

INDICATORS OF SUSTAINABILITY IN MILITARY ORGANIZATIONS

*Second lieutenant Alexandru GHERASIM**

Abstract: *The US military is a leader and innovator in sustainability. Around 2000, the US Army Forces Command (FORSCOM) launched the International Social Survey Program (ISSP). This effort engaged the facilities and surrounding stakeholder communities to identify a range of goal and objectives to promote sustainability within the Army.*

The ISSP's initial efforts were confirmed and reinforced when US Army leaders presented a vision for sustainability in 2004 with the Army Environmental Strategy, which introduced the concept of "triple bottom line: mission, environment and community".

Keywords: *Sustainability Indicators, Army, Installation Management Command, Water Indicator, Energy Indicator, Waste Indicator, Land Indicator, Economic Impact Indicator, Welfare Indicator.*

SYNTHETIC PRESENTATION OF THE CHAPTERS

The US Army is a pioneer and innovator in the field of sustainability. Around 2000, the US Army Forces Command (FORSCOM) started the International Social Survey Program (ISSP). This effort engaged facilities and surrounding stakeholder communities in defining a set of goals and objectives to promote sustainability within the Army.

The ISSP's¹ initial efforts were emphasized and strengthened as US Army leadership presented a vision for sustainability in 2004 with the Army's Environmental Strategy, which introduced the concept of a "triple bottom line: mission, environment, and community."

In 2008, the first Army-wide Annual Sustainability Report was published. The Army continues to seek innovation on its path to

* Land Forces Academy, Sibiu, Romania, email: gherasimalexandru63@yahoo.com

¹ Iancu D. Management of the military organization - fundamental elements, "Nicolae Bălcescu", Sibiu, (Sibiu, Land Forces Academy Publishing House 2013), p. 121

sustainability while learning from its past efforts. For example, he has implemented more than 30 ISSPs.

Unfortunately, this bottom-up approach has created a situation in which utilities have set different sets of lofty goals, albeit potentially unattainable ones. None of these efforts were required by policy or regulations; Instead, the Army saw sustainability as important enough to its mission to take the lead.

To enhance the Army's sustainability, IMCOM needed to be able to determine how best to use available resources. To do this, IMCOM decided on an approach that uses a small set of carefully selected indicators as a management tool to determine installation sustainability, and the United States Army Installation Management Command (IMCOM) must now determine how to implement sustainability and infrastructure practices at facilities and how they can promote sustainability within the Army².

To enhance the Army's sustainability, IMCOM needed to be able to determine the best way to use available resources. To do this, IMCOM decided on an approach that uses a small set of carefully selected indicators as management tool to determine facility sustainability and begin to answer the question "How sustainable are we?" Unlike TISSP targets that were set independently at the facility level and were not comparable between facilities, the set of indicators at the facility level will be designed to enable comparison of relative sustainability states and priorities across the IMCOM organization. Installation-level indicators can also reach the Army level to provide more informed reporting on trends in the US Army's Annual Sustainability Report while providing better information for setting ISSP goals at the installation level³.

The work is composed of four chapters, and divided into two parts, theoretical and practical aspects.

² U.S. Army, 2004. Available at <http://www.asaie.army.mil/Public/ESOH/doc/Army-EnvStrategy.pdf>, accessed at 18.05.2023.

³ Badea, D., *Management of military logistics systems – Fundamental elements*, (Sibiu, Publishing Academy of the Terrestrial Forces "Nicolae Bălcescu", 2011), p. 145.

The first part includes the first 2 chapters and deals Aspects on Research And Sustainability Indicators In The Framework Of Military Organizations⁴.

1. Water: water need/available water (the maximum amount needed by the installation versus the available amount);

2. Energy: fossil fuel energy (BTU)/person (fossil fuel energy used per person);

3. Waste: total cost of waste up to final disposal per person (cost of solid waste + hazardous waste + disposal of construction and demolition waste per person);

4. Land: available training land area/required land area (acres available vs. acres required to accomplish the mission of the facility);

5. Economic impact: facility payroll (\$)/regional GDP (ratio of facility payroll to local community economic metric);

6. Wellbeing: Overall score from the scoreboard developed by the G1 Army Welfare Division, Personnel.

The value of each indicator is not significant in isolation; becomes significant when used in comparison to previous values and/or compared to other installations.

Chapter III Case Study of Sustainability Indicators in Military Organizations and analyses: Water indicator, Energy indicator, Waste indicator, Land indicator, Economic Impact indicator, Well-being indicator and the Strategic Management System Army.

The final chapter details the Comparison of Approaches to Capture the Level of a Sustainable Organization, namely: the Tri-Service Sustainable Communities Dashboard, the SERDP Atkinson Report, the Sustainability Report and the army durability.

The work paper ends with a series of conclusions.

CONCLUSION

The US Army is pioneering the adoption of sustainability as a goal. Over the years, the Army has continued to develop its collective vision and

⁴ Lachman, B., E. Pint, G. Cecchine, and K. Collaton.. "*Developing Headquarters Guidance for Army Installation Sustainability Plans in 2007*", (S.U.A., RAND Corporation Report, 2009), p. 181.

approaches to operationalize that vision. At the outset of this report, IMCOM has adopted an approach that is not only unique, but also pragmatic, and has resulted in a set of indicators aimed at answering the question “How sustainable are we?” This set of indicators can complement other current approaches to sustainability by providing information that has rarely been used in analysis and decision-making. The approach to developing the indicators described in this report began with a team familiar with the Army's many sustainability efforts, and then expanded this approach by reviewing other organizations' approaches for information on their sustainability. A set of criteria has been developed for the desirable properties of the indicators; An exemplary list of possible indicators was then proposed.

The objective of this work was to develop a set of five to seven sustainability indicators for use by IMCOM at the corporate and facility level.

The indicators would measure the progress towards sustainability that was due to the implementation of the policy and other initiatives. Although it is not yet possible to fully quantify sustainability, the indicators will be used as a relative or comparative measure of sustainability. Using available data, this initial set of indicators allows an organization to begin to answer the question "How sustainable are we?"

Our development of a set of facility sustainability indicators followed the path described here.

1. Define the attributes of the ideal indicators. Given the small number, the set of indicators should cover the spectrum of sustainability and generate an overall picture.
2. Prepare a list of ideal indicators that have the desired attributes.
3. Comparison of indicators with other lists of sustainability parameters.
4. Discover and document the data sources that have the greatest ability to drive indicator value.
5. Negotiation between ideal indicators and available data sources to determine the practical indicators closest to the ideal.



BIBLIOGRAPHY

- IANCU D. Management of the military organization - fundamental elements, "Nicolae Bălcescu", Sibiu, (Sibiu, Land Forces Academy Publishing House 2013);
- LACHMAN, B., E. PINT, G. CECCHINE, and K. COLLATON. "Developing Headquarters Guidance for Army Installation Sustainability Plans in 2007", (S.U.A., RAND Corporation Report, 2009);
- BADEA, D., *Management of military logistics systems – Fundamental elements*, (Sibiu, Publishing Academy of the Land Forces "Nicolae Bălcescu", 2011);
- U.S. Army, 2004. Available at <http://www.asaie.army.mil/Public/ESOH/-doc/ArmyEnvStrategy.pdf>.

