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A Case Study of Defense Resource Management in a (Un)Sustainable Development Perspective

Případová studie řízení obranných zdrojů z hlediska (ne)udržitelného rozvoje

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Abstract: The US military presence in Afghanistan has been the subject of retrospective analyzes that facilitated the identification and learning of important lessons for future military actions. This article analyses, through the case study method, the way defense resources were managed from a sustainable development perspective, focusing on the durable effects of the main projects aimed at ensuring this country's initial steps towards a sustainable development destination. As a result, this study points to the positive potential that the military instrument could have in a country's efforts to achieve sustainable development goals, highlighting the way that unsustainable management practices can compromise or even nullify the progress in this area. Consequently, the main product of this research is a model of unsustainable use of defense resources that decision makers should know and avoid in the future, to obtain long-term beneficial results.

Abstrakt: Tento článek analyzuje s využitím případové studie způsob, jakým byly obranné zdroje řízeny z hlediska udržitelného rozvoje, a zaměřuje se na trvalé účinky hlavních projektů, jejichž cílem bylo zajistit prvotní kroky této země směrem k udržitelnému rozvoji. Tato studie následně poukazuje na pozitivní potenciál, který by vojenský nástroj mohl mít v úsilí země o dosažení cílů udržitelného rozvoje, a zvýrazňuje cestu, jakou mohou způsoby neudržitelného řízení ohrozit nebo dokonce zmařit pokrok v této oblasti. Hlavním výsledkem výzkumu je model neudržitelného využívání obranných zdrojů, který by orgány s rozhodující pravomocí měly znát, a kterému by se měly v budoucnu vyhnout, aby dosáhly dlouhodobě prospěšných výsledků.

Key words: Afghanistan; Defense Resources; Military Expenditures; Sustainable Development Goals; Unsustainable.

Klíčová slova: Afghánistán; obranné zdroje; výdaje na obranu; cíle udržitelného rozvoje; neudržitelný.

INTRODUCTION

Sustainable development is a desideratum of responsible societies and institutions, which aims to reconsider the way economic development goals are designed and implemented, so that limited resources can be used efficiently and accessed by future generations¹. In this context, sustainability practices aim at achieving long-term beneficial effects at the economic, social, environmental and institutional levels². By contrast, unsustainable practices lead to financial efforts without achieving the expected effects or to superficial results in the short term, which translates into the resumption of steps and the repetition of the unsustainable process.

The idea that military conflicts and the exacerbation of the arms race lead to unsustainable development has been reported since 1987³. What is worrying is that 35 years after this, Russia's invasion in Ukraine shows that conflict issues cannot always be solved through diplomacy, the military instrument of power still being used. It can be noticed that the appetite for conventional armed confrontations still exists, causing major destruction and humanitarian crises, which interrupt the progress of sustainable development and prolong the time to achieve sustainability, its ultimate goal⁴.

From this perspective, the last NATO mission in Afghanistan, conducted between 2015 and 2021, that is, the Resolute Support Mission, consisted of "training and assisting Afghan forces and institutions in building their own capabilities to defend and protect citizens in a sustainable manner"⁵. Although the idea of sustainability was introduced too late in the formulation of the Alliance's mission in this country, this attests to the fact that the need for long-term beneficial effects has nevertheless been realized.

Taking into account the fact that the military organization uses financial resources allocated from the state budget, it is expected that the generated benefits be as sustainable as possible. This article draws attention to the need for sustainable management of defense resources, highlighting the effects of unsustainable practices, which should be avoided in the future. As a result, the goal was to identify the unsustainable ways in

¹ United Nations. *Report of the World Commission on Environment and Development: Our Common Future*. [online]. Oslo: Oxford University Press, 1987, p. 16, [viewed date: 10 April 2022]. Available from: <<https://sustainabledevelopment.un.org/content/documents/5987our-common-future.pdf>>.

² Munasinghe, M. *Sustainable Development in Practice. Sustainability Methodology and Applications*. [online]. New York: Munasinghe Institute for Development (MIND), Cambridge University Press. 2009. p. 35. ISBN-13 978-0-511-53996-1. [viewed date: 10 April 2022]. Available from: <<https://z-lib.org/>>.

³ *Ibidem*, pp. 242-247.

⁴ Blewitt, J. *Understanding Sustainable Development*. [online]. Third Edition. London and New York, Routledge, Taylor & Francis Group, 2018, p. 4. ISBN 978-1-315-46585-2. [viewed date: 10 April 2022]. Available from: <<https://z-lib.org/>>.

⁵ Inspector General, U.S. Department of Defense. *Audit of Coalition Partner Reimbursement of Dining Facility Services at Resolute Support Headquarters, Kabul, Afghanistan*. [online]. 2020. Report No. DODIG-2020-096. p. 1. [viewed date: 10 April 2022]. Available from: <<https://media.defense.gov/2020/Jun/26/2002321943/-1/-1/1/DODIG-2020-096.PDF>>.

which US military defense resources were used in Afghanistan, to provide the military management with recommendations to manage defense resources in such a way as to have a constructive contribution to sustainable development. Starting from this main objective, a secondary one was developed, namely to design a model of unsustainability of defense resources management, which should be avoided by all military structures that manage defense resources and want to follow a sustainable path.

The first part of the article examines the extent of defense resources involved by the US Department of Defense in Afghanistan, to create an image of the effort made along these lines. At the same time, this first part represents the basis for identifying the sustainable development goals that should have been the focus of the US military management in Afghanistan from the beginning of the mission.

The second part is dedicated to exemplifying the unsustainable ways of using American defense resources, while reporting these results to the goal of sustainability. The third part reviews specialists' recommendations to avoid the unsustainable use of defense resources. Based on these recommendations and the reported problematic issues, a model of unsustainability of defense resources management was developed in the fourth part. Finally, the conclusions and recommendations align the objectives and results of the case study, emphasizing the positive contribution that defense management could have, if unsustainable practices were avoided.

1 METHODOLOGY

To achieve the objectives mentioned above, the research was based on a qualitative approach. Therefore, an individual case study was conducted by analyzing both relevant documents in the field and available content on the Internet, to obtain answers to the following questions: 1) can unsustainable defense resource management practices affect the sustainable development of a nation? 2) how could unsustainable defense resource management practices be avoided? 3) why should unsustainable defense resource management practices be avoided? In this sense, the case of Resolute Support Mission, recently completed by US troops in Afghanistan, can be considered both representative and revelator, highlighting the need for sustainable use of defense resources, a prerequisite for the military organization's contribution to sustainable development.

2 THE DEFENSE RESOURCES USED BY THE US MILITARY MANAGEMENT IN AFGHANISTAN AND THE SUSTAINABLE DEVELOPMENT GOALS

The 9/11 terrorist attacks on some of the iconic American infrastructure and the tragedy created at that time led the country's leadership to the invasion of Afghanistan,

whose officials refused to hand over the culprits⁶. Twenty years after that, the level of the implied defense resources, weighed against the effects of the withdrawal from Afghanistan, shows that this decision led to an “unsustainability trap”⁷, which calls into question the effectiveness of the military instrument in large scale missions.

Although the “huge” opportunity cost of US military spending due to involvement in Afghanistan has been reported since 2008⁸, the decision to withdraw forces from Afghanistan proved to be difficult. Experts believe that this was caused by the widespread involvement of the military instrument in solving the problem of post-conflict reconstruction, the initial mission, focused on establishing security, being completed with the one on the sustainable economic development of Afghanistan⁹. In order to carry out these missions, a well-developed strategy was undoubtedly needed.

However, the authors of some studies conducted in 2011 and 2020 showed the lack of such a long-term vision. While the first study describes the entire strategy aimed at the widespread use of the military instrument as “unsustainable and unbelievable”¹⁰, the study developed nine years later highlights the need to properly link the mission to the military resources involved¹¹. In other words, the very involvement of military resources in the sustainable development of the country was not a long-term beneficial measure, without questioning their inadequacy. Following the withdrawal of troops from Afghanistan, it was concluded that the US military management had the expertise and resources to carry out a reconstruction mission, but not for large-scale missions and

⁶ The 9/11 Commission Report. *Final Report of the National Commission on Terrorist Attacks upon the United States*. Authorized Edition. New York: W.W. Norton & Company, Inc., 2004. p. 369. ISBN 0-393-32671-3.

⁷ Glickstein, D; Spangler, M. Reforming the Afghan Security Forces. *Parameters* [online]. 2014, **44** (3), p. 92. [viewed date: 10 April 2022]. Available from: <<https://press.armywarcollege.edu/cgi/viewcontent.cgi?article=2731&context=parameters>>.

⁸ Clark, G.E. War and Sustainability: The Economic and Environmental Cost. *Environment: Science and Policy for Sustainable Development* [online]. 2008, **50** (1), p. 3. [viewed date: 10 April 2022]. Available from: <<https://doi.org/10.3200/ENVT.50.1.3-5>>.

⁹ Duczynski, G.; Jablonski, J.; Huddleston, S. Sustainability of the Afghan Law Enforcement and Security Forces: A ‘Wicked, Messy Problem’. *Journal of Information Warfare* [online]. 2015, **14** (1), pp. 48-58. ISSN 1445-3347. [viewed date: 10 April 2022]. Available from: <<https://www.jstor.org/stable/26487518>>.

¹⁰ Abshire, D. M.; Browne, R. The Missing Endgame for Afghanistan: A Sustainable Post-Bin Laden Strategy. *The Washington Quarterly* [online]. Center for Strategic and International Studies, 2011, **34** (4), p. 60. [viewed date: 10 April 2022]. Available from: <https://csis-website-prod.s3.amazonaws.com/s3fs-public/legacy_files/files/publication/twq11autumnabshirebrowne.pdf>.

¹¹ Yasa, A. R. From Security Sector Reform to Endemic Corruption: The Case of Afghanistan. *Journal of Strategic Security* [online]. 2020, **13** (3), pp. 99-100. ISSN 1944-0472. [viewed date: 10 April 2022]. Available from: <<https://digitalcommons.usf.edu/cgi/viewcontent.cgi?article=1755&context=jss>>.

not without the involvement of economic and government instruments¹². This highlights a level of ambition that was too high, even for the modern American defense, which should have received additional support from other instruments of power (political, economic, civil)¹³.

In general, the involvement of the US military structures in the post-conflict reconstruction issue has led to a shortage of initially estimated capabilities, which has conducted to an increase in the level of military resources, and also in the outsourcing of services and the widespread involvement of contractors, which generated poor results¹⁴. This fact determined the allocation of some defense financial resources that could have been used strictly for military missions.

For example, at the level of the US military management, it can be considered that the civil solutions have been augmented by the military ones. The conclusions of a specialized analysis showed that the American defense management adopted the use of contractors as an “implicit” solution¹⁵. The documents attest to the lack of a comprehensive analysis that would have allowed a detailed understanding of the financial resources allocated to outsourced support and the need to monitor the performance of the contracts awarded¹⁶. This indicates a reduced concern for the efficient use of available funds, with a high potential to generate waste.

The fact that American projects and programs in Afghanistan would generate an enormous waste of financial resources was reported in 2012, but recommendations for evaluating their sustainability by the Afghan government’s financial ability to continue or fund them were not respected¹⁷. Some data published in the middle of the mission showed that, in that year, the amount of waste associated with a single unsustainable project/program in Afghanistan exceeded \$11 billion¹⁸. Furthermore, estimates indicated that the Afghan government would not be able to support security spending “at least until 2023”¹⁹.

¹² Special Inspector General for Afghanistan Reconstruction. *What We Need to Learn: Lessons from Twenty Years of Afghanistan Reconstruction*. [online]. 2021. SIGAR-21-46-LL. p. IV. [viewed date: 10 April 2022]. Available from: <<https://www.sigar.mil/pdf/lessonslearned/SIGAR-21-46-LL.pdf>>.

¹³ Supreme Headquarters Allied Powers Europe. Allied Command Operations. *Comprehensive Operations Planning Directive COPD Interim V2.0*. [online]. Belgium: 2013. p. 1-9. viewed date: 10 April 2022]. Available from: <<https://www.cmdrcoe.org/download.cgf.php?id=9>>.

¹⁴ Special Inspector General for Afghanistan Reconstruction. *What We Need to Learn: Lessons from Twenty Years of Afghanistan Reconstruction*. [online]. 2021. SIGAR-21-46-LL. p. 10. [viewed date: 10 April 2022]. Available from: <<https://www.sigar.mil/pdf/lessonslearned/SIGAR-21-46-LL.pdf>>.

¹⁵ *Ibidem*, p. 5.

¹⁶ *Ibidem*.

¹⁷ Commission on Wartime Contracting in Iraq and Afghanistan. *CWC Special Report 5. Sustainability: Hidden Costs Risk New Waste*. [online]. 2011. p. 1. [viewed date: 10 April 2022]. Available from: <https://www.academia.edu/8400564/Special_Report_5_Sustainability_hidden_costs_risk_new_waste>.

¹⁸ *Ibidem*.

¹⁹ *Ibidem*, p. 2

In this context, specialists recommended that “preparations for the withdrawal of forces took into account the inability of the local government to operate and maintain the projects and programs carried out”, an aspect that was not included in the plans developed in this regard, nor in those related to new initiatives²⁰. This can be attributed to the decision of not extending the mission, as the Afghan government was, probably, too far from being able to handle the situation.

Continuing the analysis of the financial resources used by the US officials in Afghanistan, the published data show an amount of \$2.313 trillion, along 2001-2022²¹. Regarding the amounts actually spent by the US Department of Defense, the data below show a financial effort of \$902.6 billion, of which \$824.9 billion for military operations, and \$82.7 billion for reconstruction activities of the Afghan state²², with the military instrument accounting for about 63% of the total reconstruction expenditure. As the following figure shows, the funds dedicated to reconstruction during the Resolute Support Mission, between 2015-2021, amounted to \$33 billion, a quarter of the total sum for this destination, a smaller percentage than the one allocated between 2009-2013 (\$68 billion – 52%). This fact suggests that the largest reconstruction effort overlapped the combat one and was halved at the wrong time, when the specific of the mission changed and would have requested at least the same level of funds, without mentioning that no money was given to reconstruction in the last year of US presence. Moreover, during the Resolute Support Mission, the highest level of funds was still allocated to combat purposes, though a reversal between the two lines of financial effort should have been implemented.

²⁰ *Ibidem*, p. 1

²¹ Watson Institute. International & Public Affairs. Brown University. *Costs of War*. [online]. 2021. [viewed date: 10 April 2022]. Available from: <<https://watson.brown.edu/costsofwar/figures/2021/human-and-budgetary-costs-date-us-war-afghanistan-2001-2022>>.

²² Special Inspector General for Afghanistan Reconstruction. *Quarterly Report to Congress*. [online]. Virginia: 2021. p. 34. [viewed date: 10 April 2022]. Available from: <<https://www.sigar.mil/pdf/quarterlyreports/2021-04-30qr.pdf>>.

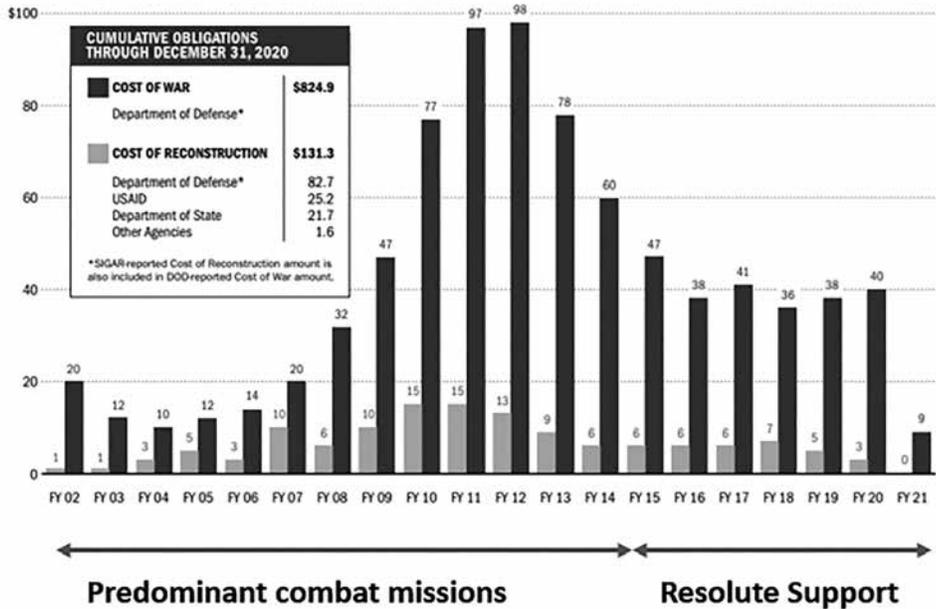


Figure 1: US financial effort in Afghanistan (combat and reconstruction missions) - annual and total (2002-2021).

Source: *Apud* Special Inspector General for Afghanistan Reconstruction, Quarterly Report to Congress, Section 2, April 30, 2021, p. 34.

Analyzing another report issued several months later by the same institution, an increase in the amount related to the combat mission (\$837 billion²³) could be noticed, which indicates the discovery of new sources of spending on this line. For these reasons, one can consider that the volume of financial resources involved by the US Department of Defense is not clearly established. This fact is also supported by the following detailed analysis of the funds allocated to reconstruction.

Thus, the first 2021 report shows that, overall, the US military managed three major programs out of the eight programs set up to fund reconstruction in Afghanistan²⁴, namely:

- Afghanistan Security Forces Fund (ASFF) - \$82.90 billion;
- Commanders’ Emergency Response Program (CERP) - \$3.71 billion;
- Drug Interdiction and Counter-Drug Activities (DICDA) - \$3.28 billion.

²³ *Idem*, *What We Need to Learn: Lessons from Twenty Years of Afghanistan Reconstruction*, p. 4.

²⁴ *Idem*, *Quarterly Report to Congress*, p. 31.

To these programs, some other sources of reconstruction financing were added, amounting to \$2.8 billion, the total value of this destination becoming \$92.69 billion²⁵. Compared to that sum, the reconstruction amount specified on the other page (presented here in *Fig. 1*) reveals a difference of about \$10 billion, so that different financial data for the same destination can be identified in the same document.

Regarding the Afghan State Reconstruction Mission, the US Department of Defense has directed the available financial resources to the following major actions²⁶: preparing and supporting the Afghan security system (military and police), the electoral system (including by supporting the establishment of political parties), the education system (with a focus on educating the female population), the social reintegration of armed fighters, the private sector development; reducing corruption among Afghan officials; discouraging poppy cultivation and reorienting farmers; providing services to the Afghan people to support the Afghan government; developing the necessary infrastructure of the medical system and training the Afghan government to be able to sustain all this effort after the withdrawal of the Americans.

Normally, a state has other power tools to deal with these issues. Moreover, the two financing mechanisms which were used, budgetary (“on-budget”) and extra-budgetary (“off-budget”), but especially the preference for the second option, which involved the management of funds directly by external contributors, without the involvement of the Afghan state apparatus²⁷, were factors that favored the unsustainability of the projects. This approach influenced the way other types of US military resources were connected to the allocated financial resources.

With respect to human resources, the experts concluded they were insufficient, did not have the necessary skills to solve all tasks²⁸, or the available US military personnel were too involved in activities that should have been carried out by the Afghan military²⁹. According to an official report, the availability of human resources was not taken into account when reconstruction programs were planned³⁰. It could be argued that this approach generated all problematic aspects, especially in the field of defense resources.

Thus, in relation to the second reported problem, two American specialists who participated in the military operation in Afghanistan recommended, in 2014, that activities in the field of military logistics (supply) and those regarding recruitment and mentoring

²⁵ *Ibidem*.

²⁶ *Idem*, *What We Need to Learn: Lessons from Twenty Years of Afghanistan Reconstruction*, p. 4.

²⁷ *Ibidem*, p. 44.

²⁸ *Ibidem*, p. XII.

²⁹ Douglas, M.A.; Ritschel, J. Air Advising in Afghanistan – Building an Organization in Flight. *Air & Space Power Journal*. [online]. 2018, p. 87. [viewed date: 10 April 2022]. Available from: <https://www.airuniversity.af.edu/Portals/10/ASPI/journals/Volume-32_Issue-3/C-Douglas_Ritschel.pdf>.

³⁰ Special Inspector General for Afghanistan Reconstruction. *What We Need to Learn: Lessons from Twenty Years of Afghanistan Reconstruction*. [online]. 2021. SIGAR-21-46-LL. p. 50. [viewed date: 10 April 2022]. Available from: <<https://www.sigar.mil/pdf/lessonslearned/SIGAR-21-46-LL.pdf>>.

were carried out by the Afghan Army in support of Afghan security forces³¹. Although at that time this solution seemed optimal, time has shown that the involvement of structures in activities that do not fall within their main object of activity can negatively influence the sustainability of the supported forces. In addition, the lack of skills also appeared as a result of relaxing the criteria necessary for employment, to cover the staff shortage³². It would appear that the mentioned aspects, respectively, the insufficiency of the staff and the lack of competencies for solving non-specific tasks, generated a real exodus of resignations, which deepened the problem of staff insufficiency.

Regarding the third issue, the documents attest the existence of situations in which the US military augmented the Afghan Army, the realized progress being based on a certain dose of unrealism³³. The same lack of realism was manifested when it came to determining the level of human losses. For example, the casualties suffered by the US military structures in Afghanistan between October 2001 and August 2022 amounted to 6247 (of which: 2324 soldiers, 6 civilians and 3917 contractors)³⁴. Other official documents show different figures, but admit that they might have been underestimated³⁵.

In terms of material resources, the period dedicated to the reconstruction mission of Afghanistan meant for the US military a maximum extension of the logistics lines, the Afghan military and police structures dealing with shortfalls in providing vehicles, weapons, radio stations and ballistic protection equipment³⁶. An example is the way in which logistic resource allocation refers to maintenance-related goods and services provided to support the successful completion of the mission to create a sustainable Afghan Air Force³⁷. In this case, the 2008 decision of the US military management to spend \$549 million on the purchase of G222 transport aircraft, for which spare parts were no longer manufactured, proved unsustainable in just six years, when the equipment was sold as

³¹ Glickstein, D., Spangler, M., *Op.cit.*, p.92.

³² Special Inspector General for Afghanistan Reconstruction. *What We Need to Learn: Lessons from Twenty Years of Afghanistan Reconstruction*. [online]. 2021. SIGAR-21-46-LL. p. 50. [viewed date: 10 April 2022]. Available from: <<https://www.sigar.mil/pdf/lessonslearned/SIGAR-21-46-LL.pdf>>.

³³ *Ibidem*, p. 32.

³⁴ Watson Institute International & Public Affairs, Brown University, *Op.cit.*

³⁵ Special Inspector General for Afghanistan Reconstruction. *What We Need to Learn: Lessons from Twenty Years of Afghanistan Reconstruction*. [online]. 2021. SIGAR-21-46-LL. p. IV. [viewed date: 10 April 2022]. Available from: <<https://www.sigar.mil/pdf/lessonslearned/SIGAR-21-46-LL.pdf>>.

³⁶ United States Government Accountability Office. Report to Congressional Committees. *Afghanistan Security: Further Congressional Action May Be Needed to Ensure Completion of a Detailed Plan to Develop and Sustain Capable Afghan National Security Forces*. [online]. 2008. GAO-08-661. p. 2, [viewed date: 10 April 2022]. Available from: <<https://www.govinfo.gov/content/pkg/GAOREPORTS-GAO-08-661/pdf/GAOREPORTS-GAO-08-661.pdf>>.

³⁷ Douglas, M.A.; Ritschel, J., *Op.cit.*, pp. 86-87.

waste for a total of only \$40,257³⁸. On the other hand, the provision of logistic equipment, for which the military did not have the proper knowledge to operate, accentuated the long-term dependence of the Afghans on external support³⁹. Furthermore, in connection with the carried-out projects, specialists showed that logistical resources were also insufficient. Deficits, coupled with insufficient staff to assess and monitor project implementation, generated “redundancies” in the supply chain⁴⁰.

The knowledge resource was also used insufficiently and not sustainably. Therefore, the participation of the US military in rebuilding and reforming the Afghan security system (police and military) is an eloquent example. Beyond the lack of strategy and doctrine underlying the Afghan training process, the involvement of special forces and retired military personnel who did not have adequate experience, as well as the unavailability of the necessary equipment⁴¹, were the premises for creating an underperforming Afghan security system. Furthermore, the participation of contractors, paid to train Afghan police and military on the basis of too short training programs, as well as the too frequent rotations of the instructors⁴², which did not ensure the continuity and fluency of the training, also contributed to this result.

Regarding information resources, the analyzed documents attest to the lack of feedback to ensure the US military decision-makers' connection to the reality on the ground. For example, they were accused of not understanding the Afghan context and not taking into account the culture of this nation, adopting measures that were difficult to adapt to the needs and possibilities of the population, often having an adverse effect⁴³. In addition, strictly for the reconstruction mission, since 2008, the 427 audit missions have resulted in “191 reports on special projects, 52 quarterly reports and 10 reports with identified lessons”⁴⁴, which highlights the fact that decision makers were nevertheless informed. For instance, in the latest report on the identified lessons, the issuer estimates that the reported problems could have been solved in a timely manner and that, at the same time, the convictions of the culprits generated savings of \$3.84 billion⁴⁵, which can be considered beneficial, but of insufficient influence in relation to the total amount of expenditure.

³⁸ Special Inspector General for Afghanistan Reconstruction. *What We Need to Learn: Lessons from Twenty Years of Afghanistan Reconstruction*. [online]. 2021. SIGAR-21-46-LL. p. 46. [viewed date: 10 April 2022]. Available from: <<https://www.sigar.mil/pdf/lessonslearned/SIGAR-21-46-LL.pdf>>.

³⁹ *Ibidem*, p. 78.

⁴⁰ *Ibidem*, p. 53.

⁴¹ Yasa, A.R., *Op.cit.*, pp. 101.

⁴² *Ibidem*, pp. 101-102.

⁴³ Special Inspector General for Afghanistan Reconstruction. *What We Need to Learn: Lessons from Twenty Years of Afghanistan Reconstruction*. [online]. 2021. SIGAR-21-46-LL. pp. XII-XIII. [viewed date: 10 April 2022]. Available from: <<https://www.sigar.mil/pdf/lessonslearned/SIGAR-21-46-LL.pdf>>.

⁴⁴ *Ibidem*, p. IV.

⁴⁵ *Ibidem*, p. IX.

In order for the information resource to be available in full volume and also relevant, specialists pointed out the need for a greater emphasis on monitoring and evaluation activities⁴⁶. In this regard, the inadequacy of specialized human resources was considered a dangerous factor in the objectives of the entire mission⁴⁷. Thus, a suggestive image regarding the interdependence between these types of defense resources appears, respectively, on the way in which the insufficiency of human resources can create negative effects on the availability of the information resource.

The time available to the US military to carry out the assigned missions is also an important resource in this endeavor. The scale and non-military nature of the missions have widened the time horizon of the US military involvement in Afghanistan. In this context, the seemingly endless operation not only generated substantial costs, but also called into question the effectiveness of military action and fuelled unfriendly Taliban propaganda⁴⁸. However, a mission to rebuild a state cannot be compared to a combat mission, so the twenty-year horizon may be reasonable in this context.

In fact, the published documents show that the time devoted to the reconstruction mission was insufficient and the necessary funds were not allocated from the beginning⁴⁹. This has led to rapid spending of the available funds, which has resulted in increased corruption, reduced program efficiency, and increased pressure to demonstrate progress on the adoption of rapid projects that were not in line with the real Afghan ability to support in the long-term⁵⁰. In addition to the lack of time allocated to projects, those involved in the planning activity were also pressured by the “imminent withdrawal”, which had been announced long before it actually took place⁵¹. These issues support the idea of a lack of strategy and inadequate planning timeframe, but also testify to the pressure of executing non-specific missions by the military, amid the compression of temporal resources.

In terms of energy resources, the involvement of the US military in Afghanistan has highlighted the need to diversify and reduce the consumption of these resources. Thus, considering the attacks of the Taliban on land supply lines, US officials have identified the need to reduce dependence on conventional fuels⁵². Apart from this beneficial conclusion, it appears that, in the long run, US military structures had an unsustainable involvement in Afghanistan when trying to increase the energy resources available to the

⁴⁶ *Ibidem*, p. XIII.

⁴⁷ *Ibidem*.

⁴⁸ Yasa, A.R., *Op.cit.*, pp. 99.

⁴⁹ Special Inspector General for Afghanistan Reconstruction. *What We Need to Learn: Lessons from Twenty Years of Afghanistan Reconstruction*. [online]. 2021. SIGAR-21-46-LL. pp. X-XI. [viewed date: 10 April 2022]. Available from: <<https://www.sigar.mil/pdf/lessonslearned/SIGAR-21-46-LL.pdf>>.

⁵⁰ *Ibidem*, pp. X-XI.

⁵¹ *Ibidem*, p. 25.

⁵² Flaherty, C. 3D Vulnerability Analysis Solution to the Problem of Military Energy Security and Interposing Tactics. *Journal of Information Warfare* [online]. Terrorism Research Centre. Washington DC: 2014, 13 (1), p. 21. ISSN 1445-3347. [viewed date: 10 April 2022]. Available from: <<https://www.jstor.org/stable/26487008>>.

Afghan people. Studies show that the efforts of military decision-makers to build and refuel two generators in the city of Kandahar, as a partial solution to the entire need for infrastructure for this purpose, proved ineffective in just a few years, with the funds to ensure the necessary supplies being unavailable to the US Department of Defense since 2015⁵³. This could be appreciated as a matter of certainty about the inability of the Afghan authorities to assume these responsibilities, given the fact that the US military structures faced the problem of insufficient financial resources.

3 THE UNSUSTAINABLE USE OF US DEFENSE RESOURCES IN AFGHANISTAN

The authors of some detailed studies show that the resources allocated to US military management in Afghanistan have not been used in a sustainable way, leading to waste. From their perspective, this key word for unsustainability was the result of the “inability to ensure specialized personnel, spare parts, fuel and maintenance”⁵⁴ of the executed projects. An eloquent example of the unsustainable use of defense financial resources in Afghanistan is the practice of directing a part of them to the Taliban, in exchange for maintaining a state of security that made possible the awarded contracts being put into effect⁵⁵, as they were so necessary to support the participating forces. This was possible by making the necessary amounts available to purchasing structures in the “cash” format, a problem that was remedied in 2012, when electronic payment was introduced, leading to a 38% decrease in the amounts paid to contractors⁵⁶.

Another example of the unsustainable use of US military resources in Afghanistan is the carrying out of costly infrastructure projects that led to large-scale future expenditures the Afghan state could not afford⁵⁷. The \$800 million funds allocated by the US Army Corps of Engineers for a period of five years to maintain the 663 facilities designated to the security forces⁵⁸, illustrate the high level of financial effort.

Furthermore, these projects did not take into account the real needs of the Afghan people and were not planned and coordinated with the participation of representatives

⁵³ Special Inspector General for Afghanistan Reconstruction. *What We Need to Learn: Lessons from Twenty Years of Afghanistan Reconstruction*. [online]. 2021. SIGAR-21-46-LL. p. 33. [viewed date: 10 April 2022]. Available from: <<https://www.sigar.mil/pdf/lessonslearned/SIGAR-21-46-LL.pdf>>.

⁵⁴ Commission on Wartime Contracting in Irak and Afghanistan, *Op.cit.*, p. 2.

⁵⁵ Schwartz, M.; Church, J. *Department of Defense's Use of Contractors to Support Military Operations: Background, Analysis, and Issues for Congress*. [online]. Congressional Research Service, 2013. R 43074, p. 8. [viewed date: 10 April 2022]. Available from: <<https://sgp.fas.org/crs/natsec/R43074.pdf>>.

⁵⁶ *Ibidem*, p. 10.

⁵⁷ Commission on Wartime Contracting in Irak and Afghanistan, *Op.cit.*, p. 4.

⁵⁸ *Ibidem*.

of this country⁵⁹. This resulted in a lack of unity of effort, an essential principle in such military operations⁶⁰, as well as a lack of cooperation and coordination, a basic principle of military logistics⁶¹. Failure to apply these principles led to fragmentation of vision, planning, and execution, with military commanders being asked to act uncoordinatedly to implement economic development projects for which they had not been prepared⁶².

According to some studies, the main negative result of the security sector reform was the increase in the level of corruption among Afghans operating in this field, generated by the high flow of funds for the expenditure of which the US military had not established clear monitoring mechanisms⁶³. Poorly trained and equipped, Afghan security structures used to recruit and promote members based on other criteria than those related to actual skills⁶⁴, which completed the picture of unsustainable practices in this sector.

Moreover, the analyzed literature shows that the US military involvement in the reconstruction activities of the Afghan state, the support of other allies, as well as its own disproportionate, oversized contribution to the entire financial effort, doubled by the existence of unpaid payment obligations by some coalition partners⁶⁵, are real landmarks of the unsustainability of US military financial resources in Afghanistan. For example, because the bills for feeding services provided by contractors between January 2016 and September 2019 were not issued to the coalition partners, the US Department of Defense had to bear these costs, and in October 2019, only \$880,000 had been reimbursed, from a total of \$6.3 million⁶⁶.

Concerning the effects of corruption, the practices of stealing fuel, issuing falsified bills, directing ammunition purchased by the US Department of Defense to the Taliban,

⁵⁹ Special Inspector General for Afghanistan Reconstruction. *What We Need to Learn: Lessons from Twenty Years of Afghanistan Reconstruction*. [online]. 2021. SIGAR-21-46-LL. p. 76. [viewed date: 10 April 2022]. Available from: <<https://www.sigar.mil/pdf/lessonslearned/SIGAR-21-46-LL.pdf>>.

⁶⁰ NATO Standardization Office, *AJP – 01, Allied Joint Doctrine*. [online]. Edition E, Version 1, 2017, p. 1-13. [viewed date: 10 April 2022]. Available from: <https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/905877/20200728-dctrine_nato_allied_joint_doctrine_ajp_01.pdf>.

⁶¹ NATO Standardization Office, *AJP – 4, Allied Joint Doctrine for Logistics*. [online]. Edition B, Version 1, 2018, p. 1-2. [viewed date: 10 April 2022]. Available from: <https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/907825/doctrine_nato_logistics_ajp_4.pdf>.

⁶² Schwartz, M. *War-time Contracting in Afghanistan: Analysis and Issues for Congress*. [online]. Congressional Research Service, 2011, R 42084, p. 3. [viewed date: 10 April 2022]. Available from: <<https://sgp.fas.org/crs/natsec/R42084.pdf>>.

⁶³ Yasa, A. R., *Op.cit.*, pp. 99-105.

⁶⁴ *Ibidem*, p. 108.

⁶⁵ Inspector General, U.S. Department of Defense. *Audit of Coalition Partner Reimbursement of Dining Facility Services at Resolute Support Headquarters, Kabul, Afghanistan*. [online]. 2020. Report No. DODIG-2020-096. p. ii. [viewed date: 10 April 2022]. Available from: <<https://media.defense.gov/2020/Jun/26/2002321943/-1/-1/1/DODIG-2020-096.PDF>>.

⁶⁶ *Ibidem*.

and their infiltration among Afghan security forces⁶⁷ have led to disastrous effects, which can be classified as evidence of unsustainability. This image is completed by the inconsistency of US and EU views on Afghan police reform, with the two organizations oscillating between the militarized version and the civilian approach⁶⁸.

Furthermore, the widespread involvement of US military logistic resources in Afghanistan had another undesirable effect in terms of sustainability. Experts showed that the continuous supply of equipment and maintenance services, coupled with the massive involvement of US military logisticians and mentors, led the Afghan Air Force to dependence⁶⁹. This effect, generated by the implementation of fast, inefficient solutions on the long-term⁷⁰, could represent a lesson that must be avoided by any military organization oriented towards sustainability.

From a gender perspective, the US military presence in Afghanistan had positive results. When faced with a full-scale development at that time, Afghanistan benefited from women's health programs⁷¹. In addition, through its membership in NATO and participation in the Resolute Support Mission, the US Department of Defense funded training programs for women soldiers in this country⁷². Despite this progress, the withdrawal of US troops and the return of the Taliban to power have nullified progress in this area. This aspect is evidenced by the discriminatory measures of the Taliban against women: disappearances among feminist activists⁷³, conditions imposed on women's right to education⁷⁴, restrictions on movement⁷⁵, or even executions⁷⁶.

Taking into account the stable climate, an important resource for the success of reconstruction efforts, experts blamed US officials for not initiating and reconciling relations

67 Yasa, A. R., *Op.cit.*, pp. 108-112.

68 *Ibidem*, p. 114.

69 Douglas, M.A.; Ritschel, J., *Op.cit.*, p. 86.

70 *Ibidem*, p. 87.

71 Kitt, M.M. and others, *An Occupational Health Services Initiative at a Women's Hospital in Kabul, Afghanistan*. [online]. Public Health Reports, 2006, **121**, p. 650. [viewed date: 10 April 2022]. Available from: <<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1781906/pdf/phr121000650.pdf>>.

72 North Atlantic Treaty Organization. *The Secretary's General Annual Report*. [online]. 2019, pp. 70-71. [viewed date: 10 April 2022]. Available from: <https://www.nato.int/nato_static_fl2014/assets/pdf/2020/3/pdf_publications/sgar19-en.pdf>.

73 United Nations. *Six women's rights activists still missing in Afghanistan*. [online]. [viewed date: 10 April 2022]. Available from: <<https://news.un.org/en/story/2022/02/1111012>>. [viewed date: 10 April 2022].

74 United Nations. *Taliban's backtracking on girls' education, 'deeply damaging'*. [online]. [viewed date: 10 April 2022]. Available from: <<https://news.un.org/en/story/2022/03/1114482>>.

75 United Nations. *Afghanistan: 'Palpable' fear of 'brutal and systemic repression' of women grows*. [online]. [viewed date: 10 April 2022]. Available from: <<https://news.un.org/en/story/2021/09/1100562>>.

76 United Nations. *Afghanistan women's rights are 'red line', UN rights chief tells States*. [online]. [viewed date: 10 April 2022]. Available from: <<https://news.un.org/en/story/2021/08/1098322>>.

with the Taliban⁷⁷. However, in February 2020, there was an agreement between the US government and the Taliban based on reducing violence and closing ties with the Al-Qaeda terrorist group, but the expected effects did not materialize⁷⁸. This is not surprising and the result completes the existing controversies, balancing the scales against such actions.

The aspects discussed in the first two parts of this article show a high potential for the US defense resources to have contributed to the inclusion of Afghanistan on the sustainable development path. Therefore, the efforts were not in vain; it was imperative that the mentioned unsustainable practices be avoided. The third part is dedicated to the recommendations issued by the American specialists, regarding the avoidance of unsustainable approaches in the future.

4 SPECIALIST RECOMMENDATIONS FOR AVOIDING UNSUSTAINABLE US DEFENSE RESOURCES MANAGEMENT MEASURES

The documents reviewed in this case study have revealed a number of recommendations issued by specialists, which the US military management needs to consider in the future, if it is to engage in reconstruction missions. Although addressed to the US military and the US government, these recommendations have wide applicability and could be taken into account at the level of other decision-makers who choose to use the military instrument of power in reconstruction issues, but also in strategic military management, in relation to daily activities. It is the case of the last audit report that targeted the execution of the reconstruction mission, which identified the seven major problems summarized below⁷⁹, remedial solutions exceeding the military and conflict domains:

- a strategy needed to achieve objectives;
- realistic definition of the time required to carry out a reconstruction mission, in order not to favor rapid spending of funds, corruption and inefficiency;
- creation of institutions and development of sustainable investment projects;
- implementation of productive personnel policies and practices;
- reduction in the level of insecurity, to favor the reconstruction effort;
- adaptation to the context and culture of the supported nation;
- continuous adaptation of effort by monitoring and evaluating results.

Although these formulations may seem familiar to those who studied and practiced management, experts point out that in Afghanistan, US officials did not take into account

⁷⁷ Special Inspector General for Afghanistan Reconstruction. *What We Need to Learn: Lessons from Twenty Years of Afghanistan Reconstruction*. [online]. 2021. SIGAR-21-46-LL. p. 18. [viewed date: 10 April 2022]. Available from: <<https://www.sigar.mil/pdf/lessonslearned/SIGAR-21-46-LL.pdf>>.

⁷⁸ *Ibidem*, p. 19.

⁷⁹ *Ibidem*, p. 2.

a planning horizon of more than one year⁸⁰. In addition, the operational planning process was undermined by the inability of the US government to define the final state, modalities and means of fulfillment⁸¹, an essential condition for a constructive planning of military operations. However, this was explained by a lower availability of resources in the US government, compared to those allocated to the Department of Defense⁸². It could be argued that this is not a reason to involve the military instrument in actions that go beyond its competence and long-term possibilities. According to a study that examined, among other things, the issue of the sustainability of US-adopted solutions in Afghanistan, a reconstruction mission must be clearly differentiated from a humanitarian one, and the benefits targeted on the long-term⁸³.

Another recommendation received from specialists who audited and analyzed the way the US mission in Afghanistan was fulfilled, is related to the implementation of the adopted policies in practice. Regarding the creation of these policies, experts pointed out the need that each US military project be analyzed and designed on the idea of sustainability⁸⁴. This criterion should be decisive in setting military objectives that require a broad involvement of defense resources. In addition, the need for effective participation of beneficiaries, both in the planning phase and during actions, must be taken into account to create the foundation of the four pillars of sustainable development.

Carrying out an independent assessment of the sustainability of projects aimed at supporting other foreign soldiers is another recommendation received by the US military management in 2017⁸⁵. Regarding the participation in the reconstruction of Afghanistan, the reports did not provide clear information on the existence of such assessments⁸⁶. Furthermore, there was a recommendation on the information resource, the most recent audit report stating the need for early involvement of intelligence structures to gather information on the participation of host country officials in activities of corruption, crime, trafficking, and terrorism⁸⁷, to identify obstacles to the implementation of reconstruction projects.

Referring to the considerable effort made by the US military management in Afghanistan, attested by the impressive volume of the allocated resources, as well as the low sustainability of the positive results, one cannot help wonder if there were also some benefits. The analyzed documents highlighted some beneficial aspects of NATO's presence

⁸⁰ *Ibidem*, p. 7.

⁸¹ *Ibidem*, p. 9.

⁸² *Ibidem*, p. 11.

⁸³ *Ibidem*, p. 39.

⁸⁴ *Ibidem*, p. 40.

⁸⁵ *Ibidem*.

⁸⁶ Special Inspector General for Afghanistan Reconstruction. *The Risk of Doing the Wrong Thing Perfectly: Monitoring and Evaluation of Reconstruction Contracting in Afghanistan*. [online].2021. SIGAR-21-41-LL. pp. XVIII, 16. [viewed date: 10 April 2022]. Available from: <<https://www.sigar.mil/pdf/lessonslearned/SIGAR-21-41-LL.pdf>>.

⁸⁷ *Ibidem*, p. 81.

in Afghanistan⁸⁸, with applicability to the defense system of any participating member or partner country, and to the American one, as follows:

- opportunity to test cohesion, with outstanding results, especially in the fight against terrorism;
- awareness of the need to set realistic targets for the military instrument of power, aligned with the tasks entrusted to it, and to complement the military effort by actors from other instruments of power;
- improvement of combat capabilities and progress on interoperability and political integration;
- identification of the need to connect to the specifics of the host nation and to align with its ability to absorb the received support;
- demonstration of the ability to successfully carry out a non-combatant evacuation operation. As mentioned earlier, the validity of these results can be noticed at the level of all participating countries, but, at the same time, there is no communication of a benefit specific to the US military structures.

5 RESEARCH RESULTS

Analyzing the wide range of defense resources used by the US Department of Defense in Afghanistan, an hierarchical interdependence between the main types of such resources, schematized in the following figure, shows that: the allotted time can determine the level of information resource and of that represented by knowledge. Measures to reduce the time required to obtain these two types of resources can only result in low levels. Based on available information and knowledge, the need for financial resources can realistically be measured. In turn, they can influence both the level of information and knowledge resources, as well as the level of human, material and energy resources required.

Furthermore, the interdependence relationship also shows that resources at the bottom level can influence the resizing of those at higher levels. The main benefit is that their long-term availability can reduce the financial resources that could be redirected to obtain new information and knowledge resources. In this respect, for the analyzed case, it can be considered that a sustainable use of human, material and energy resources could have reduced the level of financial resources, which could have been directed towards key resources, like information and knowledge.

⁸⁸ North Atlantic Treaty Organization. *Afghanistan Lessons Learned Process*. [online]. 2021. p. 1. [viewed date: 10 April 2022]. Available from: <https://www.nato.int/nato_static_fl2014/assets/pdf/2021/12/pdf/2112-factsheet-afgh-lessons-en.pdf>.

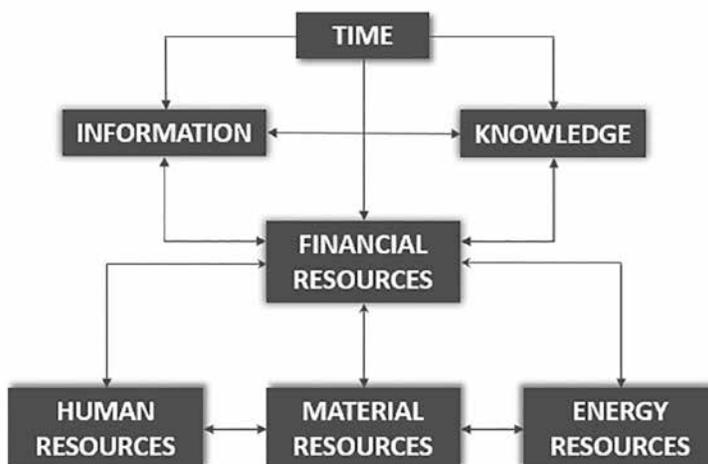


Figure 2: The interdependence between the main types of defense resources used by the US management in Afghanistan

In addition, this interdependency highlights the need for a comprehensive approach when managing the broad range of defense resources, the unsustainable practices adopted in the case of one type having a boomerang effect upon the others.

Contrary to the wide range of resources involved in Afghanistan, the positive results in state reconstruction were minor and at the same time important, consisting of: decreasing infant mortality rate, increasing the gross domestic product (GDP) per capita, increasing literacy rate, and improving health⁸⁹. These achievements were largely undermined by the withdrawal of US troops from Afghanistan, with the ensuing events undoubtedly attesting to the unsustainability of the effort and to the fact that benefits were artificially obtained. An eloquent proof of this is the country's precarious situation, which now faces an unprecedented humanitarian crisis, with famine and disease affecting the Afghan population⁹⁰.

Furthermore, analyzing the directions in which the presented defense resources were used, an outline of a trend towards sustainable development can be observed. Thus, of

⁸⁹ Special Inspector General for Afghanistan Reconstruction. *What We Need to Learn: Lessons from Twenty Years of Afghanistan Reconstruction*. [online]. 2021. SIGAR-21-46-LL. p. 33 [viewed date: 10 April 2022]. Available from: <<https://www.sigar.mil/pdf/lessonslearned/SIGAR-21-46-LL.pdf>>.

⁹⁰ United Nations. *Afghanistan: UN launches largest single country aid appeal ever*. [online]. [viewed date: 10 April 2022]. Available from: <<https://news.un.org/en/story/2022/01/1109492>>.

the seventeen sustainable development goals⁹¹, one can notice an orientation toward ten, obtaining an involvement of American defense resources of about 60% in this respect. The figure below resumes the correspondence between the projects in which the US defense resources were involved, and the sustainable development goals.

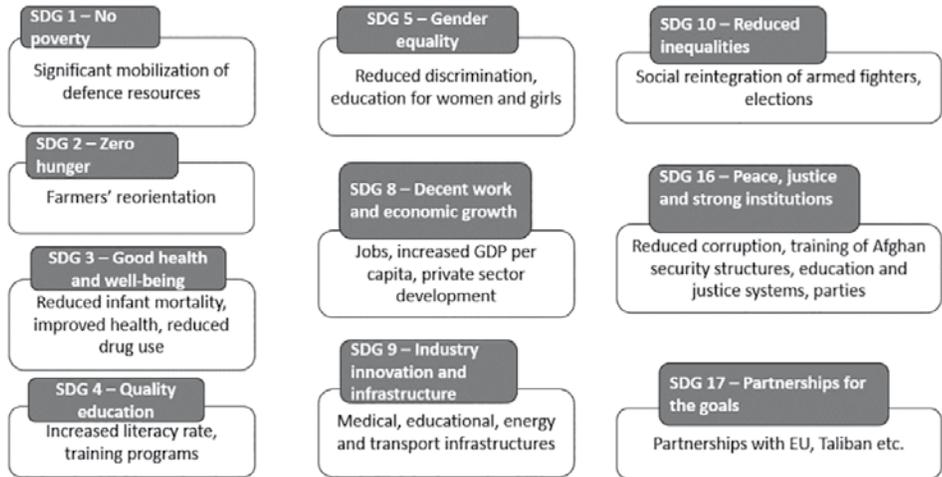


Figure 3: The correspondence between US military projects in Afghanistan and sustainable development goals (SDGs)

Because achieving these goals remains a long-term objective even for developed societies, the focus of US defense management on them in Afghanistan attests that a military organization could contribute to society's overall effort to achieve sustainable development. It should be noted that there were no programs oriented toward the environmental component of sustainable development. For example, goals no. 6 - "clean water and sanitation", no. 7 "affordable and clean energy", no. 11 - "sustainable cities and communities", no. 12 - "responsible consumption and production", no. 13 - "climate action", no. 14 - "life below water" and no. 15 - "life on land"⁹² were not covered by the involved American defense resources. This can be considered an additional argument for the unsustainable use of US military defense resources in Afghanistan, as a country severely affected by conflict needs consistent environmental protection programs.

Corroborating the analyzed aspects with the recommendations formulated by the American auditors, and with the interdependence identified between the main types of US

⁹¹ United Nations. *Transforming Our World: the 2030 Agenda for Sustainable Development*. [online]. New York, 2015,

pp. 14-28. [viewed date: 10 April 2022]. Available from: <<https://sustainabledevelopment.un.org/content/documents/21252030%20Agenda%20for%20Sustainable%20Development%20web.pdf>>.

⁹² *Ibidem*, p. 18.

defense resources used in Afghanistan, a model of unsustainability could be traced, that military decision-makers must know and avoid in the future. The following figure summarizes the most important elements of the unsustainability model emerging from the US military management actions in Afghanistan.

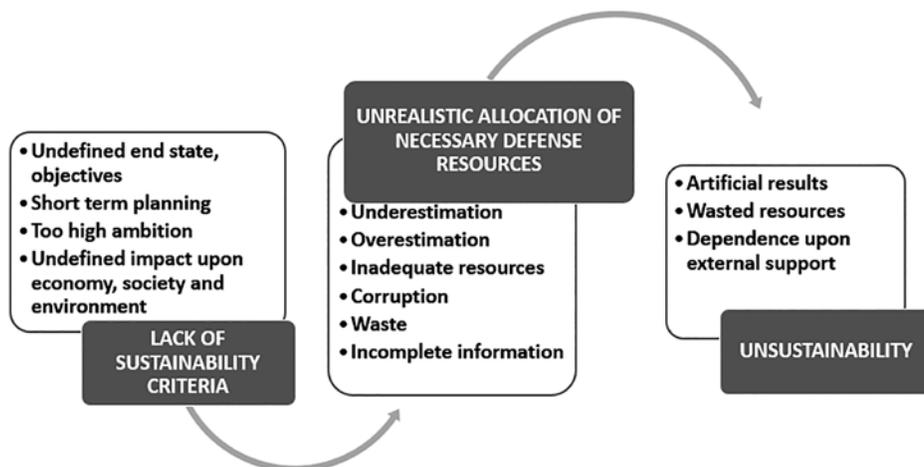


Figure 4: The model of unsustainable use of defense resources

For a sustainable military management, this model should also be perceived as a challenge to do things the other way around, to transpose each of its elements into actions that facilitate the sustainable use of defense resources, and to develop its good counterpart, namely, a model of sustainable use of defense resources. Moreover, to meet the sustainability goals, it is important that each element of the part dedicated to the allocation of necessary defense resources be analyzed in an integrative framework, that takes into consideration both the right level of each type of defense resources, and the benefits for economy, society, environment, and the military organization, in itself.

CONCLUSIONS AND RECOMMENDATIONS

The military organization can allocate the available resources to contribute to the sustainable development of the society to which it belongs. In this respect, it is important that its efforts are integrated with those of other instruments of power to achieve long-lasting positive results, because the diversity of such instruments is not accidental. Additionally, realistic foresight of the involved defense resources is essential, as evidenced by the unsustainable results obtained by both underestimating and overestimating. To make this possible, defense management must adopt a rigorous long-term planning process, taking into account all actors involved, for the implementation of the

comprehensive approach and for the realistic definition of the desired military end state and objectives associated with it.

At the same time, the way defense resources are used can help achieve a sustainable military organization in itself. The case study highlighted the need to avoid unsustainable defense management practices, this measure having the potential to bring long-term benefits and avoid future inefficient solutions. From this perspective, the avoidance of rapid solutions, which artificially solve management problems related to all kinds of defense resources, could have a major contribution to the sustainability of positive effects.

Furthermore, the idea of analyzing every project that implies the usage of any kind of defense resources by sustainability criteria, should be adopted by any military organization, and their formulation should be a precondition for the implementation of any project, whether it is aimed at attracting the necessary resources, conducting administrative activities, or organizing, planning, and carrying out exercises and missions of any kind. The failure to regularly apply these criteria in day-to-day decisions, which do not involve the solving of a crisis situation, could lead to major difficulties in adapting optics to demanding situations. Therefore, the management of defense resources must practice in advance the orientation toward the durable benefits of its decisions, in order to avoid waste and insignificant results.

In this regard, ensuring conditions for the regeneration and retention of limited defense resources, correlating the assigned and assumed missions with the real possibilities of fulfillment, avoiding the overloading of military structures, their involvement in activities for which they were not trained and diminishing the dependence on external support, corroborated with an objective evaluation, could represent key factors for the existence and contribution of military organization to sustainable development.

To sum up, it should be noted that this case study has achieved its objectives. It revealed that defense resource management practices, despite their good intentions, could affect a nation's evolution toward sustainable development by not aiming at long-term beneficial results. In this sense, the proposed unsustainability model could lead to a more efficient management of defense resources. However, two main steps should be followed in the future through further research: validation and refinement of the proposed unsustainability model, and its consideration as a starting point for developing a sustainable use model of defense resources in the context of sustainable development. In this regard, more detailed studies and lessons identified from other military actions are needed to complete the framework for managing defense resources in a more efficient and responsible way.

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