

STUDY OF THE ROLE OF THE INDONESIAN INSTITUTE OF SCIENCES (LIPI) IN BRIDGING BETWEEN RESEARCH AND DEVELOPMENT POLICY

FINAL REPORT¹

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GLOSSARY

ACRONYM	INDONESIAN	ENGLISH
Balitbang	<i>Badan Penelitian dan Pengembangan</i>	Research and Development Board
BAPPENAS	<i>Badan Perencanaan Pembangunan Nasional</i>	National Development Planning Agency
BKN	<i>Badan Kepegawaian Nasional</i>	National Personnel Board
DG	<i>Direktur Jenderal</i>	Director General
DURENAS	<i>Departemen Urusan Reset Nasional</i>	National Research Affairs Department
FEUI	<i>Fakultas Ekonomi Universitas Indonesia</i>	Faculty of Economics University of Indonesia
ICIAR		International Center for Interdisciplinary and Advanced Research
IPH	<i>Ilmu Pengetahuan Hayati</i>	Biological Sciences
IPK	<i>Ilmu Pengetahuan Kebumian</i>	Earth Sciences
IPSK	<i>Ilmu Pengetahuan Sosial dan Kemanusiaan</i>	Social Sciences and Humanities
IPSK	<i>Ilmu Pengetahuan Sosial dan Kemanusiaan</i>	Social Sciences and Humanities
IPT	<i>Ilmu Pengetahuan Teknik</i>	Technical Sciences
IPTEKDA	<i>Ilmu Pengetahuan dan Teknologi Daerah</i>	Regional Science and Technology
ITB	<i>Institut Teknologi Bandung</i>	Bandung Institute of Technology
JASIL	<i>Jasa Ilmiah</i>	Scientific Services
LARAS		Library Archive and Analysis System
LEKNAS	<i>Lembaga Ekonomi</i>	Economic and Social Science Research
LEMRENAS	<i>Lembaga Reset Nasional</i>	National Research Institute
LIPI	<i>Lembaga Ilmu Pengetahuan Indonesia</i>	Indonesian Institute of Sciences
LPND	<i>Lembaga Pemerintah Non-Departemen</i>	Non-Department Government Institution
LPNK	<i>Lembaga Pemerintah Non-Kementerian</i>	Non-Ministry Government Institution

ACRONYM	INDONESIAN	ENGLISH
Menristek	<i>Menteri Riset dan Teknologi</i>	Research and Technology Ministry
MIPI	<i>Majelis Ilmu Pengetahuan Indonesia</i>	Indonesian Science Council
MOHA	<i>Menteri Dalam Negeri</i>	Ministry of Home Affairs
MONE	<i>Menteri Pendidikan Nasional</i>	Ministry of National Education
MORT	<i>MenRistek</i>	Ministry of Science and Technology
OPIPA	<i>Organisasi untuk Penyelidikan dalam Ilmu Pengetahuan Alam</i>	Organization for the Study of Natural Sciences
Otda	<i>Otonomi Daerah</i>	Regional Autonomy
PDII	<i>Pusat Dokumentasi Informasi Ilmiah</i>	Scientific Information Documentation Center
PNBP	<i>Pendapatan Negara Bukan Pajak</i>	Non-Tax State Income
PNS	<i>Pegawai Negeri Sipil</i>	Civil servants
P2E	<i>Pust Penelitian Ekonomi</i>	Center for Economics Research
PPK	<i>Pusat Penelitian Kependudukan</i>	Center for Population Research
PPMB	<i>Pusat Penelitian Masyarakat dan Budaya</i>	Center for Humanities and Cultural Research
PPP	<i>Pusat Penelitian Politik</i>	Center for Politics Research
PSDR	<i>Pusat Penelitian Sumber Daya Regional</i>	Center for Research on Regional Resources
R&D		Research and Development
Renstra	<i>Rencana Strategis</i>	Strategic Plan
S1	<i>Sarjana 1</i>	Undergraduate
S2	<i>Sarjana 2</i>	Master's
S3	<i>Sarjana 3</i>	Doctorate
SESTAMA	<i>Sekretaris Utama</i>	General Secretariat
ToR	<i>Kerangka Acuan</i>	Terms of Reference
tupoksi	<i>Tugas Pokok and Fungsi</i>	Main Tasks and Functions
UGM	<i>Universitas Gajah Mada</i>	Gajah Mada University
UKP4	<i>Unit Kerja Presiden untuk pengawasan dan Pengendalian</i>	Presidential Work Unit for Development Supervision and Control.

ACRONYM	INDONESIAN	ENGLISH
UPT	<i>Pembangunan Unit Pelaksana Teknis</i>	Technical Implementation Unit

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1. INTRODUCTION

As part of the preparatory work for the Australia Indonesia Partnership initiative for 'Revitalizing Indonesia's Knowledge Sector for Development Policy,' this report presents the results of a diagnostic investigation of the Indonesian Institute of Sciences (*Lembaga Ilmu Pengetahuan Indonesia* or LIPI). With a focus on the sections of the Institute dealing with the social sciences and humanities², the report seeks to provide an overview on the structure and operations of LIPI, on strengths and weaknesses and to provide some suggestions on ways that the AusAID program might deal with or otherwise support LIPI in meeting the Partnership's objectives.

The report is divided into several sections. Following this Introduction and based on the ToR, Section 2 provides a summary of the objectives of the assignment, the intended research tasks and some of the key issues and possible avenues of AusAID support raised by earlier analysts. This material was also provided in the Inception Report, but is repeated here to help set the background and to provide continuity for the subsequent analysis.

Section 3 which is updated from the Inception Report provides some general background on LIPI, its history, its structure, and how it relates to the overall structure of government research institutions and research policy. Section 4 deals briefly with the approach and methodology used in this diagnostic study as a basis for setting the stage for the subsequent analysis.

Section 5 looks more closely at LIPI's role in bridging between research and development policy. This is a key issue given the Partnership's over-riding concern with promoting knowledge-driven development and is fundamental to defining the relevance of LIPI in the overall knowledge-policy nexus. Section 6 provides an analysis of internal structure (focusing on the Division of Social Sciences and Humanities)³ and including analyses related to issues of staffing, overall financing, remuneration, other sources of income and the nature and quality of research output.

² The ToR indicated that the review should be limited to areas outside of the 'non-technological or hard sciences.'

³ The Division of Social Sciences and Humanities (*Bidang Ilmu Pengetahuan Sosial dan Kemasyarakatan*) is one of five divisions in LIPI and the only one is outside of the hard sciences. The other four divisions cover Earth Sciences (*Bidang Ilmu Pengetahuan Kebumihan*), Biological Sciences

Section 7 deals with the demand side; looking at some of the users or potential users of LIPI's work. This is equally important and promotion and application of quality research is a function of factors associated with demand, not just supply and how LIPI's research is transmitted, received and utilized is of clear importance to the discussion. Finally, Section 8 provides some conclusions and recommendations, including possible avenues of AusAID support. It also includes a more general discussion of the position of LIPI in research and policy and the role that government must play and kinds of reforms that are needed if knowledge-driven policy and planning is to become more of a reality.

2. REQUIREMENTS AND BACKGROUND FOR THE STUDY

Objectives of the Assignment

The objectives of the study were as follows:

- (1) Undertake an analytical review of LIPI's role in bridging research to development policy in Indonesia; in particular to:
 - a) Detail the strengths and weaknesses of LIPI's activities to date in cultivating high-quality research for development policy (i.e. not technology or hard sciences);
 - b) Determine whether the AusAID's program in this area should include support to LIPI in implementing required institutional reforms and any risks associated with this; and
 - c) Detail the reforms/activities this would entail.
- (2) Produce a detailed analytical report for the Government of Indonesia and AusAID, and present a synopsis to the Knowledge Sector Management Committee outlining the issues above, and provide recommendations for how this initiative could best proceed in their efforts to revitalize the sector.

Issues Hindering LIPI's Performance

To provide some guidance, the ToR also outlined some of the perceived issues surrounding LIPI's performance and some of the possible avenues for AusAID assistance that have been gleaned from other studies carried out under the overall knowledge sector review. These are briefly summarized below as these are among the kinds of issues that are addressed during the course of the study and that are taken into account in formulating clear and feasible recommendations for AusAID involvement, if any, in LIPI in the future.

- LIPI has significant financial constraints; even though the LIPI budget has not declined in absolute terms in recent years it has in real terms due to inflation;
- Partly as a result of financial constraints there has been reduced quality in research outputs;

(Bidang Ilmu Pengetahuan Hayati), Technical Sciences (Bidang Ilmu Pengetahuan Teknik) and Scientific Services (Bidang Jasa Ilmiah).

-
- LIPI focuses on the hard sciences rather than social science research, including in key social and economic areas directed at development policy;
 - LIPI acts as both a supplier of research and intermediary with Government raising questions about its overall role vis a vis Government in the knowledge sector;
 - In this regard, if LIPI continues its role as a supplier, more formal mechanisms would need to be developed for providing input into the policy making process as current linkages are weak;
 - LIPI does not host a national database comprehensively detailing and cross-referencing development research and publications for public access;
 - LIPI's function in accreditation of international researchers through to awarding of research professorships could be more effective;
 - There is limited monitoring and evaluation of impact of research in Indonesia upon public policy; and
 - There is some overlap/duplication of roles with Government Research institutes (the *balitbang*, *badan penelitian dan pengembangan* or research and development units) that are located in Government Ministries.

Possible Avenues for AusAID Support

The ToR also noted some possible avenues for AusAID support that can be looked at in the context of this review. These included:

- Utilizing ICIAR (The International Center for Interdisciplinary and Advanced Research) to provide an interdisciplinary platform for improved communications and sharing of knowledge between Indonesian researchers;
- Strengthening LIPI's public relations unit in building an intermediary role for LIPI, providing support to ensure better advocacy work and communication of research findings through improved electronic access to data and information collected and stored in LIPI;
- Providing a stronger legal basis for LIPI, particularly in a transition from being dependent on a Presidential Decree to a more stable legal basis and with clearer channels for LIPI to provide input to decision makers;
- Responding to further requests from LIPI Senior executives including:
 - Staff training in writing executive summaries for policy makers – translating research findings to policy relevant knowledge; and
 - Increasing awareness among policy makers about the importance of using research outcomes as inputs into the decision-making process; and
- Possible assistance to LIPI in reforming human resourcing structures and processes; for example in dealing with publication requirements of researchers to maintain their accreditation where this may constrain their involvement in policy-making.

Some of these will be returned to in the course of the discussion and in the concluding section dealing with the consultant's own recommendations for possible avenues of AusAID support.

Research Tasks

Finally, building upon these issues and possible avenues of support, the ToR outlined some of the key tasks that would form part of the work:

- (1) To provide an **overview of LIPI's approaches to bridging research to development policy linkages**, focusing particularly on overall strengths and weaknesses of the organization and any reform periods such as the Habibie reforms of 2001.
- (2) To provide an **overall assessment of the quality of products** produced both by LIPI staff and from work commissioned by LIPI staff from external research organizations and the related ability of these products to influence policy.

While these tasks are central to the work, it will also be necessary to deal with them carefully and to ensure that they lead to a fair assessment of LIPI's role and work. For example, at least in the social sciences, some preliminary work suggested that it is not at all clear if or how LIPI plays a "bridging" role nor how it does much if any "commissioning" of work from external sources. In fact, as will be seen, researchers seem to be primarily engaged in their own research work that is mainly funded via the LIPI budget, but occasionally from outside sources.

3. BACKGROUND ON LIPI

History⁴

The roots of LIPI date well back into the colonial period, starting as far back as 1817 with the creation of the Indonesian Botanical Garden (*S'land Plantentuin*) by C.G.L. Reinhardt of the Dutch Colonial Government in Bogor to promote botanical and agricultural research. The first significant expansion of this role, however, had to wait until 1928 which saw the establishment of the Netherlands Indies Natural Sciences Center (*Natuurweten-schappelijk Raad voor Nederlandsch Indie*), an organization that, following the end of World War II in 1948 was further transformed into The Organization for the Study of Natural Sciences (*Organisatie voor Natuurweten-schappelijk Onderzoek - Organisasi untuk Penyelidikan dalam Ilmu Pengetahuan Alam* or OPIPA). This latter organization was maintained until 1956 when, under Law No. 6 of that year, the Government created a new Indonesian Science Council (*Majelis Ilmu Pengetahuan Indonesia* or MIPI) with the main tasks of:

1. Guiding the development of science and technology; and
2. Providing inputs to government on public policy on science and technology.

In 1962, the Government went one step further creating a National Research Affairs Department (DURENAS) which included MIPI, but which also had the additional assignment of: developing and overseeing a number of other national

⁴ These first few paragraphs are taken mainly from the LIPI web site and the LIPI (2010), and the *Rencana Strategis Kedeputan IPSK Tahun 2010-2014*.

research institutes as well. In 1966 the government changed the status of DURENAS to become the National Research Institute (LEMRENAS). Finally, on February 16, 1967, the Chair of the Temporary People's Consultative Assembly dissolved both LEMRENAS and MIPI to create LIPI with the task of conducting research for the country. Under its new mandate, LIPI was assigned to provide guidance in the development of science and technology rooted in Indonesia; and serve as an advisory board to the state in defining national science and technology policy. In executing its tasks, LIPI was given full autonomy, independence with its own assets directly accountable to the cabinet presidium.

This also gave LIPI a strong legal position within the Government, a position that while modified to some degree has not really been weakened over the ensuing years. Under Presidential Decree No. 34/1974, LIPI became a Non-Department Government Institution (NDGI/LPND), today better known as a Non-Ministerial Government Institution (NMGI/LPNK). Then under Presidential Decree No. 1/1986 LIPI was declared as a NDGI directly responsible to the President. In 2000, Presidential Decree No. 178 restated the position of LIPI as 1 of 24 NDGI. Finally, Presidential Decree 43/2001 provided for a reorganization of the structure of LIPI to become what it is today. However, the strong legal basis remains as dealt with in the most recent major legislation, Law No. 18/2002 on the System of National Research, Development and Application of Science and Technology (LIPI 2010).

General Organization and Structure

LIPI is one of 7 LPNK (*Lembaga Pemerintah Non-Kementrian* or Non-Ministerial Government Institutions) under the Ministry of Research and Technology (*Menteri Riset dan Teknologi* or MENRISTEK). These include:

1. The Indonesian Institute of Sciences (*Lembaga Ilmu Pengetahuan Indonesia* or LIPI)
2. The National Aviation Agency (*Lembaga Penerbangan dan Antariksa Nasional* or LAPAN)
3. The Agency for Technological Analysis and Implementation (*Badan Pengkajian dan Penerapan Teknologi* or BPPT)
4. The National Nuclear Agency (*Badan Tenaga Nuklir Nasional* or BATAN)
5. The Nuclear Protection Agency (*Badan Pengawas Tenaga Nuklir* or BAPETEN)
6. The National Mapping Agency (*Badan Koordinasi Survei dan Pementaan Nasional* or BAKOSURTANAL)
7. The National Standardization Board (*Badan Standarisasi Nasional* or BSN).

Under current law MENRISTEK maintains a coordinating role over these agencies, but in practice their legal status, programming and budgets – once they are set - remain largely independent of the Ministry. Thus they, including LIPI, can be dealt with individually even though at some stage it is likely to be necessary to look more broadly at the overall public sector research environment in formulating knowledge sector reform.⁵ For purposes of this report, it is also important to note

⁵ MENRISTEK holds the LIPI budget, but substantively it is BAPPENAS that approves LIPI's research agenda for government funding.

that most of these agencies (and MENRISTEK itself) focus virtually exclusively on technology and the hard sciences. In fact, LIPI is the only state-owned research institution in Indonesia with any significant capacity in the social sciences or humanities.

In addition, in the area of state owned research agencies, LIPI is by far the major player, with more than 4000 employees and 1000 accredited researchers. In fact, LIPI is one of a kind, the only government research institution with such a long history and, as will be seen, a significant pool of invaluable assets. Even though issues surrounding the performance of the organization and questions regarding just what needs to be done remain, it should also be clear that LIPI should remain as a key element in Indonesia's indigenous knowledge network. The question is thus not whether LIPI should exist or not, but how it could be improved and how AusAID should or should not be involved. It is dealing with these issues and options that form the basis for this investigation.

Internally LIPI is divided into a General Secretariat (*Sekretaris Utama* or SESTAMA), an Inspectorate and five substantive divisions for Earth Sciences (*Ilmu Pengetahuan Kebumihan* or IPK), Biological Sciences (*Ilmu Pengetahuan Hayati* or IPH), Technical Sciences (*Ilmu Pengetahuan Teknik* or IPT), Social Sciences and Humanities (*Ilmu Pengetahuan Sosial dan Kemanusiaan* or IPSK), Scientific Services (*Jasa Ilmiah* or JASIL), and the Center for Science and Technology Research Development.

The Divisions are further divided into Centers (*Pusat*) that focus on more specific types of functional duties or specific areas of research. They also include a number of more specialized regional centers (UPT). A full list of these is provided in **Appendix x**. From this, the predominant focus on hard sciences and technology should be clear. In this regard, with the obvious exception of the Division for Social Science and Humanities, there is relatively little in the work of LIPI that would bear directly on social and economic policy formulation. This is the reason for the relatively narrow focus of this study on the work of this division alone.⁶

The Division for Social Sciences and Humanities (IPSK) is headed by a Deputy. In turn, the Deputy oversees the heads of the Division's 5 Research Centers: the Center for Humanities and Cultural Research (*Pusat Penelitian Kemasyarakatan dan Kebudayaan* or PMB); the Center for Economics Research (*Pusat Penelitian Ekonomi* or P2E), the Center for Population Research (*Pusat Penelitian Kependudukan* or PPK), the Center for Politics Research (*Pusat Penelitian Politik* or PPP), and the Center for Research on Regional Resources (*Pusat Penelitian Sumber Daya Regional* or PSDR).

Three of these Centers dealing with economics, politics and population are of clear relevance to the guidelines for the study. The center dealing with humanities and culture is also relevant as it deals with cultural and other related issues related to social policy. The Center dealing with regional resources however is almost

⁶ However, because of its relevance as a repository of knowledge, including in the social sciences, we do include the LIPI library (*Pusat Dokumentasi dan Informasi Ilmiah* or PDII) which is part of the Scientific Services Division in the analysis as well as in recommendations for possible avenues of assistance.

entirely dedicated to dealing with issues outside of Indonesia. While their work may be relevant to foreign policy it is not really applicable to the domestic planning issues of concern here.

Each of these Centers also operates three sub-centers identified in terms of defined areas of core competence (see **Table 1**). These “competencies” do serve to define at least part of the research agenda by providing a focus for what is defined as ‘thematic’ research being carried out by the Division. They also serve, at least in theory, to define areas of “expertise” where researchers could be called upon to address various policy concerns. However, as has been noted,⁷ this can also serve to ‘box’ researchers into a corner, making it difficult to expand intellectual horizons or integrate with researchers in other sub-divisions to jointly deal with more general issues as they arise at any one time.

4. APPROACH AND METHODOLOGY

As was noted in the ToR, the overall focus of the initiative for ‘Revitalizing Indonesia’s Knowledge Sector for Development Policy’ is on “building Indonesian capacity in the area of social and economic research for policy making, and to assist the Indonesian Government and a range of Indonesian stakeholders to examine current constraints and identify solutions to foster a healthy indigenous knowledge sector.” In broad terms, this implies a need to consider the both supply and demand sides related to knowledge flows; as well as the institutional systems and policies that guide both the research process and the relations (or lack of same) between researchers (operating either as individuals and members of the institution) and policy makers. We have sought to address these concerns in a number of ways.

Relying on both interviews with Heads of Centers and staff as well as analysis of secondary information either obtained directly from LIPI or sourced from the public domain (mainly internet), we have examined the internal structure of the Social Science and Humanities Section (IPSK) of LIPI, its capacity and output. Within IPSK, the analysis has focused on the four Centers which we judge to be of relevance to this study.⁸ Within LIPI and, particularly IPSK, we also focus on reviewing the role and activities of the organization, and particularly how these relate to the mandates set out in the various Laws and Decrees regarding the organization and its institutional goals and objectives. In addition, because LIPI is a government agency is subject to government rules on employment and deployment of personnel as well as on utilization of financial resources provided via or incorporated into the national budget, we also deal with issues associated with the regulatory structure, particularly the degree to which it constrains research influences the behavior of researchers,

A related concern here has to do with regulations guiding research planning and budgeting, particularly as they relate to the ability (or lack of ability) for LIPI to respond effectively to the needs of policy makers, particularly where questions arise on a more or less ad hoc basis. In fact these kinds of bureaucratic problems caused

⁷ Written comments from a researcher received on May 2, 20110).

⁸ As noted earlier, the Center for Regional Resources deals almost exclusively with international concerns in Southeast Asia, Asia-Pacific and Europe, not with domestic development issues.

the mandated planning and budgeting processes affect all government agencies,⁹ but they are of particular concern where decision makers often require expert advice on a more short-term basis.

Another issue with the research-policy nexus is that neither side is monolithic. Government (research users or policy makers) have widely varying priorities and needs, even within a general sector. The same holds true for LIPI where there are more than 1000 researchers in all, and even within IPSK which oversees 5 Centers with more than 230 researchers. This often makes it hard for the two sides to easily relate on an institutional basis alone. In this regard, we need to differentiate between institutional and individual roles in the process and to understand how bureaucratic and other constraints at the institutional level can be circumvented by researchers acting on an individual basis. This raises questions such as, how extensive this is, who are these researchers, what are their strengths that allow them to play a more individual role and what about the weaknesses of those without similar access? These are a few of the questions guiding our supply side analysis. And in fact, the results of the study clearly indicate that, in the final analysis, it is not at the formal institution level that real relations are built but it is rather at the personal level that these relations endure.

We also look at LIPI as an intermediary, defined in the ToR as “focusing its resources on translating policy questions into research questions, commissioning research, conducting systematic reviews, conducting quality checks of research commissioned, translating research findings into usefully packages briefing for policy makers, and developing important networks with both supply and demand actors”. While it is clear that the research arms, such as IPSK, do not play this kind of role (they neither commission research nor generally attempt, beyond normal reporting and publication, to synthesize results for policy purposes) we do look at the position and possible roles for the PDII (*Pusat Dokumentasi dan Informasi Ilmiah*, or Scientific Information and Documentation Center). This center is one of four units of the Scientific Services Division of LIPI¹⁰ and it is located on the same compound in Jakarta housing both the LIPI leadership and the Social Sciences Division (IPSK). Even though most of the holdings of the PDII are in the hard sciences, we still try to assess the potential of this center to carry out an intermediary role between social science research and public sector policy makers.

Outside of LIPI the focus is on potential users of knowledge outputs, including outputs coming from LIPI, and on institutions and individuals that are likely to require (or at least should require in principle) information of the type that could potentially be provided by IPSK in their work. This includes relevant government departments including the Ministry of Science and Technology (*MenRistek*), the National Planning Agency (Bappenas), the Ministries of Education. The questions we focus on start with their relations to LIPI. Why do they or don't they seek the assistance of LIPI

⁹ Regulations generally limit the ability to adjust budgets to meet changing demands. These rules for better or worse generally require considerable advance planning with proposals often having to be drawn up more than a year in advance of receipt of any funding.

¹⁰ The Scientific Services division oversees four centers and three UPT: The Center for Research on Calibration, Instrumentation, and Metrology; Research Center for Research on Quality and Technological Assessment Systems; Center for Documentation and Scientific Information, and Innovation Center.

when social issues require solutions? If they do not turn to LIPI, do they rely on their 'in-house' *balitbang* (badan penelitian dan pengembangan or R&D units). If neither LIPI nor *balitbang* are their sources of solutions – e.g. where do they go?

We also include results of meetings with a number of bilateral and multilateral organizations that are involved in providing assistance to the Indonesian Government and citizens. Here the focus is on understanding levels of experience (if any) with LIPI and LIPI products. In addition from all of these demand-side sources we remain interested in perceptions on the role of research and knowledge in their work and on the role of various sources of information including the relevant position of an official government scientific research institute such as LIPI. Here we have not followed a particular research plan but rather have started with sources suggested by AusAID or others known to the Consultant working on this study and then have tried to snowball from there in order to try and encompass as wide a range of potential stakeholders as possible in the time allowed.

In summary, methodologically, the study has relied mainly on interviews and on desk reviews of documentation including reports, publications and other material relevant to understanding how the system works in practice. In particular, emphasis has been placed on gaining a more systematic view of aspects of both quantity and quality in research output and the degree to which this research is received by or even perceived as relevant by policy makers – these are among the key elements of this study.

5. LIPI BRIDGING BETWEEN RESEARCH AND DEVELOPMENT POLICY

This study attempts to address the issue of the relation between LIPI and policy makers, or the lack thereof; for LIPI to take an intermediary role bridging research to development policy in Indonesia. Although it is the only government research institution of its kind dealing in the social sciences and humanities, LIPI still has to abide by the rules and regulations governing government agencies generally regarding their existence and activities. These include regulations related to the government planning and budgeting processes.

As noted earlier, LIPI is one of seven LPNK (*Lembaga Pemerintah Non-Kementerian*, Non-Ministry Government Institution), under overall coordination of *MenRistek* (*Menteri Riset dan Teknologi*, Ministry of Research and Technology). *Menristek* holds the LIPI budget but substantively Bappenas approves its research agenda for government funding. As such Bappenas can request LIPI to fulfill its research-based knowledge information needs, of course subject to prevailing government rules of planning and budgeting under which planning is supposed to be done with Bappenas and where budgeting is an exercise of the Ministry of Finance with Parliamentary approval for implementation during the following year. Because the process is controlled by the annual planning and budgeting cycle, there are no research funds available for ad hoc projects, for example to respond to sudden demands from government. LIPI's own financial resources are utilized to fund bottom-up proposed research projects while requests from other arms of government can only be accommodated through special topping-up allocations.

LIPI is a large organization with a research staff exceeding 1000 persons, more than 20 percent of whom worked in IPSK, the Social Sciences Division, which counted 233 researchers in 2011. There is also an illustrious past, including in the social sciences which benefits from its predecessor, LEKNAS (*Lembaga Ekonomi Nasional*) that included internationally renowned scholars such as the economist Thee Kian Wie, sociologist Mely Tan and historian Taufik Abdullah, who, even after retirement, still remain active and continue to make significant academic contributions. Along with these senior scholars, who made their claim to fame through their publications and participation in international academic activities, there are currently a number of relatively younger researchers who have followed the same path. Some of these researchers have also benefitted from exposure in the media becoming 'celebrities' and thereby creating a demand for their services from domestic and international institutions. They all help to keep the aura of LIPI as a research institute alive. Finally, knowledge of LIPI is enhanced due to its annual scientific competitions for students of all levels that are widely attended by youngsters throughout the country. Thus it should be clear that LIPI, with its solid history is a well established institution and, with or without outside additional funding, is likely to prevail; it is a sustainable institution remaining on the Indonesian scene.

On the other hand, LIPI as a knowledge center has suffered significantly from cost cutting by the government. For instance, whereas many other ministries and government agencies have received substantial funds in recent years to support new or renovated facilities, LIPI, even though serving as a national knowledge center has not. The main LIPI building on the inner-city ring-road looks rather dilapidated (both inside and out) and with poorly attended grounds with part of the area looking like an unfinished construction site. Even worse, prior to the crisis of 1998, the LIPI library, PDII (*Pusat Dokumentasi Informasi Ilmiah*, or the Center for Scientific Documentation and Information) subscribed to some 1,600 foreign journals. Today, however, subscriptions are limited to only 6 e-journals, as the center has only around 100 million IDR for library acquisition (see **Appendix 7**).

As far as inter-government agency relations go, LIPI researchers do claim that they provide inputs to government. This relationship is generated through discussions/seminars dealing with research designs and outcomes hosted by LIPI and involving representatives from '*instansi terkait*' (related institutions). Through this process LIPI researchers claim to have contributed to discussions and changes in public sector rules and regulations, including in areas dealing with labor laws,¹¹ education laws and policies¹² (e.g. BOS, *Biaya Operasi Sekolah*), and with inputs related to the creation of the election commission(s) as well as other activities and law(s) (other rules and regulations) for MOHA (Ministry of Home Affairs). Currently (2011) the Culture and Society Division is conducting a national priority study to produce a dictionary on dying' languages spoken by isolated communities in various parts of the archipelago; a project being carried out with Bappenas approval.

At the individual level, researchers from the **Politics** and **Economics** Divisions claim to have provided inputs to the government on **decentralization** and

¹¹ Study presentation meetings were attended by representatives from the Ministry of Labor and Transmigration.

¹² In this case meetings included representation from the Ministry of National Education.

regional autonomy laws and modifications thereof. In addition, the UKP4 (*Unit Kerja Presiden untuk Pengawasan dan Pengendalian Pembangunan*, Presidential Work Unit for Development Supervision and Control) headed by Dr. Kuntoro Mangkusubroto is drawing on LIPI's expertise about Papua to prepare a road map.¹³ However, this unit, while a prime potential user of knowledge for policy formulation, tends to rely less on institutions and commissioning of research as on individuals who are known to the unit's leadership and who can provide 'quick' answers to their questions. It is UKP4 which then puts it all together¹⁴ as advice and/or solutions for decision making by the President.¹⁵ Thus, this office does not (due to time constraints) rely on new research for its advice to the President. Hence, it does not need to identify financial resources for the compilation of knowledge through research.

Even so, the case of UPK4 is interesting as it is an example of the strong intermediation role that is currently being played by Dr. Kuntoro for the President. It is Dr. Kuntoro who translates knowledge gained for key informants into forms to meet the information needs of the President. With his authority, Dr. Kuntoro has access to all government institutions and/or agencies, including such research institutes as LIPI, state universities, etc. Still, as noted above, it is individuals who are invited to provide (or produce through particular study and/or analysis¹⁶) the information deemed necessary on a particular topic, whether it relates to immediate problem solving or for purposes of future public policy recommendations. The information obtained is processed by the UPK4 office and packaged according to what Dr. Kuntoro thinks is the President's preferred presentation style.¹⁷ However, the key point is that it is Dr. Kuntoro, who plays the true intermediary role here between knowledge-based information and the top decision maker, in this case, the President. It is, however, a very personal relationship, guided by a particular chemistry between the information supply and demand personalities. The importance of personal relations guiding much of the intermediation process is one reason we suggest that a major role of intermediation between research-based information and (individual) policy maker(s) should not be played by an institution like LIPI. It cannot be systematized, because it is too individualized.

And besides this, serving government is only a small component of LIPI's functions. Specifically LIPI's *tupoksi* (*tugas pokok dan fungsi*, or main tasks and functions) are three-fold. These are: (1) to conduct research to advance knowledge, (2) provide input to its stakeholders composed of government, the private sector, and the academic community; and (3) assist in problem solving in society.¹⁸ In short, it means that the actual conduct of research, particularly research oriented at practical

¹³ On the other hand, with regard to poverty issues this office relies on expertise located in IPB (Bogor Institute of Agriculture).

¹⁴ In this case UKP4 plays the role of intermediary between researchers and the country's top decision maker, the President.

¹⁵ Interview with Dr. Kuntoro Mangkusubroto at UKP4 on May 9, 2011.

¹⁶ Dr. Faisal Basri, a popular economist was cited as example of the type of expert who would prepare a paper for UKP4.

¹⁷ Which, it should be remembered, also means that it is UPK4 which also selects or sorts out what they think the President should (and wants to) hear or read.

¹⁸ For instance during the height of the community conflicts that occurred around 2005, LIPI conducted research on social conflicts in various locations in the country.

concerns facing society, is the principal task of the organization. In practice, translation of these tasks into research proposals comes from the researchers themselves in a bottom-up process. Proposals are prepared by the researchers based on their interests and knowledge of what is relevant and are defended and approved by a selection committee and later also monitored and evaluated by another committee. The list of projects conducted in 2010 by IPSK (see **Appendix 4**) does, in fact, suggest a reasonably up-to-date and relevant set of topics.

However, LIPI's research outcomes are not widely known. The studies are written in Indonesian with limited dissemination or even announcements, as only around 100 copies of major reports are printed and mainly for internal reporting and use and often not even for wider internal distribution and possible scrutiny by peers. Each Center of IPSK has its own small 'library'. However these facilities are for internal use only and even the Center's journals and research reports¹⁹ are not always available. Worse, there seems to be little concern about these deficiencies, either from the researchers or from those in charge of the library. This raises the question as to how IPSK-LIPI researchers on the one hand keep up with developments in a particular subject and on the other hand inform the public of their achievements.

In light of the question as to whether LIPI should play a bridging role between research and policy makers, we also looked at PDII (*Pusat Dokumentasi Informasi Ilmiah*, Scientific Information Documentation Center), which is not part of IPSK. PDII basically functions as a library and has a long history, but one of mostly serving the hard sciences rather than the social sciences and humanities.²⁰ This is of some interest given the location of PDII on the main LIPI compound in Jakarta and where the main building located there houses the social science division (IPSK) while the hard sciences are housed in many other places throughout the country. Thus this facility is hardly used by IPSK researchers who claim to rely on their own centers' facilities or friends in their 'alma maters' when studying overseas.

For this reason, in regard to the social sciences PDII facilities mainly serve the public. According to staff about 100 social science students from private universities around the city come to PDII a day where they mainly find only 'old references' (i.e. not current LIPI research outputs). It is interesting how this inconsistency has remained for decades, unnoticed even by the leadership. In the meantime, the person in charge is not a librarian but a chemist by training (Dr. Ir. Putut Irwan Pudjiono, M.Sc.). PDII currently does have LARAS (the Library Archive and Analysis System) which is to be expanded. When it is better established, the system will allow all research outcomes and specialized libraries held by the numerous centers to be up-loaded in digital form and interconnected and thus accessible to all members of the institute (see a further description of PDII in **Appendix 7**).

¹⁹ All IPSK-LIPI Centers have their own journals in which LIPI as well as outside researchers can publish their papers.

²⁰ The head of PDII, Dr. Ir. Putut Irwan Pudjiono, M.Sc., explained the limited holdings of social science documentation at the center as being a consequence of the structure of LIPI where the social sciences constitute only one of five divisions.

In sum, LIPI in general and also IPSK in particular lag in recognition of the value and importance of publicity, of the need to 'market' their achievements (as well as their weaknesses for the public to scrutinize). And thus, unlike NGO's and private (for profit) companies whose existence is dependent on their marketing endeavors, LIPI makes no resource allowances for this purpose. There are no announcements of their achievements, and even worse few outputs in English, the most widely used international language among Indonesian scholars as well. It is in this light that we have also looked at a possible role for PDII, which could be assigned an additional function, to also serve as LIPI's public face. As such, perhaps PDII could also be exposed to build its capacity to more effectively meet market demand as well as try to 'sell' its services, including to government public policy makers requiring inputs from the social sciences.

If such a role for PDII could be achieved, then the role of bridging between research and development policy might not require a new unit like ICIAR (the International Center for Interdisciplinary and Advanced Research) - the author understands that this center is still to be established. This is also because under current conditions quality researchers are still not in abundance at LIPI and establishing another center would only spread the available limited supply of quality resources even thinner; thus raising doubts about the potential for improving the research quality of existing LIPI staff unless the centers rely on outside resources. And, if the goal of ICIAR is to improve communications and sharing of knowledge between Indonesian researchers, then this could be better achieved through possibly stronger investments in a PDII with improved resources and relying on modern technology to perform this task.

6. THE INTERNAL STRUCTURE OF THE SOCIAL SCIENCE AND HUMANITIES DIVISION OF LIPI

Having looked broadly at the role of LIPI and IPSK, particularly from the point of view of exercising a bridging role between knowledge formulation (scientific research) and government policy, we now turn to a closer look at issues related to the internal structure, staffing, financing and activities actually carried out by the organization. That also requires a closer look at existing rules and regulations either enhancing or hindering the development of relations and supply of knowledge between LIPI and policy makers in government. As indicated earlier, this study focuses on only one of five divisions of LIPI, the Social Science and Humanities Division (IPSK).

Staffing

In 2009 IPSK had a total staff of 325 persons, virtually all of whom were assigned to one of five Centers and, within these Centers to one of the designated fields referred to as areas of 'core competence' for the particular Center (see **Appendix 1**). Of these staff, a total of 216 or two-thirds were designated as researchers. This fairly closely follows what is seen within LIPI to be an "ideal" ratio of 2:1 between researchers and non-researchers, with the latter composing administrators and other support personnel (LIPI 2010).

Currently IPSK-LIPI has a research staff of **233** persons (see **Appendix 2**). However, these are not equally distributed between Centers. The Culture and Society Center has 62 researchers, Politics has 53, Population and Economics each have 44 researchers and Regional Resources, the youngest center has only 30 active researchers (as 7 are attending school). Politics has the highest proportion with doctorates (26 percent), followed by Culture and Society (19 percent), Economics (18 percent) and Regional Resources (17 percent).

Interestingly, the IPSK-LIPI research staff is slightly biased toward females, with more just over half (52 percent) being women. This is a function of more recent recruitments which has tended to favor women as the younger, the less educated and the lower ranking research positions all show a positive relation in terms of femininity (percent females).²¹ Interestingly, it is the Population Center that contributes most strongly to the femininity of the LIPI research staff where the great majority of the research staff (86 percent) are women. The next most feminine Center is in the Regional Resources Center with 60 percent female; while the least feminine is Economics with only 34 percent female researchers. The reason these variations in gender composition has not been investigated.²²

Researchers are accredited professionals²³ (see **Appendix 3** for an explanation of the quantitative and very tedious point system that sets out promotion requirements). However, the minimal education requirement for professional researchers is only an undergraduate (S1) degree. Of the 233 researchers in IPSK in 2011, less than one-fifth or 44 persons held Doctorates (S3), half or 115 held Masters Degrees (S2) and the remaining one-third held undergraduate degrees (S1).²⁴ This is a reasonable education composition among researchers in the social sciences. However, quality is not only a function of degrees, but also of the capability of the individual and here, it should be clear that some fields are more marketable than others, offering non-academic or non-research options to the best students. For example, FEUI (the Faculty of Economics, University of Indonesia) finds it difficult to entice their best graduates in accounting and management to continue schooling as the opportunity costs are unfavorable, while in the sciences we are told, schools like ITB (Institut Teknologi Bandung) has more than 90 percent of its staff with Ph.D.²⁵

The field of study composition of researchers in the research centers is rather inter-disciplinary and the system does allow for at least some mobility between centers. For example, not all researchers in the Center for Politics have educational backgrounds in politics. Even though the majority studied politics, government, or

²¹ This suggests that an important selection criteria is academic performance as increasingly we find girls performing better in school than boys.

²² There is a also a gender study which will hopefully addresses this issue.

²³ Accreditation of Researchers is the responsibility of LIPI (*Keputusan Bersama LIPI & BKN 3719/D/2004 & 60/2004*). This applies not only to LIPI researchers but also to those stationed in R&D centers of Ministries (*Balitbang*) as well as what is known as LPNK (Non-Ministry Government Agencies). This is a recent requirement designed to acknowledge professionalization across a number of occupations. Similar procedures are currently required of teachers and lecturers, who all have to be accredited, ultimately by the Ministry of National Education (MONE).

²⁴ This composition is significantly different from what existed only two years earlier when the education composition was 1:2:1 for S1:S2:S3 degree holders.

²⁵ From an interview with the DG of Higher Education at MONE on April 29, 2011.

international relations, others came with backgrounds in areas such as economics, communications, Arabic literature, development studies, business, or American history. In addition, while in general researchers remain within their respective centers throughout their career with LIPI, mobility between centers is possible.

LIPI staff and researchers are government employees²⁶ and are therefore subject to the same rules of recruitment and career development as most other government employees. To join the government as a researcher²⁷ one has to start at the bottom, in Rank IIIa if one has only an undergraduate education, IIIb with a Masters and IIIc for those already holding a doctorate or Ph.D. degree (see **Appendix 3** for details on promotion point system requirements). After an approximately one year trial period the candidate is accepted into the civil service as a PNS (*Pegawai Negeri Sipil* or civil servant) and immediately achieves tenure. Higher positions are filled from below and through a mostly seniority- rather than merit-based promotion system. In other words, government institutions cannot obtain the best and the brightest Indonesians wherever they are by offering them a high level position, like a Research Professorship in the case of LIPI.²⁸ At best they can only be offered a short-term contract. This makes it difficult to attract highly qualified Indonesian scientists who are already established elsewhere in Indonesia or overseas, unlike policies adopted by some other Asian countries to attract their best and brightest from overseas posts to come home and serve as engines of growth.

LIPI obtains its research staff through an open web-based recruitment system, accessible to all Indonesians. The IPSK Deputy regards this system as an improvement over a closed system in order to obtain 'quality' input for the LIPI pool of researchers.²⁹ On the other hand, even with this, the quality of the inputs into the LIPI system cannot compete with top universities such as UI or ITB in getting the 'best brains' the country has to offer; the reason being that the universities are much more "inbred", recruiting from among their students, who, in turn, due to the high level of selectivity in admissions, are among the best in the country. LIPI simply does not have this kind of pool to choose from.

As shall be discussed later, LIPI does not offer competitive remuneration and/or rewards. LIPI can only offer levels of remuneration that are sanctioned by the state under the civil service system, which are extremely low³⁰ (see descriptions

²⁶ Researchers are grouped into the following classes: (1) Research Professor; (2) Principal Researcher; (3) Researcher; (4) Junior Researcher; and (5) First Class Researcher.

²⁷ Researchers, as well as publically paid lecturers at state and private universities, are subject to civil service or PNS (*Pegawai Negeri Sipil*) rules of admission and promotion. These vary in terms of requirements of eligibility. Accreditation of researchers is the responsibility of LIPI and this includes affected researchers in LIPI as well as in research sections in ministries or *Balitbang*, or Non-Ministry Government Institutions or LPNK (*Lembaga Pemerintah Non-Kementerian*).

²⁸ Requirements for a Research Professor mirror those for professors in universities. The minimum requirement is a doctorate and publication as sole author in an accredited journal. To become an acknowledged Research Professor, as a promotion from Principal Researcher, the person also has to write a policy paper for public presentation (*orasi ilmiah*).

²⁹ The benefit of an open system as opposed to a closed system is that evaluation results are also posted and accessible to relevant stakeholders (interview with Dr. Aswatini 1 April 2011).

³⁰ Higher take-home pay is created through supplementation. For instance professors at state universities receive supplementations in the order of 300% over and above their salaries.

below). Part of the reason also may lie in the fact that LIPI does not create revenue, currently known in budgetary parlance as PNBP (*Pendapatan Negara Bukan Pajak*, Non Tax State Income). Top state universities, on the other hand, do create substantial PNBP revenues from teaching and research. These revenues are used by these universities to top-up or supplement state salaries (where the base salaries are currently at similar levels as LIPI researchers). Besides, experience shows that public universities are better 'stepping stones' than LIPI to public office. And thus, for LIPI to have similar access to the best potential candidates among young and bright candidates requires LIPI to be able to offer competitive packages of remuneration and other opportunities.

Even so, development of quality is still possible. As a government institution, LIPI is able to provide a range of benefits and one of these is access to advanced education. After serving a specified number of years, a researcher can apply for graduate education either in-country or overseas with direct government financial support through scholarships either using government funds or using funds provided by bi-laterals for government employees.³¹ This remains a valuable incentive to attract potential researchers.

The data also demonstrates the sustainability of the institution as a government agency. Irrespective of quality, there is a continuous replenishment as senior researchers retire and younger ones are recruited, joining the ranks at the bottom of the ladder to take their place. After a few years of service and as they reach middle levels, they can benefit from access to scholarships to study at the post graduate level at either overseas or domestic institutions, depending on availability and qualifications and thus progress further until they achieve the rank of senior researchers, themselves.

Financial Resources

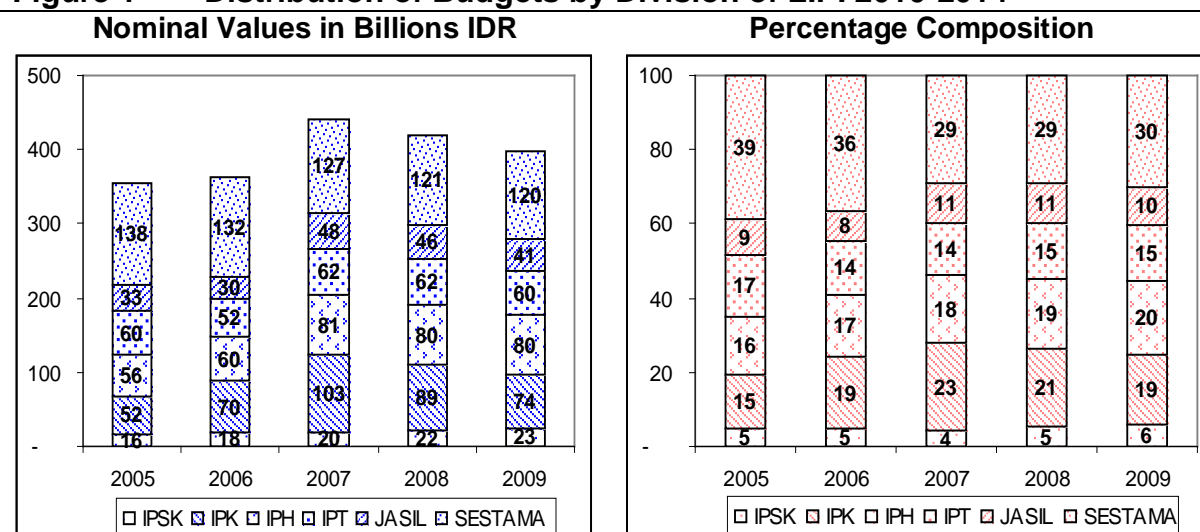
Whatever the argument or reasoning, among the sciences, the social sciences have always treated as 'a stepchild' and remain chronically underfunded. In Indonesia the most frequent argument provided by bureaucrats is that unlike the social sciences the hard sciences require laboratories and expensive machinery. Unfortunately, this overlooks the real costs of conducting social research, including the costs associated with scientifically designed field research and the collecting of high quality data to produce high quality knowledge and information. To obtain properly designed scientific social data from people, social scientists often have to travel great distances to difficult places (without the comforts of star-rated hotels). And, as well, data collection from properly designed scientific samples also requires lengthy field work time. All in all, properly collected scientific data is not an inexpensive exercise, whether in the hard or the social sciences. And yet, this need for the social sciences, the actual cost of quality data collection, is seldom accommodated in public budgeting.

This stereotype of the social sciences requiring limited financial resources to conduct research is reflected in LIPI's overall budget allocations for the period 2004-2009 (see **Figure 1**). During the period, the overall institution's budget rose from 355

³¹ This includes such scholarships as made available by AusAID.

to 398 billion IDR and, while the Social Science Division budget increased faster in percentage terms (rising from 16 to 23 billion IDR) it still constituted only 5-6 percent of the total LIPI budget.

Figure 1 – Distribution of Budgets by Division of LIPI 2010-2014



Source : LIPI (2010) *Rencana Strategis 2010-2014*.

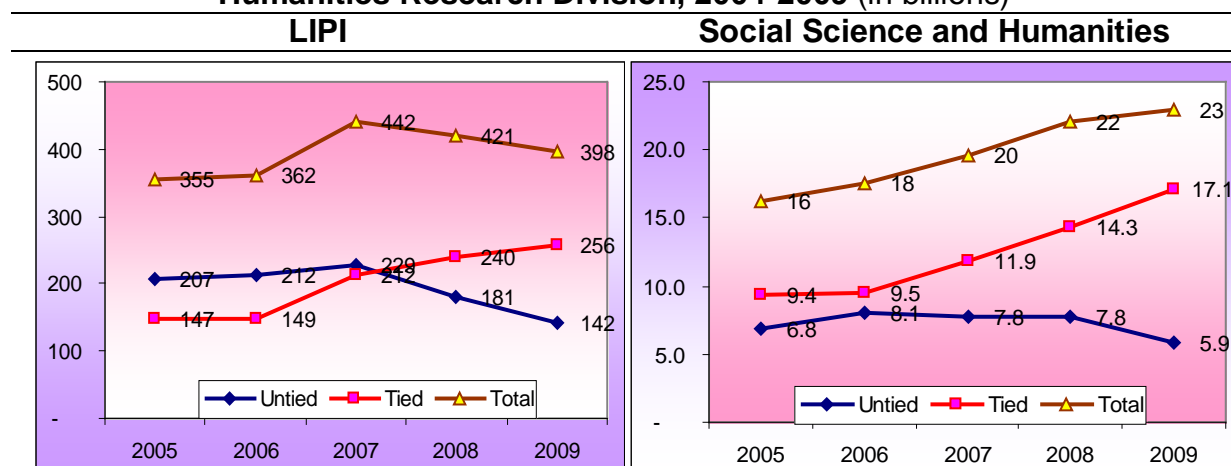
Note : IPSK (Social Sciences); IPK (Earth Sciences); IPH (Biological Sciences); IPT (Technological Sciences); JASIL (Scientific Services); and SESTAMA (Secretariat)

The budget can also be separated into tied and untied funds. Tied funds cover operational costs, including salaries, and competitive research funds controlled by the Institute's secretariat (*Sestama*), while untied funds are basically those monies allocated for thematic research activities.³² **Figure 2** provides some indication of the level of government appreciation for the knowledge sector at least as far as LIPI is concerned. During the previous government of 2005-2009, LIPI's allocation from the national budget rose slightly in mid-decade but declined in absolute terms in more recent years from a peak in 2007 of IDR 442 billion to less than IDR 400 billion at the end of the preceding presidential term in 2009.³³ Analysis conducted by the Social Sciences division also raises concerns about the rise in tied funding as opposed to a decline in untied funding. The reason for this concern is that untied funding is used for so-called thematic research projects that are proposed from the bottom up, that is selected and determined at the division level. However, in tied funding, which rose significantly from 9.5 to 17.1 billion IDR, includes funding for competitive research projects which are selected at the institutional level and therefore are open to a wider audience including other divisions focusing on areas in the hard sciences and technology.

³² Competitive research funds are held by the LIPI central office because selection of projects for funding is at the overall institutional level. Another source of research funds is held at the divisional level which selects thematic research projects for funding.

³³ This level of funding can be compared to the 2009 national budget to the tune of more than 900 trillion IDR (*Laporan Keuangan Pemerintah Pusat*, LKPP), constituting only 0.04%, the same as it is in the 2011 budget (around 0.5 trillion compared to 1,200 trillion IDR).

Figure 2 – Tied and Untied Budgets of LIPI and the Social Sciences and Humanities Research Division, 2004-2009 (in billions)



Source: LIPI (2010), *Renstra Kedepatian IPSK 2010-2014*.

In summary, the institutional sources of research funding available to LIPI researchers from the national state budget, APBN include:

- Thematic and Competitive Research funds** – These refer to funds from LIPI's budget or DIPA (*Daftar Isian Pelaksanaan Anggaran*) that are accessible to LIPI researchers on the basis of approved proposals. These include thematic grants that approved at the Division level for projects proposed by staff of sub-divisions according to their respective core competences, and competitive grants that are approved at the overall institutional level for grants and which can involve researchers from several centers, divisions, or even include researchers from outside LIPI.
- Incentive Research Grants** – These refer to grants distributed on a competitive basis by the Ministry of Research and Technology or *Menristek* that are open generally, but can also include researchers from LIPI. For two years (2009 and 2010), it was the DRN (*Dewan Riset Nasional* or National Research Council) which was assigned by the previous Minister to conduct the selection of proposals. However, starting in 2011 this task has been taken back by the Ministry. In 2010, Menristek funds for this purpose amounted to around 100 billion IDR. In addition, these funds have been significantly augmented by MONE,³⁴ which due to the large amount of funding dictated by the education law has picked up supplementation for researchers that was promised by the President during a visit the LIPI rice research station. The end result was an additional MONE contribution of 250 billion IDR to this research fund. As a rule the funds allow for about 50 million IDR per researcher.³⁵
- Iptekda (Regional Science and Technology)** – These represent assignments from other ministries which also provide the funding for such purposes, either

³⁴ MONE (Ministry of National Education) is extremely well funded. By law No.20/2003, the national and regional budgets have to allocate 20 percent of their respective budgets to education.

³⁵ As explained by Dr. Benjamin Lakitan, Deputy for Scientific Institutions

through their respective budgets or in funds that are included in the LIPI budget but on top of their 'regular' allocation.

Except for the special assignments, LIPI research funds are theoretically accessible to all researchers. As well, ultimately all researchers are involved in one or more projects. A basic distribution is primarily ensured by the bottom up system of thematic grants where proposals are prepared by groups of 2-5 researchers at the level of sub-centers or 'core competences' and approved for funding by a selection committee. Whereas thematic projects are selected at the Division level, competitive projects are selected by a committee at LIPI. Selection implies that not all proposals are funded; either due to lack of funding or for reasons of substandard quality. This rule applies to both thematic as well as competitive projects. Those groups whose proposals are not funded then regroup with others that have been funded depending on who is willing to work with whom.

In 2010 IPSK-LIPI implemented 101 projects by its 233 researchers (**Table 1**). There appears to be a relation between the number of projects and researchers in a center. Culture and Society with the largest number of researchers (62) also conducted the largest number of research projects (28). This was followed by Politics with 24 project and 53 researchers. However, even though Economics and Population had the same number of researchers, economics had many more projects funded in 2010 (23) compared to population with only 14 projects. The 'youngest' center, Regional Resources with only 30 researchers (of whom a number are still attending school) conducted only 12 projects. Even at this quantitative level, these data imply diversity in 'quality' as implied by the relation between number of research projects and researchers.

Table 1 – Numbers of Research Projects Conducted by IPSK-LIPI by Center and Type of Research in 2010

	Politics	Cult & Society	Economics	Population	Reg. Sources	Total
Thematic	9	10	10	6	7	42
Competitive	4	4	4	4	1	17
Special Assignment	1		3			4
MORT/MONE funded	10	14	6	4	4	38
Total	24	28	23	14	12	101
No. of Researchers	53	62	44	44	30	233

Source : **Appendix 4**, List of IPSK research titles by Center and type of research

Note : MORT=Ministry of Research and Technology; MONE=Ministry of National Education

All these projects are funded by the state from the national budget (APBN). LIPI is constrained as to other sources of funding for their research. As a government institution funded by the state, LIPI cannot bid on other government research projects (Sherlock 2010) or 'sell' its services to the private sector. LIPI cannot sign contracts with other government institutions, or accept earnings from the private sector as these would have to be submitted to the state as PNB (Penerimaan Negara Bukan Pajak, Non-Tax State Income) and spending would be subject to the same rules as those governing other sources of funds from the state.

Even worse, this latter rule also applies to foreign funds from cooperative research with international institutions that would also need to be reflected in LIPI's budget.

Remuneration

LIPI researchers are civil servants and thus remunerated at civil servants' levels. Without adjustment, the lowest basic salary for new recruits (in rank IIIa with 0 (zero) years experience) is IDR 1.7 million or about Aus\$200 per month,³⁶ and for the highest ranked researchers with 32 years of service (about to retire) it is still only IDR 3.6 million or about A\$400 per month (details of incremental raises are shown in **Appendix 5**). In addition, researchers are eligible to receive supplements, which for First Class Researchers is IDR 325 thousand (about Aus\$36) per month rising to IDR 1.4 million (Aus\$155) for Principal Researchers or Research Professors (see **Appendix 5**). Structural position holders are also given additional supplements, potentially doubling these meager salaries. Although exact calculations are impossible, in practice a typical center head is likely to make between IDR 6-7 million a month or at the most still less than Aus\$ 800 per month. This of course, cannot realistically be considered as living wages for top researchers, certainly not compared to Jakarta's cost of living. Compare that for instance to top university entrance fees of some IDR 50 million, or where a specialist doctor's fee in a private hospital is IDR 300-500 thousand per visit.

LIPI is letting the world know that they are not appreciated financially. A senior researcher wrote in the daily *Kompas* (15 September 2010) *Negara dan nasib peneliti* (State and the fate of researchers), lamenting the very low salaries received by government researchers and the discrimination among civil servants. *Suara Pembaruan*, an afternoon daily has taken up their cause and wrote editorially on their behalf on March 29, 2011 on *LIPI, dibutuhkan tapi diabaikan* (LIPI, needed but neglected). On March 30, the same paper devoted its editorial to the cause *Berdayakan LIPI* (Empower LIPI), and there was another write up *Peneliti Indonesia butuh jaminan kesejahteraan* (Indonesian researchers need their welfare guaranteed). Here the writer is correct because the current system is blatantly discriminatory,³⁷ as some sections of government (where so-called civil service reforms have taken place such as in the Ministry of Finance) are paid much higher salaries than others.

In practice of course, the low civil service salaries have been allowed to be compensated by additional supplements from projects and/or outside activities. The problem is that in general it is only among the 'better trained' among those in higher positions and among those with greater public recognition that there are greater

³⁶ At the time of writing the exchange rate was about A\$ 1 = IDR 9,000.

³⁷ Most publicized are the remuneration levels that have been awarded to the Ministry of Finance personnel, particularly tax officers. Also often mentioned are the levels of pay for parliamentarians who are given official take-home pay of more than IDR 50 million. Most of the difference lies in the amounts and types of supplements given to those working in different public sector agencies (**Error! Hyperlink reference not valid.**). This is of course no comparison to the private sector which rewards the best personnel at comparable levels to other economies. Even public university professors are currently beneficiaries of significant supplementations of up to 300 percent, providing them with a take-home pay of around IDR 14 million a month.

possibilities for gaining access to additional earnings from projects or outside activities.

Research Income Supplementation

All researchers in LIPI participate in funded research projects and this does serve as a source of income supplementation. As noted earlier, the LIPI budget from the state makes available funding for two types of research projects – thematic and competitive projects. Thematic projects are distributed throughout all centers and sub-centers in such a way that all of these units have at least a few projects and all researchers are able to participate. However, competitive projects can involve researches from several centers and even from outside and access to funding is limited to those whose proposals are selected for funding. Appropriately, to provide sufficient incentive, competitive grants are significantly larger (around IDR 300 million) than thematic grants (around IDR 100 million).

The problem is that whichever the source, at the level of the individual researcher, the incentives are limited. The highest supplemental project payment rate for the highest class (IV a-e) of researchers is only IDR 50,000/hour³⁸ and this declines to IDR 35,000 /hour for class III (a-d), and IDR 25,000/hour for support staff. Another limitation is that the maximum number of hours per month that can be claimed is only 75, a level that at the payment rates noted above translates to less than IDR4 million a month for the highest ranked researchers. However, even this is seldom attained as according to Prof. Syamsudin Harris from the Center for Politics,³⁹ there is not enough money to go around and thus hardly any researcher has access to the monthly maximum number of hours for extra pay.

Not surprising, those who can create a market for their skills. A number of LIPI researchers have become celebrities supported by media coverage. Their LIPI attributes gives them credibility as resource persons, to national and local governments, political parties and so on. They are invited as speakers and/or moderators during seminars, of also write newspaper articles for which they receive honoraria. Others may conduct research projects with funding to individuals. Such assignments can be a source of additional income as they are often carried out as additional ‘projects’ that can be conducted for a fee. This is critical as LIPI’s budgets are fixed and can only be applied to their pre-planned projects as designated in their annual work plans. They do not have any extra budget to respond to outside requests and neither do they have the budgetary flexibility to do so.

The exact extent of these kinds of activities in relation to the total staff cannot be determined although, given that we are talking mainly about more established senior researchers, it is likely to be relatively small. However, it does represent what appears to be a fairly common response to a demand side that tends to target individuals rather than institutions as sources of knowledge or expertise. And although this report looks mainly at the social sciences, the idea of drawing on individual expertise would likely apply to other sectors (as well as other research institutions) as well. While there are obligations to carry out assigned research

³⁸ A researcher reminded us that the IDR 50,000 is a level that should, but often not what is.

³⁹ Conveyed during an interview on 11 April 2011 by Mr. Sjamsudin Haris.

projects, these do not generally appear to preclude this kind of outside work and it is understandable that researchers would often tend to opt (where possible) for activities that would lead to greater peer recognition and chances to influence policy even where they did not come from regular research work.

On Research Outcomes

Given the variations in capacities of research staff as well as some of the issues about research design and funding noted above it should not be surprising that current researchers and their outcomes are characterized by great variation. Some produce very good research including publications in the form of books or articles in refereed journals. Others, on the other hand, are much weaker with little or no experience of conducting quality scientific research where they have grown in a 'culture of mediocrity' in an environment of having to make adjustments for (extreme) financial constraints and a lack of demand for quality research.

What is clear however is that statements of overall mediocrity are misplaced; on an individual level there are a number of quality researchers, known internationally as well as domestically. While international recognition is indicated by their participation in international academic seminars or meetings or research projects, domestic reputation is attained through personal networks, including those in government, and appearances in printed and electronic media in talk-shows. Some are recruited by international agencies like the World Bank as staff consultants/researchers. Again others conduct individual consultancies for international or domestic agencies.

Besides their designated research projects, a number of researchers do have linkages with the Government. A number of LIPI researchers cooperate with government or carry out assignments, including provision of policy input. The Population Center, for instance, claims having given inputs to the revision of the Labor laws (one of their core competences is in the area of Labor). Claims have also been made on the Center's inputs to basic education policies.⁴⁰ The Economics Center has one of its staff on assignment with the World Bank,⁴¹ and others also provide assistance to government. For instance, the UKP4 (*Unit Kerja Presiden Pengawasan dan Pengendalian Pembangunan*, Presidential Work Unit for Development Supervision and Control) headed by Dr. Kuntoro Mangkusubroto, has turned to LIPI for advice on building a roadmap for Papua.⁴² And this year, IPSK-LIPI has been assigned a sizable (about 2 billion IDR) national priority project to contribute to a dictionary of (almost) extinct languages spoken by limited numbers of people in isolated communities.

Other LIPI researchers have claimed to have contributed inputs and/or 'academic articles' (*naskah akademis*) as basis for preparing laws by government

⁴⁰ From an interview with Dr. Sri Sunarti Purwaningsih, MA, head of the Population Center and staff on 24 March 2011.

⁴¹ From an interview with Drs. Darwin Syamsulbahri, M.Sc. head of the Economics Center on 25 March 2011.

⁴² This Papua project was conducted by the Political Science Center. However, it took them two years to 'lobby' government to even pay attention to the importance of LIPI in this work.

and/or parliamentarians. For example LIPI researchers gave inputs to the National Election Commission, the Ministry of Home Affairs (MOHA), and parliament. The current rules on national and local elections as well as earlier and revised laws on decentralization and regional autonomy (*Otonomi Daerah/Otda*)⁴³ were also claimed to be designed with inputs from researchers in politics and economics.

The same is true of research outputs; although these are characterized by variation in quality. Some research results are published by commercial publishers while others are printed in-house for LIPI and/or for purposes financial accountability. A cursory review of a limited number of IPSK-LIPI publications does suggest however, that there are some reasonable results, in at least some cases as good as those produced by other institutions more favored by international agencies.

However, there remains a particular problem where research relies on empirically based primary data collection that makes much of this research insufficient as basis for policy formulation. The main reason here is that the very limited available financial resources allow for micro studies only, not necessarily representative of wider populations. Moreover, field work funds are so constrained that even at the micro level it may not be possible to conduct proper data collection through surveys, properly representing even selected communities. On average, a researcher is allocated a maximum of 10 days fieldwork funds for a project and this includes travel time. Thus poor data quality also leads to poor overall research outcomes. Worst, these stringent rules and regulations also apply to foreign funds received by the institute that are included in its budget (Government Regulation No. 10/2011).

Such limitations have to be accepted by the researchers as facts of life to which one has to adjust one's expectations and one's standards. In other words, current government-imposed budgetary rules and regulations only tend to strengthen a culture of mediocrity in research quality. The culture of mediocrity in quality does not only characterize LIPI's current researchers. In fact, the late Professor Koentjaraningrat (1974) warned Indonesians of being too easily satisfied. Moreover, this culture of mediocrity is further reinforced by the fear of being accused of improper use of public funds. It is more important to produce something in print between covers to be submitted as proof of project completion at the end of the fiscal year, rather than ensuring that the results are of good or of publishable quality ready for peer review.

Another important shortcoming of IPSK-LIPI's research reports is the language. Those funded by the Indonesian government are all prepared and written in Indonesian. As such, it is suggested, these results are seldom read or referenced by members of the international community. Moreover, IPSK-LIPI, like some other small private sector firms, has no separate budget for the purpose of publicizing its research results, if not on a bi-lingual basis, at least in English. This can be particularly effective in reaching policy makers particularly where funds are available

⁴³ From interviews with Prof. Syamsudin Harris, Head of the Research Center for Politics and Prof. Ikrar Nusa Bhakti, previous Head of the Center on 11 April 2011.

to produce glossy, beautifully designed and full color briefs and/or newsletters,⁴⁴ which can be distributed for free, a marketing tool.

But there may be hope. PDII (*Pusat Dokumentasi dan Informasi Ilmiah*, Center for Scientific Documentation and Information) of LIPI is planning an integrated library system. The introduction of LARAS (the Library and Archive Analysis System) will allow the current decentralized library and information holdings that are now spread out among the numerous research centers throughout the country to be consolidated and indexed and with the potential for application of such search engines as Google and Yahoo. Other possibilities are also being promised (see **Appendix 7** for further details on PDII-LIPI).

7. DEMAND

On the demand side, the study attempted to look at two potential sources – government and international agencies. Unlike the case with the supply side, focusing on IPSK-LIPI, however, this part of the exercise uncovered only limited information. Nevertheless, some themes did emerge. For example, in regards to the question as to whether government would turn to LIPI when needing knowledge-based information, it is clear that the answer requires differentiation between demands relating to the institution or more to specific individuals and this applies to both government as well as LIPI.

In addition, there is the recognized wide variation in the level and sophistication of demand. If LIPI and even more specifically IPSK-LIPI is characterized by variation in capability, the much larger body of organizations and institutions, particularly political institutions, and people in government show even far greater variation. There are of course the very sophisticated government officials. However, many of these people tend to rely on their personal networks, often from their own alma maters. For instance the Director General of Higher Education claimed to prefer to turn to ITB, and the Director of the National Education Council to UGM, their respective universities, before they would consider turning to LIPI.⁴⁵ Another example is UKP4 mentioned earlier, which relies on its head and or staff networks to identify sources of information, again more likely focusing on individuals than on institutions.

There may be exceptions. For example in the reliance that Bappenas or the World Bank place on institutions such as SMERU or Survey Meter that do have a reputation of producing quality output and where the institutions have a history of close relations with many of their clients. However the results of the interviews held still suggest the importance of personal relations and personal reputations in determining choices on the demand side.

⁴⁴ This suggestion is based on personal experience. There was a time when this writer wrote research papers exclusively in Indonesian. The result however, was an almost total lack of recognition, even within the country. When the author started to write mainly in English, which could be read by foreign consultants with whom she was working at the time, these consultants were able to more easily refer to her work when they met Indonesian officials.

⁴⁵ Even though it is recognized that these are not career MONE staff.

On the other hand, the reality is that various arms of government including people in senior positions in charge of policy decision-making are simply not that concerned about (scientific) 'knowledge' (or about data and/or facts for that matter), particularly where top posts, i.e. ministers are political appointments and where politics may override facts and where the ultimate function of government - the provision of services to the *rakyat*, the people – may be set aside. This is found even among those in charge of development planning in those organizations. Thus we still find supposed plans without data and where future targets are stated only as *naik* or *turun* (up or down) or else, where objectives are stated qualitatively using words like 'sufficient' or 'insufficient' that require no properly and objectively collected data - no properly scientifically collected knowledge. Neither is there often any indication of how improvements are to be achieved.

More critically, from the user's perspective it is far more often at the personal as opposed to the institutional level that services are requested and fulfilled. While interpersonal relations are inevitably important anywhere this condition is exacerbated by existing rules and regulations. Currently LIPI as a government institution cannot accept an assignment from another government agency that goes beyond LIPI budgetary allocations (also discussed in detail in Sherlock 2010). On the other hand, regulations do permit government departments to more easily hire individuals, who can be treated as 'self managed' consultants (*swa kelola*) as long as the value of the assignment does not exceed 50 million IDR. Procurements worth less than 50 million IDR can be done by direct appoint, appropriate for individual personal assignments to conduct small studies, without having to collect primary data. Although never personally experienced by the author, this appears to be a common practice. Also an often heard practice is that when projects are budgeted for larger amounts they are broken down into segments of less than 50 million IDR to avoid tendering requirements. And, in the meantime, government institutions like LIPI turn a blind eye to individuals taking up outside assignments to top up their meager government salaries.

In the same vein, we were not able to find much interest in LIPI or more specifically IPSK-LIPI from international agencies.⁴⁶ For instance, the World Bank⁴⁷ considers there to be a general absence of indigenous research institutes, except possibly for SMERU and maybe Survey Meter, with the capacity to collect and/or analyze data to their standard of quality. In Indonesia the Bank has a sizeable research staff, and they are able to directly recruit new in-house research capacity from among the better Indonesian scholars from the public sector that even includes people from institutions such as LIPI, University of Indonesia, etc. Thus the World Bank does not see a need to try and rely on Indonesian Institutions for such services.

The Ford Foundation in Jakarta is a much smaller office with very divergent interests. Interestingly, in the past Ford did help to develop Indonesian scholars, scholarship and leaders including in university economics faculties and in LIPI's predecessor (LEKNAS), where Ford was instrumental in supporting the cadre of

⁴⁶ Interestingly, it proved to be very difficult to meet with foreign agency representatives.

⁴⁷ From an interview with Mae Chu Chang World Bank Coordinator, Human Development Sector, Lead Educator.

researchers and policy makers known as the ‘Berkeley Mafia’ (a term coined by Rand), or in the 1980s when it supported social science research stations to develop a cadre with good qualitative research skills. Today, however, Ford’s interests lie elsewhere⁴⁸ and therefore it currently has no relations with LIPI. Our interview with the representative made them aware of the existence of IPSK as an institution potentially worth considering in the future.

In short, we saw little notice of LIPI in general or IPSK-LIPI in particular among government officials that we met and interviewed for this study. This observation is particularly true of LIPI as an institution. This is a matter of concern as LIPI is the only institution of its kind - a national public research institution funded by public sources and few implementing agencies rely on its services as basis for designing public policy, particularly those affecting people. Is this an outcome or is it a cause of LIPI not being on the radar of government or other international institutions and thus not receiving the necessary attention and especially financial support? That is a question for further discussion.

8. CONCLUSIONS AND RECOMMENDATIONS

Conclusions

To put it in a nutshell, **IPSK-LIPI is suffering from a lack of credibility in an environment that is often characterized by a low level of public respect for the knowledge sector.** In this regard, the organization is widely considered to be weak in terms of research methodology and the quality of research output and there are few demands for its services for purposes of public policy formulation. There are several explanations for this, but one key root cause lies in the extremely limited budgetary allocation for its activities, potentially rendering the institution to ‘die’ a slow death. Neither the executive nor legislators - those with the power to approve state budgets - have shown much interest in properly making significant budgetary allocations for the knowledge sector.⁴⁹ And yet the future lies in demand-driven knowledge-based development. Such a future development path needs at least initially to be government led and promoted in order to attract private sector participation, including cooperation among the wider community of researchers taking an active role in its developments.

Another salient issue is that, like for many other institutions of its kind and size, that there is great variation in the quality of researchers and research outputs. In fact, even with number of complaints there are, in fact, a number of gems between weaker researchers. Among the better scholars some have become “celebrities” in the sense that they enjoy a wider (beyond the institution) level of recognition. They

⁴⁸ The current focus of the Ford Foundation Jakarta office is on the following issues: (1) Democratic and Accountable Government, (2) Economic Fairness, (3) Sustainable Development, (4) Freedom of Expression; and (5) Sexuality and Reproductive Health and Rights.

⁴⁹ To give one example, throughout East Asia, Indonesia is one of very few countries in the world and the only country among its neighbours, which has no policy and investment program in the area of nanotechnology which is widely seen as a driving force of future development. This is also consistent with media reports on an increasing dependence of Indonesia on imports of just about everything and anything, including, or maybe especially, food products (Oey-Gardiner and Wahyuni 2011).

are often invited as seminar speakers or moderators and at times they are also asked to produce special studies for public policy makers. Others have remained more closely bound to the institution, remaining true scholars in pursuit of expanding the scientific horizons. These are exemplified by those currently working on the language project in the Center of Culture and Society one of very few that does enjoy substantial government approved funding.⁵⁰ In any case, the broader challenge for LIPI in general and IPSK in particular is to change its current image to one of an organization that produces quality basic, applied, as well as policy research, contributing solutions to social problems, in essence properly fulfilling its main tasks and functions, ready to be publicly scrutinized.

IPSK-LIPI's weaknesses also likely lie in the fact that much of the public are not being properly informed of its research achievements (or lack thereof). The institute and its centers are not provided with and therefore cannot allocate significant resources to publication and distribution of their outputs. At best they print a limited number of copies of their research reports. Each Center in IPSK does support a journal, but these also enjoy very limited exposure and much of what is published simply reflects reports on research that have not been subjected to adequate technical scrutiny or peer review. In addition, from the point of view or adequately informing policy makers, no resources are allocated for the production of more publically-oriented flyers, newsletters or bulletins in hard copies, and while LIPI does have a website, the information is not properly maintained and the research outputs of the institute are generally not reported. Even worse, little of the work is published in English which would be necessary to get exposure in a wider international arena.

On the other hand, it is still important to stress the position of LIPI and of IPSK in the research nexus. It is effectively a one of a kind, a government institution dedicated to research. Its legitimacy is also regulated by law and, thus it enjoys a level of permanence and distance from political manipulation. In this regard, thus far LIPI has been able to maintain a level of independence as they are not dependent on any particular arm of the government. And IPSK does have a brief encompassing three main tasks and functions (*tupoksi*) that, if effectively applied, could help make the organization more relevant to policy maker, namely to: (1) conduct research for scientific developments; (2) provide inputs to relevant stakeholders consisting of Government, the Private Sector, and Academia; and (3) solve problems in society. But given the problems noted above any kind of effective implantation is difficult if not impossible to achieve.

The main point, however, is that with or without special assistance, LIPI in general as well as the IPSK-LIPI division will remain and the pertinent question thus not one of the continuing existence of the institution, but one of just form it will take - just muddling along as it is today, further declining and at an increasingly faster pace, or becoming more relevant to the knowledge base and policy guidance needs of government and the community at large.

⁵⁰ This project has been approved by Bappenas at a level of 2 billion IDR and is to be completed over several years.

Recommendations

IPSK-LIPI should be strengthened. However, this should not be in the area of developing an intermediary role for the institution, but rather to continue its current mandate of conducting research for the purpose of advancing knowledge, serving the needs of various stakeholders (including but not limited to government) and with the ability to meet special requests funded at levels beyond the current channels that maintain the institution's regular/planned activities.

Strengthening LIPI, however, cannot achieve the desired outcome unless very basic changes are put in place, particularly changes related to bureaucratic reform. Reforms are required in current levels of remuneration that will allow the staff to dedicate more of their time to research. However, even this is not sufficient as far more basic reforms will need to be introduced to provide the necessary incentives to serving as incentives to produce quality output, including the need to introduce an effective 'peer review' system, even if it only starts internally and is subsequently expanded to extend to direct and indirect external reviewers at a later date.

To strengthen LIPI in general and IPSK in particular requires organizational reforms which we suggest are conditional upon fulfillment of at least the following conditions:

- (1) **Awareness** – It is not clear that the IPSK/LIPI leadership is adequately aware that something is not right, that the demand for their services is limited and that many of the reasons for this lie within the organization. As such there is a tendency for them to be defensive and blame the outside world, which although it may be partly true is not helpful in building the institution's credibility.
- (2) **Willingness to change** – There is always at least some resistance to change because if properly carried out it will affect a lot of people and while some will benefit others will also suffer. How (at times painful, but also necessary) changes can be introduced within a civil service organization is a key question. This will require further study working closely with institutional management to identify the best opportunities to introduce possible changes.

Given this introduction the following material deals with a number of general recommendations surrounding key aspects of the problem – demand, human resources and financing. This is followed by some specific responses to earlier AusAID thoughts on directions assistance to LIPI might take that were noted in the Terms of Reference for this assignment.

Demand Driven Changes

The role of government – While our position is clear, that LIPI should be strengthened, we also recognize that this can only be achieved by attending to the demand side, the government. It is the government which can and should demand services from LIPI for research-based information as input and basis for development policy formulation. As this situation is still far from common, there is a need for increased socialization on the need for research and data-based

development planning and of LIPI as a potential source. While hardly the entire picture, building a more informed and effective demand is an important component in the development of the knowledge sector, and is therefore highly relevant for AusAID support.

A further role for government – We further argue that it is the government which also has to move to encourage and support a broader range of actors in producing the kinds of knowledge necessary for informed policy making. This is because government all too often finds it more convenient to turn to project-funded policy research and to international institutions such as the World Bank (which has a growing Indonesian research staff) that provide much of the funding or to a relatively small number of indigenous research institutions as SMERU that are heavily supported by this same donor community. Because of this the government often seems to ignore or fails to recognize the value of having access to existing government sources of research such as IPSK thereby making it that much more difficult to improve the quality of work coming from this institution. Not only providing for improved quality at the institutional level, but also working to create incentives on the demand side that help level the playing field and encourage greater competition among research organizations could help support change. AusAID might be able to play an intermediary role, where on the one hand IPSK-LIPI should be strengthened in a ‘demand driven’ environment allowing both IPSK-LIPI and more “favored” organizations like SMERU to compete with each other to fulfill research-based information demands.⁵¹

Reconciliation of research financial needs – To allow LIPI to respond to government requests, work clearly has to be done at modifying public sector budgeting and expenditure rules and regulations. On the one hand, LIPI can only implement research projects and activities planned one year earlier (by March of the preceding year) when budgets have to be submitted and thus has great difficulty dealing with special funds for sudden ad hoc requests for special studies. Any special funds from other government agencies have to be included in LIPI’s budget and are subject to rigid rules regarding allowable unit prices and numbers of units. Thus, enabling LIPI to respond to sudden research requests requires reconciliation with planned budgetary allocations that is often extremely difficult to handle under current regulatory conditions.

Turning Around

As mentioned several times, it is this reviewer’s opinion that simply because LIPI (and here referring particularly to IPSK-LIPI) as the only national research institute of its kind it should be included in assistance to be made available by AusAID. If assistance is provided, the primary focus should be directed at strengthening the capacity of the institute allowing it to make a turn-around regaining a reputation it once held as being one of the top social science research institutions in LEKNAS. Assistance should be directed at enabling the organization to produce better quality research with improved means of dissemination that can help create a reputation for the institute to become both better known to the world and also

⁵¹ For LIPI this requires changes or at least modifications in current rules and regulations on financial resources.

appearing on policy makers' radar as a source of knowledge and research-based information as input for development policy. Ultimately, improving IPSK-LIPI's research reputation requires improvements in the quality and quantity of human and financial resources, the focus of the recommendations.

Human Resources

- **Invest in post graduate education for younger researchers** – Even though the education composition among IPSK-LIPI researchers is quite reasonable – about one-fifth are doctorate degree holders (S3), another half have masters' equivalents (S2) and almost one-third are undergraduates (S1) – the positive relation between education and age means that the highest research degrees are held by those who are generally more advanced in age. And yet if we expect change to occur at IPSK-LIPI this should be expected to be driven by younger staff. More rapid progression among suitably qualified younger staff could be helpful and could be an area where AusAID, which is very well known in Indonesia because of its scholarship programs, could provide support.
- **Training in appropriate research methods** – IPSK-LIPI researchers require training in research methods and particularly in identifying appropriate methodologies adaptable to the limited funding available for individual project activities, instead of current practices of one-sided adjustments to financial constraints only.
- **Training in collecting high quality data** – An important, if not the most important, ingredient of quality research is that it is based on valid and reliable data. A review of IPSK-LIPI research outputs suggests that much of the data collected or used does not yet reflect this requirement. Better understanding or competence in dealing with quality data collection issues would also help produce better quality research in the future.
- **Policy-responsive research requires macro data and research** – Yet, given allowable research budgets, IPSK-LIPI conducts micro studies as funds available generally limit the scope of work to something more akin to case studies of a few small communities. Assuming that financial constraints can be overcome, and IPSK-LIPI is able to engage in policy research at this level, improved skills in managing collection, processing and analysis of larger data sets will be required via training activities, including even in workshops.
- **Building a reputation through the dissemination of research outputs** – Building an improved basis for dissemination of research results is critical if LIPI and IPSK are to gain better and wider recognition. While this could theoretically be carried out by IPSK, it should be noted that IPSK is only one of five LIPI divisions and it may be more efficient to place dissemination activities in a more centralized location. Here, as mentioned earlier, LIPI has a unit responsible for holding all research and scientific documentations and information called PDII which is supposed to function, at least in part, to provide services directly to the public. Although it is not meeting this need adequately at present still does represent a logical place to concentrate skills

for improved dissemination of IPSK research results, as well as for LIPI generally. At present, however, this unit does not perform this function and, if it decided to use PDII as a dissemination unit, then the necessary investments would have to be made in specialized training of dedicated staff for the purpose.

- **Bureaucratic Reforms** – Ultimately, quality improvement in LIPI can only be achieved through true bureaucratic reform. Better remuneration as one part of the necessary reforms is already planned for introduction in 2012.⁵² However, more basic personnel policy reforms are required if LIPI is to embark on a road to become a true high quality research institution, comparable to similar institutes in the region. Current practices and incentives (or disincentives) are not conducive to producing quality research. Exactly what incentives or disincentives are required, however, remains a matter for further detailed study.

Financial Resources

- **Image building: Renovating the home of social science researchers** – It is suggested that to lift the reputation of LIPI it is important to invest in physically changing LIPI's image. Currently, the main building on Jl. Gatot Subroto, which mainly houses the social sciences division, is one of only a few on this major inner-city road which has not received a face-lift for many years, something that can be compared to most other government institutions which have benefitted from modernizing renovations and new buildings. It is hard to imagine LIPI's research outcomes gaining a high reputation when the building is in such a poor condition. Commitment to publically supported quality research would be enhanced by investment in improved facilities and the project might be able to assist government and LIPI in designing useful improvements or in identifying possible or potential sources for this purposes.
- **Image Building: Publication and dissemination of research outputs** – The Knowledge Project might be able to be instrumental in helping to socialize knowledge output through supporting dissemination of research outputs and the preparation of research documentation in forms most easily accessible to policy makers and planners. In general, government offices are not used to having to create a demand for their services. As mentioned earlier, it is suggested that this service could be centralized, located in PDII because of the need for to allocate dedicated staff with special (marketing) communication skills in presenting specialized materials for general public consumption besides the necessary hardware and software.
- **Research Funds** – It is suggested that bureaucratic reforms include identifying mechanisms and systems to properly access and use research funds by LIPI researchers (including application of rules of transparency and accountability). The reforms should be specifically designed to serve to attract initially the best researchers available in the institute and simultaneously also

⁵² As mentioned by Dr. Mesdin Simarmata, Director for Industry, Science and Technology and State Companies, of Bappenas

allowing for research designs which can produce quality data leading to improved quality and credibility of overall research outcomes.

On Possible Avenues for AusAID Support

This final section offers specific comments, resulting from this investigation, on the section on “Possible Avenues for AusAID Support” that was included in the Terms of Reference for this assignment.

- **On utilizing ICIAR** – based on our analysis of the LIPI situation, we hesitate to promote reliance on ICIAR as ‘an interdisciplinary platform for improved communications sharing of knowledge between Indonesian researchers.’ This is for the following reasons:
 - o ICIAR is designed as another unit in LIPI and may be engulfed in contemporary problems faced by the wider institution, with no design specification on how the unit could be used to improve the overall research quality of IPSK-LIPI. That means that it will have to rely on the same personnel and reward system, which are in general, not conducive to producing quality research.
 - o LIPI already has an institution called PDII, a scientific information documentation center which can (and probably should) be converted into a unit that can also be staffed with bi-lingual marketing skills

- **On Strengthening LIPI’s public relations unit** – It is suggested that this function can best be fulfilled by PDII. If suitably strengthened, PDII can serve as both a **repository** of scientific documentation, including all research outputs, as well as being in charge of the **distribution** aspects of the work done by LIPI researchers. We have identified a number of requirements for PDII as well as benefits for LIPI in general:
 - ♣ In PDII, LIPI can have one **public face**, in charge of dissemination of LIPI’s achievements, a marketing function.
 - ♣ This requires dedicated staff for this purpose, requiring training in producing bi-lingual announcements/publications (both in hard copy as well as electronically) of LIPI’s staff achievements.
 - ♣ For this purpose, PDII may need some reorganization. The present computers and search engines may benefit from a proper and more user-friendly update.
 - ♣ Included in the system, as already planned for PDII, is an overall integration of all center libraries spread out throughout the wider institution. While plans are already in place for socialization, it is suggested that it is at least equally if not more important to have an institution-wide policy on **what should and should not** be included in the system that can be uploaded and for easy public access. Here it is suggested that this be a LIPI leadership policy decision that placement of papers on the web means placement in the public domain, available and accessible for public scrutiny. It is this aspect which also requires socialization to all researchers, for this system would also allow the potential for wider peer review.

-
- ♣ However, the value of an improved system lies in the possibility of **sufficient and proper resource allocation for maintenance**,⁵³ both of the IT-based information system which would require continuous updating and improvements commensurate with technological developments in the field (library system) as well as 'enforcing' requirements for all research reports to be uploaded in the system.
 - **A stronger legal basis for LIPI** – This study notes that most of the current links between researchers and decision-makers lie not in the legality of institutional relations but rather in the reputation of individual researchers' that are recognized by particular decision-makers' in dealing with specific issues and when the need arises, it is suggested that any changes LIPI's legal status should seek to support greater reliance of decision-makers on LIPI as an institution.
 - **Reactions to requests from LIPI Senior Executives on:**
 - o **Staff training in writing executive summaries for policy makers:**
 - ♣ On executive summaries for policy makers:
 - As the need for research-based information among policy makers differs according to time and topic as well as personal style there is likely to be no standard format which would suffice to meet the needs of all policy makers on all topics and at all times. Thus, such specialized training should not be awarded the highest priority;
 - We suggest greater benefits would be gained by IPSK-LIPI staff through more general **training in proper research methods**. This is particularly true in light of prevailing bureaucratic and financial constraints to that often make it difficult to produce better quality data and analysis, so that improvement in this area should also result in improvement in the overall research quality of the institution;
 - Also beneficial would be staff training in writing proper abstracts that consistently reflect the contents of the report;
 - o **Increasing awareness among policy makers about the importance of using research outcomes as inputs into the decision-making process**
 - This recommendation should be supported with the warning that it should also be properly designed. There is great variation among policy makers. Some are politicians while others are bureaucrats. Some are highly educated while others have only limited educational experience. And thus some are interested in knowledge/research-based information while others are more responsive to political (or other social) pressures. Moreover, the overall knowledge sector can be called successful when development planning is actually based on properly collected quality data.

⁵³ The reason for this reminder is a 'weakness' in Indonesia's public budgeting allocation which emphasizes acquisition of new goods while hardly making available allocations for maintenance. Any project should look into this issue.

- On **reforming the human resourcing structures and processes in LIPI**
 - If the suggestion here is to eliminate the accreditation requirements of researchers, something that some claim often mainly serves to constrain their involvement in policy making, then the argument sounds a little too far-fetched because the current requirement is to have only one publication every two years. And, it is important to recognize (as has been the case with Indonesia's most credible research institutions) that publication is a minimum requirement of researchers.
 - On the other hand, if LIPI wants to appear more often on policy-makers' radar screen, then it may well be very necessary if LIPI as an organization is willing to respond to observations questioning the quality of their research outputs.

REFERENCES

- Adam, Asvi Warman (15 September 2010). Negara dan nasib peneliti (State and researchers' fate) in *Kompas daily*.
- Gardiner, Peter (2010). *Public Perception and Leadership Survey for AusAID*
- Gayatri, Irline Hiraswari, Eko H. Hutaningtyas, Athiqah Nur Alami, Tri Handayani and Tri Lestari (2010). *Laporan Tahunan Pusat Penelitian Politik-Lembaga Ilmu Pengetahuan Indonesia, Tahun 2009 (Annual Report of the Research Center for Politics-LIPI 2009)*.
- Gayatri, Irline Hiraswari Emilia Yustiningrum, Athiqah Nur Alami, Tri Handayani and Tri Lestari (2011), *Laporan Tahunan Pusat Penelitian Politik-Lembaga Ilmu Pengetahuan Indonesia, Tahun 2010 (Annual Report of the Research Center for Politics-LIPI 2010)*.
- Karetji, Petrarca Chawaro (30 September 2010). *Indonesian knowledge sector expert* (draft Final Report)
- Koentjaraningrat (1983). *Kebudayaan, Mentalitas dan Pembangunan* (Culture, Mentality and Development). Jakarta: Gramedia
- Mashad, Dhurorudin, Sri Sunarti Purwaningsih, Moc Nurhasim, Endang Soesilowati, Sutamat Aribowo, and Dundin Zainuddin ((2010). *Renstra Kedeputian IPSK 2010-2014*.
- McCarthy, John, and Rustam Ibrahim (8 March 2010). *Review of social science capacity building support to Indonesia's knowledge sector* (unpublished)
- Oey-Gardiner, Mayling and Sari Wahyuni, "Small is Beautiful and Increasingly Powerful: Where Do We Stand?" (2011) Paper prepared as contribution of the Faculty of Economics to a publication by the University of Indonesia on Nano Developments.
- Sherlock, Stephen (June 2010). *Knowledge for policy: Regulatory obstacles to the growth of a knowledge market in Indonesia* (unpublished)
- Suara Pembaruan* (29 March 2011). LIPI, dibutuhkan tapi diabaikan (LIPI, needed but ignored).
- Suara Pembaruan* (30 March 2011). Peneliti Indonesia butuh jaminan kesejahteraan (Indonesian researchers need welfare security).
- Suara Pembaruan* (30 March 2011). Berdayakan LIPI (Empower LIPI).
- Sumarto, Sudarno (January 2011). *The SMERU Research Institute: History and Lessons Learned* (draft final report).

REGULATIONS

PERATURAN PEMERINTAH REPUBLIK INDONESIA NOMOR 10 TAHUN 2011
TENTANG TATA CARA PENGADAAN PINJAMAN LUAR NEGERI DAN
PENERIMAAN HIBAH (Government Regulation Republic of Indonesia No. 10,
2011, on Obtaining Foreign Loans and Grants).

Keputusan Bersama LIPI & BKN 3719/D/2004 & 60/2004 (regulation governing
accreditation requirements for researchers, as arrangement between the
National Civil Service Personnel Agency (BKN) and the relevant agency

Appendix 1 – Organizational Structure and Core Competence of the Social Sciences and Humanities Deputy of LIPI

Social Sciences and Humanities	
Research Center for Politics (P2P)	Local Political Developments
	National Political Developments
	International Political Developments
Research Center for Population (PPK)	Population
	Labor
	Human Ecology
Research Center for Humanities and Culture (PMB)	Humanities
	Law
	Community Development
Research Center for Economics (P2E)	Money and Banking
	Regional Development
	Industry and Trade
Research Center for Regional Resources (PSDR)	Developments in Southeast Asia
	Developments in Asia and the Pacific
	Developments in Europe

Source: LIPI (2010), *Rencana Strategis Kedeputian IPSK Tahun 2010-2014*.

Appendix 2 – Percentage Distribution of IPSK–LIPI Researchers in 2011

Characteristics of Researchers	Total IPSK	Centers					Sex		Education		
		Cult & Society	Population	Politics	Economics	Reg Res	Males	Females	S1	S2	S3
Total Number	233	62	44	53	44	30	112	121	74	115	44
% distribution	100	27	19	23	19	13	48	52	32	49	19
Sex											
Males	48	61	14	51	66	40	100	-	43	47	59
Females	52	39	86	49	34	60	-	100	57	53	41
Age											
<30	18	11	16	25	18	27	16	21	46	8	-
30-39	28	18	30	25	32	50	19	37	23	40	7
40-54	35	39	36	42	27	23	35	35	20	31	68
55-64	18	32	16	9	23	-	30	7	11	20	25
65+	0	-	2	-	-	-	-	1	-	1	-
Total	100	100	100	100	100	100	100	100	100	100	100
Highest Degree											
S1	32	29	30	38	23	43	29	35	100	-	-
S2	49	52	59	36	59	40	48	50	-	100	-
S3	19	19	11	26	18	17	23	15	-	-	100
Total	100	100	100	100	100	100	100	100	100	100	100
Rank											
III/a	13	8	14	23	9	13	10	17	42	-	-
III/b	16	10	23	9	11	37	11	21	22	18	-
III/c	18	15	11	15	25	30	13	23	7	30	5
III/d	5	5	7	2	9	3	6	4	3	5	9
IV/a	10	18	11	8	7	-	9	11	5	10	18
IV/b	10	13	14	8	5	10	13	7	9	10	9
IV/c	12	11	9	19	11	3	13	11	9	9	23
IV/d	4	11	-	-	2	3	4	3	1	3	9
IV/e	12	10	11	17	20	-	22	3	1	14	27
Total	100	100	100	100	100	100	100	100	100	100	100
Job Title											
Candidate Researcher	15	16	-	19	11	33	17	13	35	7	2
1 st Class Researcher	11	-	41	9	2	7	2	20	23	8	-
Junior Researcher	22	16	16	17	30	40	13	30	14	32	9
Researcher	32	45	32	28	32	13	39	26	24	37	34
Principal Researcher	20	23	11	26	25	7	29	12	4	17	55
Total	100	100	100	100	100	100	100	100	100	100	100

Source: IPSK-LIPI centers

Appendix 3 – Point Promotion Requirements among Public Sector Researchers

No.	Requirements	Position of Researchers									
		First Class Researcher		Junior Researcher		Researcher			Principal Researcher		Research Professor
		(Penata Muda)	(Penata Muda Tk.I)	Penata	Penata Tk.I	Pembina	Pembina Tk.I	Pembina Utama Muda	Pem bina Utama Madya	Pem bina Utama	
I	MAIN ITEMS	100	150	200	300	400	550	700	850	1050	1250
	1 Education										
	Formal Education										
	S1 / DIV	100	100	100	100	100	100	100	100	100	
	S2		150	150	150	150	150	150	150	150	
	S3			200	200	200	200	200	200	200	200
	Short Courses										
	Certified scientific short courses (given certificate of completion)										
	Pre-position short course.	2	2								
	2 Published Scientific thoughts										
	Published thoughts/ research output										
	International book	40	40	40	40	40	40	40	40	40	40
	National Book	30	30	30	30	30	30	30	30	30	30
	International chapter in book	20	20	20	20	20	20	20	20	20	20
	National chapter in book	15	15	15	15	15	15	15	15	15	15
	International journal	40	40	40	40	40	40	40	40	40	40
	National journal	25	25	25	25	25	25	25	25	25	25
	International scientific proceedings	15	15	15	15	15	15	15	15	15	15
	National Scientific Proceedings	10	10	10	10	10	10	10	10	10	10
	Non-accredited national scientific journal	5	5	5	5	5	5	5	5	5	5
	Summary of research results/scientific thoughts in accredited scientific journal	3	3	3	3	3	3	3	3	3	3

No.	Requirements	Position of Researchers									
		First Class Researcher		Junior Researcher		Researcher			Principal Researcher		Research Professor
		(Penata Muda)	(Penata Muda Tk.I)	Penata	Penata Tk.I	Pembina	Pembina Tk.I	Pembina Utama Muda	Pembina Utama Madya	Pembina Utama	
I	MAIN ITEMS	100	150	200	300	400	550	700	850	1050	1250
	Summary of research results/scientific thoughts in non-accredited scientific journal	1	1	1	1	1	1	1	1	1	1
	Not/Unpublished Research results/ thoughts										
	Research results/ review/ commentary presented at scientific meeting	3	3	3	3	3	3	3	3	3	3
3	Science and Technology (S&T) Developments										
	S&T developments and utilization										
	Developing theory/ practical concepts										
	With international impact and achieving recognition from relevant institutions					150	150	150	150	150	
	With national impact and achieving recognition from respective institutions					50	50	50	50	50	
	Creating prototypes, design, pilot projects, machines and products used by society										
	Create/produce patent(s)										
	Dissemination of S&T Use										
	Nationally published and distributed higher education Text book			20	20	20	20	20	20	20	
	Nationally published and distributed			20	20	20	20	20	20	20	

No.	Requirements	Position of Researchers									
		First Class Researcher		Junior Researcher		Researcher			Principal Researcher		Research Professor
		(Penata Muda)	(Penata Muda Tk.I)	Penata	Penata Tk.I	Pembina	Pembina Tk.I	Pembina Utama Muda	Pembina Utama Madya	Pembina Utama	
I	MAIN ITEMS	100	150	200	300	400	550	700	850	1050	1250
	handbook/technical writing										
	Published and used school text book	10	10	10	10	10	10	10	10	10	10
	Published and used informative books and popular writings	10	10	10	10	10	10	10	10	10	10
	S&T paper to disseminated research results in non-accredited scientific books/ journals/ semi popular journals	5	5	5	5	5	5	5	5	5	5
	Train Research Cadre										
	Guide/counsel researchers			1	1	1.5	1.5	1.5	2	2	
	Teach at short courses/ including for researchers			0.04	0.04	0.06	0.06	0.06	0.08	0.08	
	Lead and participate in research group	1	1	2	2	3	3	3	4	4	
	Scientific appreciation and assignment for leading R&D work unit										
	Honorific Award for international scientific achievements	5	5	5	5	5	5	5	5	5	5
	International Academic Honorific Award			5	5	5	5	5	5	5	
	Achievement Award for national scientific activity	3	3	3	3	3	3	3	3	3	3
	National Academic Honorific Award			3	3	3	3	3	3	3	
	Head of R&D unit at Echelon I								11	11	
	Head of R&D unit at Echelon II					8	8	8			
	Head of R&D unit at Echelon III			5	5						
	Head of R&D unit at Echelon IV	3	3								
	SUPPORTING ELEMENTS										
	S&T paper and community service										

No.	Requirements	Position of Researchers									
		First Class Researcher		Junior Researcher		Researcher			Principal Researcher		Research Professor
		(Penata Muda)	(Penata Muda Tk.I)	Penata	Penata Tk.I	Pembina	Pembina Tk.I	Pembina Utama Muda	Pembina Utama Madya	Pembina Utama	
I	MAIN ITEMS	100	150	200	300	400	550	700	850	1050	1250
	Scientific paper published in popular magazine/ newspaper	2	2	2	2	2	2	2	2	2	2
	Write S&T paper for electronic media	2	2	2	2	2	2	2	2	2	2
	Write S&T paper not for publication	2	2	2	2						
	Community service or other activities in support of government and development										
	Provide services in one's own expertise			1	1	1	1	1	1	1	
	Provide services as part of one's tasks			1	1	1	1	1			
	Text book translation										
	Higher education/ scientific book			15	15	15	15	15	15	15	
	Text book(s) for basic and high school	5	5	5	5	5	5	5	5	5	5
	Participate in scientific activities										
	Editor of papers presented in meetings, journals, books, text books										
	Member of scientific meeting organizer, technical consultant, expert researcher and RI delegate										
	Inter-unit/research organization technical scientific meeting										
	Participate in scientific activity/scientific short courses/scientific training in non-specialty but related field										
	Supervise Non-Research Cadre										
	Doctorate										

No.	Requirements	Position of Researchers									
		First Class Researcher		Junior Researcher		Researcher			Principal Researcher		Research Professor
		(Penata Muda)	(Penata Muda Tk.I)	Penata	Penata Tk.I	Pembina	Pembina Tk.I	Pembina Utama Muda	Pembina Utama Madya	Pembina Utama	
I	MAIN ITEMS	100	150	200	300	400	550	700	850	1050	1250
	Main Advisor								8	8	
	Co-Advisor					3	3	3	3	3	
	Doctorate Examiner								1.5	1.5	
	Post graduate										
	Main Advisor					3	3	3	3	3	
	Co-Advisor			2	2	2	2	2	2	2	
	Post graduate examiner			1	1	1	1	1	1	1	
	Undergraduate										
	Main Advisor			1	1	1	1	1	1	1	
	Co-Advisor	1	1		1	1	1	1	1	1	1
	Lecturer Scientific Cadre										
	S1 (Undergraduate)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
	S2/S3 (Masters/ Doctorate)			1	1	1	1	1	1	1	
	Scientific short courses	1	1	1	1	1	1	1	1	1	1
	Achieved award/medal										
	Achieved other academic degree in different field										

Appendix 4 – List of 2010 IPSK Research Projects by Center, Funded from Different Sources of the National Budget

Kegiatan Penelitian IPSK per Puslit, Tahun 2010		Research Activities of the Social Sciences and Humanities in 2010
1.	Pusat Penelitian Politik	Center for Politics
a)	Penelitian Tematik	Thematic Research
	1. Piagam ASEAN, Perkembangan Isu Demokrasi dan Hak Asasi Manusia (HAM): Studi Kasus Indonesia, Thailand, Filipina.	ASEAN Charter, Developments in Democracy and Human Rights: Case Studies: Indonesia, Thailand, and the Philippines
	2. Pergeseran Peran Elit Lokal Pasca Orde Baru: Studi Kasus di Sumbawa.	Shifts in the Role of Local Elites Post the New Order: Case Study in Sumbawa
	3. Pola dan Kecenderungan Studi Konflik di Indonesia: Analisis terhadap Studi Kekerasan pada Kasus Aceh dan Ambon.	Patterns and Trends in Conflict Studies in Indonesia: Analysis on Studies of Violence in Aceh and Ambon
	4. Nasionalisme, Demokratisasi, Sentimen Primordial di Indonesia: Problematika Identitas Keagamaan Versus Keindonesiaan (Kasus Perda Bernuansakan Syariah Islam di Bulukumba Sulsel dan Cianjur Jabar).	Nationalism, Democracy, and Primordial Relations in Indonesia: Problem of Religious Identity vs Indonesianism (the case of Local Rules tending toward Syariah Islam in Bulukumba South Sulawesi and Cianjur in West Java.
	5. Problematika Penggabungan Daerah.	The Problem of Merging Regions.
	6. Kecenderungan Hubungan Anggota Legislatif dengan Konstituen: Studi Kasus DPRD Banten Hasil Pemilu 2009.	Trends in Relations between the Legislature and their Constituents: Case Study of Banten 2009 elected local Parliamentarians.
	7. Masalah Ekonomi Politik Masyarakat Perbatasan Myanmar-Thailand.	Political-Economic Problem of communities in border areas: Myanmar-Thailand
	8. Polri di Era Demokrasi: Dinamika Pemikiran Internal.	The Police in Democracy: Dynamics of Internal Thoughts
	9. Politik Luar Negeri Indonesia dan Lingkungan Hidup.	Indonesian Foreign Policy and the Environment
b).	Penelitian Kompetitif	Competitive Research
	1. Pembangunan, Good Governance dan Upaya Penanggulangan Kemiskinan di Pedesaan.	Development Good Governance and Rural Poverty Alleviation Efforts.
	2. Penanggulangan Kemiskinan di Indonesia: Analisa Strategi Nasional atas Peran Negara Donor, MNCs dan Lembaga Internasional	Poverty Alleviation in Indonesia: National Strategy Analysis on the Role of Donor Countries, MNCs and International Agencies.
	3. Arah Kebijakan dan Strategi Pembangunan Ketahanan Wilayah Pesisir di Kepulauan Riau:	Policy Direction and Development Strategy in Coastal Regional Defense in the Riau Archipelago:
	4. Konteks Dinamika Regional	Regional Dynamics Context
c).	Penelitian Iptekda/Penugasan Khusus	Iptekda Research/Special Assignments
	1. Alfred Russel Wallace : Kiprah dan Karyanya sebagai Ilmuwan Sosial	Alfred Russel Wallace: Achievements and Creations as Social Scientist
d).	Penelitian Kerjasama (Anggaran Non-DIPA LIPI/Insentif)	Cooperative Research (Non-LIPI DIPA Budget/Incentive)
	1. Strategi Penanganan Pasca Bencana Alam di Indonesia: Dampak terhadap Kelompok	Post Natural Disaster Development Strategy in Indonesia: the Impact on the

Kegiatan Penelitian IPSK per Puslit, Tahun 2010	Research Activities of the Social Sciences and Humanities in 2010
Rentan	Disadvantaged.
2. Minoritas Muslim di Indonesia: Kasus Muslim Bali di Gianyar, Tabanan dan Klungkung.	Minority Muslims in Indonesia: the Case of Muslims in Bali in Gianyar, Tabanana and Klungkung.
3. Penanaman Modal Asing dan Otonomi Daerah di Era Reformasi: Studi Kasus Kalimantan Selatan, Riau, Banten dan DKI Jakarta.	Foreign Direct Investment and Regional Autonomy in the Reformed Era: Case study of South Kalimantan, Riau, Banten, and DKI Jakarta.
4. Keamanan Selat Makassar sebagai ALKI II: Tantangan dan Peluang.	Security in the Makassar Strait as ALKI II: Challenges and Opportunities.
5. Evaluasi Kinerja DPR Periode 2004-2009.	Evaluation of Parliament 2004-2009
6. Strategi Pengelolaan Keamanan Energi Nasional: Perspektif Keamanan Non-Militer.	National Energy Security Management Strategy: Non-Military Security Perspective
7. Fungsi Militer dalam Operasi Militer Selain Perang: Pelibatan TNI dalam Pengelolaan Bencana di Indonesia.	The Function of the Military in Non-War Military Operation: Involvement of TNI in Managing Natural Disasters in Indonesia
8. Kajian Strategis tentang Gender dan Politik Lokal: Pemetaan Faktor-Faktor yang Mempengaruhi Partisipasi Politik Perempuan di Empat Daerah (Lampung, NTB, Sulawesi Utara dan Papua).	Strategic Analysis on Gender and Local Politics: Mapping Factors Affecting Participation of Women in Politics in Four Areas (Lampung, NTB, North Sulawesi, and Papua).
9. Perempuan dan Globalisasi: Studi Kasus Trafficking di Kabupaten Karawang.	Women and Globalization: Case Study of Trafficking in Kerawang District.
10. Sejarah Kaimana	History of Kaimana
2. <u>Pusat Penelitian Masyarakat dan Kebudayaan</u>	Center for Humanities and Culture Research
a). Penelitian Tematik	Thematic Research
1. Etnisitas dan Pandangan Hidup : Komunitas Sukubangsa Di Indonesia	Ethnicity and Views of Life: Ethnic Communities in Indonesia
2. Nasionalisme Indonesia Dalam Kerangka Otonomi Daerah: Rekonstruksi Pluralisme dan Etnisitas	Indonesian Nationalism within the Context of Regional Autonomy: Pluralistic Reconstruction and Ethnicity
3. Agama dan Transformasi Kultural : Respon Lembaga Pendidikan Islam Terhadap Modernisasi dan Globalisasi	Religion and Cultural Transformation: Islamic Education Institutions' Responses to Modernization and Globalization
4. Ekologi Bahasa Di Wilayah Pesisir dan Pedalaman	Ecology of Languages in Coastal and Hinterland Areas
5. Strategi Sosial Budaya Dalam Adaptasi Perubahan Lingkungan Pesisir Akibat Pemanasan Global	Social Cultural Strategies in Adapting to Coastal Environmental Changes due to Global Warming
6. Kesiapan Generasi Muda Indonesia Menyongsong Perubahan Kepemimpinan	Preparedness of the Indonesian Youth Towards Changing Leadership
7. Dinamika Kewarganegaraan Kelompok Sosial Di Perkotaan	Dynamics of Citizenship of an Urban Social Group
8. Perempuan dan Hukum: Studi Tentang Hak Perempuan Dalam Konsepsi Hak Asasi Manusia	Women and the Law: Study on Women's Rights in Conceptualizing Human Rights
9. Pengelolaan Sumber Daya Hutan: Dampak dan Manfaatnya Bagi Masyarakat Lokal	Managing Forest Resources: Impact and Utility for the Local Community
10. Dinamika Sosial Di Perkotaan Pantura dan	Social Dynamics in Urban North Coast and

Kegiatan Penelitian IPSK per Puslit, Tahun 2010	Research Activities of the Social Sciences and Humanities in 2010
Implikasinya Bagi Indonesia	Its Implications for Indonesia
b). Penelitian Kompetitif	Competitive Research
1. Persoalan Kemiskinan dari Perspektif Kebudayaan	A Cultural Perspective of Poverty
2. Studi Pengembangan Kelembagaan Bank Pangan Non Beras di Tingkat Masyarakat Untuk Membantu Ketahanan Pangan di Perdesaan	Study on the Development of a Non-Rice Banking Institution at the Community Level to Promote Rural Food Security
3. Studi Penerapan Hak Pengusahaan Perairan Pesisir (HP3) Pada Masyarakat Pulau Kecil Sebagai Solusi Mengatasi Problem Kemandirian Masyarakat di Wilayah Perbatasan Indonesia	Study on Applying the Right to Manage Coastal Waters among Small Islands Communities, as a Solution to Overcome the Problem of Community Independence in Border Areas of Indonesia
4. Peran TIK Dalam Mengatasi Kemiskinan Strategi Global , Nasional, Lokal	The Role of Information Technology in Local, National, Global Poverty Alleviation Strategy
c). Penelitian Kerjasama (Anggaran Non-DIPA LIPI/Insentif)	Cooperative Research (Non-LIPI-DIPA/ Incentive (MOST)
1. Remaja dan Pemahaman Ajaran Agama: Studi Kasus Agama Islam	Youth and Understanding of Religious Teachings: Case study of Islam
2. Pondok Pesantren dan Pendidikan Kewargaan di Daerah Minoritas Muslim	Pondok Pesantren and Civics in a Muslim Minority Area
3. Strategi Bertahan Hidup pada Masyarakat Pulau Kecil dan Terpencil, Pulau Perbatasan, dan Pulau Sengketa: Studi Kasus Etnografi Budaya	Survival Strategies among Isolated Small, Border, and Disputed Islands Communities: Cultural Ethnographic Case Study
4. Pola Hubungan <i>Stake Holder</i> dalam Mengelola Sumber Daya Air Danau Toba di Sumatera Utara	Stakeholder Relations Patterns in Managing Water Resources in Lake Toba, North Sumatra
5. <i>Human Trafficking</i> : Pola Pencegahan dan Penanggulangan Terpadu terhadap Perdagangan Perempuan	Human Trafficking. Integrated Prevention and Handling of Women Trafficking
6. Perjuangan Nelayan dalam Mengatasi Kemiskinan: Strategi, Kendala, dan Dukungan Kebijakan	Struggle of Fishermen in Poverty: Strategy, constraints, and Policy Support
7. <i>Cyber Demokrasi</i> : Wacana Emansipatoris dalam Pemilihan Presiden 2009	Cyber Democracy: Emancipation Discourse in the 2009 Presidential Election
8. Pemberdayaan Buruh Migran Perempuan di Daerah Pengirim	Empowering Female Migrant Workers in Sending Areas
9. Transformasi Sosial di Perkotaan Pantai Utara Jawa: Studi Perbandingan Pekalongan dan Jepara	Social Transformation in North Coastal Towns of Java: Comparative Study of Pekalongan and Jepara
10. Hukum dan Perubahan Sosial: Analisis Perkembangan Peraturan Perundang-Undangan dan Kelembagaan tentang Pemberantasan Korupsi di Indonesia	The Law and Social Change: Analysis of Developments in Rules, Regulations, and Institutions on Corruption Eradication in Indonesia.
11. Anarki Masyarakat dalam Iklim Demokrasi (Kasus Pelaksanaan Pilkada secara Serentak di Beberapa Daerah di Jawa)	Community Anarchy in a Democratic Environment (the Case of Implementing Simultaneous Local Election in Areas of Java)

Kegiatan Penelitian IPSK per Puslit, Tahun 2010	Research Activities of the Social Sciences and Humanities in 2010
12. Studi Integritas dalam Pelayanan Publik di Indonesia (Kasus Pelayanan Kebutuhan Air di Jabodetabek)	Study on Integration in Public Services in Indonesia (Case of Water Services in Jabodetabek)
13. Aplikasi Pengobatan Tradisional dalam Sistem Pelayanan Kesehatan Terpadu	Application of Traditional Medicine in an Integrated System of Health Services
14. Sejarah dan Filosofi Berbagai Praktek Pengobatan Tradisional Kelompok Etnik di Indonesia : Studi Etnografi Kebudayaan dan Etnobotani terhadap Praktek Pengobatan (Mobolong) Suku Tau taa Wana di Pedalaman Hutan Sulawesi Tengah	History and Philosophy of Various Practices of Traditional Medicine in Ethnic Groups of Indonesia: Cultural Ethnographic Study and Ethnobotani on Medication Tau taa Wana ethnic group in the Interior of Central Sulawesi Forests.
3. Pusat Penelitian Sumber Daya Regional	Center for Regional Resources Research
a). Penelitian Tematik	Thematic Research
1. Mitos kearifan lokal dan manajemen hutan di Asia Tenggara.	The Myth of Local Wisdom and Forest Management in Southeast Asia
2. Pembangunan industri pertanian studi kasus Thailand	Agro-Industry Development, Case Study in Thailand
3. Environmental movements di Republik Ceko : Bagian dari Proses Civil Society	Environmental Movements in the Republic of Czechoslovakia: Part of Civil Society Processes
4. Daya saing dan prospek tenaga kerja Indonesia di Belanda	Competitiveness and Prospects of Indonesian Workers in the Netherlands
5. Pengembangan kebijakan pekerja migran di Korea Selatan	Migrant Workers Policy Developments in South Korea
6. Negara masyarakat dan manajemen bencana di China	The State, Society and Management of Chinese Disasters
7. Diaspora etnik Cham di Asia Tenggara	Diaspora Cham Ethnic Group in Southeast Asia
b). Penelitian Kompetitif	Competitive Research
1. Etnisitas, Pengembangan Sumberdaya Lokal dan Potensi Perdagangan Internasional dalam rangka peningkatan kesejahteraan masyarakat Nunukan Kalimantan Timur	Ethnicity, Local Resources Developments and International Trade Potential within the framework of Raising Social Welfare in Nunukan, East Kalimantan
c). Penelitian Kerjasama (Anggaran Non-DIPA LIPI/Insentif)	Cooperative Research (Non-LIPI-DIPA Budget/ Incentive)
1. Diaspora Bugis di Sabah Malaysia Timur : Migrasi Transnasional, Integrasi dan Identitas Budaya	Bugis Diaspora in Sabah East Malaysia, Transnational Migration, Cultural Integration and Identity
2. Pengelolaan Remittances Buruh Migran Indonesia : Melalui Optimalisasi pemanfaatan potensi sosial ekonomi daerah	Managing Remittances of Indonesian Migrant Workers: Optimal Potential Utility for the Local Social Economy
3. Rasionalisasi Sains, jaringan pengetahuan dan penanganan bencana: Studi tentang praktek kultural dalam antisipasi dan mitigasi gempa di Sumbar, Yogyakarta dan Sulawesi Utara	Scientific Rationalizing, Scientific Network and Disaster Handling: Study on Cultural Practices in Earthquake Anticipating and Mitigation in Sumbar, Yoryakarta, and North Sulawesi

Kegiatan Penelitian IPSK per Puslit, Tahun 2010	Research Activities of the Social Sciences and Humanities in 2010
4. Pusat Penelitian Ekonomi	Center for Economics Research
a). Penelitian Tematik	Thematic Research
1. Efek Pasar Tunggal dan Basis Produksi ASEAN terhadap Perekonomian Indonesia	Impact of Single Market and ASEAN Production Basis on the Indonesian Economy
2. Efektivitas Kebijakan dan Kinerja UMKM dalam Mendukung Perekonomian Nasional	Policy Effectiveness and UMKM Productivity in Support of the National Economy
3. Pertumbuhan Ekonomi, Kesempatan Kerja, dan Kemiskinan	Economic Growth, Employment Opportunities and Poverty
4. Analisis Tingkat Upah dan Produktivitas Tenaga Kerja	Analysis of Labor Wage Levels and Productivity
5. Revitalisasi BUMD dalam Perekonomian Daerah	Revitalizing Regional Companies in Local Economies
6. Peranan dan Tantangan Perbankan Syariah dalam Mendorong Sektor Riil (Studi Kasus Sektor Perdagangan)	Role and Challenges of Syariah Banking in Support of the Real Sector (Case Study of the Trade Sector)
7. Dinamika Industri Kreatif dalam Perekonomian Nasional	Creative Industries Dynamics in the National Economy
8. Revitalisasi Peranan Wakaf untuk Peningkatan Kesejahteraan Masyarakat	Revitalizing the Role of Wakaf to Improve Social Welfare
9. Membangun Iklim Bisnis dalam Meningkatkan Daya Saing Daerah	Strengthening the Business Climate by Improving Local Competitiveness
10. Pengembangan Industri Energi Alternatif: Studi Kasus Bioetanol	Developing Alternative Energy Industry: Case Study on Bioethanol
b). Penelitian Kompetitif	Competitive Research
1. Percepatan Pertumbuhan Ekonomi Kawasan Karimata Melalui Integrasi Antar Daerah	Acceleration of Economic Growth in Karimata Through Regional Integration
2. Sinergitas Fungsi <i>Corporate Social Responsibility</i> (CSR), Usaha Kecil dan Menengah (UKM) dan Partisipasi Masyarakat di Wilayah Pesisir Karimata: Persepsi Media Massa, Lembaga Swadaya Masyarakat (LSM), Tenaga Kerja dan Konsumen	Functional Synergy Corporate Social Responsibility (CSR) Small and Medium Enterprises and Community Participation in Karimata Coastal Region: Mass Media Perception, NGOs, Labor and Consumers
3. Pengentasan Krmiskinan Melalui Penguatan Ketahanan Pangan dan Stabilisasi Harga Produk Pangan di Indonesia	Poverty Alleviation Through Strengthening Food Security and Price Stability of Food Products in Indonesia
4. Model Kebijakan Anti Kemiskinan di Indonesia (Pendekatan Transfer Pendapatan dan Transfer Sosial)	Anti-Poverty Policy Model in Indonesia (Income and Social Transfer Approaches)
c). Penelitian Iptekda/Penugasan Khusus	Iptekda Research/ Special Assignments
1. Pengembangan Produk-produk UKM Ekonomi Kreatif Binaan Program Iptekda – LIPI melalui Promosi dan Pameran	Development of Creative Economic Small Businesses' Products, Iptekda Program-LIPI through Promotion and Exhibits
2. Penanaman Pisang Skala Kebun Mendukung Perekonomian dan Sumber Pangan Alternatif Bagi Daerah Korban Gempa Kabupaten Padang Pariaman dan	Growing Bananas in Gardens in Support of the Economy and Alternative Food Resources for Earthquake Victims in the District of Padang Pariaman and city of

Kegiatan Penelitian IPSK per Puslit, Tahun 2010	Research Activities of the Social Sciences and Humanities in 2010
Kota Pariaman	Pariaman
3. Pengembangan Penggunaan Briket Tempurung Kelapa pada UMKM di Kota Pariaman untuk Usaha Rehabilitasi Ekonomi Pasca Gempa Sumbar	Development of the Use of Coconut Shells Briskets in SME in Pariaman City for Economic Rehabilitation Effort Post West Sumatra Earthquake
d). Penelitian Kerjasama (Anggaran Non-DIPA LIPI)	Cooperative Research (Non-LIPI-DIPA Budget/ Incentive)
1. Analisis Dampak <i>Conditional Cash Transfer</i> untuk Pengentasan Kemiskinan: Studi Kasus pada Program Nasional Pemberdayaan Masyarakat (PNPM) Mandiri	Impact Analysis of Conditional Cash Transfer to Alleviate Poverty: Case Study in the PNPM Program
2. Efektivitas Kebijakan Aglomerasi dalam Mempercepat Pertumbuhan Ekonomi Daerah	Effective Agglomeration Policies in Accelerating Regional Economic Growth
3. Perilaku Konsumen Muslim dalam Konsumsi Makanan Halal	Muslim Consumer Behavior in Halal Food Consumption
4. Optimalisasi Peran Jasa Transportasi Kereta Api: Pendekatan Model <i>Diamond Porter</i>	Optimizing the Role of Trains: Porter Diamond Model Approach
5. Model Pembiayaan Syariah dalam Mengembangkan Sektor Agribisnis	Syariah Financing Model in Developing the Agribusiness Sector
6. Pilkada dan Pergeseran Sistem Perencanaan Pembangunan Daerah: Studi Kasus Provinsi Banten	Local Election and Shifting Regional Development Planning System: Case Study of Banten Province
5. Pusat Penelitian Kependudukan	Center for Population Research
a). Penelitian Tematik	Thematic Research
1. Perubahan Struktur Penduduk dan Strategi Adaptasi Dalam Konteks Ketahanan Ekonomi Rumah Tangga di Provinsi Jawa Timur	Changing Population Structure and Strategic Adaptation in the Context of Household Economic Security in East Java
2. Pemahaman dan Perilaku Kesehatan Masyarakat Perkotaan Terkait Perubahan Iklim	Understanding Urban Community Health Behavior due to Climate Change
3. Kajian Kebijakan Perencanaan Tenaga Kerja Dalam Menghadapi Ledakan Penduduk Usia Kerja	Labor Planning Policy Analysis in Facing Working Age Population Explosion
4. Pengembangan Kemitraan Antara Tenaga Kerja/Masyarakat, Dunia Usaha dan Pemerintah Untuk Kelangsungan Pekerjaan	Developing Relations between Labor/Society, Business and Government for Sustainable Employment
5. Kajian Pengetahuan dan Pemahaman Masyarakat Pedesaan Terhadap Perubahan Iklim dan Pengelolaan SDA Terkait dengan Keamanan Insani	Analysis of Knowledge and Understanding Rural Society to Climate Change and Management of Natural Resources Related to Human Security
6. Pemahaman Masyarakat Perkotaan Terhadap Perubahan Iklim dan Lingkungan Perkotaan	Urban Societal Understanding of Climate Change and Urban Environment
b). Penelitian Kompetitif	Competitive Research
1. Mengembangkan Model Penuntasan Wajib	Developing a Model for Completing

Kegiatan Penelitian IPSK per Puslit, Tahun 2010		Research Activities of the Social Sciences and Humanities in 2010
	Belajar	Compulsory Education
	2. Konsep Pemberdayaan Keluarga	Concept of Family Empowerment
	3. Kemiskinan dan Pelayanan Kesehatan: tinjauan dari aspek kependudukan	Poverty and Health Services: overview from a population perspective
	4. Pengetasan Kemiskinan Penduduk Desa di Sekitar Hutan	Poverty Alleviation of Rural Population around Forrest
c).	Penelitian Kerjasama (Anggaran Non-DIPA LIPI/Insentif)	Cooperative Research (Non-LIPI-DIPA/ Incentive)
	1. Perspektif Masyarakat Dalam Pengembangan dan Pemanfaatan Energi Alternatif	Societal Perspective in Developing and Utilizing Alternative Energy
	2. Pemetaan Pekerjaan Pada Penduduk di Kawasan Miskin Perkotaan	Mapping Jobs of the Urban Poor
	3. Pendayagunaan Tenaga Kerja di Perdesaan Pada Sistim Pertanian Terpadu	Empowerment of Rural Labor in Integrated Agricultural System
	4. Perluasan Kota Terhadap Penguasaan Lahan dan Kondisi Ekonomi Penduduk	Impact of Urban Expansion on Land Control and Economic Conditions of the People

Source : IPSK-LIPI

Annex 5 - Basic Salary Scales of Civil Servants in 2010

(000)

Service (years)	Class III				Class IV				
	A	b	c	D	a	b	c	d	e
0	1,743	1,817	1,894	1,974	2,058	2,145	2,235	2,330	2,429
1									
2	1,786	1,862	1,940	2,023	2,108	2,197	2,290	2,387	2,488
3									
4	1,830	1,908	1,989	2,072	2,160	2,251	2,347	2,446	2,549
5									
6	1,875	1,954	2,037	2,133	2,213	2,307	2,404	2,509	2,612
7									
8	1,921	2,002	2,087	2,175	2,267	2,363	2,463	2,567	2,676
9									
10	1,968	2,051	2,138	2,229	2,323	2,421	2,524	2,630	2,742
11									
12	2,017	2,102	2,191	2,280	2,380	2,481	2,586	2,695	2,809
13									
14	2,066	2,153	2,245	2,339	2,438	2,542	2,649	2,761	2,878
15									
16	2,117	2,206	2,300	2,397	2,498	2,604	2,714	2,829	2,949
17									
18	2,169	2,260	2,356	2,456	2,560	2,668	2,781	2,899	3,021
19									
20	2,222	2,316	2,414	2,516	2,622	2,733	2,849	2,970	3,095
21									
22	2,277	2,373	2,473	2,578	2,687	2,801	2,919	3,042	3,171
23									
24	2,332	2,431	2,534	2,641	2,763	2,869	2,991	3,117	3,249
25									
26	2,390	2,491	2,596	2,706	2,820	2,940	3,064	3,194	3,329
27									
28	2,448	2,552	2,660	2,772	2,890	3,012	3,139	3,272	3,411
29									
30	2,508	2,615	2,725	2,840	2,961	3,086	3,216	3,352	3,494
31									
32	2,570	2,674	2,792	2,910	3,033	3,162	3,295	3,435	3,580

Source: Annex to Republic of Indonesia Government Regulation 25/2010 (5 February 2010)

Appendix 6 – Functional Supplements for Researcher by Level

No	Level of Researcher	Rank	Amount of Supplement (IDR)
1	First class researcher	III/a-III/b	325,000
2	Junior Researcher	III/c-III/d	750,000
3	Researcher	IV/a-IV/c	1,200,000
4	Principal Researcher	IV/d-IV/e	1,400,000
5	Research Professor		1,400,000

Appendix 7 – PDII-LIPI: Towards an Integrated Library System

PDII-LIPI (Pusat Dokumentasi Informasi Ilmiah) terletak di kompleks LIPI di jalan Gatot Subroto-Jakarta Selatan. Mulanya bernama Pusat Dokumentasi Ilmiah Nasional (PDIN), diresmikan tahun 1965 dengan SK Menteri Riset Nasional No. 107/M/Kpts/Str/65. Tahun 1986, namanya diubah menjadi PDII karena ada reorganisasi LIPI. Tugas pokok dan fungsi PDII adalah pengelolaan dokumentasi (data)⁵⁴ dan informasi ilmiah, mulai archieve sampai diseminasi. Pengelolaan data dan informasi yang baik akan dapat membantu pengambil kebijakan dalam merumuskan kebijakan dan membuat keputusan. Oleh karena itu, PDII menyediakan jasa ini bagi peneliti, pengambil kebijakan dan masyarakat umum

Koleksi perpustakaan PDII-LIPI sekarang ada di dua lokasi, Jakarta di Jl. Gatot Subroto dan di Serpong⁵⁵. Koleksi perpustakaan di Jakarta ditekankan untuk Iptek sedangkan Serpong untuk Teknologi. Lebih banyaknya koleksi PDII-LIPI tentang ilmu alam dan tehnik itu daripada ilmu sosial karena di LIPI ada 4 Kedeputian alam dan teknik⁵⁶; dan 1 Kedeputian sosial dan kemanusiaan.

Saat ini, setiap Satker punya perpustakaan sendiri dan bila semua buku yang ada di satker disimpan di PDII, PDII tidak dapat menampungnya. Oleh karena itu, PDII saat ini mulai membangun *integrated library*. Artinya, LIPI hanya akan mempunyai satu perpustakaan di PDII tapi dapat mengakses berbagai dokumen yang disimpan di masing-masing Satker dan LPNK melalui website. Jadi perpustakaan di masing-masing Satker perlu ditingkatkan agar dokumen yang ada dapat diakses oleh pihak di luar Satker dan juga pihak di luar LIPI.

Bila buku dibeli oleh Satker, buku akan diunduh dan disimpan dalam server PDII-LIPI untuk kemudian kembali dalam tampilan 3 dimensi sehingga pengunjung akan dibawa seolah-olah membaca buku yang sebenarnya di perpustakaan. Keunggulan lain dalam tampilannya yaitu dapat mencari kata dalam setiap halaman buku, sehingga pengguna tidak perlu melihat indeks dan membolak-balik buku tersebut. Tetapi buku elektronik hanya dapat diakses melalui intra LIPI, atau membaca di lokasi “Bibliotainment” yang ada di gedung PDII-LIPI lantai 1. Hal tersebut dilaksanakan mengingat buku yang ditampilkan merupakan buku yang memiliki copy right, sehingga memiliki keterbatasan, sesuai dengan aturan kaidah keperpustakaan.

Mulai tahun ini PDII melakukan sosialisasi agar Satker dapat secara optimal mengelola perpustakaan masing-masing agar buku yang mereka miliki dan hasil penelitian yang mereka buat, dapat diakses oleh PDII. PDII akan membantu mereka untuk membuat sistemnya seperti sistem katalog dan sistem data base. PDII mempunyai produk LARAS (Library Archieve and Analysis System)⁵⁷ sebuah aplikasi digital library.

⁵⁴ Bentuknya bisa dokumen tertulis, film, rekaman suara atau apa saja dan tidak hanya yang dihasilkan oleh peneliti LIPI.

⁵⁵ Di Serpong hanya ada 3-4 pegawai perpustakaan.

⁵⁶ LON/Lembaga Oceanografi Ancol di Jakarta), Ilmu Pengetahuan Alam di Bogor, Kebumian Bandung, dan Ilmu Pengetahuan Teknik di Bandung dan Serpong.

⁵⁷ LARAS (*Λιβραρυ ανδ Αρχηιπε Αναλυσισ Συστεμ*) dirancang untuk pengelolaan koleksi perpustakaan. Informasi yang tersedia bisa langsung diakses sampai *φυλλ τεξτ* secara mudah dan *ρεαλιτιμε*. Di samping itu, data yang ada harus bisa dipertukarkan dari indeks oleh mesin pencari (*σεαρχη ενγινε*), seperti *γοογλε* dan *ψαηοο*. Saat ini fitur yang tersedia dalam LARAS antara lain pengolahan metadata, *υπλοαδ φυλλτεξτ* dan cover, sampai pada pelaporan pengolahan yang dibutuhkan oleh pengelola dokumen sesuai dengan kebutuhan. Dari sisi pengguna, fitur yang tersedia mencakup pencarian sederhana (*σιμπλε σεαρχη*) dan pencarian canggih (*αδπανχε σεαρχη*). LARAS dikembangkan dengan basis *οπεν σουρχε* ditulis menggunakan PHP, basis data MySQL dan PostgreSQL dan bisa ditempatkan pada server berbasis UNIX maupun Windows, sehingga

Untuk membangun sistem pengelolaan yang baru, dibutuhkan pendanaan. Untuk itu PDII kampanye terus. Sebelum wawancara, kepala PDII baru bertemu dengan Kepala LIPI untuk mendorong beliau agar terus mengangkat issue perpustakaan terpadu ini di forum LIPI

Kalau menggunakan jasa PDII yang lama dimana pengguna PDII harus datang ke PDII, mungkin banyak peneliti IPSK yang tidak menggunakannya tetapi kalau menggunakan pendekatan perpustakaan terpadu akan banyak yang menggunakannya.

Atau dulu, kalau ada permintaan dari UPT Ambon untuk mencarikan sebuah artikel, PDII LIPI akan melayani dengan pos atau internet kalau file kecil. Dengan perpustakaan terpadu, pelayanan dapat lebih cepat.

PDII sekarang sudah menyediakan:

a. **ISJD (Indonesian Scientific Journal Database)**

Secara resmi ISJD diluncurkan tanggal 22 Oktober 2009. Situs ini berisi kumpulan jurnal ilmiah yang terbit di Indonesia yang diserahkan ke PDII-LIPI untuk didiseminasikan. Sampai bulan September 2010 tercatat lebih dari 500.000 pengunjung yang telah akses dari 77 negara dan 90 kota di Indonesia. Penerbit yang telah tergabung dalam ISJD hampir 4.000 penerbit dan yang telah dimasukkan datanya lebih dari 58.000 artikel dengan 39.000 artikel dapat diakses secara lengkap. Melalui ISJD, produk penelitian LIPI dapat diketahui oleh pihak di luar LIPI termasuk di luar Indonesia.

Siapa saja, tidak terbatas pada pegawai LIPI, dapat mencari melalui judul artikel, subjek, pengarang, penerbit, dan berdasarkan nama jurnal. Saat ini untuk mengunduh (*download*) dokumen lengkap, pengguna dapat mengakses secara gratis melalui pustakaiptek.go.id atau ristek.go.id atau pdii.lipi.go.id.

Kalau jurnal yang dihasilkan Satker LIPI tidak diserahkan, PDII tidak bisa melakukan apa-apa karena untuk menyerahkannya cuma tertuang dalam SK Menteri dan tidak ada sanksi bila hal itu tidak dipenuhi. Kalau di luar negeri semua riset yang dibiayai negara harus disimpan dan dibuka untuk publik karena dibiayai negara. Penelitian DIPA LIPI yang dibiayai pemerintah, sebenarnya wajib dapat diakses umum, tetapi menurut Kepala PDII penerbit jurnal yang didanai pemerintah menjual produknya (buku atau jurnal) padahal sebenarnya mereka tidak boleh menjualnya.

Menurut Kepala PDII, LIPI Press hanya penerbit dan tidak mempunyai percetakan, sehingga mereka kerjasama dengan Yayasan buku Obor untuk mencetaknya dan mendistribusikannya. Jadi ada buku atau jurnal yang dijual oleh Yayasan Obor sebab hak distribusi ada di Obor.⁵⁸ Akibatnya, PDII tidak bisa membuka publikasi itu untuk diakses secara gratis. "Kami bisa konflik dengan Obor".

PDII sering sosialisasi kepada pengelola publikasi LIPI dan penerbit untuk menyerahkan publikasi mereka. Ketika ditanya mengapa sosialisasi tidak dilakukan kepada peneliti, kepala PDII menjawab "Sebab peneliti menyerahkan tulisannya ke penerbit. Dan yang punya hak adalah penerbit. Tetapi penerbit kadang bias dengan kepentingan komersial".

b. **Proquest**

pengembangan LARAS dapat dilakukan oleh siapapun sesuai kebutuhan. <http://www.ristek.go.id/?module=News%20News&id=8546>

⁵⁸ Kenny pernah melihat Jurnal Penelitian Ekonomi yang dikeluarkan oleh P2E dijual di salah satu toko buku Gramedia

Selain ISJD, PDII juga bekerjasama dengan Proquest. Ada 650 artikel dari kelautan dan perikanan masuk Proquest. PDII menerjemahkan artikel bahasa Indonesia sebelum menyerahkan ke Proquest. Kami bantu supaya bisa masuk proquest kalau tidak percaya pada ISJD. Proquest lembaga komersial. ISJD yang bahasa Indonesia saja, sudah diakses dunia karena mereka punya penerjemah. Tetapi untuk proquest, belum ada peneliti IPSK yang mengirimkan artikelnya.

Bila dulu semua Perguruan Tinggi, lembaga riset harus menyerahkan hasil penelitiannya ke PDII, dengan konsep perpustakaan terpadu, mereka dapat menyimpannya di tempat mereka masing-masing tidak perlu lagi menyerahkan ke PDII. Yang sampai saat ini masih menyerahkan hasil penelitian adalah Perguruan Tinggi sebab “mereka punya keterbatasan waktu untuk menyimpan. Biasanya setelah beberapa tahun, mereka tidak akan lagi menyimpannya,” kata Kepala PDII.

Buku di PDII memang tidak terlihat banyak. Menurut informasi dari kepala PDII, “*Saat ini lembaga penelitian, kementerian, satker beli buku sehingga untuk apa lagi PDII beli buku*”. Apalagi anggaran yang tersedia untuk menambah koleksi jauh berkurang setelah krisis ekonomi. Sebelum krisis moneter 1997-98, PDII pernah berlangganan sekitar 1600 jurnal asing, tetapi sekarang hanya 6 e-jurnal asing. Tahun 2011, dana untuk PDII Rp 12 Milyard untuk menggaji karyawan yang berjumlah sekitar 150 orang dan mengelola semua kegiatan PDII. Dari jumlah itu, uang yang tersisa untuk menambah koleksi tahun ini tinggal Rp 100 juta.

Kini ada kesepakatan diantara LPNK bahwa pengadaan jurnal asing dikoordinir oleh Kementerian Ristek yang berlangganan *Science Direct*, pengelola database ternama di dunia, sehingga jaringan komputer di lingkungan LPNK-Ristek termasuk PDII-LIPI dapat mengakses jurnal ilmiah secara online. Akses bisa dilakukan melalui <http://pustaka.ristek.go.id> atau lewat bibliotainment [http:// elib.pdii.lipi.go.id](http://elib.pdii.lipi.go.id). Kesepakatan ini dilakukan agar negara bisa menghemat ABPN untuk pengadaan jurnal asing. Sebelumnya, bisa terjadi 1 jurnal yang sama dilanggan oleh lebih dari satu LPNK.

Dari catatan di buku pengunjung dalam 7 hari terakhir, rata-rata jumlah pengunjung PDII yang menyediakan 3 lantai untuk menyimpan koleksi sekitar 80 orang, walau menurut kepala perpustakaan rata-rata 100 pengunjung per hari.