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Sustainable Development and Consumption: Sustainable Consumption Model in Iraq's Commerce

Mamoon Ali Ebrahim ¹, Saeid Sharifi ², Younis Mohammad Khther al-Sabaawe ³, Mehrdad Sadeghi ⁴

¹public administration, Islamic Azad University, Isfahan branch (Khorasgan), Isfahan, Iran.

^(2,4) Faculty Member of cultural management department, Islamic Azad University, Isfahan branch (Khorasgan), Isfahan, Iran

³ faculty of business administration & Economic-Kirkuk University , business department, Kirkuk, Iraq.

mamoonaljibory@gmail.com¹

sa.sharifi@khuisf.ac.ir²

younis.mohammad@uokirkuk.edu.iq³

mehr.sadeghi@khuisf.ac.ir⁴

Abstract: The current research was conducted with aim of presenting a model of sustainable consumption in Iraq's trade and commerce. The research method was carried out in framework of mixed method (qualitative and quantitative) in first Phase research using the grounded theory method (GT). Based on the principle of theoretical saturation, it was done from the number of 15 knowledgeable experts in the field of study using the purposeful sampling method based on the semi-structured interview criteria. Two methods of review by two coders and review by experts who did not participate in research, returning to the interviewees were used to measure the validity of the data. The data was analyzed through several stages of open, axial and selective coding based on Strauss and Corbin's model. results showed the pattern of sustainable consumption in Iraqi trade and commerce with 15 general categories in the form of a paradigmatic model including causal conditions (sustainability requirements, infrastructural development and life changes), central phenomenon (sustainable consumption policy), background conditions (influence of information and media and environmental requirements and climate), intervening conditions (governance performance, non-principled interventions and consumer activism), strategies (consumption knowledge strategy, intervention policies, operational tactics) and consequences (economy-sustainability care, consumer behavior sustainability, sustainability policy) were placed. In the second phase, a survey method was used; the tool for collecting information was the researcher-made questionnaire in the first part; the statistical sample was 210 experts in the field of environment who were randomly selected; the results showed that the model had a good fit.

Keywords: Sustainable Development, Consumption, Environment, Economy.

التنمية المستدامة والاستهلاك: نموذج الاستهلاك المستدام في وزارة التجارة العراقية

م.م. مأمون علي إبراهيم^١، أ.م.د. سعيد شريف^٢، أ.م.د. يونس محمد خضر السبعوي^٣، أ.م.د. مهرداد صادقي^٤

^١ الإدارة العامة، جامعة آزاد الإسلامية، فرع أصفهان (خراسكان)، أصفهان، إيران
^٢ جامعة آزاد الإسلامية، فرع أصفهان (خراسكان)، أصفهان، إيران
^٣ جامعة كركوك- كلية الإدارة والاقتصاد، قسم إدارة الأعمال، كركوك، العراق

المستخلص: أجري البحث الحالي بهدف تقديم نموذج للاستهلاك المستدام في وزارة التجارة في العراق. تم تنفيذ طريقة البحث في إطار المنهج (النوعي والكمي) في المرحلة الأولى من البحث باستخدام طريقة النظرية المجذرة (GT). واستناداً إلى مبدأ المراجعة النظرية، ومن ثم تم اختيار (١٥) خبيراً من ذوي الخبرة في مجال الدراسة باستخدام أسلوب العينة العمدية القصدية المبنية على معايير المقابلة شبه المنظمة. تم استخدام طريقتين للمراجعة من قبل اثنين من المبرمجين والمراجعة من قبل الخبراء الذين لم يشاركون في البحث، والعودة إلى الأشخاص الذين تمت مقابلتهم لقياس صحة البيانات. تم تحليل البيانات من خلال عدة مراحل من الترميز المفتوح والمحوري والانتقائي بناءً على نموذج (Strauss and Corbin) أظهرت النتائج نمط الاستهلاك المستدام في التجارة والتبادل التجاري العراقي بـ ١٥ فئة عامة على شكل نموذج نمذجي يشمل الظروف السببية (متطلبات الاستدامة، تطوير البنية التحتية وتغييرات الحياة)، الظاهرة المركزية (سياسة الاستهلاك المستدام)، الظروف الخلفية (تأثير المعلومات والإعلام والمتطلبات البيئية والمناخ)، والظروف المتداخلة (أداء الحوكمة، والتدخلات غير المبدئية ونشاط المستهلك)، والاستراتيجيات (استراتيجية المعرفة الاستهلاكية، وسياسات التدخل، والتكتيكات التشغيلية) والعواقب (رعاية الاستدامة الاقتصادية، واستدامة سلوك المستهلك، والاستدامة السياسية) تم وضعها. وفي المرحلة الثانية تم استخدام الأسلوب المسحي؛ وكانت أداة جمع المعلومات هي الاستبيان الذي أعده الباحث في الجزء الأول؛ وتكونت العينة الإحصائية من ٢١٠ خبيراً في مجال البيئة تم اختيارهم عشوائياً؛ أظهرت النتائج أن النموذج كان مناسباً بشكل جيد.

الكلمات المفتاحية: التنمية المستدامة، الاستهلاك، البيئة، الاقتصاد.

Corresponding Author: E-mail: mamoonalijibory@gmail.com

1. Introduction

In recent decades, environmental approaches have focused on pollution control, cleaner production, and improving resource efficiency on the production side. At the end of the 1990s, this scope was extended to post-consumer waste collection and product management by manufacturers. As a result, tangible improvements were achieved in reducing the consumption of primary resources. However, final consumption kept pace with population growth and rising wealth, so that efficiency improvements on a per-product basis were negated by rising total consumption (Scholl et al., 2010). The Sustainable Development Goals were created by the United Nations in 2015. Goal 12 of sustainable development specifies "ensuring sustainable consumption and production patterns" (Vinuesa et al., 2020). Specifically, Goals 1 and 12 aim to implement frameworks and support developing countries to "move towards more sustainable consumption and production patterns". Sustainable development goals are a challenge that many government departments are facing in promoting sustainable growth. Local governments, as the closest government layer to citizens, should consult on strategies and actions that are coordinated to achieve sustainable development goals for the benefit of their communities (Bisogno et al., 2023).

A fundamental challenge in the field of government interventions and sustainable consumption is statements about the existence of a gap between the representation of consumers' needs in the direction of sustainable development and the value propositions of social businesses and government tools (de Melo et al., 2023). This creates a gap in policy making and the real world.

Sustainable consumption in various fields of environmental care includes attention to renewable resources and issues of this kind that government institutions and institutions with the importance of finding issues related to sustainable development in their macro policies and policies have placed. Because renewable resources create generational and intergenerational equality to the extent of their capacity to renew (Whitson & French, 2021), It is of strategic importance for governments in policies and macro policies. In this context, one of the challenging issues, especially in developing countries such as Iraq, with its special conditions in the last decade or two, is sustainable food consumption; the environmental impacts of meat and dairy production are high. Raising animals for human consumption accounts for approximately 40% of the total agricultural output in industrialized countries. It occupies 26% of the earth's surface and the production of food crops consumes about one third of the total arable land (Steinfeld, 2006).

Another serious challenge in the field of consumption of the new generation and intergenerational changes, and as a result, fundamental changes in consumption and consumption policies by the government and the government (Seyfi et al., 2024). In fact, it provides a correct understanding of consumer behaviour and a deeper insight to guide government and business actors in the development of sustainable consumption strategies and policies.

In the National Development Plan of Iraq 2022-2018, it is warned that approximately 4095 square kilometres of Iraqi agricultural lands are at risk of desertification (Al-Haboby et al., 2014). In addition, the Socio-Economic Atlas of Iraq for 2019 estimated that in 2017, 11 percent of Iraqi families depended on agriculture for their livelihood, which was the main source of Iraq's food security.

In micro and macro trends, we can expect variables such as economic growth under the influence of micro variables be like consumption Evidence has shown that the relationship between electricity consumption and economic growth in Iraq has been direct (Ibrahim& Ahmed, 2020).

Research conducted in the field of water management and sustainability policies (Sulaiman et al, 2019), groundwater management (Obeed Al-Azawi & Ward, 2017) demand for renewable energy (Saeed et al., 2023) sustainable health care (Al Issa et al, 2023) sustainability of ecotourism (Mohammed et al,2023) natural reserves and sustainable development (Abdullah et al, 2023), strategic sustainable development in small companies (Ismael & Ismael, 2023), sustainability policies (Ahmed, 2023) have also been investigated, which has assumed the nature of foreign policy. Sustainability requires environmental awareness and sustainable consumption behaviour of consumers to be successful (van der Velden, 2021).

Companies that are active in importing and producing products in Iraq can manage their programs based on sustainable consumption capacities. In terms of management and policy-making, the issue of sustainable consumption policy is problematic due to the fact that Iraq has accepted sustainability obligations in the field of 2030 development goals, and attention to it will necessarily be on the agenda of the Iraqi government, and organizations and managers will be required to achieve the development goals. Paying attention to sustainable consumption policies is of strategic importance. In addition to identifying the components of sustainable consumption policy, determining the contribution of sustainable consumption variables that can determine the position and duty of governing institutions, especially in Iraq, regarding environmental care while responding to food needs. Issues such as packaging of goods, importing food types that can affect the taste of Iraqi citizens are very important. Therefore, the problem of the current research will be to find a model for policy makers in the field of sustainable consumption in Iraq. This model can be a possibility for formulating consumption and sustainability policies based on sustainable development indicators.

2. Conceptual Framework

The term "Sustainable Consumption" has many interesting features. It consists of two opposite words, which makes it an oxymoron. Researchers from various fields, including economics, psychology, sociology, anthropology, and neurobiology, have researched consumption, and each academic field provides its own contextual definitions (Stern, 1997). Consumption can be ordinary or subtle, visible or invisible (Shove & Warde, 2002). Flashy or extravagant, which makes it difficult to define, but everyone agrees that consumption leads to destruction and waste (Graeber, 2011).

One of the theories that can be used in the discussion of sustainable consumption policy; the theory is social action. Social action theory has been used in research on the development and stability of social practices (Hargreaves, Longhurst & Seyfang, 2013). As well as on how practices are intertwined in different contexts of consumption (Powells et al, 2014). Consumer behaviour has also been discussed in several field s, (Jensen, 2017) such as energy (Hesselgren, Sjöman & Pernestål, 2020) transportation and food (Leray, Sahakian & Erkman, 2016).

Although an accepted standard definition still does not exist (Giulio et al, 2014). Nevertheless, many examine sustainable consumption through its most consistent features and dimensions with elements such as (1) satisfaction of basic human needs. (2) Prioritizing quality of life over material standards.

(3) Less consumption; (4) Attention to future generations through responsible, efficient and informed consumption. (5) Environmentally and socially compatible consumer choices. (6) It conceptualizes waste and pollution minimization (Fien, Neil, & Bentley, 2008).

Sustainable consumption is the most important goal of sustainable development goals, which includes avoiding negative health and environmental effects, minimizing waste production and generally ensuring an environmentally friendly lifestyle; Sustainable consumption is the use of products and services in ways that minimize their effects on the environment in order to meet human needs now and also for future generations (Fadlallah et al, 2021).

3. Research Method

This research is conducted using a qualitative method of grounded theory. In this case, the process of building a codified theory through organized data collection and inductive analysis of data is used to answer the new questions of those qualitative researches that do not have sufficient theoretical foundations in the field of the subject under study (Thornberg & Charmaz, 2014). In fact, "grounded data theorizing is a systematic and thorough procedure to produce a theory that describes a process, action, or interaction about a real micro-issue, at a "general conceptual level"(Creswell et al, 2007). The research community in this research is all subject matter experts and specialists, senior experts of the Iraqi Ministry of Commerce, university professors and experts in the field of environmental policy who were interviewed in a non-uniform way with 15 subject matter experts in different fields of business, management and economics, as described in Table (1). In this research, the sampling method is theoretical sampling. According to Strauss and Corbin (1998), grounded theory uses theoretical sampling to maximize opportunities to compare events, events, or occurrences in order to determine how a category changes based on its characteristics and dimensions (Strauss & Corbin, 1998).

Table (1): Demographic Characteristics

No	Education	Specialization	Work experience	Job	Age
1	P.H. D	Environmental Health	5	Assistant Professor	45
2	Ph.D	Management	15	Assistant Professor	45
3	Ph.D	social Sciences	7	Associate Professor	40
4	Ph.D	Economy	23	Professor	59
5	Ph.D	business management	15	Associate Professor	50
6	Ph.D	Strategy	16	Professor	55
7	Masters	organizational behavior	15	senior employee	47
8	Ph.D	Environmental Health	10	senior employee	38
9	Masters	Management	27	senior employee	49
10	Ph.D	Economy	5	Assistant Professor	42
11	Masters	Public policy	7	senior employee	37
12	Masters	Environmental Health	22	senior employee	45
13	Masters	Economy	20	senior employee	49
14	Ph.D	Economy	8	Assistant Professor	39
15	Masters	Management	11	senior employee	42

In the second phase, a survey method was used; the tool for collecting information was the researcher-made questionnaire in the first part; the statistical sample was 210 experts in the field of environment who were randomly selected. In the quantitative part, factor analysis and structural equation model were used in AMOS software for data analysis. Data validity was confirmed through face and content validity as well as Cronbach's alpha coefficient.

4. Results

The findings of research in the Strauss and Corbin model with components of causal, contextual, interventional dimensions, strategies and consequences are presented as follows:

Table (2): causal, contextual, interventional dimensions, strategies and consequences extracted in the paradigm model of sustainable consumption policy

Paradigm model	Dimensions	Axial code
Causal conditions	Sustainability requirements	The necessity of domestic production
		Environmental care culture
		Urban Management
	Technological development	International development
		Technological development
	Life changes	everyday life
Contextual conditions	Information and media influence	Social developments
		Celebrity
	Environmental and climatic requirements	Social responsibility
		Urban living conditions
Intervening conditions	Governance performance	Climate change
		Government policy
	Unprincipled interventions	Government performance
		Power interventions
	Consumer activism	Political and governmental influence
		Consumer knowledge
		Consumer values
		Consumer behavior
Strategies	Enhancing consumption knowledge	Social capital
		Education development
	Intervention policies	Consumer awareness
		Supportive policies
	Operational tactics	Stabilizing incentives
		Control policies
		Revision of economic models
		Green management
Consequences	Care-biology	Technological agreement
		Stable identity
	Economic stability	Natural care
		Sustainable living
	Consistency of consumer behavior	Economic controls
		Economic optimization
	Stabilization policy	Environmental literacy

5. Selective coding

The main stage of the foundation's data analysis is selective coding, where the researcher presents a theory based on the results of open and axial coding. Since it is possible that some secondary codes or relationships between them were not well monitored in the model resulting from axial coding, for this reason, the researcher in the selective coding stage removes the excesses and expands and generalizes those secondary codes and relationships that were previously this is not well addressed. Among the identified factors, the axial coding paradigm was carried out and based on that, the linear relationship between the secondary code and the central code of the research, including causal conditions, contextual conditions, intervening conditions, strategies and consequences, was determined. Figure 1 shows the selective coding paradigm, in other words, the qualitative research process model.

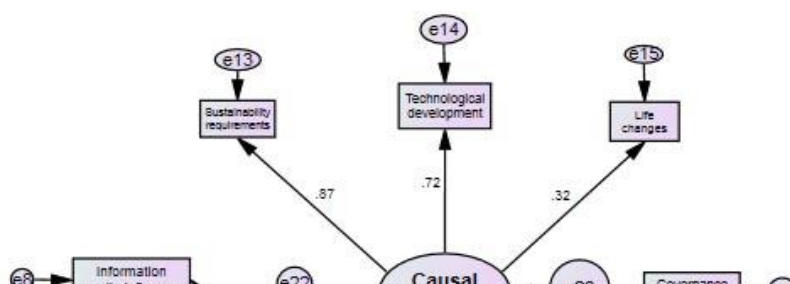


Figure (1): Structural equation model of sustainable consumption

6. Discussion

The results of this research are a suitable possibility for planning for sustainable development in the field of consumption, especially the issue of importing goods and paying attention to various aspects in the field of health and environmental health. Dimensions such as environmental literacy with elements such as consumption culture, waste separation on site and learning environmental care patterns, as well as sustainable living with elements such as increasing transparency in sustainable consumption, creating a sustainable lifestyle, controlling consumerism, increasing vegetable consumption, replacing meat Commitment to future generations and import of sustainable agricultural products are of this kind.

The research evidence of Campi et al. (2021) shows that food production and global food security and the sustainability of food systems show that the concentration of agricultural production has a negative effect on food supply, food security and the sustainability of food systems. The competitiveness of countries and the coherence of their diversity patterns increase per capita food supply and food security, but may harm sustainability. In this sense, restrictions on the production of agricultural products in the long term can affect sustainability.

Water and water management are no longer related to environmental studies. There is a very strong connection between water and the security of a state, as well as its survival and development. A decrease in water availability may lead to the collapse or even extinction of an entire civilization. The importance of water as a natural and fundamental resource, because it plays a significant role in all aspects of life. As Al-Noor & Al-Makhzoumy (2022) state, the value of water resources in Iraq is increasing over time with population growth, urban development, and increasing basic needs, especially when water resources are affected by climate change and many negative impacts. Human like sewage and industrial sewage that pollutes water and changes its taste and causes economic and social problems.

Increasing wealth in large developing countries and increasing diversion of agricultural resources for energy production greatly increases the demand for agricultural resources. As Rask and Rask (2011) show, food consumption and production changes during development are analyzed using resource-based grain equivalent measures. Upgrading the diet to animal products requires a fivefold increase in per capita food resource use,

reflecting a consistent pattern that is only marginally affected by the land base. Increased food consumption over production during early development leads to imports.

It seems that the standard of living in Iraq is closely related to the level of urbanization. In general, rural areas suffer from higher rates of poverty. This shows the inequality in quality and access to infrastructure, health, education and security for different social classes. According to the United Nations report (2018), the more urban density grows, the less poverty occurs; Therefore, poverty is at its lowest in larger cities. This was the main motivation for internal migration to the bigger cities of Iraq, especially in the 1950s and 1960s of the last century. In addition, coercive measures have led to the destruction of rural areas and villages. For example, many people were forced to leave their villages due to the sudden lack of water they depended on for their livelihoods when the government drained swamps in the villages in the 1990s.

The contextual conditions mainly provide a possibility to consider these capabilities through the creation of natural and environmental contexts and social infrastructures for the model of sustainable consumption policy in Iraq, which will affect different areas of consumption in Iraq. In fact, the influence of information and media and environmental and climatic conditions make it possible to pay attention to biological and social aspects simultaneously in order to create a sustainable consumption model. In the social dimension, attention to the social responsibility of organizations in the sustainability of consumption is significant. Corporate social responsibility has been an emerging issue worldwide since the 1990s. On the other hand, the influence of leadership on feeling and behaving responsibly towards society is undeniable. Social entrepreneurship, which is considered to improve the non-financial indicators of the organization, plays an important role. The evidence of Rashid's research (2022) in Erbil, Iraq, shows that participation in corporate activities aimed at preserving the environment, protecting the interests of shareholders and meeting the expectations of stakeholders will lead to the strengthening of social entrepreneurship and social responsibility.

The green strategy, which pays attention to the aspects of environmental sustainability in innovative productions, especially in the performance of new companies, plays an essential role in achieving a sustainable policy. In Iraq, attention has been paid to green policies in the last three decades. It is applied in post-war Iraq, where the performance of green innovation was conditioned by a commitment to sustainable management and the development of green technology and skills. Al- Halbusi et al.'s (2022) ³⁸evidence in this context shows that product and green process innovation performance increases with green core competence, but only when the company invests in people and research and development or, in the case of green process innovation, top management real commitment. It shows in sustainable ways.

Iraq has the lowest per capita health expenditure in the region at \$154 in 2015, which has led to poor health services and a greater financial burden on Iraqi citizens. It is estimated that the average out-of-pocket payment of an Iraqi person is equivalent to 70% of the medical services they receive. The World Health Organization has recommended that this ratio be less than 30% to protect patients from falling below the poverty line.

7. Conclusion

Understanding countries' specialized patterns in food production can provide relevant insights for evaluating and designing policies that seek to achieve food security and sustainability, which is key to achieving several sustainable development goals.

One of the significant ways to achieve sustainable development is through the stabilization of consumption and the direction of macro policies in the direction of importing and producing consumer products, including meat and organic agricultural products, as well as reducing plastic consumption and controlling waste in Iraq. An issue that a major part of which depends on the ability of organizations to align with the goals of sustainable development.

In order to develop the culture of environmental care and strengthen issues such as recyclable materials and sustainable food information, the use of incentives, especially tax incentives, amnesty of crimes, etc., which help to strengthen it, should be done. In order to strengthen various aspects of consumer behavior, it is important to pay attention to healthy and unhealthy food consumption patterns and training such as waste segregation at the place of its production in the domestic and industrial fields. Therefore, it can be useful to consider incentives such as separation rewards and

training in the field of citizenship by municipalities, education and training and universities. In terms of green management, it is important to pay attention to control and support policies, including green tax, especially with emphasis on tax exemptions for green and environmentally friendly businesses. In the dimension of knowledge-enhancing consumption strategies, paying attention to the aspects of organic food consumption and optimizing energy consumption through consumer education, especially in the field of films and media productions, is suggested for the public.

8. Research limitations

Due to the fact that the statistical population of this research is limited to Iraq, caution should be taken in generalizing the results to other countries and organizations. The data of this research is limited to the period of 2022 and 2023. Also, this research has tried to avoid political and cultural biases, however, due to the interpretative nature of the analysis, it may have been influenced by the views of the researcher. Because managers and experts have been interviewed, there may be bias among the respondents, however, the researcher has tried to remove the bias from the results by increasing the number of the population.

References

1. Abdullah, A. M., Al-Karawi, A. S., Aswad, O. A. K., Alubadi, A. E., Ati, E. M., & Ajmi, R. N. (2023). Natural Reserves and Sustainable Development of AL-Tayeb Reserve/South Iraq: A Review Article. *Global Scientific Review*, 16, 29-37.
2. Ahmed, D. A. (2023). The role of environmental planning in treating pollution from war remnants in Iraq after 2003. *ENTERPRENEURSHIP JOURNAL FOR FINANCE AND BUSINESS*, 4(1).
3. Al Halbusi, H., Klobas, J. E., & Ramayah, T. (2022). Green core competence and firm performance in a post-conflict country, Iraq. *Business Strategy and the Environment*.
4. Al Issa, H. E., Abdullatif, T. N., Ntayi, J., & Abdelsalam, M. K. (2023). Green intellectual capital for sustainable healthcare: evidence from Iraq. *Journal of Intellectual Capital*, 24(4), 929-947.
5. Al-Haboby, A., Breisinger, C., Debowicz, D., El-Hakim, A. H., Ferguson, J., van Rheenen, T., & Telleria, R. (2014). *Agriculture for development in Iraq? Estimating the impacts of achieving the agricultural targets of the national development plan 2013 2017 on economic growth, incomes, and gender equality* (Vol. 1349). Intl Food Policy Res Inst.
6. Al-Noor, A. J. M., & Al-Makhzoumy, E. A. H. K. (2022). Origins and Implications of The Water Crisis in Iraq. *Diyala Journal of Human Research*, 3(94).
7. Bisogno, M., Cuadrado-Ballesteros, B., Rossi, F. M., & Peña-Miguel, N. (2023). Sustainable development goals in public administrations: Enabling conditions in local governments. *International Review of Administrative Sciences*, 00208523221146458.
8. Campi, M., Dueñas, M., & Fagiolo, G. (2021). Specialization in food production affects global food security and food systems sustainability. *World Development*, 141, 105411.
9. Creswell, J. W., Hanson, W. E., Clark Plano, V. L., & Morales, A. (2007). Qualitative research designs: Selection and implementation. *The counseling psychologist*, 35(2), 236-264.
10. de Melo, P. T. N., Cambrinha, G. M. G., & Gómez, C. R. P. (2023). Sharing representations in the relations between business proposals, consumption visions, and government policies. *RAM. Revista de Administração Mackenzie*, 24.
11. Fadlallah, S., Roy, P. S., Garnier, G., Saito, K., & Allais, F. (2021). Are lignin-derived monomers and polymers truly sustainable? An in-depth green metrics calculations approach. *Green Chemistry*, 23(4), 1495-1535.
12. Fien, J., Neil, C., & Bentley, M. (2008). Youth can lead the way to sustainable consumption. *Journal of education for sustainable development*, 2(1), 51-60.
13. Giulio, A. D., Fischer, D., Schäfer, M., & Blättel-Mink, B. (2014). Conceptualizing sustainable consumption: toward an integrative framework. *Sustainability: Science, Practice and Policy*, 10(1), 45-61.
14. Graeber, D. (2011). Consumption. *Current anthropology*, 52(4), 489-511.
15. Hargreaves, T., Longhurst, N., & Seyfang, G. (2013). Up, down, round and round: connecting regimes and practices in innovation for sustainability. *Environment and Planning A*, 45(2), 402-420.
16. Hesselgren, M., Sjöman, M., & Pernestål, A. (2020). Understanding user practices in mobility service systems: Results from studying large scale corporate MaaS in practice. *Travel Behaviour and Society*, 21, 318-327.
17. Ibrahim, M. A., & Ahmed, S. A. (2020). Measuring the impact of corporate governance mechanisms on social responsibility reports for a sample of Iraqi companies listed on the Iraq Stock Exchange. *Journal of Economics and Administrative Sciences*, 26(121).

18. Ismael, R. S., & Ismael, G. Y. (2023). An Assessment Of The Relationship Between Knowledge Management And Strategic Sustainable Development In Small Scale Companies In Kurdistan Region Of Iraq. *Baltic Journal of Law & Politics*, 16(1), 469-475.
19. Jensen, C. L. (2017). Understanding energy efficient lighting as an outcome of dynamics of social practices. *Journal of Cleaner Production*, 165, 1097-1106.
20. Leray, L., Sahakian, M., & Erkman, S. (2016). Understanding household food metabolism: Relating micro-level material flow analysis to consumption practices. *Journal of Cleaner Production*, 125, 44-55.
21. Mohammed, M. W., Feizizadeh, B., Klug, H., Ghanbari, A., & Blaschke, T. (2023). Ecotourism sustainability assessment using geospatial multiple approach in the Kurdistan region of Iraq. *GeoJournal*, 88(3), 3283-3306.
22. Obeed Al-Azawi, A. A., & Ward, F. A. (2017). Groundwater use and policy options for sustainable management in Southern Iraq. *International Journal of Water Resources Development*, 33(4), 628-648.
23. Powells, G., Bulkeley, H., Bell, S., & Judson, E. (2014). Peak electricity demand and the flexibility of everyday life. *Geoforum*, 55, 43-52.
24. Rashid, S. J. M. (2022). The Relationship Between Social Entrepreneurship, Corporate Social Responsibility and Organizational Performance in Social Economy Companies at Kurdistan Region of Iraq. *QALAAI ZANIST JOURNAL*, 7(1), 1019-1037.
25. Rask, K. J., & Rask, N. (2011). Economic development and food production–consumption balance: A growing global challenge. *Food Policy*, 36(2), 186-196.
26. Saeed, I. M., Tarkhany, A., Hama, Y., & Al-Shatri, S. (2023). Environmental considerations, sustainability opportunities and iraqi government's energy policies: A comparative study. *Environment, Development and Sustainability*, 25(7), 6879-6895.
27. Scholl, G., Rubik, F., Kalimo, H., Biedenkopf, K., & Söbech, Ó. (2010). Policies to promote sustainable consumption: Innovative approaches in Europe. In *Natural resources forum* (Vol. 34, No. 1, pp. 39-50). Oxford, UK: Blackwell Publishing Ltd.
28. Seyfi, S., Hall, C. M., & Strzelecka, M. (2024). Introduction: Gen Z, tourism, and sustainable consumption. In *Gen Z, Tourism, and Sustainable Consumption* (pp. 3-17). Routledge.
29. Shove, E., & Warde, A. (2002). Inconspicuous consumption: the sociology of consumption, lifestyles and the environment. *Sociological theory and the environment: classical foundations, contemporary insights*, 230(51), 230-251.
30. Steinfeld, H. (2006). *Livestock's long shadow: environmental issues and options*. Food & Agriculture Org.
31. Stern, P. C. (1997). Toward a working definition of consumption for environmental research and policy. *Environmentally significant consumption: Research directions*, 12-35.
32. Strauss, A., & Corbin, J. (1998). Basics of qualitative research techniques.
33. Sulaiman, S. O., Kamel, A. H., Sayl, K. N., & Alfadhel, M. Y. (2019). Water resources management and sustainability over the Western desert of Iraq. *Environmental Earth Sciences*, 78, 1-15.
34. Thornberg, R., & Charmaz, K. (2014). Grounded theory and theoretical coding. *The SAGE handbook of qualitative data analysis*, 5(2014), 153-69.
35. United Nations Environment Report. Public Policy Issues, Green Economy. (2018)
36. van der Velden, M. (2021). 'Fixing the World One Thing at a Time': Community repair and a sustainable circular economy. *Journal of cleaner production*, 304, 127151.
37. Vinuesa, R., Azizpour, H., Leite, I., Balaam, M., Dignum, V., Domisch, S., ... & Fuso Nerini, F. (2020). The role of artificial intelligence in achieving the Sustainable Development Goals. *Nature communications*, 11(1), 1-10.
38. Whitson, J., & French, M. (2021). Productive play: The shift from responsible consumption to responsible production. *Journal of Consumer Culture*, 21(1), 14-33.