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Final Report

EXPLORING COLLABORATIVE RESEARCH MODELS IN INDONESIA

May 2019

CCPHI

Partnership for Sustainable Community

Final Report

EXPLORING COLLABORATIVE RESEARCH MODELS IN INDONESIA

CCPHI is a non-profit organisation that promotes and facilitates partnerships among companies, NGOs and local governments for healthy and sustainable communities. CCPHI was set up to respond to and mobilise resources in contributing to the achievement of the Sustainable Development Goals. Society, economy and environment are the pillars of sustainable development. Achieving these goals requires resources that can reach more communities, and consequently requires the involvement of all stakeholders. Our activities cover all aspects of multi-sector partnership programs, ranging from planning, initiation and implementation, to monitoring to evaluation.

This research was written by Ben K. C. Laksana and Rara Sekar Larasati on behalf of CCPHI. Jakarta, 15 April 2019.

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Final Report
Exploring Collaborative Research Models in Indonesia

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ABBREVIATIONS

Bappenas	:	*Badan Perencanaan Pembangunan Nasional* (National Development Planning Board)
CRC	:	Cooperative Research Centre
CSR	:	Corporate Social Responsibility
FGD	:	Focus Group Discussion
Kemenristekdikti	:	Ministry of Research, Technology and Higher Education
KSI	:	Knowledge Sector Initiative
LPDP	:	*Lembaga Pengelola Dana Pendidikan* (Management Agency for Education Fund)
Perpres	:	*Peraturan Presiden* (Presidential Decree)
PP	:	*Peraturan Pemerintahan* (Government Regulation)
PRI	:	Policy Research Institute
RIRN	:	*Rencana Induk Riset Negara* (National Research Master Plan)
RUU	:	*Rancangan Undang-undang* (Bill)
UU	:	*Undang-undang* (Law)

Executive Summary

One of the aims of the Knowledge Sector Initiative (KSI) is to encourage the development of Indonesia's knowledge sector ecosystem through multi-sector partnerships, which connect three key stakeholders–the government, policy research institutes (PRIs) and the private sector (companies and philanthropy)–to collaborate in promoting policy research. Against this backdrop, KSI, working together with CCPHI, commissioned this research to explore opportunities for stakeholders to collaborate in policy research. One focus of reference for this possible collaboration looks at Australia's Cooperative Research Centres (CRC) program as a model to be studied for a possible joint research scheme. This includes research topic identification and research funding. This research looks at possibilities for the application of the CRC models or schemes and/or models similar to the CRC in the context of, and practice in, Indonesia.

Over nine months[1], we carried out this research through a study of the opportunities and challenges facing three sectors: 1) the government, 2) the private sector, and 3) PRIs. This research found that trust among the sectors remains a fundamental issue preventing collaboration, including in policy research. However, we also found that although the problem of trust remains the norm, these sectors have had past and ongoing experiences in collaborating with one another. With a deeper understanding of existing research collaboration schemes conducted between the government, the private sector and PRIs, we argue that it is not impossible to develop collaboration models between the sectors, including in the area of policy research.

Key Findings

- Implementation of collaborative research models/ schemes between the government, the private sector and PRIs (such as the CRC model in Australia) is possible in Indonesia, as all sectors interviewed for this research are interested in participating in collaborative schemes for policy-related research.
- Collaboration schemes and policies exist in Indonesia but require leadership action from the government to initiate collaborations with the private sector and PRIs.
- Participation of the private sector in multi-source funding schemes and cooperative research models for public policy purposes is highly possible if the government addresses problems of trust, transparency, access to research collaboration schemes and lack of financial incentives.
- There is a lack of communication and information regarding research collaboration schemes from the government, and the problem of trust between sectors remains. Respective parties and organisations should further address this. For example, KSI and CCPHI need to facilitate stronger links between sectors, as it is necessary to build common understanding, especially in defining public policy in Indonesia.

1 This research commenced in August 2018 and ended in April 2019.

- There are two options for piloting a CRC-like scheme within Indonesia: The first is to tap into the endowment fund or *dana abadi* scheme, similar to but extensively modified from the LPDP endowment fund scheme, and establish a new multi-sector research collaborative program under it, heavily funded by dana abadi.
- The second option is to work with existing legal frameworks or schemes from the Ministry of Research, Technology and Higher Education (Kemenristekdikti) and *Badan Perencanaan Pembangunan Nasional* (National Development Planning Board, Bappenas), and create partnerships with research topics selected from focus group discussions (FGDs) with the private sector.
- Continue to conduct a series of Research and Business Forums that act as workshops, exploring intersecting themes/issues to establish CRC-like projects, and connecting PRIs with available funding opportunities from government programs and private sector contributions.
- The government should provide a centralised portal where anyone, including the private sector, can easily access information regarding collaboration schemes with the government.
- Brokering between parties is important, especially with an entity that has extensive background experience in building constructive relationships among the three sectors.

1 Introduction

The Knowledge Sector Initiative (KSI) is a partnership between the Governments of Indonesia and Australia, which seeks to improve the quality of public policies within Indonesia through the use of research evidence, or what is better known as evidence-based policy making. It does so by working within the knowledge sector, which it defines as "the overall institutional landscape of government, private sector, and civil society organisations that provide knowledge to support the development of public policy" (AusAID, 2012, p.1-2). It is within this space that government actors, policy research institutes (PRIs) such as universities, and the private sector are able to collaboratively conduct research to identify, communicate and perhaps formulate evidence to inform the decisions of policy makers. One of the ways it tries to actualise this is by working with these sectors "to increase their demand for evidence, and their systems for procuring and using it in government policy making" as well as "identify and mitigate systemic barriers to evidence production, intermediation, demand and use" where the lack of evidence hampers appropriate and quality policy making (ODI, 2019).

But why is the emphasis on research important for policy making in Indonesia? Indonesia's continued growth and prosperity depends on the ability of the government to develop effective public policies that translate "into better public services and increased economic opportunities for all" (KSI, 2017). It is this fundamental understanding: that in order to develop effective public policies, Indonesian policy makers need access to a range of evidence based on high-quality, timely and relevant policy research. Yet one of the main issues faced here is the relevance of the research topic itself and the problem of research funding by the government, which is still low. For example, Indonesia spent just 0.25 percent of its GDP on research and development. Additionally, with Indonesia's authoritarian and centralised past still at times influencing the logic of policy making, the legacy of Indonesia's top-down policy making persists. Thus, at times, disconnected public policies are produced that overlook the needs of local governments, communities and the private sector (KSI, 2017).

With the need to increase research funding and provide more relevant research, this research project aims to provide an assessment of the possibilities of building collaboration initiatives for policy research and/or areas linked to policies between industry, government, researchers and communities in Indonesia. This project aims to see what can be learned about the barriers preventing these collaborations and to help identify possible future directions for these collaborations to be implemented in Indonesia.

Initial discussions with Indonesia's industry, government, researchers and communities have shown that there are still limited collaborations between them, especially within the area of policy research and/or areas linked to policy, thus hampering possibilities of change in policy issues faced by industry.

To explore the possibilities of changing the research ecosystem in Indonesia, for this research we refer to the Cooperative Research Centres (CRC) program

in Australia as a potential model. CRC is an industry-led research program co-funded by the Australian Government. It believes in industry research collaboration as an important factor in fostering business and economic growth, resulting in both economic and social impacts for the country. The CRC program in Australia commenced in 1991 with the main objective of delivering significant economic, environmental and social benefits to Australia by providing structural support for productive industry-led collaborations to take place between three major parties: industry, research organisations and the community, along with the government.

By looking at the positive economic, environmental and social impacts of the CRC program in Australia, this research project aims to explore the possibilities of establishing collaboration initiatives similar to CRC for policy research and/or areas linked to policies within the context of Indonesia. Although this research will use the CRC program as a best practice model for possible collaboration models between the government, industry, researchers and communities, this research also seeks to understand other smaller, yet similar models or initiatives carried out by other institutions as possible collaboration models, which suit the local context in Indonesia.

a. Research Objectives

Drawing from the CRC program already established, this research project was designed to:

- Provide an assessment, if any, of similar initiatives to CRC, focusing on policy research and/or areas linked to policies in Indonesia to see what could be learned from them
- Provide a prospective assessment to help identify possible future directions for CRC-like initiatives in Indonesia for policy research and/or areas linked to policies.

b. Research Questions

The scope of the assessment was to help set the direction for possible CRC initiatives for policy research and/or areas linked to policies within the Indonesian context. This research focused on the following specific questions:

1. What similar initiatives to CRC exist in Indonesia? What have public and/or private institutions done to establish initiatives similar to CRC? What can we learn from these past and/or ongoing CRC-like initiatives?
2. What are the existing or needed structures (financial, legal, political, cultural, etc.) for CRC or similar initiatives that focus on policy research and/or areas linked to policies to be implemented in Indonesia?
3. What are the challenges to initiating initiatives similar to CRC, focusing on policy research and/or areas linked to policies in Indonesia?
4. What form of multi-sector collaborations focusing on policy research and/or areas linked to policies suits the Indonesian context? How might it differ from the original CRC derived from the Australian context? How and in what way can current forms (if any) of CRC-like initiatives be improved and continue? What might be its future direction, especially in the area of policy research and/or areas linked to policies?

c. Research Methodology

This research used a qualitative approach, a methodology that is used to collect unquantifiable facts, in order to gain necessary insights and data to answer the research questions. This qualitative approach was deemed suitable, as the aim of the research is to understand reasoning and motivation, as well as the possibilities of establishing collaboration initiatives similar to the CRC program within Indonesia. Three data collection methods were used:

1. Interviews

Individual, semi-structured interviews were conducted to collect data from individuals at public, private and policy research institutions in relation to (as suggested by Johnson & Christensen (2012)), their thoughts, beliefs, knowledge, reasoning and motivations for implementing CRC within Indonesia. Interviews were carried out with people from institutions that had done

Table 1: Participants of In-Depth Interviews

No.	Institution	Category
1	Centre for Innovation Policy and Governance (CIPG)	PRI
2	*Dirjen Penguatan Riset dan Pengembangan* – Kemenristekdikti (Directorate General of Research and Development – Kemenristekdikti)	Government
3	*Kemenkeu* (The Ministry of Finance)	Government
4	Food and Beverage Company	Private sector
5	*Balitbang Makassar* (Makassar Research and Development Agency)	Government
6	Eastern Indonesian Knowledge Exchange Foundation (BaKTI)	PRI
7	Eastern Indonesian Region Research Network (JiKTI)	PRI
8	Extractive Industry Company	Private sector
9	Ministry of Education and Culture, specifically from the Directorate General of Culture	Government
10	*Bappenas* (Indonesian Ministry of National Development)	Government
11	Former official from the Ministry of Finance	Government

initiatives similar to CRC to gain insight into what was done, as well as the challenges to establishing and managing these initiatives. In-depth interviews were done with the stakeholders listed in Table 1.

2. FGDs

A moderator led two FGDs to examine the group's thoughts, beliefs and/or feelings about the topics discussed. As suggested by Berg & Lune (2012), this method was an effective technique for drawing out the participants' perceptions, which in this case were the perceptions of stakeholders regarding the CRC initiative for policy research and/or areas linked to policies. The group dynamic was used to gather data regarding topics of interest to the group that the researcher could see might provide perspectives and viewpoints.

Two FGDs were held with private sector actors discussing the possibilities and challenges of engaging in a multi-sector policy research collaboration, as well as exploring their interest in taking part in setting up a collaborative research-oriented pilot project. The focus on the private sector was the result of previous interviews with government officials, where the study found that many from the government were sceptical about the willingness of the private sector to take part in a research-oriented collaboration.

To explore the varied understanding of policy research and the possibilities of conducting multi-sector collaborations, this study looked at the private sector from various backgrounds. The private sector participants selected were those who responded to this study's request for interviews. The first focus group

FGD participants in this research will be presented anonymously, as stated in the participant consent form.

consisted of five private sector representatives who focus on services and/or are start-ups. The second focus group consisted of three private sector representatives who focus on tangible products (manufacturing, food & beverage, extractive industries, etc.)[2]. Each FGD was audio-recorded and lasted approximately two hours. In guiding our discussions to understand the role and experience of the private sector in research collaboration schemes, we referred to the key questions below:

- Which public policy related issues are of interest to the private sector? What does the private sector seek in partnerships with the government?
- Why is the private sector still unwilling or hesitant to actively engage in research collaboration schemes with the government and PRIs? What would be the perfect collaboration scheme to which the private sector feels comfortable contributing?
- What are the challenges within the private sector to conducting and investing in multi-year and multi-sourced research schemes?
- Are there any differences within the private sector in perceiving the urgency of policy-oriented research? How do established industries such as those of food and beverage or extractive industries respond to the idea of research collaboration schemes with the government in comparison to, for example, tech industries or start-up companies?
- Would a stricter legal regulation enforce more active engagement of the private sector in collaborating in research for public policy? How would this collaborative research funding scheme benefit all sectors involved?

3. Desk Research/Secondary Data

Alongside interviews and FGDs, data was also collected through desk research. As explained by Johnson & Christensen (2010), this included official documents, physical data and archived research data from institutions interested in establishing CRC, and from institutions that have experience in initiatives or programs similar to CRC for policy research and/or areas linked to policies. The collection of secondary data was mostly used to complete the literature review of this research project, specifically of existing triple helix models in Indonesia, to achieve a more detailed picture of the possibilities of establishing similar initiatives to the CRC program in Indonesia. However, it is important to note that as most of the secondary data we retrieved was accessed through official government websites or documents from correspondence with government officials, the study found that many of these data were out dated. To address this, whenever possible the study identified the year the data was last updated.

2 Guiding Concepts: CRC and CRC-like Initiatives in Indonesia

a. A Brief Overview of the CRC in Australia

The Cooperative Research Centres (CRC) program is an industry-led program that is co-funded by the Australian Government. It was founded on domestic and international evidence that shows that industry research collaboration is an important factor in fostering business and economic growth, resulting in both economic and social impacts for the country. Beginning in 1991, CRC's main objective is delivering significant economic, environmental and social benefits to Australia by providing structural support for productive industry-led collaborations to take place between three major parties: industry, research organisations and the community, along with the government. Overall, the CRC program aims to improve the competitiveness, productivity and sustainability of Australian industries, particularly industries that align with areas where Australia has a competitive strength, as well as Australian Government priorities.

The program has two elements: CRC Grants, which provide support for medium- to long-term, industry-led collaborations; and CRC Projects, for short-term, industry-led collaborative research. Since its inception, 297 collaborations under these schemes have taken place and accumulated AUD 4.6 billion in research funding. CRC funding between 1991 and 2017 led to a significant amount of around AUD 14.5 billion in direct economic impacts, from CRC produced technologies, products and processes (Department of Industry, Innovation and Science, 2018). From the impact research published in 2012, the outcomes of the CRC have resulted in environmental and social benefits. For example, environmentally the program has impacted the sustainability of land and ecosystems, and management of pollutants, natural resources, plants, animals and biodiversity, while socially it has affected the health and well being of individuals and the Australian community in general.

The CRC program's unique structure contributes to its ability to produce high-quality research and link researchers with industry. Particularly, the CRC provides opportunities for long-term collaborations to address research projects that require time and resource-heavy, in-depth research. These are normally seen as impractical. The rigorous application process for CRC funding has resulted in only high-quality, sustainable projects being supported–those that are able to deliver significant, positive economic, environmental and social impacts to Australia.

Although not solely focused on policy research, the CRC program has proven to be a successful collaboration initiative. Thus, further research will be done on how a program similar to the CRC, yet focusing on policy research and/or areas linked to policies, could be implemented within the context of Indonesia.

By looking at the positive economic, environmental and social impacts of the CRC program in Australia, this research project aims to explore the possibilities of establishing ***collaboration initiatives similar to the CRC for policy research and/or areas linked to policies*** within the context of Indonesia. In Indonesia, as reaffirmed through this research, structured and sustainable collaborations between industry, research organisations and government are still limited, of

lower priority, and remain scattered. This lack of synchronised interest and effective communication between stakeholders may have detrimental impacts on the stakeholders themselves. Although there are forums providing platforms for government, businesses and researchers to collaborate in Indonesia, they are rudimentary and limited, and do not provide structured engagement or productive collaboration between sectors. By acknowledging these limited collaborations, this research project will study existing initiatives that are similar to the CRC in Indonesia to explore what has been done, the challenges faced by stakeholders, and learning from the best practices of the CRC program in Australia. It will also look at what form of CRC best suits the Indonesian context for policy research and/or areas linked to policies.

b. CRC in Indonesia: The Triple Helix Model

What similar initiatives to CRC exist in Indonesia? What have public and/or private institutions done to establish initiatives similar to CRC? What can we learn from these past and/or ongoing CRC-like initiatives?

A further study of the CRC model revealed that the CRC itself seems to be based on the triple helix model first introduced by Henry Etzkowitz and Loet Leydesdorff (1995). They refer to it as collaborations between researchers, industry and government in order to foster economic and social development. In essence, this concept further develops the two-element collaboration between industry and the government to a triadic interaction or collaboration between industry, government and researchers within universities or PRIs. It is hoped that through the triple helix concept universities and other PRIs may help ease the real-world application of scientific knowledge and facilitate knowledge transfers, thus increasing the potential to innovate and develop products or policies that are applicable and needed by society.

According to the Triple Helix Research Group of Stanford University, California (AIPI, 2017), there are three configurations of interaction patterns in the triple helix model. The first configuration consists of the government as the leader of the collaboration in developing knowledge and innovation. This configuration, in essence, will have researchers and/or industry not leading the identification of problems or initiating and developing innovative transformation, thus depending on the government for the development of the collaboration.

The second configuration, or the *laissez-faire* configuration, sees the academic sector play the main role in identifying problems and developing innovative solutions to address those problems. Within this configuration, the government and industry play limited roles in identifying problems and/or developing solutions. This may result in producing knowledge and solutions not directly applicable for the industry.

The third configuration is a balanced configuration between government, industry and PRIs, where they all actively collaborate and engage in identifying problems, as well as developing innovative solutions. This configuration requires universities and PRIs to be proactive in conducting research, by forming and maintaining relations with industry and producing new forms of knowledge that are needed and applicable. The role of industry here is to provide inputs to universities to identify problems. The government acts not only as a regulator, but also as a public entrepreneur and venture capitalist, thus providing initial funding for the research.

Using the triple helix concept, the CRC can be classified as a version of the triple helix model, however it has been adjusted towards having industry lead the research collaboration and identify the problems, and thus the desired product outcome. Universities carry out research from these industry-identified problems, and here the Australian government acts as the main funder and regulator for research priorities. Although there are no CRC government/research bodies in Indonesia, there are a number of regulations, programs and initiatives that have some similarities with the CRC. This can be seen and used as an entry point to further develop and advance collaborative models.

c. Key Regulations for Research and Funding Collaborations in Indonesia

What are the existing structures (financial, legal, political, cultural, etc.) for CRC or similar initiatives that focus on policy research and/or areas linked to policies to be implemented in Indonesia?

There are a number of regulations in Indonesia that directly support multi-sector research collaboration, including its funding. However, the definition of research here is often still limited to practical and tangible industry-focused outcomes, such as products or production processes. There is no mention of policy-oriented research within regulations. Additionally, there are very limited incentives for industries to take part in research themselves, even if this provides useful and tangible products for them to use. Although none of the following regulations concern policy-oriented research, they should be seen as examples or perhaps even entry points through which the government, under the guidance of KSI, can develop specific regulations for future collaborative research on policies, including possible multi-source funding:

- UU no. 18 tahun 2002/Law no. 18 year 2002: *Sistem Nasional Penelitian, Pengembangan dan Penerapan Ilmu Pengetahuan dan Teknologi* or National System for Research, Development and Application of Science and Technology. Article 13 mentions the need for collaborations between the government, universities and industry. Articles 27 and 28 mention the need (but do not go in to specifics) for industries to conduct research (this is further supported by Perpres no. 38 tahun 2018 and Permenristekdikti no. 20 tahun 2018) and to allocate budget for research.
- PP no. 35 tahun 2007/Government Regulation no. 35 Year 2007: Allocation of Company Income for Engineering, Innovation and Diffusion of Technology Capacity Building. This regulation further emphasises and specifies the need for industries to allocate their income for research. However article 3 states that the amount of budget allocated "depends on the capacity of the company/industry", with the government unable to force the industry sector to allocate sufficient funding for research or even take part in research. The government has resolved to provide incentives for industries to take part in research, which can be read in article 6, with the specifics in later regulations. This also provides incentives for industries that collaborate with universities in using the results of their research.
- Kepmenristekdikti NOMOR 341 /M/Kp/V/2015. This regulation provides incentives for industries using technology from research conducted by universities.
- As of March 2019, the Ministry of Finance is constructing a 300 percent super deductible tax regulation for industries willing to take part in research and development.

d. Past and Current Research Funding Collaboration Schemes

Most, if not all, research collaboration schemes in Indonesia focus on tangible products that can be used by industry. So far, only one also focuses on policy research, namely *Riset Inovatif Produktif* under *Lembaga Pengelola Dana Pendidikan*/Management Agency for Education Fund (LPDP). As explained briefly above, research collaboration schemes are still highly dependent on government, if not international donor funds. If there are research funding collaborations, or multi-source funding, the initiative of the funding is still strictly based on personal relations. Currently, there is no single government body that manages all multi-source funding. Much like the regulations above, the schemes below are multi-sector research collaboration schemes that, although mostly focusing on tangible products, may provide workable examples of multi-sector research collaboration schemes (including its funding) for policy research.

- **PUSNAS (*Penelitian Unggulan Strategi Nasional*)**

  According to its guidelines, the National Strategic Research Program (PUSNAS) was launched by the Directorate General of Higher Education in 2015 to facilitate industrialisation to support Indonesia's development agendas. The research schemes funded through PUSNAS grants focus on strengthening institution-based research activities. They are only offered to research units (not individual researchers) that work hand in hand with higher education institutions. One of the objectives of PUSNAS is the realisation of a 'research centre of excellence' that is able to foster innovation in line with state of the art technologies that are market driven, with the hope of producing applicable research results for industrial development.

PUSNAS research priorities are decided through a top-down manner and derived from the National Research Agenda 2010-2014. This includes fields of: food security, health and medicine, new and renewable energy, security and defence, information technology and communication, maritime and marine, art and culture, technology and transportation management, and advanced material. Within this research scheme, the involvement of industrial partners (private sector) and research institutions/governmental research agencies is highly encouraged to foster a strong network for research with and among higher education institutions, industrial partners and users. However, technical guidance on how this cooperative scheme can be implemented is not available in the guidelines. Based on our limited research, no recent updates can be found on PUSNAS, and it seems that PUSNAS has not operated since 2016.

- **RAPID (*Riset Andalan Perguruan Tinggi dan Industri*)**

  RAPID (Leading Research in Higher Education and Industry Program) 2004-2016, is managed by Kemenristekdikti. It provides an opportunity to develop a collaborative relationship between institutions that produce concepts, and technology, manufacturing or industrial institutions. The purpose of RAPID is to: (1) develop a research culture that produces prospective results in the market and is well developed, into industrial products that are able to provide benefits to the community, (2) realise sustainable cooperation between universities as research institutions and industries as manufacturing institutions through balancing the 'market pull' and the 'technological push', and (3) encourage the development of the manufacturing sector based on results of domestic research and development to foster Indonesia's economic autonomy.

  The scope of RAPID's research priorities is similar to PUSNAS. It is determined top-down and encompasses these specific strategic fields: (1) Agriculture and Food, (2) Health, (3) Information Technology, (4) Energy, (5) Manufacturing Technology and (6) Marine and Fisheries. In conducting RAPID, industrial partners are the entry points in preparing grant proposals by groups of academics. In this scheme, the academic groups must either support or supply the types of technologies needed by industrial partners. Furthermore, industrial partners must be able to demonstrate technological requirements that require research collaboration and must be able to demonstrate the commercial prospects of the use of this technology.

  What is interesting to highlight from RAPID is that industrial partners are required to contribute funding in the form of cash. In addition to government funds of Rp 300-500 million per year (RAPID is a multi-year research program that lasts two to three years), industrial partners must contribute cash funds of at least 10 percent of the nominal value of the contract (excluding in-kind contributions). Higher education institutions are required to contribute a minimum of 15 percent of cash funds from the nominal value of government-financed contracts (excluding in-kind contributions). Similar to PUSNAS, recent updates on the progress of RAPID were not available in 2018 and it seems that the program has been inactive since 2016.

- ***Skema Penelitian Pengembangan* (Development Research Scheme)**

  As explained in Kemenristekdikti's *Buku Panduan Penelitian dan Pengabdian Pada Masyarakat XII* (Guide Book for Research and Community Service XII), the Research and Development Scheme aims to achieve further development for a model/product/prototype that has been tested in the proposed environment. The Research and Development Scheme is a research model that is specifically directed at developing commercial products. In relation to the triple helix approach, in this study the involvement of partners (private sector) as investors is also needed. Within the Technology Readiness Level (*Tingkat Kesiapterapan Teknologi*/TKT) measurement process, the results of this development research scheme must be at the TKT levels of 7 to 9 (highly ready and applicable).

  Kemenristekdikti has set out 10 focus areas of

research: (1) Food-Agriculture, (2) New and Renewable Energy, (3) Health-Medicine, (4) Transportation, (5) Information and Communication Technology, (6) Defence and Security, (7) Advanced Materials, (8) Maritime Affairs, (9) Disaster, and (10) Social and Humanities-Arts and Culture-Education. The content and results of the Development Research Scheme must refer to the 10 focus areas of research intended, which are then derived into themes, topics and research titles.

- ***Skema Penelitian Pengembangan Unggulan Perguruan Tinggi* (PPUPT)**

  Kemenristekdikti's Higher Education Leading Development Research Scheme (PPUPT) is designed specifically to facilitate the development of the results of higher education research (basic/applied) to be applicable for the user community. Research proposals for PPUPT must be able to describe their relevance to the university's research strategic plan. Research must be focused (not general) and its approach can either be top-down or bottom-up.

  PPUPT is quite similar to the Research and Development Scheme, as it also intends to achieve further development of a model/product/prototype that has been tested in the actual environment for which it is designed. This scheme is directed at developing commercial products. However, in PPUPT, partners can come from a legal entity unit owned by the proposing higher education institutions. Similar to the Development Research Scheme, the involvement of partners (private sector) as investors is crucial for the success of the research results. Within the Technology Readiness Level (*Tingkat Kesiapterapan Teknologi*/TKT) measurement process, the results of this development research scheme must also be at the TKT levels of 7 to 9 (highly ready and applicable).

  Both the Research and Development Scheme and PPUPT are ongoing and serve as an interesting research model that does not only encourage triadic partnership between government, industrial partners and universities, but also features a flexibility that allows for collaborative research from local and international stakeholders.

- ***Badan Pengelola Dana Perkebunan Kelapa Sawit* (BPDPKS)**

  The Palm Oil Plantation Fund Management Agency (BPDPKS) is a non-echelon organisational unit that manages palm oil plantation funds. It is directly responsible to the Minister of Finance through its Secretary General (BPDP, n.d.). BPDPKS is tasked with carrying out the management of the palm oil plantation funds, both for the development funds and development reserve funds. This is so the national palm industry may be managed sustainably, in accordance with policies stipulated by the Ministry of Finance, and based on applicable laws and regulations, specifically regulations on Indonesia Sustainable Palm Oil (ISPO).

  The sources of funding are: (1) palm oil plantation business actors, (2) finance institutions, such as banks, (3) public funds, and (4) other legitimate funds.

  Funding from BPDPKS will be used for research on sustainable palm oil programs to enhance the knowledge and potential of developing sustainable palm oil businesses. BPDPKS awards researchers and/or policy research institutions with grants for research and development of the palm oil industry. It is hoped that the research funded by BPDPKS may prove to be useful for the palm oil industry, the government and palm oil farmers. Although focusing solely on the palm oil industry, BPDPKS is a research and funding collaboration scheme that is somewhat similar to the CRC. Much like the CRC, it is industry led–the research is based on industry-identified problems yet works with PRIs to find solutions to their problems. However, what differentiates it is the source of funding; it comes directly from industry rather than the government. Additionally, there is no mention of multi-year funding for research.

- **Riset Inovatif Produktif (RISPRO) Kebijakan - (LPDP)**

  RISPRO Kebijakan is a research funding scheme that is funded by LPDP (LPDP, n.d.). Much like other funding schemes, it encourages multi-sector collaborations for its research. What is unique about RISPRO is that, unlike other research funding

schemes, whether they be under Kemenristekdikti or special agencies, such as BPDPKS that focuses its research funding on tangible, product-oriented outcomes, RISPRO Kebijakan explicitly states available research funding for policy. RISPRO Kebijakan itself is a multi-year research scheme (maximum two years), and a multi-source research funding scheme. In applying for the fund, partners must aid 30 percent of the needed funds, as well as an instrument to implement its policies.

Although the funding itself mainly derives from Indonesia's national budget, it is managed as an endowment fund, meaning that its budget is invested and the profit from the investment is used for the research fund. RISPRO, through LPDP, may prove to be a viable alternative if multi-sourced funding, especially from industry, proves to be difficult to procure.

- **The Newton Fund**

  The Newton Fund's aim is "to develop science and innovation partnerships that promote the economic development and welfare of collaborating countries" (Fund, n.d.). The fund is being delivered by seven UK delivery partners in collaboration with funders in 17 active partnering countries. They develop and run calls, and allocate and manage the money they receive as part of the Newton Fund. The Newton Fund consists of: a platform on which funders announce their calls for research and where those seeking funds can easily access information (something that is still lacking in Indonesia); and the annual Newton Prize.[3] This is a prize for Newton official development assistance (ODA) recipient countries. The Newton Fund is essentially a research collaboration funding scheme in which PRIs and universities from the UK, and the UK government, provide funding assistance to researchers and PRIs in Indonesia. There is no mention of the industry sector being involved and the overall fund will end in 2021.

- **Research and Innovation in Science and Technology Project (RISET-Pro)**

  RISET-Pro aims to develop a conducive environment for research and development in science and technology to strengthen incentives and increase the capacity of human resources within science and technology institutions (Ristekdikti, n.d.). This project involves related science and technology institutions, such as universities, research and development institutions from the central and regional governments, private research and development institutions, intermediary institutions, and the industry sector to facilitate the process of technology transfer and innovation. RISET-Pro itself is a collaborative effort between Kemenristekdikti and the World Bank, which provided an eight-year loan for this project. Research done by the Centre for Innovation Policy and Governance (CIPG) on multi-source funding for research carried out under RISET-Pro found that 95 percent of the 79 researchers interviewed personally initiated their multi-source funding, rather than having institutional assistance (CIPG, 2017). This in itself shows how research institutions still do not initiate research collaborations, especially when it comes to collaborative funding.

3 More information on the Newton Prize can be accessed here: https://www.newtonfund.ac.uk/newtonprize/

3 Research Findings

What are the opportunities and challenges to initiating initiatives similar to CRC, focusing on policy research and/or areas linked to policies in Indonesia?

a. Overview

With existing research collaboration models in mind, the question that arises now is: Is it possible to establish CRC in Indonesia? How would government bodies, the private sector and PRIs respond to the idea of establishing CRC in Indonesia today? In short, due to the lack of trust, transparency and agreement of goals between the sectors, including among government sectors, overall research findings show that it would be very difficult to establish a CRC initiative immediately. However, the possibility of initiating a CRC-like model that focuses on policy research in Indonesia in the near future remains high, as long as small steps are taken to ensure trust and transparency in setting a collaborative research agenda between parties, and agreement to collaborate on addressing the same goals together. This section will first present the findings of the research and break it into three sections: government, the private sector, and PRIs. It will then elaborate both the opportunities and challenges in regard to their participation in a CRC-like initiative.

This research conducted a total of 10 in-depth interviews and two FGDs. There were five interviews with government officials, three with PRIs and two with representatives of the private sector (see Table 1). For the FGDs, there were industry representatives from eight companies in the service sector and tangible products sector. CCPHI facilitated communication with interviewees through formal invitations via email, which were then followed up by either CCPHI and/or researchers through personal communication. Semi-structured interviews were carried out with all interviewees, mainly referring to the prepared interview questions as a guide, while also providing room for open conversation to further explore details of each question. The duration of each interview varied, but ranged from approximately 30 minutes to one hour. The interviews were recorded with the interviewees' consent, and partially transcribed and decoded for the purpose of presenting the initial findings of this research.

b. Government

Opportunities

"If we refer to Perpres 16/2018[4], it is highly possible for the private sector to participate, even to lead research collaborations, as long as it doesn't deviate from the national research agenda."

– Representative of Kemenristekdikti

- Our interviews with government officials mostly

4 Presidential Decree no. 16/2018 on the procurement of services and products.

revealed **a positive outlook on the idea of implementing research cooperative models**, such as the CRC. Government officials, in this case representatives of Kemenristekdikti, the Ministry of Finance and the local research and development agency from Makassar, continually **highlighted the importance of implementing the triple helix approach**. It is worth noting that government officials usually did not specifically refer to a cooperative (*koperasi*) economic model for research collaborations.

- All interviewees were able to showcase their understanding of the available frameworks (legislation/mandates) that allow this cooperative model to take place. This was evident in how **most government officials made reference to existing legal frameworks and/or policies regarding research in Indonesia**, such as:
  - RIRN (*Rancangan Induk Riset Nasional*/National Research Master Plan)
  - Perpres (Presidential Decree) No. 38/2018 on RIRN
  - UU Sisnas Iptek (the National System of Science and Technology Law) in 2002
  - The revised RUU Sisnas Iptek (the Draft Law of the National System of Science and Technology) in 2018, in which participation of the private sector is highly encouraged (but not enforced) to strengthen the research and development master plan in Indonesia
  - The working double tax deduction incentive for private sectors involved in research funding schemes with the government.
- It is not surprising that **most government officials** interviewed specifically **emphasised the inclusion of the private sector in research collaborations and multi-source funding schemes** for research and development for technology and policy-related research. Representatives from Bappenas emphasised the significance of data that the private sector holds, saying it could and should be used in the interests of the public. For example, data that is collected daily by online travel applications and online transportation start-ups could be used for public policy research.
- **Some government officials interviewed,** such as representatives from Kemenristekdikti and Bappenas, **expressed their interest in implementing the triple helix model as soon as possible and 'becoming a champion' in the implementation of CRC in Indonesia**. Bappenas, with access and knowledge to the current national development agenda particularly expressed its interest in providing a platform to synchronise research agendas between parties, with assistance from CCPHI and KSI.
- The representative of the Directorate General of Culture also raised **the possibility of implementing a collaboration scheme that allows a type of CRC to be part of a new funding scheme** it is currently working on: *Dana Abadi Kebudayaan* (Culture Endowment Fund, adapted from the existing *Dana Abadi Pendidikan*/Education Endowment Fund under LPDP, managed by the Ministry of Finance). The main source of the endowment fund however, similar to *Dana Abadi* Pendidikan, will be derived from Sisa Lebih *Pembiayaan Anggaran Tahun Berkenaan* (SILPA), which are unspent funds at the end of the fiscal year. Therefore, funding from the private sector will potentially be used as complementary to the overall funding scheme.

Challenges

- This welcoming attitude towards research collaboration schemes was not without challenges. From our interviews we observed **that government officials were mostly sceptical about the willingness of the private sector to actively engage in collaborating, and especially funding, research projects for public policy purposes**, despite the available frameworks that encourage triple helix models to happen. *"The frameworks [to involve the private sector in research] are there. Incentives are there too. The question is, is there a demand from the private sector to be actively involved in research collaborations with the government?" – Representative of Kemenristekdikti.*
- There were other concerns raised by government officials in regard to the feasibility of having sustainable research collaboration schemes. These were particularly **the lack of synchronisation between ministries, including research-related**

government institutions, in streamlining the needed research-funding infrastructure. In most interviews, government officials shared their concerns, including a lack of leadership, clashing sectoral interests, and the different perceptions of the importance of doing research for evidence-based policy. The *Rancangan Induk Riset Nasional*/ National Research Master Plan (RIRN) is at times mentioned as becoming an integrated research master plan that ministries could rely on, although in practice rigid inter-ministerial bureaucracy remains a challenge. The issue of bureaucracy is significant in the current problematic audit system for research. It is rigid and limiting for researchers and private institutions, which then creates a lack of interest and trust among researchers, PRIs and the private sector to participate in research collaboration initiatives with the government.

- **The question of research funding management schemes was one of the practical concerns of government officials who were interested in implementing the CRC.** Questions such as: Which institution will manage all research funds? Who is most capable in managing multi-sourced research funding schemes, the government or a third-party organisation? What will the funding scheme look like for each ministry/government body–an endowment fund or multi-source funding money pool, or a trust fund? Even for the Directorate General of Culture with its *Dana Kebudayaan* initiative, these questions are still being addressed in the process of finalising its legal frameworks.
- Some of the government officials we interviewed mentioned a rooted misperception **among government officials that a career in research is less valuable than other more desirable and respectable positions. This eventually demotivates and deactivates many *Balitbang*** (research and development agencies) within ministries from growing. We observed that this could be an internal challenge within governmental bodies in the long run, thus it requires a significant shift in the overall perception of the use of knowledge and research in actualising evidence-based policy making processes that go beyond jargon.

c. Private Sector

Opportunities

- Interviews and FGDs with representatives from various backgrounds of the private sector, such as travel, food and beverage, extractive industries, and service industries, revealed **that there was room in some specific fields for intersections between their business-driven research and public policy research.**
- Interviews and FGDs with the private sector revealed **five possible priority agendas that intersect with the interests of the private sector:**
  - **Water scarcity issues**: this issue is of acute interest to the food and beverage industries, as they depend on having sustainable sources of water to sustain their industries.
  - **Renewable energy**: as with the increase in international and local interest, and commitments toward a sustainable future, the focus on renewable energy may open up opportunities for a 'green market', including in the energy sector.
  - **Food security:** many within the food and beverage industry are aware of the challenges faced by this sector as a result of climate change and/or other environmental factors. Many are interested in research in this area, such as crops that are more resilient to heat and lack of water.
  - **Waste management:** this issue is central to the food and beverage industry, as it is under local and international pressure to find solutions to product waste, especially the end product after consumer use.
  - **Sustainable-economy / eco-tourism:** FGDs and interviews with travel companies found that they are interested in getting involved in sustainable economies, especially in eco-tourism. Some feel that this would not only directly benefit communities economically, but also contribute to sustaining natural tourist destinations where traditional tourism has been destructive.
  - Private sector representatives expressed an interest in **taking a more active role in recent national and sub-national government**

initiatives to curb plastic waste, especially single-use plastic waste in Indonesia. On 1 March 2019, the Association of Indonesia's Retail Businesses (Aprindo) committed to reduce plastic bag use by charging a fee for bags. This was part of supporting government programs in waste management, which they say may prove beneficial for the industry as a whole in the long run, as it reduces costs associated with plastic bags.

Challenges

- Although many in the private sector saw opportunities for collaborating with the government and PRIs on **public policy oriented research**, they acknowledged that it was **not a priority for businesses** and its application was still questionable, especially in regard to profit. Basically, they still ask: **"What's in it for me?"**
- **A more applicable definition of public policy oriented research** that meets the needs, especially monetary needs, of businesses **is highly needed.**
- Some within the government have suggested that **public policy research can be seen as a part of corporate social responsibility (CSR)** of companies. However, it is known that for the private sector, CSR programs are mandatory and expected to be tangible, measurable and able to showcase their social responsibility to the public. Therefore, they believed that research, especially for public policy, was not an effective approach to achieve this. From the interviews and FGDs, it was clear that the private sector questioned CSR conducted in such a manner. To quote one private sector representative: "CSR is to be tangible, measurable and visible enough, and hence beneficial for the industry". This is quite contradictory to research, especially in public policy, as the results are not instantly visible, nor felt.
- Even when the private sector is interested in engaging in collaborative research, many of the private sector representatives interviewed explicitly cited a **lack of information in existing legal frameworks/research collaboration schemes in partnership with the government and/or PRIs**. One representative suggested: "There should be a portal where we can easily access and understand all the research collaboration schemes available for us."
- **Private companies have a rigid internal audit system that prevents companies from funding government research projects**. This is because trust towards the government is low, especially in regard to funding. As one representative from the food and beverage industry stated: "I'm afraid of the BPK or perhaps even KPK. That is why we rarely deal with the government ourselves. Usually it is through an association that we conduct deals."

d. PRIs

Opportunities

- **Surprisingly, PRIs were very open to the idea of research collaborations** with the government and the private sector, as long as they could choose companies that were **in line with their organisational values**.

Challenges

- Similar to the private sector, **PRI representatives raised issues about accessibility to funding opportunities** (be it from the government or philanthropic sources) and **the openness of research funding that is structural**, or by design not only dependent on personal relationships. When collaborations are highly dependent on particular leadership skills from what they call 'champions' of government bodies, they believe they become unsustainable, especially when staff rotate.
- Overall, PRIs perceive that sustainable private sector collaboration is still a challenge, especially in public policy research cooperative settings. As one representative asked: **"Private companies? Why would they want be involved in long-term public policy research collaborations? I don't think they'll see any immediate benefits from it."**

e. Success Stories From the Field: Research Collaborations in Makassar

Box 1. Collaboration on Makassar's Public Transportation

A research collaboration between BakTI, UNDP, UN Pulse Lab, *Pemkot* Makassar and *Organisasi Angkutan Darat/* Organisation of Land Transportation Owners (Organda) to initiate *Pasikola* or *Petepete Anak Sekolah* began with a design-thinking workshop. This aimed to respond to public transportation issues that have arisen since the start of online transportation application. The aim was to come up with an innovative public transportation model to meet the needs of the people of Makassar. The idea of Pasikola emerged from a series of intensive workshops initiated by Pemkot Makassar, BakTI, UNDP and UN Pulse Lab. It involved a wide range of groups, from academics, local government officials, creative communities, and representatives of Organda, *Dinas Perhubungan* (transportation agency) and the local police. In essence, Pasikola is a transportation model designed for students. It is safe, and hopefully has an educational edge to it. The E-Nassami information system that supports Pasikola was developed to provide a safe tracking system that allows parents and schools to track the location of vehicles and receive notifications upon arrival or pick up. The incubation process of Pasikola was from November 2016, followed by a pilot project in November 2017. To date, Pasikola is an ongoing project that is based on a cooperative economic model. Initial funding and assistance for the program came from UNDP. It then became fully supported by the municipal government of Makassar, and in 2018 Pasikola was supported by sponsorship from the Sinarmas Company in response to a lack of funding.

Box 2. Innovations from Local Government Research Institutions

Mrs. Puspa, the former head of Balitbang Bappeda Makassar (recently transferred to lead Dinas Dukcapil Kota Makassar) is a champion for research in supporting and directing public policies. As head of Makassar's Balitbang, Mrs. Puspa and her team support Makassar's mayor to formulate policies with data generated from various research and surveys. These include surveys related to public services, and community satisfaction surveys or community satisfaction indexes. Mrs. Puspa strongly encouraged Makassar to become the centre of social innovation in Indonesia. Under Balitbang, there is an innovation sector that provides a coaching clinic for innovations produced by the residents of Makassar. They are able to enter the 20 best innovations at the national level. Innovations such as Pasikola inspired Mrs. Puspa to create an innovation lab in the government offices. This was to involve more creative communities in Makassar to gather and support various forms of social innovation and technology, with the spirit of the 'penta-helix' collaboration. It particularly pertained to multi-sourced funding and more open partnerships and collaborations. Google's office design has become one of Mrs. Puspa's main inspirations for the innovation lab she is designing with her team.

4 Recommendations

What form of multi-sector collaboration focusing on policy research and/or areas linked to policies suits the Indonesian context? How might it differ from the original CRC derived from the Australian context? How and in what way can current forms (if any) of CRC-like initiatives be improved and continue? What might its future direction be, especially in the areas of policy research and/or areas linked to policies?

The study recommends piloting a CRC-like scheme within Indonesia. There are two possible options:

- The first is to tap into the endowment fund, or dana abadi scheme, which is similar but extensively modified from the LPDP endowment fund scheme, and establish a new multi-sector research collaborative program under it. This would be heavily funded by dana abadi. This collaborative trial run should emphasise the private sector's engagement not only for funding but also for the research themes and/or topics.

  The programme objectives should have public policies front and centre and the objectives should focus on:

  - Improving the efficiency and relevance of Indonesia's public policies, especially where Indonesian industries have a competitive strength, for example water security, food security, renewable energy, eco-tourism and waste management.
  - Conducting high-quality research to solve public and industry problems related to public policies.
  - It is hoped that this multi-sector collaboration can be seen as a benchmark for future collaborations. This is the most feasible, as not only is it more flexible in funding but endowment schemes such as LPDP already have schemes for policy research that can inform this scheme. Chatib Basri, Indonesia's former Minister of Finance and architect of the LPDP endowment fund, highlighted one crucial approach in his interview: "Start small, be patient and scale up slowly. Indonesians tend to start big, and starting big means the possibilities to fail will increase. The bigger they are, the harder they fall."

The second option is to work with existing legal frameworks or schemes from Kemenristekdikti and Bappenas, and create partnerships with topics of research selected from FGDs with the private sector. However, current policies on research collaboration from Kemenristekdikti do not specifically mention policy research, thus existing collaborative schemes from Kemenristekdikti must also be modified for collaboration in public policy research. Here we recommend partnering with Bappenas, as its schemes focus on public policies and thus may ease the creation of collaboration schemes.

- In addition to the main recommendations above, there are a number of additional recommendations that need attention:
- With one of the main issues being the lack of communication between the sectors, the focus should be heavily on providing opportunities for building good relationships between the government, the private sector and PRIs.

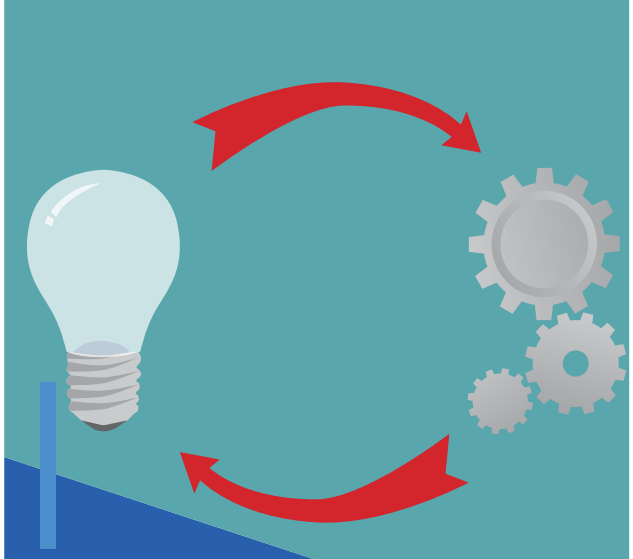
- Workshops should explore intersecting themes/ issues to establish CRC-like projects, connecting PRIs with available funding opportunities from government programs and private sector contributions, such as Research and Business Forums.
- The scheme must assist the government by providing a centralised portal so anyone, including the private sector, can easily access information regarding collaboration schemes with the government.

It is important to have brokering between parties, particularly brokering conducted by organisations that have extensive background experience in building constructive relationships between the three sectors.

Table 2. Government, Private Sector and PRI interest in the CRC Model Matrix

	Interest in CRC-like research collaboration models	Existing research cooperation models/ legal frameworks	Challenges to implementation	Proposed solutions
Government	Yes	• UU Sisnas Iptek (National System of Science and Technology Law) 2002 • RIRN (*Rancangan Induk Riset Nasional*/ National Research Master Plan) 2017-2045 • Perpres (Presidential Decree) No. 38/2018 • PUSNAS (*Penelitian Unggulan Strategi Nasional*) National Strategic Leading Research Program 2015-2016 • RAPID (Leading Research in Higher Education and Industry) 2004-2016 • *Skema Penelitian Pengembangan* (Development Research Scheme) • Higher Education Leading Development Research Scheme (PPUPT)	• Lack of interest and willingness of private sector to actively engage in research for public policy • No existing umbrella body or venture system that oversees and manages research funding in Indonesia • Lack of synchronisation of inter-governmental bodies • Lack of research culture (long-term investments in research) • Rigid audit system	• RUU Sisnas Iptek 2018 to pass; encourage multi-source and multi-year research funding schemes • Establishing a trust fund (*Dana Perwalian*) for research as a pilot project • Enforce a strict and explicit law on active participation of the private sector in research (a similar force to CSR regulations) • PP 35/2017 *tentang Pengalokasian Sebagian Pendapatan Badan Usaha Untuk Peningkatan Kemampuan Perekayasaan, Inovasi dan Difusi Teknologi* (Government Regulation 35/2017 on Partial Allocation of Revenue of Business Entities to Enhance Engineering, Innovation and Technological Diffusion)

	Interest in CRC-like research collaboration models	Existing research cooperation models/ legal frameworks	Challenges to implementation	Proposed solutions
PRIs	Yes	• No particular model exists but are open to collaborations	• Access to funding (depends on competition, personal relationships or leadership) • Synchronising research objectives with private companies' core business objectives/ values	• Platform to connect with research funding opportunities • KSI and CCPHI to host regular forums and workshops with government and private institutions
Private Sector	Yes, but contingent on a number of factors, such as area of interest and tangible benefits for the industry.	• Reactive research to respond to changes in regulations, usually in collaboration with universities and/or third-party research organisations through business associations • CSR programs (but not necessarily implemented with a triple helix approach)	• Internal audit system (anti-bribery act) • Investment in research not a priority for businesses • The question of, "What's in it for me?" • Benefits for private sector still questionable or uninviting • Pressure to perform well in tangible and measurable CSR programs	• Identity research needs in relation to public policy of the private sector (what are the urgent issues for the private sector to respond to with research?) • Understand how effective the super tax deduction is as an incentive for the private sector, especially in the long term • Explore the role of business associations and their role in funding research collaboration schemes with the government and PRIs • Identify the challenges of the internal audit system of different cases in the private sector



5 Conclusion – Possibilities of Implementing CRC

This research has looked at and identified the challenges and opportunities to conducting collaborative public policy research within each sector, as well as the feasibility of having such a collaborative scheme. What this study has demonstrated is that although a multi-sector collaborative scheme between the government, the private sector and PRIs that focuses on public policy research is highly possible and even desirable across sectors, it faces similar challenges within each sector. Fundamentally, there is a problem of trust, transparency and openness in collaborating towards similar goals.

To reiterate, first and foremost there is a need to facilitate stronger links between sectors. This not only builds trust, it is crucial in building a common understanding, especially in defining public policy, the processes for policy making and how this will benefit all sectors, not just the government. What is needed is a shared understanding of what constitutes public policy research and analysis, what resources policy makers need to research this evidence, and how it is used effectively. Without this, any collaborative scheme will be uneven and those outside the government sector may feel left out, or as many in the private sector often say: "We feel that the government merely sees us as an ATM."

Directly implementing Australia's CRC, a large-scale collaborative scheme that focuses on policy research,

Box 3. Directorate General of Culture: Cultural Endowment Fund for Policy Research

The Directorate General of Culture (*Ditjenbud*) is currently in the process of preparing regulatory mechanisms for the launch of *Dana Abadi Kebudayaan*, or the Cultural Endowment Fund in 2021. This is a funding scheme that is similar to LPDP, with different objectives focusing on cultural advancement and responding to the challenges of funding in the cultural sector. The presence of *Dana Abadi Kebudayaan* is hoped to provide opportunities to support innovative initiatives, cultural policy research and multi-sourced, funded collaborative schemes for cultural development.

However, as explained by the Director General of Culture, it is important to understand culture not as merely a set of rituals, world views or traditions. Culture should be approached from a multi-disciplinary perspective. For example, he used the story of *gudeg*, a traditional Javanese cuisine made primarily from unripe jackfruit. "We all know that *gudeg* is known as a traditional cuisine from Yogyakarta and that it plays an important part in shaping tourism in Yogyakarta. But apparently most of the jackfruit used to produce *gudeg* are not grown in Java, but are from Lampung. So when discussing culture, we have to look at it from a multitude of factors, including the role of the supply chain, the role of the private sector, the economic system and policies that could further support it."

Through this example, the preservation of culture is no longer the sole responsibility of the government. Collaboration between the sectors supported by funds such as those from *Dana Abadi Kebudayaan* become essential to advancing policies that help preserve our cultural heritage.

Box 4. Working together with the National Planning Agency (Bappenas)

Collaborations between the government and the private sector have happened, although with limited funding and time, and not in a systemised way. That is, they depend on personal relationships between individuals within the sectors involved. Interviews with Bappenas have shown their interest in furthering these collaborations in the hope of helping construct evidence-based public policies.

As mentioned by two directors of Bappenas from the Directorate of Higher Education, Science and Technology and the Directorate of Industry, Tourism and Creative Economy during the discussion, they are very eager to set up research collaborations with start-ups, such as Go-Jek. This is a transportation service provider working on many issues, such as data procurement on traffic information. Bappenas has voiced its interest in collaborating with other start-ups, such as Traveloka, an online travel agency, to gather data on Indonesia's domestic travel destinations. This is to support policies under Indonesia's national development agenda. With Bappenas being open to research collaborations with the private sector, and with its focus on public policy, this eases setting up multi-sector collaborations that focus on policy research.

would be unreasonable, as the possibility of failing would be high. Thus, it would be more advantageous for KSI to pilot a small-scale multi-sector collaborative scheme in order to build trust among the sectors. A scheme would need to be based on an endowment fund, such as the culture endowment fund from the Directorate General of Culture. This possible collaborative scheme, described in this report, is an initial step towards improving the enabling environment needed for evidence-based policy making. It may prove to be a solution to funding for many researchers, and as it embraces the needs of sectors outside the government, it could possibly be more relevant to the public. Undertaking this pilot collaborative scheme would not only be an opportunity to actually see if it could work, but also to see what could be learned about building bridges across sectors– whether it fails or succeeds.

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Focus Group Discussion Report - 22 February 2019

Purpose and Objectives

The Knowledge Sector Initiative (KSI), in collaboration with CCPHI, is working to encourage the development of the knowledge sector ecosystem in Indonesia through multi-sector partnerships that connect key stakeholders. This includes the government, policy research institutions and the business sector collaborating to promote policy research initiatives. One effort to encourage the development of the knowledge sector ecosystem is to conduct a study of research funding models based on cooperation among the stakeholders, where all stakeholders play an active role in terms of funding and / or determining research topics. This study aims to understand the funding model that enables stakeholders to collaborate on conducting policy research that results in progress for the development of the knowledge sector ecosystem.

Focus Group Discussion

To explore the varied understandings of policy research and the possibilities of conducting multi-sector collaborations, CCPHI conducted a focus group discussion (FGD) with a number of companies with various backgrounds in the private sector. The objective of the FGD was to discuss and provide input that would help KSI and CCPHI to identify the right direction in understanding the needed cooperation model for funding policy research.

The private sector participants were selected based on those who responded to this study's request to take part in the FGD. From this, CCPHI then divided the FGD into two group sessions. The first focus group consisted of five private sector representatives, focusing on services. The second focus group consisted of three private sector representatives, focusing on tangible products (for example: manufacturing, food and beverages, extractive industries, etc.)[5].

Participants in the FGD:

Session 1:	**Session 2:**
1. Igico	1. Freeport
2. Traveloka	2. Chandra Asri Petrochemical
3. Maverick	3. Mitrabahtera Segara Sejati
4. Go-Jek	
5. Instellar	

The FGD was held on 22 February 2019. Each session last approximately two hours and was audio-recorded. To guide our discussion to understand the role and experiences of the private sector in research collaboration schemes, we referred to the following key questions:

- Which public policy related issues are of interest of the private sector? What does the private sector seek in partnerships with the government?
- Why is the private sector still unwilling or hesitant to actively engage in research collaboration schemes with the government and policy research institutes (PRIs)? What would be the perfect collaboration scheme to which the private sector feels comfortable contributing?
- What are the challenges within the private sector to conducting and investing in multi-year and multi-sourced research schemes?
- Are there any differences within the private sector in perceiving the urgency of policy-oriented research? How do established industries, such as food and beverage or extractive industries, respond to the idea of research collaboration schemes with the government in comparison to, for example, tech industries, or start-up companies?
- Would a stricter legal regulation enforce more active engagement of the private sector in collaborating in research for public policy?

Focus group discussion participants in this research will be presented anonymously, as stated in the participant consent form.

- If there were incentives such as a double tax deduction for the private sector when contributing to collaborative research with the government, would there be interest in being actively involved?
- Are there other forms of incentives that are ideal for the private sector?

FGD Results

Initially, it took some time for the participants in both groups to be open and honest about their relationship with the government. However, after reaffirming to them that the results of the FGD would be anonymous, participants were willing to be much more open and relaxed about their answers. The FGD was structured such that the researchers first asked the questions above and each participant was given an opportunity to answer. The FGD itself was carried out through a semi-structured interview. Follow-up questions were directly asked by the researchers if clarifications were needed or if the answers from participants warranted further exploration. The FGD provided crucial insights for the research, especially clarifying the relationships and perceptions of private companies towards conducting policy research collaborations with the government.

The following is a summary of the results:

- Most of the private sector is open to the idea of conducting a CRC-like research collaboration model or the triple-helix model as an ideal model.
- Research interests of the private sector interviewees include: public transportation, big data, tourism, socio-cultural research, market research, sustainability, waste management, health research, research to support and maintain their businesses, and community development research.
- Some of the private sector interviewees have had experience with research collaboration, although not necessarily within the triple-helix model.
- Gojek has conducted several research collaborations, including one that involved the government (Bappeda Jakarta – the Jakarta Development Agency) and the World Bank. Gojek conducted a study on the coverage of public transportation in Jakarta. Gojek has also collaborated on another study related to public transportation with a research think tank group from Universitas Indonesia. However the duration of these research projects was relatively short (one month) and not multi-year, unlike research projects under the CRC model.
- Private sector interviewees from manufacturing and extractive industries had mostly conducted research collaborations with either the government or PRIs for community development projects (education, poverty reduction, community empowerment, livelihood projects, conservation projects, implementation of the Sustainable Development Goals (SDGs), etc.). When it comes to public policy research, these representatives usually communicate, support or negotiate their research interests through business associations.
- Most of the private sector groups interviewed agreed that the lack of a research ecosystem between the private and public sector had made it difficult for them to access information on shared agendas or objectives under collaborative research models.
- Some private sector representatives who conduct market research said research was essential to maintaining their business, however relying on government data could sometimes be challenging. This was particularly true when data were not updated, synchronised between sectors, or did not match the market. Therefore, research collaborations that involve the private sector and PRIs are needed to support data-driven and evidence-based policy making processes, within both the government and the private sector.
- Another challenge posed by most representatives from the private sector was that of searching for common ground in regard to research agendas, objectives and approaches to knowledge production that has the potential to influence public policy.
- The issue of mutual trust between parties (private and public) could be addressed by brokering dialogue between identified parties with similar research interests. This could be continued through conducting pilot projects.

- Further study of identified potential partners should attempt to understand the shared value of what could be accomplished by the government, the private sector and PRIs when conducting research collaboration schemes, such as CRC. It is also important to understand how best practices from these pilot projects can inform more systematic collaboration schemes that address the *Prioritas Riset Nasional*/National Research Priority (PRN).
- The development of an integrated information portal (website) could be an effective entry point to developing a better research ecosystem based on transparency, openness and, hopefully, trust. The portal would include information on: the PRN, research agendas of ministries and local government bodies, available research funding schemes (*Dana Abadi Penelitian / Dana Abadi Pendidikan,* etc.), research collaboration models, forums or discussion groups between parties (DPR, ministries, the private sector, PRIs and NGOs, such as *Forum Riset dan Bisnis*), invitations or open calls for the participation of the private sector, and PRIs.
- Further socialisation and discussion of incentives for the private sector, such as tax deductions, is needed in order to understand how effective incentives would work for the private sector (with different backgrounds). Most of the private sector is not aware of the current proposal of a double tax deduction incentive for the private sector when involved in collaborative research schemes with the government.

Knowledge Sector Initiative (KSI)

Ratu Plaza Office Tower 9th Floor

Jalan Jenderal Sudirman No. 9

Jakarta 10270 Indonesia

Phone : 62 21 7278 9921

Fax : 62 21 7278 9934

Email : ksicommunication@ksi-indonesia.org