွက် မြန်မာနိုင်ငံရှိသဘာဝပတ်ဝန်းကျင်ဆိုင်ရာ အကျိုးပြုစီးပွားရေးလုပ်ငန်းစု ၄စုကို ကိုဗစ်တတ်ယလှိုင်းကာလနှင့် စစ်အာဏာသိမ်းကာလတို့ဆုံရာ ထပ်ဆင့်အကျပ်အတည်းကာလတွင် ဆက်သွယ်မေးမြန်းခဲ့ပါသည်။

မျဉ်းကြောင်း၊ စာကြောင်းများနှင့် စကားစုကုဒ်ရေးခြင်းနည်းဖြင့် အချက်အလက်များကို ခွဲခြမ်းစိတ်ဖြာထားပြီး အခြေခံသီအိုရီသုတေသနနည်းကို အသုံးပြုခြင်းဖြင့် ဤစာတမ်းအား ရှင်းလင်းတင်ပြထားပါသည်။ ဝင်ငွေထိခိုက်မှုကဏ္ဍ အခြေအနေ ပြင်းထန်မှုသည် လုပ်ငန်းအမျိုးစားအပေါ်မူတည်သော်လည်း ကိုဗစ် တတ်ယလှိုင်းနှင့် နိုင်ငံရေးမတည်ငြိမ်မှု ပေါင်းစုံမှုတို့ကြောင့် လုပ်ငန်းအားလုံးနီးပါး ဆုတ်ယုတ်ကျဆင်းသွားခဲ့သည်ကို တွေ့ရှိရသည်။ သို့ဖြစ်၍ ကိုဗစ် ကပ်ရောဂါကာလနှင့် စစ်တပ်အာဏာသိမ်းကာလ တစ်လျှောက်အတွင်း လုပ်ငန်းရှင်များသည် ၎င်းတို့၏လုပ်ငန်းကို ဆက်လက်တောင့်ခံနိုင်ရန် ကြိုးပမ်းထိန်းသိမ်းကြပုံကိုလည်း လေ့လာ တင်ပြထားပါသည်။ ဤလေ့လာမှုသည် အကျပ်အတည်း ကာလများအတွင်း အဆိုပါလုပ်ငန်းများ၏ရုန်းကန်မှုများကို ဖော်ပြထားပြီး အနာဂတ်တွင် ယင်းလုပ်ငန်းစုများကို လူထုက ပိုမိုသိရှိနားလည်၍ အားပေးပံ့ပိုးလာကြရန်ရည်ရွယ်ပါသည်။

1. Introduction

Environmental protection in Myanmar was severely damaged under the authority of the military regime. Myanmar's underdeveloped international markets and financial resources have put pressure on the environment (Raitzer, 2015). Under the leadership of President U Thein Sein who was leading Myanmar's restructuring from military regime to embryonic democracy, gradual democratic reform has seen a change in strategy (Wang, 2012). During the transition to embryonic democracy and democracy era, Myanmar has been gradually allowing local environmental enterprises and non-governmental organizations (NGOs) to come in and work with local residents to protect the environment.

There are several factors indicating the rise of environmental enterprises around the world in past decades: customers have been becoming more informed about the product they choose; high demands for eco-friendly products in market; peer pressure from public advocating companies to make positive impact on environment; governmental aids, funds and cost-effective in the long term have been encouraging not only the entrepreneurs to start an eco-friendly business but also pressure the existing companies to transform into one (Parletta, 2019). However, every attempt has come to halt when the pandemic strikes and affects all the business in a very serious

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way. The first Covid-19 case was identified in December 2019 and the pandemic has spread to almost every country in the world, taking the lives of 4.5 million people as of September 2021 according to World Health Organization (WHO). However, the casualties are not only the Covid-19 harm in its way, the supply chain of the economy has also taken a toll by Covid-19 and threatened the livelihood of all kinds of business across the world. Governments around the world have restricted traveling and imposed the lockdown on nations in order to contain the Covid-19 has interrupted the transporting of raw materials and final products in business (Hrapko, 2021). With the majority of people staying at home and trying to lower human contact and exposure, the pandemic has led to damage in various types of business.

Environmental enterprises in Myanmar are also taking a huge blow from the pandemic as their income declined dramatically since the first wave of Covid-19. Most environmental enterprises in Myanmar focus on tourism, recycling, ecosystem preserving and waste management. A sharp drop in tourist and government travel restrictions has put a heavy burden on the enterprises as some enterprises report having zero visitors for consecutive months during the first wave. Various companies and enterprises are taking measures against Covid-19 as temporarily shutting down, downsizing and

reducing working hours to preserve and tough it out till the end and resulting in the employees across the country loss of income according to IFPRI² survey results in September 2020. With the sudden drop in income, price increases in necessity household commodities are encouraging people to spend their money on only essential household items and consumable food leaving a slim to none amount of money for traveling, entertainment and luxury products (Kunst, 2020). Immunologists and virologists are estimating that instead of hoping for Covid-19 to be eradicated, we will have to live with it as a new normal (Phillips, 2021).

The objective of this study is to give deeper insight into the hardship and struggle the environmental enterprises encounter during the crises and how they try to overcome them, to have a better understanding of what we can learn from this pandemic and develop a better strategy for possible upcoming waves and pandemic in future.

2. Literature Review

2.1. Background of Environmental Enterprise in Myanmar

Environmental Enterprise is an environmentally friendly business that validates a commitment to an environmentally

² International Food Policy Research Institute

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sustainable prospect. Eco-tourism, Eco-consulting, Garden planning, Organic farming, Eco restaurants, Waste management, Recycling and Upcycling businesses are the kinds of environmental enterprises. Those enterprises try to have a positive influence on their community and the environment with the aim of starting a business (Wood, 2021). Environmental Enterprises prioritize the environment rather than profits and have become aware of doing their best to mitigate their impact on the environment. They may provide a win-win situation for both the economy and the environment, as well as by reaching out to their own business goals. Environmental Enterprises are consequently able to improve the environment within their own companies, and their products and functions enable the public to be widely educated about the benefits of environmental protection (Kirkwood & Walton, 2014). Myanmar has been broadly considered one of the most vulnerable countries to environmental degradation and critical environmental issues. Decades of military corruption and over-exploitation of the country's natural resources have put enormous pressure on the country's ecosystem. After General Ne Win's 1962 military coup, the country plunged into civil strife and plunged into poverty, but in recent years, there have been signs of progress (Aung, 2021)

Environmental economics is the economic procedure of addressing ecological and environmental issues by consolidating environmental and ecological systems into economic simulations. It emphasizes the financial value of ecosystems and the expenses and profits of environmental policies (Smith, 2001). With the opening of Myanmar's environmental economics after the transition time of the military regime to the embryonic democracy government led by U Thein Sein in the 2010 election, environmental enterprises in Myanmar began to emerge gradually and are on the way to good prospects. However the country still lacks much of the infrastructure to support Environmental Enterprise growth due to the lack of education about environmental awareness, public acceptance of eco-friendly practices remains low. Although the environmental sector has obtained little attention in Myanmar's economic reform since 2011, the government tried to emphasize environmental growth in its development policy. After reuniting with the international community in 2012, Myanmar has been able to attract interest from the donor agencies and development partners, which has made notable progress between the government and other sectors. (Institute, 2017)

During the National League for Democracy (NLD) regime, the Environmental Enterprises gradually expanded in Myanmar. The people in Myanmar become educated by getting

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more environmental awareness via these enterprises. Public acceptance and support are growing in the way to better potential. In 2019, Myanmar declared its proclamation for national environmental and climate change policies which are envisioned to point government decisions on environmental development planning and management, in line with Myanmar's Sustainable Development Plan for 2018-2030 (Aung, 2021). In the crisis, the country's economy and the environmental sectors have been affected by Covid-19 and Military Coup, so that the recovery of a sustainable economy will be critical for enduring sustainability and a robust future.

2.2. Public acceptance and support on Environmental Enterprise

Ever since the rise of Covid-19 pandemic, people have come to realize the importance of climate change, global warming and the impact of their consumption habits on it (Emmert, 2021). Activists around the world have been encouraging people to prefer sustainable products for years. The impact of the pandemic has made people more conscious about their choices and transformed them into *green consumers*³ by

³ Green consumers are those who try to avoid the product that can “endanger the health of the consumer or others; cause significant damage to the environment during manufacture, use or disposal; consume a disproportionate amount of energy; cause unnecessary waste; use materials derived from threatened species or environments; involve unnecessary use or

making them buy eco-friendly products through a complex decision making process (Kachaner, 2020), (Moisander, 2007). Even among all the generations, the younger generation such as the millennial⁴ and generation Z⁵ are the ones who will be affected by the environmental crisis most (Sumas, 2019) and thus they are more active in accepting the environmental enterprises and encouraging the remaining companies to go green and environmentally sustainable (Townsend, 2008).

Cyclone Nargis hit Myanmar in 2008 taking the lives of 140,000 people and the livelihoods of 2.4 million people were affected by it (Reuters, 2008). Ever since that cyclone, both the Myanmar government and citizens are becoming more active in environmental maintenance and raising the awareness of environmental issues such as protesting at Myitsone dam, *Friday for Future*⁶ in Yangon and mining companies in Mon State and many more throughout the last 10 years. Entrepreneurs started environmentally sustainable businesses to reduce plastic usage and encouraged the public to use biodegradable materials in daily use, although most of the customers they receive are mainly foreigners and tourists in the beginning, the number of

cruelty to animals [or] adversely affect other countries'' according to Elkington (1989).

⁴ Millennials is the generation born between 1980 and 1995, also known as generation Y.

⁵ Generation Z is the people who are born between 1996 and 2012.

⁶ Global environmental strike movements that begin in 2018

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local customers steadily increases over the years and majority of them being a younger generation. Along with the increase in the number of foreign firms investment and their CSR programs⁷; NGO & INGO projects in rural and urban places; government implementing environmental education and awareness programs; and easier access to information in digital ages has made the consumer in Myanmar to become more aware of the severity of environmental damage and to increase their support towards eco-friendly products and environmental enterprises.

3. Methodology

This research is studied how Covid-19 impacts on income of Environmental Enterprises in Myanmar and how enterprise owners perceive the pandemic threat based on observation and in-depth interviews are defined as qualitative studies. This research studies with limited interviewees that are not aiming to establish statistical associations between variables. This study can give the information to reveal answers to questions that can have significant effects on our society. In order to effectively measure the impact of the pandemic on enterprises and to have a better understanding of the feelings of

⁷ Corporate Social Responsibility: internal programs or practices within companies that intend to balance the negative and positive impact of a company on community both environmental and social aspects.

business owners in this crisis, rather than quantitative measures, the author has decided to use qualitative measures for this study (Basit, 2010). Qualitative research is an exploration approach that typically emphasizes words rather than quantification in the data collection and analysis (Bryman, 2016). The strength of the qualitative approach is that it relied on translating, interpreting and picturing the situation according to the respondent's answer rather than relying on the numerical value describing the perspective and emotion of the respondent which does not suit the situation at hand.

Environmental enterprise and eco-friendly businesses are widespread in western countries; however, Myanmar has a long history of closed economy, under decade's long military's control and lack of environmental education in rural places has led to the fewer number of people with environmental awareness compared to other countries. Similarly, environmental enterprises in Myanmar are still in the beginning phase and yet to have momentum, except for a few enterprises that dated back to the early 2000. After careful selection of environmental enterprises in Myanmar, the author has found that there are around ten enterprises in Myanmar that are operating and the author was able to get in touch with the four enterprises who were willing to cooperate for the advancement of research.

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Data were collected through the questionnaire method, which format was similar to an interview. The questionnaire was released with a non-probability sampling method and the findings in interviews are corroborated with the founders of the four Environmental Enterprises in Myanmar. In order to gain a comprehensive overview of the Environmental Enterprise sector in Myanmar and to cover up the different variables in participants, we interviewed the different types of Environmental Enterprises. The participants included the Tourism related establishment (25%), Recycling business (25%), Hospitality industry (25%) and Organic farm (25%). Enterprises are diverse geographically throughout the country including both urban and rural places such as Yangon (25%), Pyin Oo Lwin - Mandalay Region (25%), Kalaw - Shan State (25%) and Ngapali - Rakhine State (25%). Phone interviews were conducted before depth interviews from September 2021 to October 2021 to gain an initial understanding of their general situation in the pandemic. More in-depth interviews were conducted via email and phone with the founders of the enterprises.

Data analyzing is the most complex and integral part of qualitative research (Thorne, 2000). There are several ways to analyze the data in qualitative research, in this paper we will be using line by line coding of grounded theory to process the data

we gathered from the respondents. Grounded Theory is a technique for creating theory through an organized data collection and analysis procedure (Glaser, 1978). It provides qualitative research more systematically, demanding, and well-structured (Charmaz, 2006). Line by Line Coding drives the detailed data about fundamental empirical problems by composing the data from interviews, observations, documents or memoirs (Charmaz, 2006). Coding is the process of organizing the data we gathered by labeling, identifying the patterns within dialogues, creating themes and figuring out how they connect.

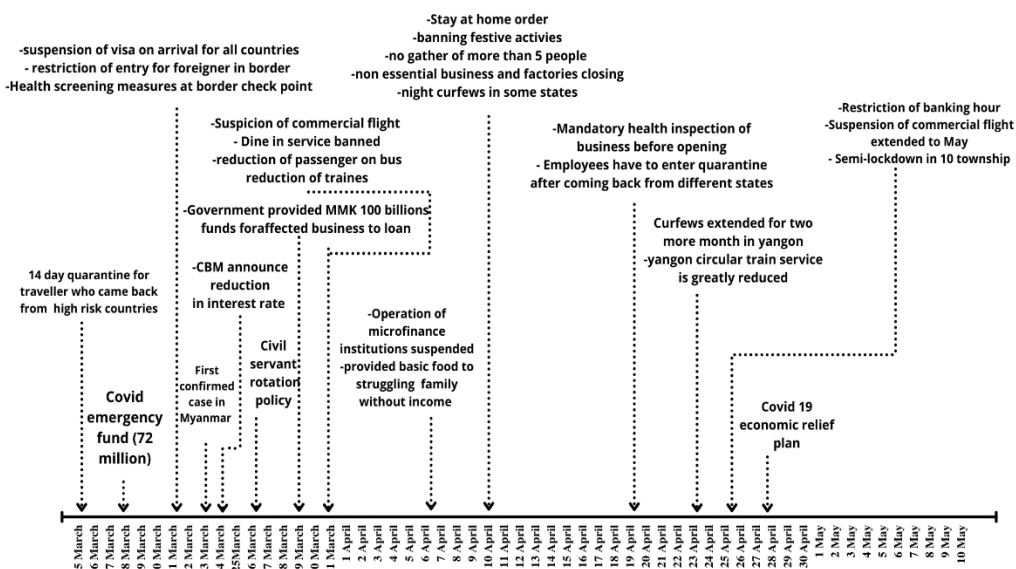
4. Covid-19 Pandemic Impact on Businesses in Myanmar

The outbreak of Covid-19 has been a prominent threat to the world economy in 2020 as it affects all the countries around the world disrupting the supply chain of the various products (Yu, 2021). Despite the fact that Covid-19 arrived in Myanmar 3 months later compared to western countries, it does not show mercy in throwing off the balance of Myanmar's economy. The National GDP of Myanmar consists mainly of exporting natural resources and agricultural products. The country's GDP decreased around 2-3% during the first wave of Covid-19 according to the World Bank's estimation. The government had a lot of time to prepare with the anticipation of Covid-19 arrival and was able to lay down a lot of restrictions and policies step

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by step systematically during the first wave and to extend necessary policy throughout Covid-19 period in table 1.

Table 1. Myanmar Government policy and measure against Covid-19 pandemic during the first wave



Source: IFPRI Myanmar (2021)

Government regulation and public safety concern has resulted in a lot of business downsizing or completely shut down during the first wave. According to the MBEI⁸ from Asia foundation, out of 750 businesses, 29% are completely shut down and about half of businesses allegedly report that they have reduced their operation to follow governmental policy and

⁸ Myanmar Business Environmental Index

adapt to the situation. The first sector that gets damaged the most by Covid-19 has been the tourism-related businesses as the government suspended the visa on arrival for all countries on 21st March 2020, combining other factors resulting in a massive 75% drop of tourists and visitors compared to last year resulting in loss of 80% revenue from the tourism-related business. Another sector that is facing high risk is the manufacturing factory which shares a lot of employees in the same space such as the garment factory which hosts a lot of workers within the industrial zone of Yangon. Dining and restaurants businesses also report that the government restriction is one of the main factors affecting their business such as no gathering exceeding 5 people or travel restriction across the townships has resulted in lack of customers during the pandemic with the sales only relying on the take out. Safety concerns of employees and customers have been one of the main reasons for closing down or not operating as usual. In order to gain customer trust and ensure worker safety, businesses are conducting the Covid-19 precaution measure as a mandatory rule in the workplace such as washing hands often, wearing masks and measuring the body temperature at the entrance. The government tried to loan out the emergency loan to 700 businesses in a total of 22 billion kyats and deferral of commercial tax in order to prevent the business, mainly SME from collapsing Myanmar Covid-19 Economic Relief Plan (MCERP) published in April (Lwin, 2020).

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5. Finding

5.1. Income of Environmental Enterprises through Pandemic and Coup

Table 2. Income Statement of Environmental Enterprise in Myanmar during Covid-19 and Military Coup

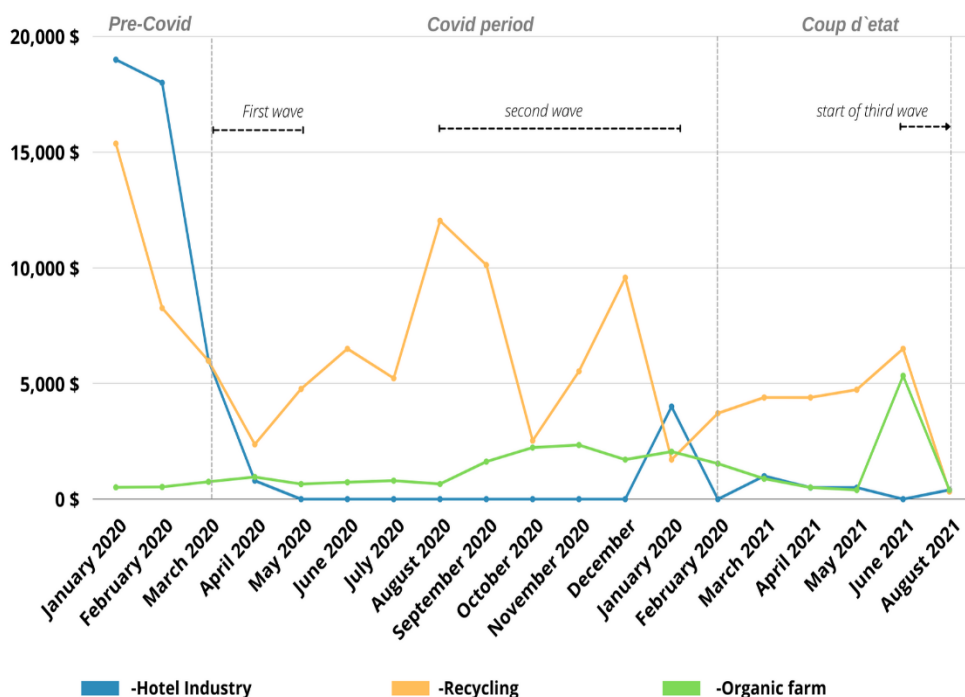
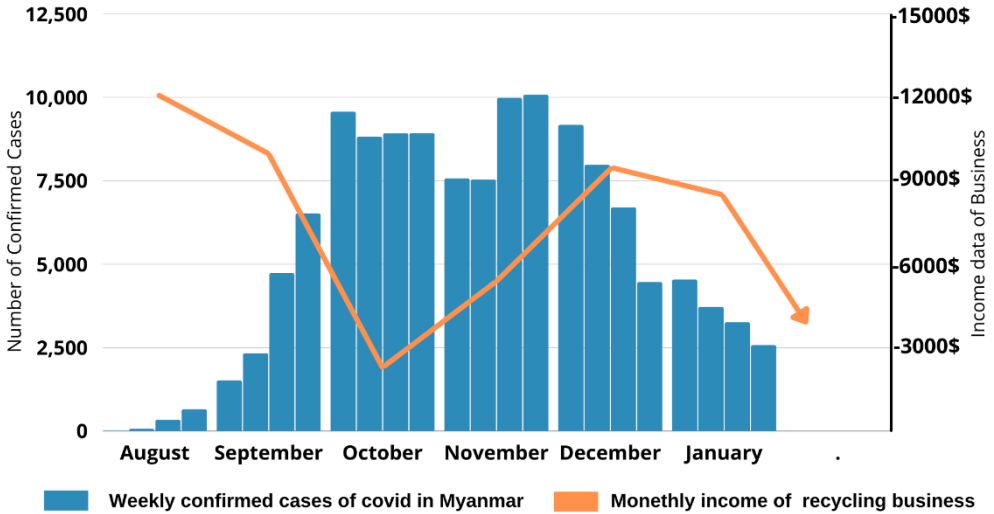


Table 3. Comparison between Covid confirmed cases and income during 2nd wave

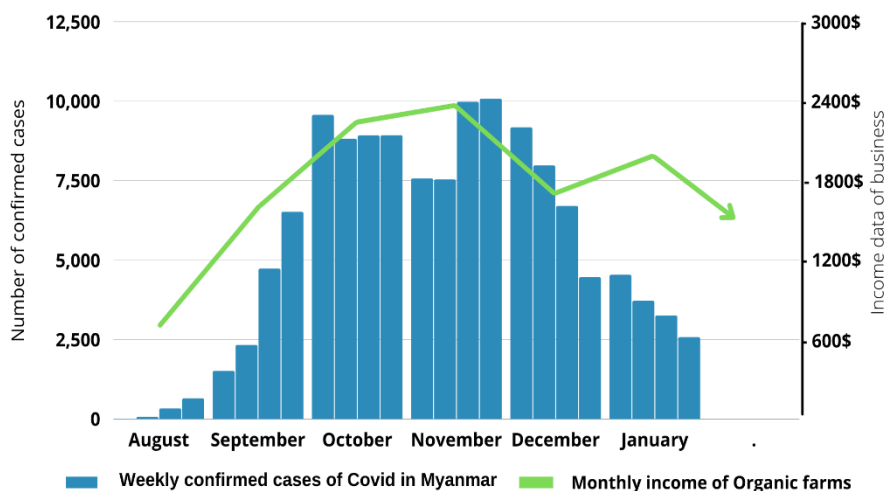


Impacts of the pandemic on Environmental Enterprise are as severe as in other types of businesses. However, in terms of impact, rather than direct impact such as catching Covid-19 or fatality of employees, the indirect impact such as government policy and lack of customers are said to have done more harm to the business. The income is usually the lowest during the peak of Covid-19 waves and the income of the business is slowly rising back after the end of each wave, yet to reach the pre-pandemic scale, until the start of the next wave (table 2). During the Covid-19 pandemic, the amount of income from most of the

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business is indirectly proportional to the amount of Covid-19 confirmed cases on daily basis (table 3).

Table 4. Comparison between Covid confirmed cases and income during 2nd wave



However, not all businesses are in deficit as there is the organic farm that reported an increase in sales during the pandemic. In this case, the income and sales are rising directly proportional to the daily confirmed cases during the pandemic as people are more likely to stay at home and order the basic needs products through delivery services (table 4). Most of the businesses that increase in sales are mostly the retailers of necessity goods in these pandemic crises such as medical

supplies or basic needs as their demands increase exponentially.

5.2. Line by Line Coding Results for Covid-19 Pandemic Impact

Line by Line Coding	Selective Coding	Themes
<i>The shortage of materials, difficulty in communication and transportation. Governmental restrictions and announcements have affected business. Epidemic completely stopped income from foreign tourists and lost income from local tourists and even to closure of business.</i>	shortage, difficulty, communication, transportation, restrictions, announcement, affected,, stopped income, lost, closure	Struggle
<i>District leader insisted that we must pay license fees although we were not able to use it due to restrictions on opening. A Lot of businesses were unable to open due to unreasonable rules for pandemic prevention.</i>	license fee, restrictions, unable, unreasonable, rules	Governmental-Imposed Limitations
<i>To run business smoothly, reduced salaries of employees, cost effective measures were taken. We trained and adapted with all our employees to the rules and laws, and also installed all requirements.</i>	reduced, salaries, cost effective, trained, adapted, installed requirements.	Adaptation
<i>Due to worldwide pandemic, the only way is to strictly follow the restrictions so that the business can be expected to arise again. During the pandemic, we learned new techniques and services were provided in advance through an online system.</i>	worldwide, strictly follow, expected, arise, learned, techniques, service, provided, online.	Opportunity

Source: Compiled by Author (2022)

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After line-by-line coding for the interviews and questionnaire results, the author found four major themes in them. Among the various impacts of the pandemic on Environmental Enterprises, one of the major themes is “**Struggle**” as businesses are unable to operate normally due to the shortage of raw materials, having trouble with remote working and the customer stops going out as the fear of pandemic rises in public. Another theme is “**Governmental-imposed limitations**”, there was a lot of criticism toward some governmental announcements and restrictions such as requesting township pass permits from staff and vehicle and curfews in Yangon as illogical or ineffective during the first wave. Difficulty in communicating with the governmental staff is one of the reasons as most of them are currently conducting remote working. The next theme identified in pandemic impact is “**Adaptation**” associated with changing and managing the workplace to better suit during the pandemic such as making space for social distancing in the workplace, installing the required things such as hand sanitizer, mask dispenser or disinfecting the workplace often as all costs are covered from the business expenses. The final theme is “**Opportunity**” as some businesses try to find a way to overcome the struggles in the pandemic and succeed in them as business blooms during the Covid-19.

5.3. Line by Line Coding Results for Political Instability Impact

Line by Line Coding	Selective Coding	Themes
<p><i>In this political conflict crisis, financial problems occurred due to limitation of the banking system, no cash from ATM. Money withdrawal are more difficult and restrictive.</i></p>	<p>financial, limitation, banking, no cash, withdrawal, restrictive</p>	<p>Cash Flow</p>
<p><i>When the operations are suspended, cost for long term become a burden and all the payments are forced to pay.</i></p>	<p>operations, suspended, cost, long term, burden, payments, forced</p>	<p>Operation Cost</p>
<p><i>Political instability hit business hardest, even to business malfunction, with zero income and operation stopped. Disruption of transportation and substitute business shut down are harder impacts and loss of hope in this crisis.</i></p>	<p>instability, hardest, malfunction, zero income, stopped, Disruption, shut down, loss, crisis</p>	<p>Uncertainty</p>
<p><i>Businesses are under threat, people only focus on staying safe, internet interruption, night time inspections, unavailable electricity and lack of freedom.</i></p>	<p>threat, safety, internet interruption, inspections, unavailable electricity, lack of freedom.</p>	<p>Safety Concern</p>

Source: Compiled by Author (2022)

The military has been back in charge and declared the “state of emergency” on 1st February, 2021. In Myanmar, the military coup in February has reversed and it has threatened the ongoing economic progress. The military government has

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imposed periodic shutdowns and limits on internet connections which have led to operational difficulties for businesses. In doing so, the biggest economic impacts so far have been driven by internal factors. The main culprit of the business freeze is the political conflict and limitation of bank retraction. It is identified as a “**Cash Flow**” theme in line by line coding. When the banks closed at the high of the Civil Disobedience Movement (CDM)⁹, the enterprises faced cash shortages. This problem still remains even after the banks were forced to reopen by the military government. Withdrawals are more difficult and restrictive as there is a lack of time to withdraw from the bank. The business collapsed as there are serious risks to the stability of the cash flow and finance sector.

Another theme called “**Operation Cost**” became the tension as costs for the long term become a burden when the operations are suspended with an uncertainty of the future. Moreover, the military government forces all payments such as total enforcement of EPC¹⁰ and other business taxes. The enterprises have to withstand without income which is a blow to the business since they have to pay for the staff and cost for additional charges. Other substitute businesses have also been down with zero income and this pushed even to business

⁹ Civil Disobedience Movement-a nationwide movement that refuse to acknowledge the ruling of military regime by workers refusing to work and boycotting the product from military associated groups

¹⁰ Electric Power Corporation

malfunction as shown in the theme “**Uncertainty**”. Businesses are under threat due to the theme “**Safety Concern**”, as people only focus on staying safe as the military government is arresting them without proper reason and due legal process. Sometimes there is unavailable electricity, nighttime inspections and taking the civilians as porters in some Regions and States. The people do not have freedom to do anything as usual, they do not dare to travel like before, they no longer dare to go outside freely. Therefore the Coup hurt the business to a large extent and it went down more than Covid-19 crisis.

5.4. Line by Line Coding Results on Sustainability of Environmental Enterprises

The Environmental Enterprises in Myanmar have all been forced to adapt to the epidemic and political crisis. “**New Strategy**” and “**Recovery Plan**” as taking the new approach to business that puts the emphasis on sustainability of their enterprises and balancing their business step by step by trying other backup plan businesses were a must in this crisis. The deduction of these enterprises is that “Being able to think about other additional activities more than typical things can sustain the business”. These enterprises mostly tried to accelerate their additional backup operation that can give the income for them. In the pandemic crisis, when the business went down, it has been

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able to stay afloat by using the pre-planned work strategy as a sustainable business.

Line by Line Coding	Selective Coding	Themes
<i>We offered the services in different ways, accelerated in additional activities. We tried to adapt to markets and sold the products at a more affordable rate than other businesses.</i>	offered, services, different ways, accelerated, additional activities, adapt, affordable	New Strategy
<i>Backup plans are used for better resilience of the business in this crisis. We created income from various parts of business.</i>	Backup plans, resilience, crisis, created, income	Recovery Plan
<i>Reduction of electricity cost and staff costs, stopping the additional service, suspended production, closing the branch offices and balancing things step by step are necessary in this crisis.</i>	reduction, cost, stopping, additional service, suspended, production, balancing, step by step	Cost Reduction
<i>We tried not to be discouraged by the crisis and supported our employees financially, and we trained them by giving the courses and carrying out modern work under the self-leadership of our employees.</i>	discouraged, crisis, supported, financially, trained, courses, modern, self-leadership	Supporting Employees
<i>Keeping good communication between suppliers and customers, good employee performance is essential and we value gaining customer trust.</i>	Keeping, good communication, employee, performance, value, gaining, trust	Customer Relation

Source: Compiled by Author (2022)

The business became more difficult to endure in the political crisis than in Covid-19 Pandemic. “**Cost Reduction**”

is also an important one as the electricity cost and the employee costs were reduced and the enterprises had to stop the additional services and suspended the production of their business. One more identified theme is “**Supporting Employees**” as supporting the employees financially and mentally, training them by providing the courses and carrying out the new modern innovative work under the self-leadership of the employees, trying not to be discouraged by the crisis and focusing on sustaining their business by thinking about the long term were the critical things to conquer the crisis. The next theme is “**Customer Relation**”. Customer relation was also highly sustained by keeping good communication between suppliers and customers with good employee performance.

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6. Results

Figure 1. Connection between themes from Line by Line coding result



The impacts of Covid-19 on the income of Environmental Enterprises depend on their management and innovative approaches. Environmental Enterprises face more challenges than any other business in this double crisis due to the limitations to innovate new measures whether they make backup business or they extend additional new business. They always have to prioritize the options that are environmentally

friendly and maintenance activities rather than their income unlike any other type of business. During Covid-19 pandemic, the Eco-tourism related industries were not able to make new measures in line with the times resulting in a sharp decline in income. According to their original business concept, it was not easy to innovate new actions as the other organic farming businesses and recycling businesses. The organic farming business was able to increase sales by expanding its distribution to other cities by taking advantage of better transportation when people stayed at home as a disease control during the pandemic. The recycling business also increased demand in the pandemic although it was the bag sewing and bag recycling business, it was able to innovate by producing and selling biodegradable surgical gowns as the medical supplies that the people needed most in the pandemic period. Strategically managing the struggles of the enterprises is the only way to get through this crisis well. These enterprises can overcome this juncture of the dilemma if they can apply appropriate new strategies which are adaptable to any period whether it is Covid-19 pandemic or Military Coup. The important thing is that they need to be able to make backup plans with effective management. After interacting with the enterprise founders, the enterprises that supply the necessities and the medical supplies during the pandemic are less vulnerable to the impacts of the crisis. It would be more convenient to have an extra plan of enterprise to

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supply the basic needs of the people whenever the situation demands.

7. Conclusion and Suggestions

This study examines the impacts on income of Environmental Enterprises during the Covid-19 pandemic and military coup which is the junction of Covid-19 third wave. During the pandemic period, these Environmental Enterprises were resilient with innovative strategies and backup plans. Despite the loss of income, they have certainly struggled to stay afloat in the face of pandemic crisis.

During the military coup in 2021, all the enterprises' income was severely affected more than Covid-19 pandemic and it is still challenging to sustain for the future and maintain day-to-day operations. After a long struggle in the pandemic, the coup occurred consecutively as the next bigger crisis and these enterprises hugely lost their income and abilities to move forward. The founders of these enterprises have lost all opportunities of launching new plans to survive the business as it is the crucial political crisis of the whole country.

As mentioned above, **struggle** and **hardships** are common occurrences for business and the appropriate way to deal with this predicament is to strategically manage and supply the basic needs of people as a backup plan in times of crisis.

Depending on the capability of business owners and their management skills, the enterprises will either overcome the struggle to move forwards or be stuck in a bottleneck. For Environmental Enterprises, it is essential to anticipate how to prepare effective strategies to survive in a long-term crisis before starting the business and to adapt the enterprises to match with the supply and demands of the market all the time. Unlike any other business, Environmental Enterprises always have to think about environmental conservation even for backup plans in times of crisis. Therefore, it is important to anticipate the potential problems from all sides before starting the business and to prepare as many solutions as possible.

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References

- Analysing Qualitative Data Read more at:
<https://www.skillsyouneed.com/learn/analysing-qualitative-data.html>. (2011). SkillsYouNeed.
- Retrieved 2021, from
<https://www.skillsyouneed.com/learn/analysing-qualitative-data.html>
- Aung, T. S. (2021). What Myanmar's coup could mean for its environment and natural resources. Conflict and Environment Observatory. Published.
<https://ceobs.org/what-myanmars-coup-could-mean-for-its-environment-and-natural-resources/>
- Bala, H., & Feng, X. (2019). Success of Small and Medium Enterprises in Myanmar: Role of Technological, Organizational, and Environmental Factors. Journal of Global Information Technology Management, 22(2).
<https://doi.org/10.1080/1097198X.2019.1603511>
- Basit, T. (2010). Manual or electronic? The role of coding in qualitative data analysis. Educational Research. Published.
<https://doi.org/10.1080/0013188032000133548>
- Beveridge, R., & Guy, S. (2007). The rise of the eco-preneur and the messy world of environmental innovation. The International Journal of Justice and Sustainability, 10(6).
<https://doi.org/10.1080/13549830500321972>
- Bhalla, N. (2021, May 6). One in two people globally lost income due to the pandemic. World Economic Forum.
<https://www.weforum.org/agenda/2021/05/how-many-people-experienced-a-lower-income-due-to-covid-19/>

- Bryman, A. (2016). *Social Research Methods* (5th ed.). Oxford University Press.
https://books.google.com.mm/books?id=N2zQCgAAQBAJ&dq=Bryman&source=gbs_navlinks_s
- Charmaz, K. (2006). *Constructing grounded theory: A practical guide through qualitative analysis*. Sage.
https://books.google.com.mm/books?hl=en&lr=&id=2ThdBAAQBAJ&oi=fnd&pg=PP1&ots=f_IZcLjyFV&sig=MyuhhChgN0RA2EM5IJ8znEb2wbc&redir_esc=y#v=onepage&q&f=false
- Charmaz, K. C. (2006). *Constructing Grounded Theory: A Practical Guide Through Qualitative Analysis*. Research Gate. Published.
https://www.researchgate.net/publication/224927524_Constructing_Grounded_Theory_A_Practical_Guide_Through_Qualitative_Analysis
- D.K. (2017). QUALITATIVE DATA ANALYSIS.
<https://drkriukow.com/line-by-line-coding-in-nvivo-10-and-11/>
- Diao, X., & Wang, M. (2020). Significant economic impacts due to COVID-19 and falling remittances in Myanmar. INTERNATIONAL FOOD POLICY RESEARCH INSTITUTE (IFPRI). Published.
https://doi.org/10.2499/p15738coll2.133762_13
- Emmert, A. (2021, July 8). The rise of the eco-friendly consumer. Strategy-Business. <https://www.strategy-business.com/article/The-rise-of-the-eco-friendly-consumer>

Covid-19 Pandemic Impacts on Income of Environmental Enterprises in Myanmar

- Freestone, O. M., & McGoldrick, P. J. (2007). Motivations of the Ethical Consumer. *Journal of Business Ethics*. Published. <https://doi.org/10.1007/s10551-007-9409-1>
- Glaser, B. G. (1978). *Theoretical sensitivity*. Sociology Press. https://scholar.google.com/scholar_lookup?hl=en&publication_year=1978&author=B.+G.+Glaser&title=Theoretical+sensitivity
- Global Green Growth Institute. (2017, December). *Green Growth Potential Assessment – Myanmar Country Report*. <https://gggi.org/report/green-growth-potential-assessment-myanmar-country-report/>
- Harapko, S. (2021). woman with headset and tablet in warehouse How COVID-19 impacted supply chains and what comes next. EY. Published. https://www.ey.com/en_gl/supply-chain/how-covid-19-impacted-supply-chains-and-what-comes-next
- Hein, Z. (2020, December 3). Tourism revenue in Myanmar dips 80% during Covid-19. MYANMAR TIMES. <https://www.mmtimes.com/news/tourism-revenue-myanmar-dips-80-during-covid-19.html>
- Htun, L. M. (2019, July 26). Local Entrepreneur Offers Plastics Alternatives. The Irrawaddy. <https://www.irrawaddy.com/lifestyle/local-entrepreneur-offers-plastics-alternatives.html>
- J., Elkington, J., & H. (1989). *The Green Consumer Guide* [E-book]. Penguin. <https://www.biblio.com/book/green-consumer-guide-john-hailes-julia/d/535965400>

- Kachaner, N., Nielsen, J., Portafaix, A., & Rodzko, F. (2020, June 14). *The Pandemic Is Heightening Environmental Awareness*. BCG.
<https://www.bcg.com/publications/2020/pandemic-is-heightening-environmental-awareness>
- Kirkwood, J., & Walton, S. (2014). How green is green? Ecopreneurs balancing environmental concerns and business goals. *Australasian Journal of Environmental Management*, 37–38.
<https://doi.org/10.1080/14486563.2014.880384>
- Kunst, A. (2020, July 3). Products & services people spend less on due to the COVID-19 pandemic 2020. Statista.
<https://www.statista.com/statistics/1107095/products-and-services-people-spend-less-on-due-to-the-covid-19-pandemic/>
- Lwin, N. (2020, April 29). Myanmar Launches Sweeping COVID-19 Economic Relief Plan. The Irrawaddy.
<https://www.irrawaddy.com/specials/myanmar-covid-19/myanmar-launches-sweeping-covid-19-economic-relief-plan.html/amp>
- Madeira, A., Palrão, T., & Mendes, A. S. (2020). Article The Impact of Pandemic Crisis on the Restaurant Business. Sustainability. Published.
<https://doi.org/10.3390/su13010040>
- Moisander, J. (2007). Motivational complexity of green consumerism. *International Journal of Consumer Studies*. Published.
<https://doi.org/10.1111/j.1470-6431.2007.00586.x>

Covid-19 Pandemic Impacts on Income of Environmental Enterprises in Myanmar

- Morgan, C. J., Croney, C. C., & Widmar, N. J. O. (2016). Exploring Relationships between Ethical Consumption, Lifestyle Choices, and Social Responsibility. *Advances in Applied Sociology*, Vol.6(No.5). [https://www.scirp.org/\(S\(lz5mqp453edsnp55rrgjt55\)\)/reference/ReferencesPapers.aspx?ReferenceID=1756816](https://www.scirp.org/(S(lz5mqp453edsnp55rrgjt55))/reference/ReferencesPapers.aspx?ReferenceID=1756816)
- Myanmar Country Environmental Analysis. (2019, June 11). THE WORLD BANK. <https://www.worldbank.org/en/country/myanmar/publication/myanmar-country-environmental-analysis>
- Nachemson, A. (2021, March 18). Myanmar's environmental record was weak but improving. Then came the coup. MONGABAY. <https://news.mongabay.com/2021/03/myanmars-environmental-record-was-weak-but-improving-then-came-the-coup/>
- Naing, K. K. (2018). Democratisation in Myanmar: Glue or Gloss? OPEN RESEARCH. <https://openresearch-repository.anu.edu.au/handle/1885/196641>
- National Environmental Policy of Myanmar. (2019). UNDP Myanmar. Published. https://www.mm.undp.org/content/myanmar/en/home/library/environment_energy/national-environmental-policy-of-myanmar.html
- Nyunt, M. (2008). Development of environmental management mechanism in Myanmar. *Asia Europe Journal*. Published. <https://doi.org/10.1007/s10308-008-0182-2>

Parletta, N. (2019, May 14). Going Green - What's Good For The Planet Is Good For Business. Forbes. <https://www.forbes.com/sites/natalieparletta/2019/05/14/going-green-whats-good-for-the-planet-is-good-for-business/?sh=159cc3203201>

Phillips, N. (2021). The coronavirus is here to stay here's what that means. Nature-NEWS FEATURE. Published. <https://www.nature.com/articles/d41586-021-00396-2>

Raitzer, D., Nuella Samson, J., & Nam, K.-Y. (2015). Achieving Environmental Sustainability in Myanmar. ASIAN DEVELOPMENT BANK WORKING PAPER, no. 467. <https://doi.org/10.2139/ssrn.2709328>

Researchers of the International Food Policy Research Institute and Michigan State University. (2020). Impacts of COVID-19 on Myanmar's Agri-Food System. IFPRI Myanmar. Published. https://www.themimu.info/sites/themimu.info/files/documents/Working_Paper_Impacts_of_COVID-19_on_Myanmars_Agri-Food_System_IFPRI_Oct2020.pdf

Reuters Staff. (2008, June 2). TIMELINE - A month on, cyclone-hit Myanmar struggling. REUTERS. <https://www.reuters.com/article/uk-myanamr-cyclone-idUKBKK32028420080602>

Smith, V. K. (2001). Environmental Economics. International Encyclopedia of the Social & Behavioral Sciences. Published. <https://doi.org/10.1016/B0-08-043076-7/02314-7>

Covid-19 Pandemic Impacts on Income of Environmental Enterprises in Myanmar

- Sustainability Management School (SUMAS). (2019, June 22). Millennials and their Impact on Sustainability. <https://sumas.ch/millennials-and-sustainability/>
- The Asia Foundation. (2020, May 29). COVID-19 IMPACT ON BUSINESSES: A SUMMARY. OpenDevelopment Myanmar. <https://opendevlopmentmyanmar.net/mbei/covid-19-impact-on-businesses/>
- Thein, H. H., & Gillan, M. (2021, June 23). How the coup is destroying Myanmar's economy. EAST ASIA FORUM. <https://www.eastasiaforum.org/2021/06/23/how-the-coup-is-destroying-myanmars-economy/>
- Thorne, S. (2000). Data analysis in qualitative research. Evidence Based Nursing. Published. <https://doi.org/10.1136/ebn.3.3.68>
- Townsend, C. R. (2008). Individual and combined responses of stream ecosystems to multiple stressors. Journal of Applied Ecology - British Ecological Society. Published. <https://doi.org/10.1111/j.1365-2664.2008.01548.x>
- Wang, C., Wang, F., Wang, Q., & Yang, D. (2012). Preparing for Myanmar's environment-friendly reform. Elsevier, 229. <https://doi.org/10.1016/j.envsci.2012.08.014>
- Wood, M. (2021, March 17). 39 Green Business Ideas for Sustainable Entrepreneurs. NerdWallet. <https://www.nerdwallet.com/article/small-business/sustainable-business-ideas>

- Yu, Z. (2021). Disruption in global supply chain and socio-economic shocks: a lesson from COVID-19 for sustainable production and consumption. *Operations Management Research*. Published. <https://doi.org/10.1007/s12063-021-00179-y>
- Zhang, H., & Jiang, N. (2019). Discussion on Environmental Protection and Enterprise Economic Development. *IOP Conf. Series: Earth and Environmental Science*. Published. <https://doi.org/10.1088/1755-1315/242/5/052004>

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