

GREEN MANAGEMENT INTERPRETATION WITHIN ENTRE- PRENEURSHIP FRAMEWORK

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Abstract: Currently, organizations are trying to organize green business along with traditional entrepreneurship. Organizing a green business improves the organization's competitive position in the market, but at the same time requires the existence of a balanced ecosystem, that promotes sustainable development. In this regard, it is important to assess the functioning of the green entrepreneurship ecosystem at the micro-level of the economy. The article clarifies the scope of the green entrepreneurship ecosystem of organizations and makes recommendations for the performance evaluation of its activities.

Key words: *green business ecosystem, sustainable development KPIs, green growth assessment, green management, green entrepreneurship toolkit*

Introduction

"Green management" is aimed at effectively managing eco-system functions. In this case, the business consumes the products of nature and looks for ways of reasonable compensation. If they are limited exclusively to environmental taxes and natural use fees, then "green management" cannot be considered effective, because it is not aimed at ensuring environmental stability and only performs preventive actions for the use of natural resources. In business activities, such resources are used that are not part of the actual activity of the organization, therefore, even after their consumption, they need to be restored by the entrepreneurs themselves (Magon, Renata Bianchini, 2018, 104-17). And if the recovery of consumed resources does not take place in business activity, then the sustainable course of green business is already in doubt in the foreseeable future.

Thus, if the fishing industry develops at the expense of the expansion of fish hunting, then in parallel, it should take measures to restore depleted fish stocks. Otherwise, future generations will not have access to similar resources, and thus the fishing industry will be disrupted and the stability of the food processing sector will be questioned. The same applies to the furniture industry, where forest resources are used, which, when they are used up, place a demand on the enterprise to restore the forest, to carry out tree planting, thereby transferring the necessary timber to future generations. to ensure the uninterrupted process of construction.

Therefore, at present, the problem of responsible consumption of eco-system services

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is raised within the framework of entrepreneurship, which to a certain extent requires "green management" in the context of sustainable development of business. In this regard, a problem arises to analyze the features of green business management in the existing ecosystem (Li, Dayuan, 2018, 462-70).

Results and findings

Studies show that the impact of business on the environment is becoming risky. In recent years, the inefficient use of water resources and the increase in the level of air pollution as a result of business activities have become prominent in the Republic of Armenia (see table). Naturally, in such conditions, the organization of green entrepreneurship management becomes urgent.

Table 1

Key indicators characterizing the impact of economic activities on the environment and use of natural resources in RA

Indicators	2018	2019	2020	2021	2022
Water abstraction from water resources, mln.m3	2 714.4	2 865.4	2 829.8	2 966.5	3 071.8
Waste water discharge, mln. m3	612.1	797.2	777.1	802.6	888.3
Emissions of hazardous substances into atmosphere, 1 000 t of which	263.4	267.9	295.4	308.9	317.4
from stationary sources	114.0	89.7	86.2	93.8	105.7
from vehicles	149.4	178.2	209.2	215.1	211.7

Source: Armenian Statistical Yearbook, 2023, page 251

Moreover, statistics show that as a result of business, the organizations operating in the Republic of Armenia increase the amount of waste in recent years, and at the same time, reduce the disposal of waste. In such a situation, not only a private but also a public demand for the activation of green entrepreneurship management is formed (see table 2).

Table 2

Formation, utilization and detoxication of wastes in organizations (1000 t)

Indicators	2018	2019	2020	2021	2022
Formation	67 146.2	67 418.0	73 389.2	88 248.6	79 088.1
Utilization	1 603.6	722.0	903.1	631.1	704.3
Detoxication	1.7	0.9	0.7	1.5	22.0

Source: Armenian Statistical Yearbook, 2023, page 256

The set of 17 Sustainable Development Goals were set back in 2015 by the United Nations and included integrated environmental, social and governance areas. And the effective implementation of that integration chain largely depends on the organization of proper green management of business. Especially the 12 SDG – “Ensure sustainable consumption and production patterns” is directly connected to green management. And since all the SDGs are interrelated, the implementation of green management has an indirect effect on others.

The stable course of business requires, first of all, the availability of necessary financial and production resources. In the foreseeable future, economic activity cannot provide "green management", if the organization is not provided with necessary productive assets

and financial resources. In particular, declines in the degree of financial stability of business primarily lead to the risks of disrupting the stability of ecosystem functions.

The development of "green management" is also facilitated by the growth of social capital formed in the business environment. Having many partners, entrepreneurs try to operate in a mutually reliable and mutually agreed environment (Chand, Mahesh, 2018,642-59). In this case, creditors are not reluctant to provide financial resources, investors trust the successful course of business and the future vision, buyers are shown mutual trust and softening of receivables, employees of the organization are presented with motivational levers to encourage work, as a result of which an attitude towards the organization's activities is formed.

In other words, the business environment turns into a society where social capital is formed on the basis of mutual trust and mutual benefit, which in turn is a serious incentive for the further development of "green management" in the organization. And if the organizations do not pay attention to the social capital formed in the business environment, and even contribute to its pulverization with their activities, then they create risks for disrupting the process of "green management". The implementation of an effective management system also contributes to the investment of "green management". Today, serious attention is being paid not only to "top-down" but also to "bottom-up" management approaches, when managed groups themselves participate in business decisions, being included in the participatory management system. In this case, administrative decisions are made on the spot, formulated more realistically and stem from emerging situations. Therefore, "green management" becomes addressable and transparent in its end-results, which promotes interest among decision-makers in order to ensure the further development of business.

Consequently, the sustainable development of business, in addition to the traditional resources for ensuring business progress, also requires additional resources in the form of environmental, social, and human capital, which become manageable through purposeful use and green activity.

Based on the objectives of sustainable development, it can already be assumed about a wide range of beneficiaries interested in their access, the boundaries of which can be expanded over time, including new players arising from the requirements of the time.

Thus, the governments of the countries pursue public interests with their departmental bodies and show demands towards business in the directions of rational exploitation of natural resources, protection of the environment, social justice, and provision of access to education. However, public services related to sustainable development can be left out of the sight of state agencies and go to public bodies. They can be solutions aimed at gender issues, mitigating the polarization of wealth, access to decent work. Furthermore, civil society organizations are taking immediate action to combat climate change and its impacts (Li, Dayuan, 2018, 462-70).

Local self-government bodies are also the beneficiaries of the sustainable development of business, because on the one hand, the expansion of entrepreneurial activity opens new jobs, improves the socio-economic condition of the population, but on the other hand, health and contains environmental risks. Local self-government bodies are interested in restoring and promoting the sustainable use of terrestrial ecosystems, ensuring sustainable forest management, combating desertification, preventing land degradation, and halting the loss of biodiversity.

Business partners are also included in the core group of sustainable development beneficiaries. Today, the attitude of the members of the value chain operating in the business model towards sustainable development is important. Organizations prefer suppliers and buyers, that contribute to sustainable development with their activities. Banks are trying to prevent the provision of such loans, the use of which by business worsens the environmental environment (Hasan, Md Morshadul, 2019, 326-39).

Figure 1

Key components of green entrepreneurship ecosystem



Source: Developed by author

Green entrepreneurship cannot run smoothly without the appropriate ecosystem functioning. Environmentally caring episodic behavioral approaches by organizations may not be considered green entrepreneurship. If the organization participates in city-wide tree planting on Saturdays, or joins one-time power outages aimed at saving electricity, then such situations are characterized only as environmental measures, and not as green entrepreneurship.

Green entrepreneurship is a continuous process that is carried out alongside traditional entrepreneurship when a toolkit for addressing green development needs is in place (see Figure 1). In this case, the trajectory of the entrepreneurial activity is constantly subject to change from the point of view of green development opportunities. At the same time, monitoring reports can be received by both internal (employees, managers, investors) and external stakeholders (buyers, lenders, state bodies, public organizations) of the enterprise. Therefore, the leitmotif of green entrepreneurship is the uninterrupted functioning of the institutional mechanism for meeting the needs of green development, in the absence of which the process of sustainable development entrepreneurship will simply be disrupted and an appropriate ecosystem will not function.

However, green entrepreneurship is not formed only by raising passions, because the latter requires a harmonious partnership, including green purchases and consumption, the search for financing sources for green business, and the establishment of community relations of like-minded people. If the business is not able to gather partners interested in green development around it, then the balance of the green business ecosystem is disturbed and it can simply stop working (Li, Dayuan, 2018, 462-70).

It should also be noted, that the partner community interested in green development must also believe that the organization has the necessary potential for green development, which can promote the sustainable development of sustainable business and support the continuity of the activity of the green business ecosystem. That potential appears not only through the application of the latest environmental technologies, but also through the organization's collection of environmentally competent human resources.

And finally, the most important component of the green business ecosystem is the introduction of the institution of corporate responsibility, when there is transparent accountability in organizations regarding the sustainable development of business. If there is a feedback loop with stakeholders, then as a rule, the foundations of the green development ecosystem are also broken and green entrepreneurship loses its effectiveness (Zhou, Yunyue, 2019, 567-81).

In practice, it is a challenge to measure and evaluate the effectiveness of the business ecosystem from the perspective of green growth.

The economic growth formed as a result of entrepreneurial activity is mainly connected with the increase of the profit of the organization, or the expansion of the managed capital (Hakobyan A., Tshughuryan A., & Martirosyan G., 2023, 169-76). However, when organizations make the transition to "green entrepreneurship", traditional approaches to assessing economic growth are revised, taking into account a number of factors of environmental, social and corporate responsibility (Tshughuryan A, Khachatryan N. 2023, 71-94). In this case, along with the economic growth of the business, the "green growth" related to the result of entrepreneurship is also evaluated. Therefore, one of the important features of the entrepreneurial activity of the transition to the green economy is the necessity of recording "green growth", thus refusing to measure economic growth exclusively by profit.

It should be noted, that at the country level, a "green growth" index is currently calculated, which combines the sustainable development goals approved by the United Nations, as well as the assessments of the determinants of the Paris climate agreement, with the following four pillars (Famiyeh, Samuel, 2018, 607-31):

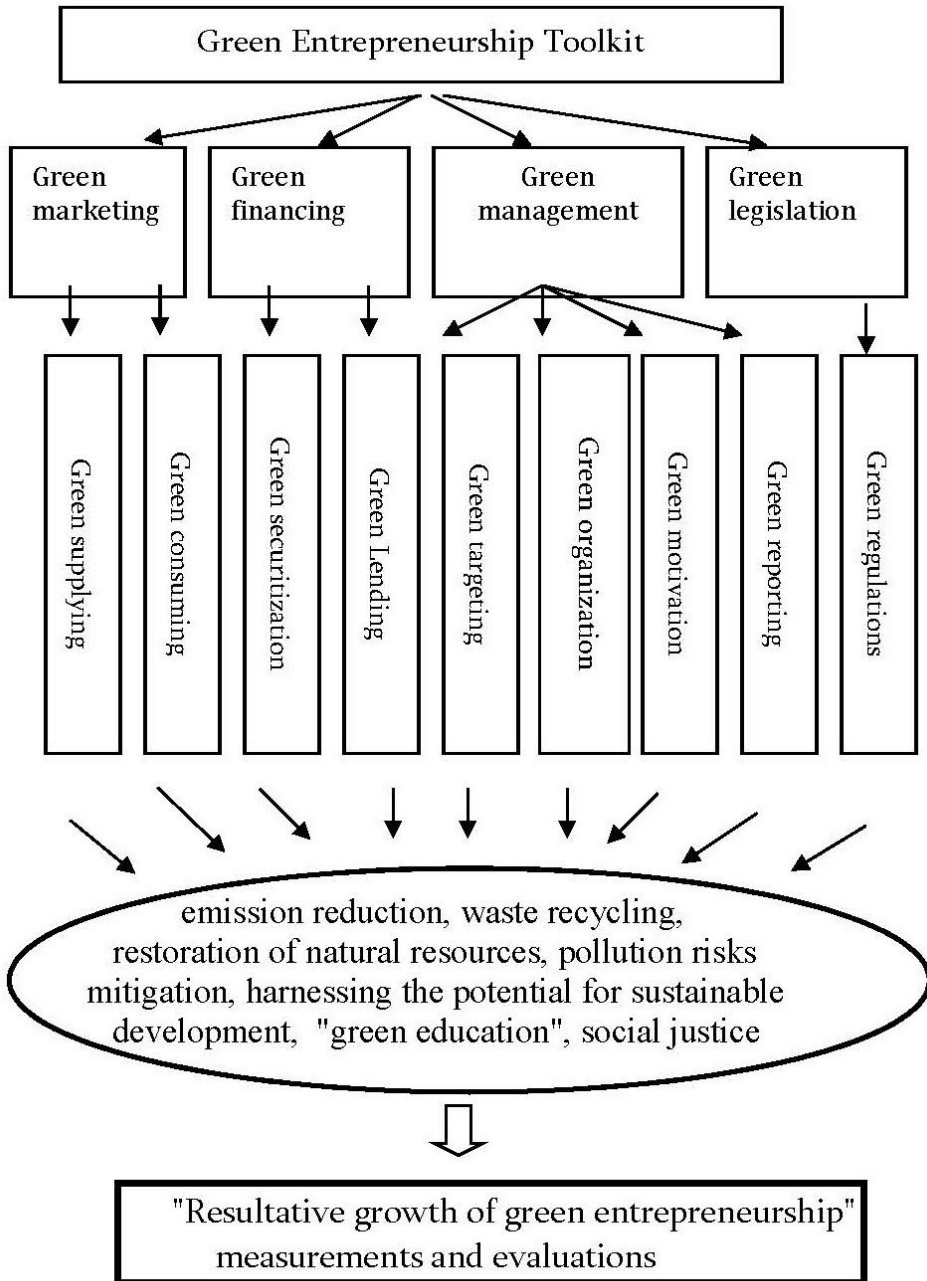
- efficient use of resources,
- protection of natural capital,
- opportunities for green economy development,
- social inclusion.

Moreover, the green growth index for each country is evaluated on the following 100-point scale: 80-100 efficient, 60-80 high, 40-60 moderate and 20-40 low efficiency.

However, evaluations of "green growth" formed as a result of entrepreneurial activity are made with other approaches, relating to the green ecosystem. And the business in green ecosystem requires financing, marketing, managerial, legislative arrangements, which will act in terms of "green activity" (see Figure 2).

Figure 2

“Green growth” assessment in the context of entrepreneurship



Source: Developed by author

Table 3

Annual report of the organization's "green performance" results

#	Indicators	KPI	Factual	Executive (%)
1.	Emissions reduction	300m ³	250m ³	83,33%
2.	Waste processing	25 ton	27 ton	108%
3.	Use of alternative energy	15 m/vt	13 m/vt	86,67%
4.	Pollution risks mitigation progress	8%	6%	75,75%
5.	Increasing of sustainable development potential	4%	3%	75%
6.	Progress in green education	12%	15%	125%
7.	Advancement of social justice	18%	20%	111,11%
"Green growth"		X	X	94,98%

Source: Developed by the author, with a conventional example.

It has certain characteristics. Therefore, it is necessary to evaluate "green growth" with an integral indicator, taking into account the above-mentioned factors. In practice, it is easier to apply the evaluation of "green growth" from the point of view of performance, when key performance indicators (KPI) are defined for the functions of sustainable development accompanied by entrepreneurship, assessing the degree of their availability.

Studies show that organizations operating in the Republic of Armenia have been publishing reports related to corporate social responsibility in recent years (Coca-Cola Hellenic, Zangezur Copper-Molybdenum Combine, Ararat Bank, Ardshinbak, etc.), but at the same time, they still do not present quantitative KPIs of green business. In that regard, we propose a "green accountability" format in which organizations use KPIs developed by themselves. The calculation of each quantitative KPI requires a special methodology, which, in our opinion, is not considered the main problem of green management. In this sense, green management emphasizes the performance monitoring of quantitative KPIs and based on this presents appropriate managerial decisions.

Evaluations of KPI indicators derive from the specifics of the sectoral activities of organizations. At the same time, it is more appropriate to evaluate the performance of "green entrepreneurship" with percentage measurement, because the result indicators are presented with different measurement units and their comprehensibility in the integral index is possible through percentage measurements (see table 3). Taking in account, that the each company set up strategic KPIs of green entrepreneurship it is possible to calculate "green growth" in microeconomic level, for analyzing business entities.

The suggested integral index of green growth expressed in percentages, which represents the average calculation of the performance of functions, can be interpreted not only in terms of general factors, but also in terms of individual factors. Thus, in spite of the fact that the green growth of entrepreneurship in the reporting year did not register the perfect 100% level of the established key assessment and was 94.98% (see table 1). Nevertheless, in some directions of green entrepreneurship, it exceeded the established benchmark more growth was recorded (waste recycling, green education, maintaining social justice).

Based on the characteristics of the enterprise, the range of "green growth" evaluation indicators can be expanded, or the definition of key indicators can be revised. However, a

business should always strive for 100% "green growth" performance. Therefore, it is important to measure the "consequential growth of green entrepreneurship" and use a sound methodology of evaluation based on the directions of sustainable entrepreneurship.

Conclusion

Green entrepreneurship cannot function effectively without the existence of an appropriate ecosystem. Therefore, there is a need to evaluate the effectiveness of the green ecosystem around organizations, which can be evaluated with an alternative approach, using KPI indicators for internal use. Moreover, by consolidating the performances of these indicators, it is advisable to apply an integral index, which will give an opinion about the green economy ecosystem operating around the organizations. By applying an integrated indicator of the performance of green entrepreneurship goals, it is possible to compare the achievements of organizations in the direction of sustainable development over time and also to highlight the weak links of the ecosystem of green business framework.

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