Management Response Evaluation of Research in Strategic Areas - Projects

Context

The evaluation was undertaken to assess the relevance and effectiveness of the program in meeting its objectives, and the efficiency of the management of the program. The evaluation will also help ensure that NSERC is meeting the requirements of section 42.1 (1) of the Financial Administration Act and the Treasury Board Secretariat's Policy on Results 2016.

The Strategic Partnership Grants for Projects (SPG-P) funding opportunity was launched in 1977 by the National Research Council (NRC) and subsequently transferred to the NSERC when it was established in 1978. The goal of the SPG-P is to increase research and training in targeted areas that could strongly enhance Canada's economy, society and/or environment within the next 10 years. It funds early-stage research projects in targeted areas that are revisited every five years. The biggest proportion of projects falls within: Environment (25% of projects), Biosciences (21%), Information & Communications (19%), and Manufacturing (18%).

The program rationale aims to:

- Encourage university and non-academic researchers to work together on early-stage research and on interdisciplinary projects in target areas of national importance.
- Ensure that Canada has enough HQP with the skills needed by user organizations in target areas;
- Contribute to industry's capacity to use university research in order to improve competitiveness and productivity in areas of national importance;
- Increase the capacity of government to use university research to contribute to strengthening public policy.

It should be noted that the 2018 Federal Budget directed a reduction in the number of business innovation programs across government, and proposed that Engage Grants, Industrial Research Chairs, Connect Grants, Strategic Partnership Grants for Networks and Projects, Experience Awards Grants, and the existing Collaborative Research and Development Grants be consolidated into a single grant program. As such, the SPG-P funding opportunity will no longer be offered once the consolidation has occurred.

Comments:

Management agrees with the findings of the evaluation which confirm that SPG-P occupies a unique niche as one of the few funding opportunities to provide substantial funding for collaborative research that, because of its high risk and/or early-stage nature, might not otherwise be undertaken. The findings also confirm the unique role of SPG-P in supporting research that contributes to the advancement of public policy, in addition to supporting collaborations with the private sector, in targeted areas of national importance. Overall, 70% of private and public sector partners have used, or plan to use, the research results derived from the collaborative project in which they were involved. These research results lead to a broad range of impacts, including influencing public policy, increasing the skill and knowledge base of partner organizations, influencing decision-making about strategic business orientations, and contributing to R&D receptivity and capacity in partner organizations. Moreover, management was pleased with the finding that SPG-P is strongly aligned with the NSERC 2020 Strategic Plan objectives, notably in strengthening the dynamic between discovery and innovation by serving as a two-way bridge between discovery research and collaborative research with partner organizations. SPG-P has also lead to international collaborations in 40% of projects which involved 40 different countries. It is also an effective mechanism to support multidisciplinary research, both across disciplines in the NSE, as well as across the social sciences, with more than two-thirds of the projects resulting in multidisciplinary research collaborations and nearly one third resulting in multi-sectoral research collaborations. Finally, SPG-P continues to support the training and employability of highly qualified personnel, and students are gaining partner-relevant skills with almost all HQP reporting direct interactions with project partners, and 96% of SPG-P HQP being employed in academia, the private sector or government following their experience.

Responses to each recommendation and the management action plan are presented below.

Recommendation #1: The federal government should continue to fund Strategic Partnership Grants. In the current context where supporting innovation has been recognized as a government-wide priority, Strategic Partnership Grants occupy a unique niche as one of the few funding opportunities to provide substantial funding for collaborative research that, because of its high-risk nature, might not otherwise be undertaken. In addition, Strategic Grants are NSERC's only source of funding that supports the development of public policy. It functions as a two-way bridge between discovery research and collaborative research with partner organizations and meets an important need for both researchers and partners. The federal government and NSERC have a necessary role in delivering the Strategic Grants which is strongly aligned with the current federal government priorities, as well as objectives and expected outcomes outlined in the NSERC 2020 Strategic Plan. It is therefore recommended that the SPG be continued, provided that funding longer-term, collaborative research projects and projects involving public sector partners continues to be a priority for NSERC.

Management Response: Agree

SPG-P is a highly competitive program that enables collaborations between Canadian academics and a diverse set of organizations in the public and private sectors that want to explore high-risk and/or early stage research. The research results generated through this program have or will be used by 70% of partners, which is an indication of the program's impact on public policy and on industrial challenges. In terms of continuing support for Strategic Partnership Grants, NSERC's Research Partnerships Directorate currently has the opportunity, and mandate, to simplify, modernize and improve the way it provides support for research through the consolidation of its partnership programs. As such, Strategic Partnership Grants will not be offered in their current form. However, a critical step in designing the new, consolidated program is considering features from the current programs that could be incorporated into the new program, which could include the unique features of SPG-P such as continuing support for the development of public policy, and of high-risk and early-stage research.

Recommendation #2: It is recommended that the program retain the requirement for partners from public organizations to actively participate in collaborative research, but the range of potential partners should be broadened to include organizations that are well positioned to use the research results and leverage them to strengthen public policy—for example, not-for-profit organizations or Northern communities. The evaluation demonstrated that collaboration between academic researchers and government organization representatives is critical to public policy impact. It also showed that a wider range of stakeholders can contribute to public policy development. It may therefore be worthwhile to encourage other forms of collaboration and rethink the tools to be implemented in future to better document the nature and extent of the strategic projects' contribution to the public discussion.

Management Response: Agree

Efforts have been taken to broaden the eligibility of partner organizations within Research Partnerships programs, and in considering the new, consolidated program, there will be a focus on impacts that generate socio-economic, environmental or other benefits for Canada. This will be achieved through the engagement of a broader range of organizations that can use research results and leverage them to strengthen public policy.

Recommendation #3: The Research Partnership Directorate should consider how to best document and measure the influence of identity factors on an applicant's ability to obtain funding. Although the evaluation did not reveal significant differences in the success rates of under-represented groups for which data are available, survey evidence suggest a perception that some barriers exist, particularly for women and to some extent for Francophone researchers. Also, the absence of data for Indigenous people and people with disabilities precluded an assessment of the extent to which they experienced identity-related barriers.

Management Response: Agree

Management recognizes the importance of collecting accurate and relevant information that will inform our ongoing commitment to strengthening equity and diversity in research. There are currently inter-agency efforts being undertaken to enhance data collection and reporting, and in considering measures to reduce barriers for under-represented groups. There is also a dedicated Equity, Diversity and Inclusion Working Group within NSERC to synthesize and integrate new information and policies on this topic. Throughout the development of the new program, consideration will be given to particular challenges regarding data collection and the perception of barriers for under-represented groups. To the extent possible, the new program design will incorporate best practices to address these areas.

Action Plan

| Recommendation | Agree Partially agree Disagree | Proposed Action | Responsibility | Target date for completing proposed action |
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| Recommendation #1. The federal government should continue to fund Strategic Partnership Grants. In the current context where supporting innovation has been recognized as a government-wide priority, Strategic Partnership Grants occupy a unique niche as one of the few funding opportunities to provide substantial funding for collaborative research that, because of its high-risk nature, might not otherwise be undertaken. In addition, Strategic Grants are NSERC's only source of funding that supports the development of public policy. It functions as a two-way bridge between discovery research and collaborative research with partner organizations and meets an important need for both researchers and partners. The federal government and NSERC have a necessary role in delivering the Strategic Grants which is strongly aligned with the current federal government priorities, as well as objectives and expected outcomes outlined in the NSERC 2020 Strategic Plan. It is therefore recommended that the SPG be continued, provided that funding longer-term, collaborative research projects and projects involving public sector partners continues to be a priority for NSERC | Agree | - Research Partnerships (RP) will consider including some of the features of SPG-P in the design and delivery of the new partnership program; such features could include support for early stage, collaborative research projects that involve private and public sector partners. | Director, Energy, Environment and Resources, RP Directorate | December 2019 |

| Recommendation | Agree Partially agree Disagree | Proposed Action | Responsibility | Target date for completing proposed action |
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| Recommendation #2. It is recommended that the program retain the requirement for partners from public organizations to actively participate in collaborative research, but the range of potential partners should be broadened to include organizations that are well positioned to use the research results and leverage them to strengthen public policy—for example, not-for-profit organizations or Northern communities. The evaluation demonstrated that collaboration between academic researchers and government organization representatives is critical to public policy impact. It also showed that a wider range of stakeholders can contribute to public policy development. It may therefore be worthwhile to encourage other forms of collaboration and rethink the tools to be implemented in future to better document the nature and extent of the strategic projects' contribution to the public discussion. | Agree | - In the development of the new partnership program, RP will consider broadening potential partners to include a diverse set of organizations, which would be able to use research results. | Director, Energy, Environment and Resources, RP Directorate | December 2019 |

| Recommendation | Agree Partially agree Disagree | Proposed Action | Responsibility | Target date for completing proposed action |
|---|---|--|---|--|
| Recommendation #3: The Research Partnership Directorate should consider how to best document and measure the influence of identity factors on an applicant's ability to obtain funding. Although the evaluation did not reveal significant differences in the success rates of under-represented groups for which data are available, survey evidence suggest a perception that some barriers exist, particularly for women and to some extent for Francophone researchers. Also, the absence of data for Indigenous people and people with disabilities precluded an assessment of the extent to which they experienced identity-related barriers. | | NSERC will ensure best practices are implemented, as they become available, with respect to self-identification data collection in support of equity, diversity and inclusion. NSERC will undertake GBA+ analysis related to new partnerships program and policies. NSERC will ensure the adoption of principles that will support NSERC's commitment to equity and diversity in research, based on results generated through tri-agency efforts to review barriers facing under-represented groups. | Director, Energy, Environment and Resources, RP Directorate Vice-President, RP Directorate Management Vice-President, Communications, Corporate and International Affairs | December 2019 |