

Getting to Know the SDGs in the Mount Arrowsmith Biosphere Region

Courtney Vaugeois, Mandy Hobkirk*, Brad Vince, Victoria Gould, & Graham Sakaki

Mount Arrowsmith Biosphere Region Research Institute, Vancouver Island University, Building 305-442, 900 Fifth Street, Nanaimo, British Columbia, V9R 5S5, Canada (Mandy.Hobkirk@viu.ca)

ABSTRACT: This pilot project worked to review how the Mount Arrowsmith Biosphere Region (MABR) is contributing to the United Nations Sustainable Development Goals (SDGs) at the local level. It is crucial that the SDGs are met locally, nationally, and internationally to achieve a sustainable future for all. Through a qualitative approach, this study explored the how groups within the region are contributing to each Goal. Results found that each of the 17 SDGs are being contributed to in the MABR, though some Goals, including Goal 15, receive more support than others.

Keywords: UNESCO, Biosphere Reserve, Sustainable Development Goals

INTRODUCTION

Adopted in 2015 by the United Nations, the Sustainable Development Goals (SDGs) (Figure 1)

aim to transform the world by 2030 through a holistic approach to sustainable development (United Nations, 2020). The SDGs call all world nations to action - regardless of their economic status - to achieve a more sustainable future for all, leaving no one behind (United Nations, 2020). SDG progress can be tracked by the targets and indicators for each Goal, which act as measurement tools (United Nations, 2020).



Figure 1. The United Nations 17 Sustainable Development Goals (United Nations, 2020).

Although the SDGs were developed for nations, their achievement requires collaboration and solutions from all levels, including the local level (United Nations, 2016). As a United Nations Educational, Scientific and Cultural Organization (UNESCO) Biosphere Reserve, the Mount Arrowsmith Biosphere Region (MABR) plays a significant role in promoting and contributing to the SDGs locally. Biosphere Reserves are areas that model solutions for a sustainable future, celebrate cultural and biological diversity, and empower positive relationships between humans and nature (UNESCO, 2019). Located on eastern Vancouver Island, British Columbia, Canada, the MABR involves partnerships between community members, stakeholders, and organizations (Mount Arrowsmith Biosphere Region, 2021). Through these partnerships and its role as a UNESCO Biosphere Reserve, the MABR is situated to make meaningful local contributions to the SDGs.

Through a bottom-up approach, this project's objectives were to raise awareness of the SDGs, and determine how community groups in the MABR are currently contributing to the SDGs. Ideally this approach will initiate momentum within the community for the future SDG project work.

METHODS

Through a qualitative approach, methods for this project included preliminary data collection,

semi-structured interviews, and qualitative data analysis. First, online websites and resources of 36 community groups (non-profits, charities, non-governmental organizations, and businesses) in the MABR were reviewed to determine how their work contributes to the SDGs. Second, the semi-structured interviews allowed for a stronger connection to be made between the community groups and the SDGs. Questions were drafted based on data collected in the preliminary review. In total, 36 groups were invited to participate in interviews and 11 groups accepted. All interviews were held virtually via Zoom, or by phone. The interviews were transcribed using Otterly.ai. Last, the qualitative analysis for the project was conducted using NVivo. Using the SDGs as nodes and SDG clusters (groups of similarly themed targets) as sub nodes, data was coded to the associated SDGs. Once coded, each SDG was analyzed to determine the level of contribution across the MABR.

RESULTS

All 17 SDGs are currently being contributed to within the MABR; however, some receive more support and contributions than others (Figure 2). Goal 15 is the SDG most contributed to, with 18 groups engaging in initiatives to support and protect ecosystems and biodiversity. For example, four groups engage in invasive species removal. Other groups contribute to SDG 15 through sustainable and regenerative forest management.

Mosaic Forest Management, for example, is committed to sustainable forest management practices, which are ensured through their Sustainable Forestry Initiative certification.

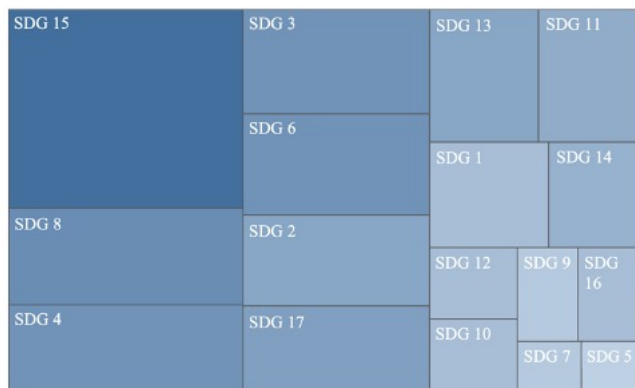


Figure 2. SDG code hierarchy chart showing contributions to each Goal.

Following SDG 15, the Goals most contributed to in the MABR include SDGs 8, 4, 3, and 6, respectively. Contributing to SDGs 8 and 4, many groups in the MABR offer educational programming for youth as well as job opportunities. For example, Oceanside Building Learning Together’s Words on Wheels (WOW) bus offers transportable educational materials to communities around Parksville. A handful of groups in the MABR promote healthy lifestyles and wellness through community programs, advancing SDG 3. Many groups within the MABR are contributing to SDG 6 by lobbying and working towards the protection of ecologically important freshwater ecosystems.

SDGs 5 and 7 were the least contributed to. Only

one group, the Haven House, offers programs addressing violence and discrimination against women and children, which contributes to SDG 5. Two groups contributing to SDG 7 are focused on changing their operational practices to feature renewable energy technologies. For example, Morningstar Farm plans to capture waste products from their cattle, such as methane, to convert into usable energy.

DISCUSSION

Through a review of online resources and interviews, this study found that initiatives taking place within the MABR are contributing to each of the SDGs. These initiatives were not developed for the SDGs, but rather they inherently contribute to them. Local initiatives are developed to address issues that may be overlooked or under prioritized by other sectors. Awareness of the SDGs is also crucial for their implementation (United Nations, 2016). By connecting local initiatives to the Goals, this project increased awareness of the SDGs.

Rationalizing why the level of contribution varies for each SDG was not the focus of this project. However, it could be speculated that Goal 15 was the most contributed to due to the social climate of the MABR and Vancouver Island. Passion for the environment is evident through communities across the island. This dates back to the early 1900s as there were many environmental groups

in the MABR (QB Museum, personal communication, January 19, 2021). Additionally, factors that may restrict contribution to other SDGs may include a lack of financial resources, limited work force, existing expectations of governmental action, and limited awareness or knowledge of the SDGs.

Moving forward we intend to continue this review and expand the research, as a limitation to this study was sample size. Not all groups within the MABR were interviewed due to limited resources, time, and a low response rate within the project timeframe. More interviews could shift the SDG hierarchy in the region.

Groups that participated in interviews are optimistic for the future development of the SDGs within the MABR, which shows potential for further promotion and contribution to the Goals moving forward.

AUTHOR INFORMATION

Corresponding Author

Mandy Hobkirk

Present Addresses

Mount Arrowsmith Biosphere Region Research Institute, Vancouver Island University, Building 305-442, 900 Fifth Street, Nanaimo, British

Columbia, V9R 5S5, Canada (Mandy.Hobkirk@viu.ca)

Author Contributions

Courtney Vaugeois (MABRRI), Mandy Hobkirk (MABR), Brad Vince (MABRRI), Victoria Gould (MABRRI), & Graham Sakaki (MABRRI).

Funding Sources

Colleges & Institutes Canada

ACKNOWLEDGMENT

We would like to thank Colleges & Institutes Canada for funding this project and all community groups who participated in the interviews.

REFERENCES

- Mount Arrowsmith Biosphere Region. (2021). *Team*. <https://www.mabr.ca/team>
- UNESCO. (2019). *Biosphere reserves*. <https://en.unesco.org/biosphere/about>
- United Nations. (2016). *SDG implementation: Strategic Plan of the Office of the president of the general assembly*. Retrieved from https://www.un.org/pga/71/wp-content/uploads/sites/40/2016/11/2_SDG-IMPLEMENTATION_external.pdf
- United Nations. (2020). *The 17 goals*. <https://sdgs.un.org/goals>