Opportunities and Challenges for Research Translation in South and Southeast Asia

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Suggested Citation

Summary

Research translation is the process by which evidence acquired from research is appropriately used to guide the work of policymakers and practitioners and the future work of researchers. This report summarizes findings from a review of literature that was conducted between May to August of 2019 to understand the pathway between research produced and research used to inform program and policy development in the Southeast Asian (SEA) region. Guided by the Canadian Institutes of Health Research (CIHR) Model of Knowledge Translation, researchers at NORC at the University of Chicago reviewed academic journals and other grey literature to understand factors affecting research translation in Bangladesh, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Nepal, Philippines, Sri Lanka, Thailand, and Vietnam. The primary goal of this literature review is to inform the agenda for the 2nd Annual UK Research and Innovation (UKRI)-U.S. Agency for International Development (USAID) Joint Meeting on Research and Impact; we also hope that it can be of use to researchers, policymakers, and development practitioners in SEA and globally to advance the appropriate use of research and evidence to improve development outcomes.

The CIHR framework describes knowledge translation as a nonlinear process. The first opportunity for research translation (and use) occurs at the research planning stage where researchers and research/knowledge users interact with each other to identify relevant research questions, priorities, and the appropriate methods for a systematic and robust approach. As the research process progresses, research users participate in the implementation and analysis of results. Findings are later packaged in a form and language that is accessible, relevant, and useful to diverse stakeholders, considering the characteristics of the context in which they operate. Research findings can be further communicated and disseminated through diverse channels targeting a variety of audiences. Research users utilize or apply the knowledge gained within their settings, enabling the research/knowledge to generate impact. Based on the results and the engagement of participants, research stakeholders may identify additional or new research questions, possibly triggering the start of a new research process.

This review found that several factors influence the use of research for policy, programming, and practice in South and Southeast Asia. While there is a fair number of studies on research translation broadly, this topic has not been as widely documented for the SEA region in the form of systematic reviews or landscape assessments. Some studies that aggregate research translation factors, issues, and challenges exist for Cambodia and Bangladesh. Additionally, most of the literature gathered on research translation focuses on medicine, public health, and education.

In several SEA countries, final decision-making is highly centralized; however, a number of stakeholders do exert influence on policymaking. The accumulation of power among specific groups has also led to opaque policymaking processes and, often, to a low demand for research. Each of the countries reviewed are characterized by complex political histories: Laos, Cambodia, Myanmar, Bangladesh, and Vietnam have all experienced some form of conflict in the past century. Complex national contexts have affected the demand for research among decision-makers, the amount and type of research produced domestically, and its socialization and use by relevant stakeholders.
In some cases, the economies of these countries have inhibited adequate investment in research capabilities among decision-makers. Furthermore, staff turnover is not an uncommon trend. Fluency in research terms and interpretation are required to create an evidence-informed policy space.

Dissemination workshops are desired by a multitude of stakeholders as they allow users and researchers to collaborate, ask questions, and inspire the next set of research questions. As donors continue to fund research activities, they have the opportunity to require research products and activities that employ such techniques. Think tanks can also play an intermediary role between users and producers.

This review has also identified several strategies that can facilitate effective translation of research into policy across borders and sectors:

- Donors and research/knowledge users who seek evidence should require research activities to develop a dissemination plan during the pre-research planning stage.
- Donors and research/knowledge users should fund national-level consortia to create platforms for collaboration and transparency of research activities.
- Both research/knowledge users and producers must improve the framing of research questions and priorities on the characteristics and needs of the current context and practice.
- All stakeholders should use technology to develop mechanisms to share knowledge in real-time (e.g., databases of research findings or researchers engaged in research activities within each sector in each country).
- Donors, policymakers, and practitioners must invest in capacity-building activities that increase their own technical research knowledge.
- Researchers must be trained to communicate effectively and develop appropriate research products.
- Donors and policymakers must develop clear policy priorities and communicate them to researchers in a timely manner.

Based on this review, the following topics are suggested for the joint UKRI-USAID workshop:

- Review concepts and share a useful framework for research translation.
- Create a forum to engage with others and share insights, experiences, and recommendations.
- Explore sectoral and country-specific challenges and successes in research translation.
- Discuss how to create an enabling environment to increase demand for research and how to identify windows of opportunity to promote research uptake.
- Learn specific tools in stakeholder mapping and engagement.
- Review best practices in communicating and packaging research findings.
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List of Acronyms

CIHR       Canadian Institutes of Health Research
CNM        Cambodia’s National Center for Parasitology, Entomology, and Malaria Control
EBM        Evidence-based medicine
EBP        Evidence-based practice
KTA        Knowledge to Action
MCHIP      Maternal and Child Health Integrated Program
MoE        Ministry of Education
MoH        Ministry of Health
NEHCR      National Ethics and Human Rights Committee
NGO        Non-governmental organization
RTAC       Research Technical Assistance Center
SEA        Southeast Asia
SNL        Saving Newborn Lives
UKRI       UK Research and Innovation
USAID      United States Agency for International Development
WHO        World Health Organization
I. Introduction

In early 2019, UK Research and Innovation (UKRI) and the United States Agency for International Development (USAID) commissioned NORC’s Research Technical Assistance Center (RTAC) to organize the 2nd Annual Workshop on Increasing Research Impact: Research Translation. The meeting aimed to enhance the capacity of university-based researchers, policymakers, non-governmental organizations (NGOs), and other development stakeholders to translate research into programming and policy^1^ and to create a space for cross-learning on solutions and good practices that can enhance the impact of research on development outcomes in the Southeast Asia (SEA) region.

An initial step in the organization of this workshop involved completing a literature review to identify the challenges and opportunities for translating development research into impactful programs and policy. This review informed the agenda and topics covered during the workshop. Researchers at NORC conducted a scan to gather information from academic journals and grey literature such as non-academic papers, reports, briefs, and toolkits. The review used search terms related to research translation, knowledge translation, implementation science, research impact, research-to-action, research policy gap, research uptake, and evidence-based policymaking. All of these terms were combined with the various countries included in this review, namely Bangladesh, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Nepal, Philippines, Sri Lanka, Thailand, and Vietnam. Titles and abstracts were examined to ensure they were likely to contain relevant information and, if possible, focused on SEA. Casting a wide net in the search process resulted in a literature sample that encompassed work in many topics, including health education, food security, natural resource management, resilience, and climate change. Health research was the focus of much of the literature focused on “research translation,” while other fields like agriculture and climate change were more commonly found when search terms like “research uptake” or “evidence-based policymaking” were used. Technical resources from different professional and government agencies were also consulted. The NORC team used several approaches to include a broad selection of relevant literature specific to the SEA context. The team identified key subjects that tended to be the focus of research translation literature in SEA—for example, disease research in Cambodia—and probed these subjects further, as the wealth of literature on these subjects allowed us to explore a variety of theories and case studies. Additional search terms were added for countries or subject areas that were underrepresented in the initial search. Only materials written in English were considered in this review. In total, the NORC team reviewed approximately 110 papers and pieces of grey literature.

This document presents the results of this review and provides recommendations to the workshop organizers and to others interested in enhancing their efforts in research translation. The document is structured as follows: Section Two provides a theoretical overview of the research translation process, presenting related concepts and frameworks for analysis and action, as well as factors that influence research translation in general terms. Section Three presents related information as applicable to the SEA context. Finally, Section Four offers general conclusions and recommendations for supporting research translation in the region.

^1^ “Policy” is to be understood as: 1) high-level government policy; 2) general policy advocacy targeting decision influencers; and/or 3) government programming.
2. What Is “Research Translation”?  

Concepts and definitions

There are several different definitions of “research translation” that emerged in the literature. A common understanding of the term focuses on the communication side—it is either a process that transforms research findings into a form that is comprehensible and relevant to research users or a process that conveys the interest and concerns of users to researchers (Hirschkorn & Geelan, 2008). Another definition posits that research translation can simply be thought of as a series of actions through which the research-policy gap is bridged (Hirschkorn & Geelan, 2008). Generally, research translation is thought of as a unidirectional pathway from researchers to other audiences. However, we feel it is important to consider the term as also encompassing the translation of policy and practice priorities and evidence gaps to inform the work of researchers. Research translation, therefore, is a dynamic, iterative process that occurs throughout the research cycle (CIHR, 2012). Hence, our working definition is broad, viewing research translation as the process by which research findings are taken up by users and appropriately used to inform policy, practice, or further research. In this definition, research users can include policymakers, program designers, practitioners, and the general public.

Box 1: Concepts related to research translation

- Research/knowledge transfer
- Research/knowledge communication
- Research/knowledge dissemination
- Research/knowledge utilization
- Knowledge exchange
- Application of research
- Implementation research
- Evidence-informed policy

Research translation itself includes the synthesis, dissemination, exchange, and ethical application of knowledge (information, evidence, and/or discoveries) between researchers and users (CIHR, 2012). Along these lines, several nomenclatures and related concepts emerge in the literature for describing it or its components. Box 1 lists some of the terms that frequently emerged during the literature review.

Research translation is a necessary process to overcome the “knowledge-to-action gap” (also known as the “research-policy gap” or “research-practice gap”). This gap refers to the disconnect between evidence and real-life applications, as well as the lack of use or uptake of research results by its intended audience. The disconnect may occur due to the lack of knowledge of users’ research interests, the lack of a clear audience for particular research results, a lack of communication between researchers and users, and the lack of uptake of research results by the relevant actors (Graham et al., 2006, Oliver et al., 2014).

Examples of this gap across disciplines have led to situations such as the following:

- In the education sector, there is “the notion that teachers rarely directly implement the educational research produced by universities and seemingly do not value it” (Hirschhorn & Geelan, 2008).
- In the health sector, “On average just over half of recommended health care practices are implemented, and the situation may be even worse for prevention and healthy behavior change interventions” (Glasgow & Emmons, 2007).
Framework for research translation

Over the course of this review, several frameworks were identified that outline the process of research translation at different stages of the research cycle. Annex 1 provides a brief overview of these frameworks. Given the scope of this activity, this review focused on the CIHR framework as a reference for further discussion, given its broader focus on knowledge translation along the entire research cycle (Figure 1). The framework, developed in 2004, describes knowledge translation as a nonlinear process. It supports the notion that research translation should not merely occur once research outputs are produced. This circuitous pathway shows that there are several opportunities for knowledge producers and users to come together during the research cycle (Sun, 2010). Both the framework and this review support the idea that successful cases of research translation are iterative, active, engaging, and collaborative.

According to the framework, an initial opportunity for research translation (and use) occurs at the research planning stage, where researchers and users interact with each other to identify relevant research questions, priorities, and the appropriate methods for a systematic and robust approach. As the research cycle progresses, users participate in the implementation and analysis of results. Findings are later packaged in a form and language that is accessible, relevant, and useful to diverse stakeholders, considering the characteristics of the context in which they operate. Research findings can be further communicated and disseminated through diverse channels targeting a variety of audiences. Users utilize or apply the knowledge gained within their particular setting, enabling the research/knowledge to generate impact. Based on the results and the engagement of participants, research stakeholders may identify additional or new research questions, possibly triggering the start of a new research cycle.

**Figure 1. CIHR Model of Knowledge Translation**

Source: Reproduced after Sun, 2010.
Factors influencing research translation

Based on the framework and other resources consulted, several factors were found to influence how research is being understood, applied, and utilized by users throughout different stages of the research cycle. The following section showcases these factors as they relate to funding agencies, knowledge producers, and users and then lists specific characteristics of knowledge transfer and communication plans that influence research translation.

- Degree to which funding agencies require knowledge producers to engage in research translation activities and develop communication plans.
- Degree to which funding agencies influence policy and research agendas and whether their priorities align with the priorities and needs of users.

Knowledge Producers

- Relevance of the research question(s) to the users.
- Research methodologies used and quality and trustworthiness of methodologies and data.
- Accessibility of language (e.g., writing style, use of technical language, use of standard terms used to convey research methodologies and conclusions).
- Applicability of recommendations proposed.
- Identification of appropriate intended users of research products.
- Understanding users’ decision-making environments and types of actions they can take.

Users

- Characteristics of the “practice/policy environment” (e.g., structural, political, economic, cultural/social, physical, operational, etc) that impede or incentivize the use of research in planning and developing programs and policies.
- Availability of resources, managerial and staff support, incentives, and the degree of motivation to access research products and implement recommendations.
- Ability to understand research methodologies, findings, and conclusions and determine how recommendations can be applied.

Knowledge Producers and Users

- Existence of a feedback loop to allow for engagement and dialogue between knowledge producers and users.

Knowledge Transfer Strategy and Communication Plan

- Adequate identification of the issue to be communicated.
- Identification of the use or impact desired (i.e., advocacy, policy, practice, or programming) of the research product.
- Determination of how information will be communicated, mode of delivery, and/or interaction with target audience.
- Identification of the most appropriate messenger to communicate the research.
- Accessibility of final research products to users.
Challenges and good practices for research translation

This section provides an overview of the challenges, many of which relate to the factors listed in the previous section, and good practices for research translation, as identified in the general literature. As noted above, a large proportion of sources focused on the health and education sectors. Nevertheless, they contain generalizable insights that are relevant across many sectors. Table 1 summarizes the results.

<table>
<thead>
<tr>
<th>Challenges</th>
<th>Good Practices</th>
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<tbody>
<tr>
<td>Lack of awareness of contextual barriers or facilitators (Lavis et al., 2003; Glasgow &amp; Emmons, 2007; Hirschkorn &amp; Geelan, 2008; Grimshaw et al., 2012)</td>
<td>Conduct a review of the research landscape to understand gaps in the existing evidence. &lt;br&gt;Review the decision-making context and identify modifiable and non-modifiable barriers and incentives related to research uptake. &lt;br&gt;Collaborate with research users to develop research agendas and questions.</td>
</tr>
<tr>
<td>Limited awareness or understanding of target audience and potential research users (Glasgow &amp; Emmons, 2007; Oliver et al., 2014)</td>
<td>Conduct a stakeholder mapping at the start of the research cycle. &lt;br&gt;Differentiate stakeholders into primary and secondary stakeholders. Primary stakeholders are those who have direct power or influence to make change and are most often the potential end-users of the research results. Secondary stakeholders can influence key decision-makers. &lt;br&gt;Whenever possible, involve stakeholders from the start and engage with them throughout the research cycle. This promotes transparency and helps both sides remain updated on changes in the policy-space that may affect research uptake. &lt;br&gt;Design a targeted dissemination strategy that takes into consideration the context in which these actors operate.</td>
</tr>
<tr>
<td>Inadequate communication processes (availability, accessibility) for research results (Lavis et al., 2003; Oliver et al., 2014)</td>
<td>Understand which type of research outputs are appropriate for each type of stakeholder, and design a targeted translation strategy that meets the needs of end-users. &lt;br&gt;The communications should be packaged in a user-friendly format and should consider what is feasible given the resources available, contextual barriers, and facilitators. That is, the recommendations should provide a good fit to the target setting. &lt;br&gt;A research translation strategy should also identify how, when, and where potential research users need to access or receive the information.</td>
</tr>
<tr>
<td>Scope of research does not support application (Lavis et al., 2003, Glasgow &amp; Emmons, 2007)</td>
<td>Some studies provide fundamental knowledge about a general problem or are so limited in scope that they do not generate sufficient actionable messages or evidence for policy and practice changes. &lt;br&gt;The research should produce recommendations that are feasible, replicable, and relevant. Whenever possible, successful case studies should be showcased to increase demand for evidence.</td>
</tr>
</tbody>
</table>

Source: Authors’ elaboration.
3. South and Southeast Asia Context: Factors Influencing Research Translation, Good Practices, and Case Studies

Overview of the literature consulted

Researchers at NORC reviewed over 100 pieces of literature, of which half were academic papers to understand research translation in Bangladesh, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Nepal, Philippines, Thailand, and Vietnam.

The results of this literature search, which focused on only English-language publications, overwhelmingly yielded papers focused on health care, medicine, and public health; however, some literature on other sectors—including labor, education, and climate change—was found that helped inform our contextual understanding of research challenges in some countries. All systematic reviews conducted in the field of knowledge translation in SEA that we found were focused on health, and none did a comparative review between all the countries included in this study. As such, most of the examples elaborated in the text are focused on the health sector, broadly defined.

Insights regarding research translation experiences in SEA

Four themes emerged during the review of literature related to translating research in SEA. These themes revolved around institutional characteristics, donor influence, the availability and accessibility of research, and linkages between research producers and users.

Theme 1: Institutional characteristics that influence research translation

This desk review found various institutional characteristics influence the use of research in decision-making. Overall, the decision-making environments of each of these 10 countries are complex, often not transparent, and the demand and use of evidence varies by sector and by country. Although the power of determining policies is often centralized in several of these countries, our review found a stakeholder-dense environment with various donors, think tanks, and research institutions playing a role in using evidence to inform decisions.

Complex Decision-making Environments While it is not within the scope of this review to detail the decision-making environments of each sector within each country, this section presents some examples found in the literature to showcase various complexities at play.

In Laos, most decision-making processes throughout the country are not transparent. For example, the literature shows that although final health care decisions are determined by a small group of people in the government, a complex web of actors exercise influence throughout the entire decision-making process because of the country’s reliance on external funding and a privatized health care system (Jönsson et al., 2015). However, in the education policy sector, the Lao People’s Revolutionary Party (LPRP) leads all decision-making and stakeholders from other levels of government, and sectors are not
given the opportunity to participate extensively in policy dialogues, which limits the use of research in decision-making (Adams et al., 2001). In Laos, we also see that there is sufficient research in the education sector, particularly within the Ministry of Education (MOE), but a lack of demand in data analysis inhibits an evidence-based approach to education policymaking and planning. When evidence is used to inform policymaking, it is often selectively chosen to confirm existing beliefs and arguments of the leading party. Debates surrounding a policy are often discouraged when a decision has already been made. Moreover, researchers are not often consulted in policy discussions (Adams et al., 2001).

In Bangladesh, policymaking in the health sector is often a top-down, centralized system where operational plans are revised infrequently, and the use of new research and critical dialogue by stakeholders is unpredictable (Walugembe et al., 2015). Some policymakers in Bangladesh attribute this to the lack of time they have, given all of their other responsibilities. Said one, “Policymakers are very busy people. They do not necessarily have the time to absorb everything that is being said. It has to be presented to them in a form that they can look at quickly. I wouldn’t say there’s no willingness to participate, it is just that it’s too few people trying to do too much in a short time” (WHO, 2009).

The research landscape in Indonesia is also characterized as unpredictable, given the high volume of stakeholders involved and inadequate bureaucratic practices that affect the way policymakers acquire knowledge. Researchers in Indonesia found that an unbiased review of research findings is often forgone among policymakers, who instead prefer to rely on their personal networks. They typically bring in academics when it bolsters their already-held beliefs on a topic (Datta, Nurbani et al., 2018). As one of the most populous countries in the world, Indonesia alone has 130 million residents who speak over 580 languages and dialects and are dispersed across multiple islands. Efforts to coordinate the diverse stakeholders and to package and disseminate research have notably more challenges in this context, compared to locations with a more homogeneous population.

Decision-making in Cambodia’s health sector is hierarchical and centralized and is characterized by non-transparency and informal processes. A history of an elite patronage system sometimes prevents staff with strong technical knowledge from influencing decision-making. Nevertheless, the demand for knowledge and research is high at the policy-level but low within the Ministry of Health (MoH) and at the implementation level (Jones, 2013).

Half a century of military dictatorships in Myanmar has left the country with weak and undemocratic policymaking systems. One of the biggest challenges they currently face is building research capabilities within the government to be able to analyze and utilize research in policymaking (Aung & Arnold, 2018).

Decision-making in Vietnam is also centralized and informal, and politics rather than skill or experience dictate the hiring of civil servants. Senior policymakers often rely on their personal networks to obtain evidence to address policy problems rather than conducting an unbiased review of the research landscape. Information and research production is mainly at the hands of the central government (Datta & Huong, 2013).

Complex Political Histories Policymaking is a complex process with a wide variety of factors determining the relative success or failure of an initiative. Government institutions and the ways in which these institutions develop policy play a major role in efforts to promote evidence uptake at a policy level.

In conflict or post-conflict areas with authoritarian tendencies, the availability of information is sometimes scarce, and available information is politicized or deemed untrustworthy. This is particularly the case in Myanmar, where interviews with NGOs revealed two interesting arguments: some NGO practitioners believe that basic information is nonexistent and existing data should be viewed with
suspicion (Schomerus & Seckinelgin, 2015). They argue that access to information is difficult and that
government information before 2008 is completely unreliable and sometimes even purposely
manipulated using flawed statistical methodologies. Whereas others argue that reliable data and
information exists, but some practitioners and international actors are not willing to believe in the
accuracy of existing information and research, given Myanmar’s political history. This conflict of whether
existing data is reliable hinders its use in developing policies and programs. Similarly, in Laos, many
medical practitioners tend to be suspicious of research while many policymakers believe research is
expensive and a waste of limited resources (Jönsson et al., 2007).

It is helpful to consider these unique contexts as they force us to question the assumption that basing
policies on evidence will improve development outcomes. Policies and programs based on flawed
research techniques or inaccurate or manipulated data will not improve development outcomes and may
instead lead to negative development outcomes. This may deteriorate trust and the demand for future
research in decision-making. Additionally, even if the techniques used and the evidence produced are
accurate, there will be little research uptake if mistrust in research is ubiquitous.

**Stakeholder-Dense Environments** Both researchers and research users in most SEA countries work in
stakeholder-dense environments. Foreign assistance to the region has grown considerably in the 21st
century, which has resulted in the engagement of several donors in development-related activities in
each of these countries. From 2004 to 2014, impact investors\(^2\) alone channeled $121 million to
Bangladesh and $12 million to Myanmar (Cambridge Associates, 2015). Increased donor activity, in turn,
has led to growth in research and in the sheer number of researchers. Lack of coordination among such
a varied group of stakeholders can impede researchers from conducting relevant research and
policymakers and practitioners from easily accessing relevant research. For example, malaria research is
being conducted in Cambodia by a wide range of in-country stakeholders, NGOs, and academic
institutions (Canavati et al., 2016). Despite the amount of research in this field, there has been little
coordination, which has led to duplication of efforts (Goyet et al., 2015).

**Lack of Research Agendas** The lack of a clearly defined research agenda can lead to a misalignment
between research produced and users’ needs. While studying the tuberculosis research landscape and
policymaking in Cambodia, Boudarene et al. (2017) found that policymakers often do not have a clearly
articulated research agenda for researchers to engage with. If policymakers do not determine or clearly
communicate a research agenda and policy priorities, researchers cannot effectively align their work
with priority areas.

Governments also hold the key to what research activities can take place, and a lack of coordination
among different departments or the ineffective dissemination of the national research agenda may hinder
pertinent research activities. For example, in 2016, the National Ethics and Human Rights Committee
(NEHCR) in Cambodia kept rejecting already-funded projects because it believed the proposals were
not considered to be relevant to Cambodia or because they believed the proposals focused
overwhelmingly on importing and testing something from abroad (Canavati et al., 2016).

**Research Capabilities** Much of the literature cited a lack of research capabilities or technical
knowledge to understand, interpret, and synthesize research studies as an impediment to the use of
evidence in decision-making. For example, in Nepal a wealth of data is generated through routine data

\(^2\) Impact investments, as defined by the Global Impact Investing Network (GIIN), are investments that intentionally
seek to generate social and/or environmental impact alongside a financial return.
collection systems, including the Health Management Information System (HMIS). However, given the lack of time and statistical skills, this evidence does not always reach decision-makers (Options, 2019).

In their research to understand barriers to applying health research in Bangladesh, Hawkes et al. (2016) discovered that this was an issue at various levels of government. One senior policymaking official stated, “I feel shy to go to research dissemination programs because I do not understand their findings, especially the statistical part.” Adequately training one person or a small group of people also does not necessarily mean that knowledge will permeate through the entire department. This is particularly a problem for entities that are not well connected and where staff turnover is high.

Challenges exist to attract qualified individuals to serve as civil servants in Cambodia, which has resulted in an inadequate number of personnel with technical knowledge in the MoH (Jones, 2013). Policymakers and civil servants in Indonesia are often appointed due to their experience and seniority rather than their technical or analytical knowledge and skills. Training courses for civil servants heavily focus on compliance with regulations (Datta, Nurbani et al., 2018). As stated before, the governments of Laos and Myanmar historically have not invested in advancing research capabilities among policymakers, so there is an inadequate number of qualified people to take on these roles.

Along with research knowledge, there are some institutional challenges to how data is collected, stored, and distributed that affect research translation. For example, limited domestic data collection capacity affects the kinds of data that are available for policymakers in Cambodia. Community-level health data, particularly in more rural areas of Cambodia, is still collected using paper-and-pencil methods, which inhibits the ability of the MoH to make timely policies for these populations (Liverani et al., 2018). However, in Laos, the national government has recently invested in the development of health information systems that collect data on diseases and programs. Nevertheless, issues in data quality persist as data validation and quality checks are not consistently practiced (WHO, 2017). Similarly in Indonesia the low quality of data and analysis as well as the inaccessibility of data to decision-makers impede research utilization (Carden, 2018).

**Theme 2: Dependency on donors affects research produced and used as well as policy and research agendas**

All of the countries reviewed as part of this study rely on international donors to some extent to fund research and programs. Therefore, there is an incentive among policymakers, practitioners, and researchers to align their agenda with that of donors. Despite the good intentions of donors, in some cases the nature of this dependent relationship has led to a misalignment between user needs and research produced.

This was most clearly evident in the health sector, where the literature often referenced how the body of existing research did not always meet the needs of the people. For example, while non-communicable diseases (NCDs) represented 35 percent of the disease burden in Cambodia, they were the subject of only 8 percent of disease-focused publications from 2000 to 2012 (Goyet et al., 2015). Similarly, despite the increase in NCDs in Indonesia, a systematic review found a lack of policy-relevant research on NCDs in the country (Schröders et al., 2017).

Despite the increasing threat of climate change in Bangladesh, Nepal, Indonesia, Thailand, and the Philippines, which will result in mass human migrations and conflict, most research on the relationship between climate change and conflict has been focused on East Africa and sub-Saharan Africa (Nordqvist & Krampe, 2018). Additionally, although 13 million Malaysians were participating in the
workforce in 2001, and many more have since entered the workforce, there is a lack of research on occupational hazards and safety (Sadhra et al., 2001, Ganesh & Krishnan, 2016).

The Council on Health Research for Development (COHRED) found that in the Philippines, “Funders’ requests for research proposals are usually focused on very specific research and it is often only by chance that an agency’s mandate falls in line with local or national priorities” (Ali et al., 2006).

Donors also influence practice and policy agendas and the research that users decide to use to inform their agendas. For instance, one study that interviewed high-level policymakers in Cambodia asserted that “the level and availability of external funding often dictated which issues were placed high on national health agendas as well as the types of interventions that were selected to address the health issues” (Khan et al., 2018). Two policymakers gave the example of mental health issues, which were perpetuated by the genocide that took place in the 1970s but were not a priority health area until 2016, due to a lack of donor funding. In Laos, we see that donors have historically influenced education research and priorities. Donors tend to favor the establishment of broad priorities such as basic education and teach in-service training as the main solution (Adams et al., 2001).

Researchers in Cambodia also found that donors more strongly favored funding pilots rather than a scale-up of tested solutions in the health sector. One policymaker noted how this sometimes leads to multiple similar pilots being carried out without any entity promoting learning between them, and this has left practitioners competing with each other for scale-up rather than learning from each other (Jones 2013). In this same study, most policymakers “felt that the history of donor involvement in the sector is one of waves of overlapping, and not necessarily mutually supportive or compatible, reforms, of multiple priorities and proliferation, and poor coordination on the part of IDPs. This fragmentation at the policy level reduces possibilities for coherently managing the sector, and for bringing reforms and responses in line with emerging evidence” (Jones, 2013).

In Bangladesh, policymakers and stakeholders from NGOs believe that “donors put a severe amount of pressure on them to conform to their standards and these often dictate what research is used and what policy is formed” (Koehlmoos et al., 2009).

There are also institutional challenges at play here that eventually affect the research-to-use pathway. In Indonesia, researchers found that some institutional challenges have limited the participation of nonprofit organizations in government-sponsored research, the type of research the government could commission, and overall funding for research. These limitations have left the government of Indonesia to rely on donors (Carden, 2018). Similarly in Cambodia and Vietnam, researchers found that government oversight of aid policies is weak (ActionAid, 2011). Weak oversight of aid eventually leads to ineffective coordination of donor and national agenda-setting, which broaden the misalignment between research used and produced.

### Theme 3: Availability and accessibility of knowledge

**Research Produced Domestically** There are benefits to domestically produced research that cannot be ignored when exploring the research translation process. Technical experts conducting research in their own country are the most knowledgeable about the context and various factors at play and are also best suited to apply this knowledge to enhance the translation process. Domestic researchers may also have the ability to better synthesize and convey their key findings in the policy-space, given their knowledge of the local language and customs. Of the countries examined in this desk review, we found that research outputs have historically been low in Laos and Myanmar. There is limited research being
produced in Laos, given the high number of educated Laotians who left the country during the revolution, the currently underdeveloped education system, and the lack of government support in building research capabilities or the lack of a culture of research use in decision-making. There is also a limited number of researchers who are available and capable of interpreting international studies (Adams et al., 2001). Oppressive military control of Myanmar until 2011 suppressed research and dialogue altogether.

**Language of Research Produced**  
Even when research is being produced by domestic researchers, most international journals publish studies that are in English (Weijen, 2012). This has the potential to alienate policymakers and practitioners who have a high demand for research but do not know English well enough to consume literature that is saturated with technical terms in another language. The fact that most well-known and international journals seek publications written in English leaves little room for the wide dissemination of relevant and useful research that is not written in English. For example, most research in biodiversity and conservation is published in local journals and in local languages, which substantially reduces the audience who receive this type of research (Panko, 2017).

Native English speakers understandably have a clear preference for studies published in English. Therefore, if the leadership of foreign donors are overwhelmingly native English speakers who are mainly consuming studies written in English to inform aid policy and agenda setting, they are not taking into consideration important local research published in other languages. In the previous section, we discussed the influence donors have in setting national research and policy priorities. Further research is needed to understand how this bias in the language of published research affects research utilization in SEA.

There are often strict regulations regarding what is published in international journals, and while it is important to have strong global research protocols, we must ask ourselves if certain countries or researchers with limited resources are being left out because of these strict rules (WHO, 2009). This sentiment was expressed among Bangladeshi researchers, but further investigation is required to see how this affects the other countries in our review.

**Technical Language, Writing Style, and Length**  
How evidence is packaged plays a critical role in what evidence is understood and utilized. Overly technical language and ill-defined research terms in dissemination products also impede utilization of evidence. In their research to understand barriers to applying health research in Bangladesh, Hawkes et al., (2016) concluded that researchers often have poor communication skills. Dense reports have the potential to go unnoticed, especially in resource-poor locations. For example, a major impediment to the uptake of evidence-based medicine (EBM) in Bangladesh is that it requires a lot of time to read literature, which physicians lack (Agarwal et al., 2008). A study on evidence-based practice (EBP) among physiotherapists in Malaysia found that although most agree that EBP is critical, 30 percent of respondents in a survey reported that they read two or fewer articles in a month, and 20 percent either never or rarely consulted literature during clinical decision-making. The writers attributed this finding to a lack of access or awareness to journal articles among physiotherapists in Malaysia (Yahui & Swaminathan, 2017).

**Location of Research**  
Location of dissemination products can directly affect whether their insights are accessed. Publishing reports on subscription/fee-based journals reduces access to users, as was the case among surveyed Malaysian physiotherapists who tried to access EBP literature (Yahui & Swaminathan, 2017). Respondents cited limited access to search engines and journal articles. Hawkes et al. (2016) found a lack of a centralized site for sharing research outputs and evidence was a barrier to research uptake in Bangladesh. However, having a centralized location may not be a panacea to promote research translation. A World Bank study found that from 2008 to 2012 the World Bank finalized an
average of 322 policy reports a year. During that time, about 32 percent were never downloaded (Doemeland & Trevino, 2014). The study also found that more expensive policy reports on middle-income countries were more likely to be downloaded and cited. More research is needed to understand how users in SEA are seeking out research outputs. It may be that although donors have centralized locations that house research, users in SEA need country-specific sites that bring together and categorize everything.

**Theme 4: Linkages between users and between researchers and users**

**Policymakers** Staff turnover and a lack of a culture of knowledge-sharing was seen in some countries. In Laos, there is not an established culture of knowledge-sharing between different departments of the government (Adams et al., 2001). In Bangladesh, civil servants are often ready to participate in trainings if given the opportunity; however, there is concern that those who receive training often do not effectively disseminate their new knowledge among their peers. Furthermore, staff turnover and interdepartmental transfers also affect knowledge sharing because trained staff are sometimes the ones who decide to leave or switch to a new ministry (WHO, 2009). Staff turnover as an impediment to research dissemination and diffusion is also an issue in Indonesia (Datta, Nurbani et al., 2018).

**Researcher-User Relationship** While the general literature indicated that researchers’ pursuit of their own narrow and academic interests prohibits research translation and utilization, such direct assertions were not readily found when reviewing literature in SEA. Nevertheless, this factor may still lead to a misalignment between researchers and users in SEA, but it may not be well documented in the literature yet. Instead the literature referenced a misalignment between the research produced and users’ needs.

**Think Tanks** The rise of think tanks in lower-income countries has only taken place in the last few decades but has garnered considerable attention from international donors given their potential to bolster research utilization in policymaking. Think tanks in East Asia were first mainly established by governments, followed by funding by private corporations and financial institutions. More recently, think tanks in the region are non-governmental and focus on social issues, rights, and justice. Many think tanks in SEA were initially established “as part of a broader political system in which they were mandated to play very specific roles. As a consequence of this difference, their current nature (functions, location, degree of independence and influence) are different” (Nachiappan et al., 2010).

**Good practices and case studies**

Using the CIHR framework to guide our understanding of research translation throughout the research cycle (recall Figure 1), a set of good practices stakeholders can implement to navigate challenges in this field is presented, followed by several case studies showcasing country-specific examples.

**Good Practices in Aligning Knowledge Produced with User Needs**

There are several ways that knowledge producers can align their work with the needs and priorities of users. Collaboration throughout the entire research cycle is critical to align funders, researchers, and users and increase the likelihood of research use (WHO, 2006; Panisset et al., 2012; Peters et al., 2013; Boudarene et al., 2017; Eriksson et al., 2017). Forums, workshops, conferences, roundtable discussions, and debates are ways of engaging with users throughout the research, analysis, dissemination, and utilization phases (WHO, 2006).
When drafting development agendas and research priorities, involving users helps identify gaps in knowledge, needs, and priorities among different stakeholders and the macro-contextual factors at play. Engaging users from the start also creates a sense of ownership, and if users feel that they have contributed to the research agenda and helped develop more relevant research questions, then they are more likely to be involved in the research, dissemination, and utilization phases. Conducting stakeholder analysis and consulting with key users are effective ways of engaging with users during the research planning stage (WHO, 2006). In some cases, policymakers have already determined priority areas, and researchers must align their work with these existing priorities. National policymakers must play their part by ensuring that these priorities and any evidence gaps they would like the research to address are clearly defined and communicated (Boudarene et al., 2017).

Engaging with users during the research phase ensures that researchers and users remain aligned. This relationship may also create a feedback loop that allows researchers to remain informed of changing contextual factors that may affect their methodology and findings. There are also advantages to reviewing initial data and findings with users prior to publication. From the users’ perspective, such interactions allow them to determine the credibility of the results, which is a critical factor in research translation and utilization (WHO, 2006).

Not only does involving users in developing recommendations result in the creation of more actionable and feasible recommendations, but it also acts as a form of endorsement. When users understand the research, they are much more likely to advocate for change or implement the new information in their line of work.

Allowing think tanks to act as the intermediary between research producers and users has seen many successes in SEA. Think tanks are often well positioned to garner the interest of government partners and donors, especially if they are funding the think tank, and have both research and communication capacities.

Four regional case studies illustrate these good practices, as elaborated below:

**Vietnam case study**: Building strong research policy links can help to create an environment for researchers and policymakers to work collaboratively, even in times of policy upheaval. During a period of “economic renovation” (Doi Moi) in Vietnam, for example, the Vietnam Economic Research Network (VERN) was critical to the government’s efforts to liberalize the country’s economy (Bennett & Jessani, 2011). A structure that facilitated communication and collaboration between researchers and policymakers allowed VERN to succeed in its efforts. The network’s advisory committee, made up of officials from the Vietnamese legislature and civil service, worked with researchers to design studies that responded to urgent economic policy questions. VERN focused efforts on expanding the capacities of policymakers to use evidence in their work, and on identifying key intermediaries with influential relationships in research and policy networks to facilitate research uptake. Key knowledge brokers were crucial to translating the evidence generated from VERN trade research to policy. Because the researchers in this case had a good understanding of how to effectively diffuse knowledge among key brokers, their findings focused on the ineffectiveness of existing tariff and export promotion policies helped to inform reforms.

**Indonesia case study**: Sometimes, misalignment between research and policy priorities are a function of administrative or structural barriers. In Indonesia, for example, public procurement regulations have been identified as a key obstacle to getting rapid and responsive research commissioned in time to address urgent policy questions. By soliciting input from a broad set of stakeholders—universities,
NGOs, and local government officials—regulators were able to recognize that existing policies were indeed a major obstacle. In particular, they identified regulations that limit the ability of smaller research organizations to compete with large commercial firms in bidding for government contracts and also that complicated and rigid requirements for financial reporting can limit the ability of researchers to provide policymakers with appropriately packaged and actionable evidence (Jackson et al., 2017).

**Bangladesh case study:** Researchers can put themselves in a better position to produce studies that have immediate policy applications by involving key stakeholders and intended end-users in their project design. This principle has particularly clear applications in agricultural research and policy. One reason for this is that many products of agricultural research, such as improved practices and technologies, are disseminated through government bodies—namely, agricultural extension agents. However, some have suggested that the supply-driven “researcher-extension agent-farmer” model limits input from end-users, i.e., farmers (Akinnagbe & Ajayi, 2010). In Bangladesh, the International Rice Research Institute (IRRI) uses a framework known as participatory action research to partner with farmers and collaboratively analyze their production decisions and resilience strategies at a household level. This research, in turn, is leveraged to develop gender-sensitive agricultural interventions and technologies. A 2015 study of IRRI’s use of participatory action research (PAR), locally known as *gono-gobeshona*, found that the practice may contribute to an increased involvement of women in production decisions and improved resilience metrics (Pasa et al., 2015).

**Malaysia case study:** The use of the Delphi approach in Malaysia shows one way to ensure alignment between different knowledge funders, producers, and users (Sadhra et al., 2001; Helmer-Hirschberg, 1967). In 1997, a British Council project used this approach to determine occupational health research priorities in Malaysia. The steps included:

- Identifying all organizations with an interest in occupational health in Malaysia.
- Grouping organizations and specific stakeholders by sector, which included government, industry, and researchers.
- Publicizing the study through meetings with representatives from different organizations to generate widespread interest and support.
- Inviting specific stakeholders to participate in two questionnaires to determine research priorities.
- The first questionnaire had an open-ended question asking respondents to identify three broad priority areas for occupational health research and specific topics under each area. The top five choices and their subtopics were aggregated by the questionnaire administrators.
- The second questionnaire asked respondents to rank in order of importance these five areas and their subtopics as well as 11 additional specific topics. The results were scored and analyzed for all respondents and then again separately by sector.
- Holding a workshop among all the stakeholders to discuss the findings and assess the feasibility of conducting research in the prioritized specific topic areas.

This approach allowed stakeholders from different sectors to have an equal say in setting the research agenda in occupational health and created a platform to have a thoughtful and data-driven discussion on research priority areas.
It is essential to understand the different stakeholders at play in each sector within each country in order to coordinate efforts, ensure they meet the demands of users, and promote the timely use of research outputs. A detailed look into each stakeholder’s decision-making environment, incentives, and constraints needs to take place to promote research translation. Researchers must also be careful when generalizing findings from one country or sector to another, given the various cultural, social, ethnic, and historical differences between each of the countries in this region.

Despite the consensus that identification of stakeholders and their barriers must take place early in the research cycle, and although there are various ways of doing so, there are not yet any standard approaches. Research translation leaders must use their best judgement to determine the best methods of identifying barriers, given the context and resources available to them (Grimshaw et al., 2012). Nevertheless, it is clear that researchers must invest time in the pre-planning stages to understand the different relevant stakeholders and their decision-making environments.

Many of the good practices discussed under the previous good practices section can be utilized to meet the demands of translating research in a stakeholder-dense environment. When applicable, funding agencies (domestic and/or foreign) should also invest more in research on implementation, which allows researchers to fully understand stakeholders, their decision-making environments, and how proposed interventions can be implemented.

A study of policy change processes in Nepal identified possible pathways, or combinations of factors, that facilitate successful policy implementation, again discussed in more detail below (Pasanen et al., 2019). It is important to note here, however, that understanding the political capital and mandates of all stakeholders related to an initiative is key to navigating research and policy environments dense with competing interests.

Three case studies provide examples of these good practices, as elaborated below:

**Cambodia case study:** The Cambodia Research Consortium is an example of how governments and funding agencies can coordinate research, policy, and practice in a stakeholder-dense environment in order to reduce barriers that impede research translation. In 2014, the Cambodian Research Consortium was established to “serve as a framework for partners, stakeholders, and researchers to share research projects, information and results, and to promote the goals of Cambodia’s National Program for Parasitology, Entomology, and Malaria Control (CNM)” (Canavati et al., 2016). Despite the considerable growth of malaria research in Cambodia, there was little coordination and collaboration among researchers and policymakers.

The consortium helped bring stakeholders (i.e., researchers, policymakers, donors, and government regulatory bodies) together to refine the research agenda and define priority research activities for malaria elimination in Cambodia. It also provided a transparent platform to review and process research proposals and map all malaria research studies. These activities, along with the integration of the NEHCR within the consortium, ensured that planned research aligned with the needs of the CNM. Skilled researchers were also identified to support capacity-building activities in research translation and scale-up. These activities built the capacity staff at a provincial level through disseminating research results along with improved skills in English technical writing and data presentation among researchers.
The consortium also helped facilitate timely use of research findings by organizing dissemination events and providing technical assistance to draft policy briefs and publications. It promoted information-sharing by establishing a research database that houses a list of all approved studies in order to reduce duplication and enhance coordination among researchers. The database compiles partners’ data from previous and ongoing malaria research. Prior to this, researchers preferred to publish papers and results without sharing results beforehand. However, this new process cultivated a collaborative environment that benefited all in the malaria research community. Through the consortium, CNM organized bimonthly meetings with WHO to share progress of current studies and preliminary findings and increase dialogue between CNM and their partners. Through all of these efforts, CNM also gained more country-ownership of malaria research (Canavati et al., 2016). The literature indicates that increasing ownership of research activities directly promotes research translation to policy and utilization among practitioners.

**Nepal case study:** The case of earthquake relief in Nepal provides an interesting example of how well-positioned intermediaries can alleviate the challenges presented by stakeholder dense environments. In the weeks after the 2015 Gorkha earthquakes, disaster managers were overwhelmed by information. This information was also often technical in nature and not packaged in a way that could encourage disaster managers to put it to use. There were designated information brokers to channel key data to relief teams; however, the fact that these individuals tended to be generalists rather than specialists hindered their ability to communicate critical information. Still, there is general agreement that too few designated knowledge brokers and science officers meant that crucial data and information did not reach stakeholders who could have put it to action (Datta, Sigdel et al., 2018).

**Bangladesh case study:** In Bangladesh, BRAC University leveraged a deep understanding of stakeholder networks to create a public space and open dialogue on sexuality and rights in a conservative and politically challenging context. BRAC successfully linked efforts to broaden the evidence based on challenges for sexual minorities with learning and capacity-building activities for service providers, advocacy groups, media, and policymakers. As a result, advocacy groups were more effectively able to reach policymakers willing to listen, develop more effective advocacy strategies, and develop learning and capacity-building materials for activists and change agents (Rashid et al. 2009).

**Good Practices in Navigating Complex Political Environments**

While it is important to keep in mind that governments are not singular entities with clearly defined mechanisms of influence, the self-interested perspectives of state actors involved in the generation and/or solicitation of evidence and in policy decisions should be considered when evaluating the role of evidence in policymaking. This can be accomplished by asking basic questions about the integration of evidence into policymaking (Schomerus & Seckinelgin, 2015):

- For what purpose is evidence being sought?
- Who are the target groups for a policy that is being developed?
- How is the target group included in the evidence production?
- Does knowing about the success of a policy in one context allow conclusions regarding how the same policy would work in a different context?

Asking these questions as part of the evidence-based policymaking process can help ensure that improved development outcomes remain the top priority.
Furthermore, despite its potential to help create more effective development policy and interventions, behavior change research remains under-prioritized and poorly understood (Sgaier 2019). Further investments must be made in this field.

A case study from Cambodia illustrates these good practices:

**Cambodia case study:** The Cambodian MoH has also provided models of institutional arrangements that can better facilitate the integration of evidence at key decision-making points. The management of the National Health Information Systems division of the MoH, for example, was integrated into the strategic planning body, which had been a separate entity within the Ministry. Technical working groups have also become significant fora for policy dialogue and information-sharing for a diverse range of stakeholders in the health research and policy fields (Liverani et al., 2018). One of the key features of the technical working groups in the Cambodian context is the participation of representatives from grassroots organizations and of local governmental institutions. Evidence may be more credible among those at the grassroots level, where policies are being implemented if it is generated in consultation with its target populations (Jacobs & Price, 2003). All of these institutional arrangements have the ultimate objective of creating a “well-functioning space for debate and coordination” (Liverani et al., 2018). From the Cambodian context, then, we see some key institutional and structural factors that can facilitate better evidence translation for policymaking: improved information systems, participatory policymaking mechanisms, and channels for the circulation of evidence across different levels of policymakers and increased availability of data.

**Good Practices in Improving Accessibility of Research**

After determining the audience and having a clear understanding of their decision-making environment, evidence must be packaged into what is relevant, clear, and achievable, given users’ barriers and resources. Researchers should begin by asking what should be transferred, which challenges them to identify the key messages for different target audiences and to customize these in language and products that are easily adapted by different audiences.

If the research is proposing new or modified programs and interventions, researchers need to keep in mind that the intensity of interventions matters in resource-poor locations. Health education and promotion interventions tend to be intensive and demanding of staff and participants, so program designers should be developing programs of the minimal intensity needed for change (Glasgow & Emmons, 2007).

Researchers need to be trained in effective writing and communication methods and how to translate their findings across a wide range of stakeholders. When researchers lack these capabilities, knowledge translators must be identified and used. Although the literature has various names for these actors, such as knowledge brokers and messengers, it is agreed that they are organizations or individual actors who are credible members of the funding, research, or user community who can adapt findings to a local context and communicate them effectively to different audiences (Norton et al., 2016).

Funders can do their part to build capacity of users to understand research terms and methodologies and how to interpret data. It is also advantageous to engage with users when data is collected. Interpreting results with users allows researchers to glean better insights, see how the results will resonate with the target audience, and develop a more comprehensive and realistic set of conclusions and recommendations (WHO, 2006).
Given findings from Hawkes et al., Doemeland & Trevino, and Canavati et al., databases that house topic-specific research activities and findings by country may increase accessibility, which will in turn improve utilization. The database created under the Cambodia Research Consortium, covered in depth under Theme 2, greatly increased policymakers’ access to information on malaria research activities and findings. Publishing in open-access journals most easily reduces any financial barriers users may experience in accessing research.

When understanding the gaps and needs of users (Theme 1) and the decision-making environments of the myriad of stakeholders (Theme 2), researchers should also determine the most effective and relevant forms of dissemination products for each type of user to ensure research uptake. Decision-makers at large funding agencies such as the WHO have users who can understand very technical research language and therefore can more easily understand evidence relayed in publications and final reports. However, policymakers working with few resources and limited time at a more local level may require dissemination workshops or one-on-one meetings to fully comprehend the methodology used, the analysis conducted, and the resulting insights. Research products must be customized for the audience, and in many cases, several products or activities may be required to ensure uptake. For example, to implement an evidence-based medical practice at a hospital in Thailand, knowledge translators designed a group of activities to promote a switch from heparinized saline flush to normal saline flush for the administration of drugs and fluids. The package of activities included not only disseminating research papers but also continuously sending reminders to prescribers and providing technical advice to nurses as needed (Thamlikitkul, 2006).

Two case studies from the region illustrate these good practices, as elaborated below:

**Bangladesh and Philippines case study:** Knowledge translators have been crucial members of translating maternal and child health research in Bangladesh and the Philippines (Norton et al., 2016). Members from USAID’s Maternal and Child Health Integrated Program (MCHIP) (led by JHPIEGO), Save the Children’s Saving Newborn Lives (SNL) Program, and other programs supported by UNICEF have come together in the past few years to create a consortium of knowledge translators. They aim to aggregate, package, and translate research to the WHO and country stakeholders through periodic technical meetings. Using Graham et al.’s Knowledge to Action (KTA) Framework to guide their activities, they form country groups comprised of health professionals such as policy advocates, health care practitioners, and health program managers. Prior to each meeting, country teams and meeting planners create a list of priority technical problem areas that need to be addressed during the meetings. Country teams use this list to analyze their local or regional situation and then create posters that aggregate their understanding and knowledge of the issue. Simultaneously, meeting planners create knowledge products such as key message briefs, which aggregate the evidence surrounding the priority technical area to promote action during and after the meetings. The meetings also provide a platform for participants to learn how to take action and discuss ways to collaborate. A survey administered among participants of one of these meetings in Bangladesh in 2012 showcases the positive effects of these activities. After attending, respondents “frequently mentioned taking an active role in sharing by packaging the knowledge into new products.” Seventy percent of the participants reported either using or planning to use knowledge gained from the meeting to improve service quality, 68 percent reported using it to advocate for policy change, and 66 percent reported using it to design projects or programs.
4. Conclusions and Recommendations

This review has shown that a large number of factors influence the use of research for policy, programming, and practice. As the literature suggests, these factors are relevant across academic disciplines and across countries. While there is a fair amount of literature on research translation broadly, this aspect has not been as widely documented for the SEA region in the form of systematic reviews or landscape assessments. Some studies that aggregate research translation factors, issues, and challenges exist for Cambodia and Bangladesh. By discipline, most of the literature gathered on research translation focuses on medicine, health care, public health, and education.

Institutional challenges perpetuated by complex political histories and intricate decision-making environments that are characterized by the existence of a multitude of stakeholders often inhibit the use of research in decision-making. The accumulation of power among specific groups has led to opaque policymaking processes. In some cases, the demand for research is low, given that decision-makers are selected based on patronage rather than qualification, prefer to obtain research from personal networks (rather than consulting unbiased researchers) in order to bolster already-held beliefs, or simply lack the skills to understand research components and interpret findings. Building research capabilities across all institutions may bolster the demand for research.

The lack of clearly defined research agendas not only prevents researchers from pursuing research that is needed in practice, but it also allows donors to fill in that gap with their own priorities. Donors play a significant role in influencing national priorities and, therefore, are well suited to ensure that countries develop adequate research agendas.

Further research is needed to understand the full-landscape of research produced by Southeast Asian researchers and consumed by users in SEA. With English as the preferred language for countless international journals, further research is also needed to understand the implications this has in research production and use in SEA.

The use of accessible language and packaging of research findings in formats that are more attractive to users is a key component of research translation. Dissemination workshops also allow users and researchers to collaborate, ask questions, and inspire the next set of research questions. As donors continue to fund research activities, they have the opportunity to require research products and activities that employ such techniques. Think tanks can also play an intermediary role between users and producers.

The following are several overall recommendations, disaggregated by stakeholder group that can improve research translation:
Table 2. Good Practices for Research Translation

<table>
<thead>
<tr>
<th>Practice</th>
<th>Donors</th>
<th>Researchers</th>
<th>Policymakers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Require research studies to develop a dissemination plan during the pre-research planning stage.</td>
<td>✔</td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>Fund national-level consortia to create platforms for collaboration and transparency of research activities.</td>
<td>✔</td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>Improve the framing of research questions and priorities on the characteristics and needs of the current context and practice.</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Use technology to develop mechanisms to share knowledge in real-time (e.g., databases of research findings or researchers engaged in research activities within each sector in each country).</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Invest in capacity-building activities that increase technical research knowledge among users.</td>
<td>✔</td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>Train researchers to communicate effectively and develop user-friendly dissemination products.</td>
<td>✔</td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>Develop clear policy priorities and communicate them to researchers.</td>
<td>✔</td>
<td></td>
<td>✔</td>
</tr>
</tbody>
</table>

Based on the review, the following topics are suggested for the joint Research Translation workshop:

- Setting the context by reviewing basic concepts and a general framework for understanding research translation.

- Exploring research translation within the SEA context, including specific challenges and opportunities.

- Discussing how to create an enabling environment to increase demand for research and how to identify windows of opportunity to promote research uptake.

- Creating a forum for policymakers, practitioners, and researchers in SEA to engage with others to share their own insights, experiences, and recommendations.

- Learning specific tools in stakeholder mapping and in identifying key audiences.

- Reviewing the tools and challenges for communicating and packaging research findings in a more effective way to reach key audiences.

- Learning how to communicate research to impact policymaking and program development in SEA.
References


Annex: Overview of Frameworks Related to Research Translation

This Annex presents several relevant frameworks reviewed during the course of this desk review that should inform research translation discussions.

One of the key frameworks focused on research uptake that we reviewed was the Overseas Development Institute’s Research and Policy in Development (RAPID) framework for assessing research-policy links with the goal of better use of research and evidence in policymaking to improve development outcomes. The framework generally focuses on four broad areas: 1) political and institutional context, 2) the packaging of evidence to demonstrate its credibility and relevance, 3) links between stakeholders, and 4) external influences. (See Figure 2.)

Figure 2. RAPID Framework: Context, Evidence, and Links

Part of the RAPID approach draws from outcome mapping methodologies to design and assess policy-influencing interventions. It puts to use an Alignment, Interest and Influence Matrix (AIIM) to identify main stakeholders and also suggest particular courses of action to engage them. The AIIM maps stakeholders in terms of agreement with the proposed approach and assumptions of the intervention (alignment) as well as the commitment to devote financial resources and time to take action on the issue in question (interest).

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A completed AIIM is shown in Figure 3 (with explanations of the positions of different stakeholders in different quadrants of the matrix) and Figure 4 (with suggested courses of action for engaging stakeholders with varying degrees of alignment and interest).

Figure 3. Completed AIIM with Explanations of Stakeholder Positions

![Completed AIIM with Explanations of Stakeholder Positions](source)

Source: extracted from the RAPID Toolkit (2010).

Figure 4. Completed AIIM with Suggested Approaches for Stakeholder Engagement

![Completed AIIM with Suggested Approaches for Stakeholder Engagement](source)

Source: extracted from the RAPID Toolkit (2010).

Jacobson, Butterill, & Goering (2003) developed a robust set of questions that researchers and other knowledge disseminators can use to increase their understanding of the target user groups. This framework has five domains, each of which contain a set of questions that help researchers organize what they know about the user group and the knowledge translation process (Table 2). The framework is most useful for a single researcher planning knowledge translation to a single user group.
<table>
<thead>
<tr>
<th>Domain</th>
<th>Questions</th>
</tr>
</thead>
</table>
| The user group | 1. In what formal or informal structures is the user group embedded?  
2. What is the political climate surrounding the user group?  
3. To whom is the user group accountable?  
4. Are changes expected in any of these?  
5. How big is the user group?  
6. How centralized is the user group?  
7. How institutionalized is the user group?  
8. What are the politics within the user group?  
9. What kinds of decisions does the user group make?  
10. What is the user group’s attitude toward decision-making?  
11. What criteria do the user group use to make decisions?  
12. What actions are available to the user group?  
13. What are the stages or phases of the user group’s decision-making work?  
14. What is the user group’s pace of work?  
15. Does the user group have a history of being involved in knowledge translation?  
16. What knowledge translation structures and processes already exist?  
17. What resources does the user group devote to knowledge translation?  
18. What are the user group’s expectations of the researcher? Of the knowledge translation process?  
19. How many user group members will be involved in the knowledge translation process? Who are they?  
20. What sources of information does the user group access and use?  
21. How does the user group process information?  
22. For what purposes does the user group use information?  
23. Has the user group demonstrated an ability to learn?  
24. What incentives exist for the user group to use research?  
25. Is the user group cynical about research and researchers?  
26. How sophisticated is the user group’s knowledge of research methods and terminology?  
27. Does the user group have a history of being involved in knowledge translation?  
28. What knowledge translation structures and processes already exist?  
29. What resources does the user group devote to knowledge translation?  
30. What are the user group’s expectations of the researcher? Of the knowledge translation process? |
| The issue      | 1. To which policy sectors does this issue relate?  
2. For which other groups is the issue salient?  
3. How does the user group currently deal with this issue?  
4. Are things changing with the issue? How quickly are those changes taking place?  
5. How much uncertainty surrounds the issue?  
6. How much conflict surrounds the issue?  
7. What risks are associated with the issue?  
8. Is it necessary to possess a particular expertise in order to understand this issue? |
<table>
<thead>
<tr>
<th>Domain</th>
<th>Questions</th>
</tr>
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</table>
| The research                         | 1. What research is available?  
2. Is the research unambiguous?  
3. Is the research consistent?  
4. What is the quality of the research?  
5. How methodologically sophisticated is the research?  
6. What is the source of the research?  
7. Is the research very focused and fragmented or quite broad and synthetic in focus?  
8. Does the research suggest an immediate application? Is it action-oriented?  
9. How relevant is the research to the user group?  
10. Does the research have implications that are incompatible with existing user group expectations or priorities?  
11. Would these implications disrupt the user group’s status quo?  
12. Do these implications suggest changes that the user group believes are politically feasible? |
| The knowledge translation relationship| 1. How much trust and rapport exist between the researcher and the user group?  
2. Do the researcher and the user group have a history of working together?  
3. Is the user group stable, or is it likely to undergo changes that will affect knowledge translation?  
4. Will the researcher be interacting with the designated representative of the user group? Will that representative remain the same throughout the life of the project?  
5. How frequently will the researcher have contact with the user group?  
6. Have the researcher and the user group agreed about the desired outcomes of knowledge translation?  
7. Have the researcher and the user group agreed about the responsibilities each will have during knowledge translation? |
| Dissemination strategies              | 1. Should the audience come to the researcher, or should the researcher go to the audience?  
2. What is the most appropriate mode of interaction: written or oral, formal or informal?  
3. If using a written mode, what format is most appropriate to the user group? What are the group’s preferences vis-à-vis length?  
4. If using an oral model, what format is most appropriate to the user group? What are the group’s preferences and constraints vis-à-vis time commitment?  
5. What level of detail will the user group want to see?  
6. Can the research be made vivid to the user group through case examples or other strategies?  
7. What is the optimum conceptual size for presentation of research to this user group?  
8. How much information can the user group assimilate per interaction?  
9. Should the researcher pre-test or invite feedback on the selected format from representative of the user group before finalizing presentation plans?  
10. Would implementation be facilitated if the researcher provided reminders and/or information updates to the user group?  
11. To what extent, and in what ways, should the researcher continue to be available to the user group after the conclusion of translating the knowledge? |
Lavis, Robertson, Woodside, McLeod, & Abelson (2003) also developed a set of thematic questions, as well as a list of potential challenges, that researchers should use to guide and organize knowledge-transfer strategies. Their original set of five questions has been summarized in Table 4.

Table 4. Knowledge Transfer Guide

<table>
<thead>
<tr>
<th>Question</th>
<th>Relevant Components</th>
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| What should be transferred to decision-makers (the message)?             | • Transfer actionable messages from a body of research knowledge, not simply a single research report or the results of a single study.  
• Message can profile a particular study when relevant.  
• Decision-makers rarely use a regression coefficient to help them solve a particular problem. Rather, “ideas” enlighten decision-makers about a particular issue and how to handle it.  
• Accountability mechanisms must be in place to ensure that when take-home messages can be generated, they are appropriate to the decision-making environments to which they are directed. |
| To whom should research knowledge be transferred (the target audience)?  | • Clearly identify the target audience(s) and develop multiple audience-specific messages.  
• Knowledge-transfer strategy must be finetuned to the types of decisions they face and the types of decision-making environments in which they live or work.  
• Learn about the different decision-making environments that exist.  
• Challenge: This is time-consuming.  
• Challenge: Literature doesn’t explain how to select the target audience(s) for a message. |
| By whom should research knowledge be transferred (the messenger)?        | • Credibility of messenger—whether messenger is an individual, group, or organization—is important to successful knowledge-transfer interventions. This is also specific to the target audience.  
• When researchers have the skills and experience to act as the principal messenger, their credibility will likely make them the ideal choice. Having researchers work with and through trusted intermediaries may constitute a way around the time constraints faced by individual researchers and some researchers’ limited interest and skills applicable to knowledge transfer while at the same time enhancing the messenger’s credibility.  
• Challenge: Building credibility and acting as a messenger can be very time-consuming and skill-intensive processes. |
| How should research knowledge be transferred (the knowledge-transfer process and supporting communications infrastructure)? | • Passive processes are ineffective, and interactive engagement may be most effective, regardless of audience.  
• Over long periods of time, two-way exchange processes that give equal importance to what researchers can learn from decision-makers and what decision-makers can learn from researchers can produce cultural shifts. |
| With what effect should research knowledge be transferred (evaluation)?  | • Performance measures for knowledge transfer should be appropriate to the target audience and to the objectives.  
• When measuring outcomes, moving beyond measuring whether research knowledge is used in decision-making to measuring how research knowledge is used becomes important. |
Graham & Logan (2006) developed the Ottawa Model of Research Use (OMRU), which is a model that promotes evidence-based approach to the transfer and use of new innovations derived from research findings. This framework looks at research use as a complex process in which decisions and actions are interconnected by a web of different individuals. The process is iterative and dynamic and includes processes of assessing, monitoring, and evaluating each element before, during, and after the decision to implement an innovation (Figure 5).

**Figure 5. OMRU Model of Promoting Uptake of Innovations**

![OMRU Model of Promoting Uptake of Innovations](image)

**Source:** extracted from Graham & Logan (2006).

Lastly, Glasgow & Emmons (2007) put together a list of factors that act as barriers to dissemination of evidence-based interventions (Figure 6). When packaging research findings and evidence into recommendations, interventions, and specific policies, researchers can use this framework to think about the challenges that may affect the research translation process.
Figure 6. Barriers to Dissemination of Evidence-Based Interventions

Source: extracted from Glasgow & Emmons (2007).