

By Mumpuni Ardiyani, Freddy Buntaran, Ratna Fitriani, and Jacqueline Pomeroy<sup>1</sup>

AusAID Agreement No. 62466

August 2012

<sup>&</sup>lt;sup>1</sup> This diagnostic has been commissioned by AusAID Indonesia's Tertiary Education and Knowledge Sector Unit. The views and opinions expressed in this paper are those of the authors only. AusAID does not accept legal liability for material contained in this document.

# Research Producers in Kalimantan and Eastern Indonesia and their Role in Influencing Public Policy

# **Contents**

List of Acronyms and Abbreviations	2
Background & Introduction	3
Structure and methodology	4
Actors in the Knowledge-to-Policy Cycle	
The Framework for Decentralized R&D	
Findings	10
The Demand Side – articulating information needs and forming the policy research	
agenda	10
Government's Perceived Need	10
Leadership	11
Funding	12
Coordination	
Dewan Riset Daerah (DRD)	15
Structure and Functions of BPPs	
Supply Side – implementing research and follow up	
Universities	18
Funding University Research	
Research Agendas and Local Government Needs	21
NGOs	22
Common Issues	24
Weak Networks	
No Knowledge Management	26
Role of Donors	
Conclusions and Recommendations	
The Government Side	
Province or District	
Other Knowledge Producers	
Universities	
NGOs	
Processes: from production to use	
Donors	
Indigenous Knowledge	
Overall Issues	
Annex 1: The Legal Framework for Research and Development	
Annex 2: Research and Development in Higher Education	
Regulatory Framework	
Research Support	
Dikti Research Grant Programs	
MP3EI	
Menristek	47
Annex 3: Learning from Southeast Sulawesi – trends in evidence-based policy-making and	
budgeting for research	49

# **List of Acronyms and Abbreviations**

APBD Anggaran Pendapatan dan Belanja Daerah

Regional Government Budget

APBN Anggaran Pendapatan dan Belanja Nasional

National Government Budget

AusAID Australian Agency for International Development BAPPEDA Badan Perencanaan dan Pengembangan Daerah

Regional Agency for Planning and Development

BALITBANGDA Badan Penelitian dan Pengembangan Daerah

Regional Agency for Research and Development

BPP Badan Penelitian dan Pengembangan

Agency for Research and Development

BPS Badan Pusat Statistik

Central Agency for Statistics

BPTP Balai Penkajian Teknologi Pertanian

Agency for Assessment of Agricultural Technology

Diknas Kementerian Pendidikan Nasional

Ministry of National Education

Dikti Direktorat Jenderal Pendidikan Tinggi,

Directorate General for Higher Education, MONE

DPRD Dewan Perwakilan Rakyat Daerah

Regional Legislature

DRD Dewan Riset Daerah

Regional Research Council

IPB Institut Pertanian Bogor
ITB Institut Teknologi Bandung

LIPI Lembaga Ilmu Pengetahuan Indonesia

Indonesian Institute of Sciences

Menristek Menteri Riset dan Teknologi

Minister for Research and Technology

MOHA Ministry of Home Affairs

Kementrian Dalam Negeri (MenDagri)

MONE Ministry of National Education & Culture

Kementrian Nasional Pendidikan & Kebudayaan

MP3EI Masterplan Percepatan dan Perluasan Pembangunan Ekonomi

Indonesia

Masterplan for the Acceleration and Expansion of Economic

Development in Indonesia

PDII Pusat Dokumentasi dan Informasi Ilmiah. LIPI

Center for Scientific Information and Documentation

R&D Research and Development SIDA Sistem Inovasi Daerah

Regional Innovation System (Menristek)

SINas Sistem Inovasi Nasional

National Innovation System (Menristek)

UGM Universitas Gadjah Mada
UI Universitas Indonesia
UNRAM Universitas Mataram
UNDANA Universitas Nusa Cendana
UNSRAT Universitas Sam Ratulangi

# **Background & Introduction**

The Australia Indonesia Partnership has recently developed an initiative entitled "Revitalizing Indonesia's Knowledge Sector for Development Policy" which aims to help Indonesia develop the institutional landscape of government, private sector, and civil society organizations that provide research and analysis to support the development of public policy. The program design was based on inputs from a wide range of diagnostic studies undertaken in consultation with the National Development Planning Agency (BAPPENAS), and incorporates a knowledge-to-policy model with four interconnected pillars (see figure 1):

- 1. The supply side consists of research organizations the produce knowledge and evidence that influence policies;
- 2. The demand side includes policy-makers and organizations that demand and use evidence in formulating and shaping policies;
- 3. Intermediary functions and bodies include translation, packaging, and communication of knowledge to enhance its policy-relevance; and
- 4. The enabling environment comprises the policies, regulations and procedures that govern how the supply, intermediary and demand sides operate and interact.

While the Program is in the process of approval, AusAID began preparations for implementing supply side activities through a grant to The Asia Foundation for a pilot program to test support mechanisms for seven research organizations. A number of issues on research production and links to policy-making at the subnational level emerged from this experience.

- a. Out of the seven research organizations, only JiKTI (*Jaringan Peneliti Kawasan Timur Indonesia*) is located outside of Java. The other six organizations are direct knowledge producers, while JiKTI functions as an umbrella network for smaller research organizations and individual researchers scattered throughout Eastern Indonesia. Not much is known about knowledge producers in Eastern Indonesia, and JiKTI's role as a network highlights the differences it faces on issues around governance, sustainability, and research quality.
- b. An initial diagnostic study was commissioned to explore the policy making environment under decentralization provided a picture on how public policies are prepared, their overall quality, the need for knowledge to improve public policies, and the available sources of knowledge<sup>2</sup>. This, in turn, highlighted how little is known about the how research organizations at the provincial and district/city levels operate, how they influence policy-making, and their role in the knowledge-to-policy cycle.

Purpose of this study is to identify the range of research actors in Kalimantan and Eastern Indonesia, to obtain a better understanding of how research is produced and used, and to identify the issues facing organizations and individual researchers in these areas.

Kalimantan and Eastern Indonesia

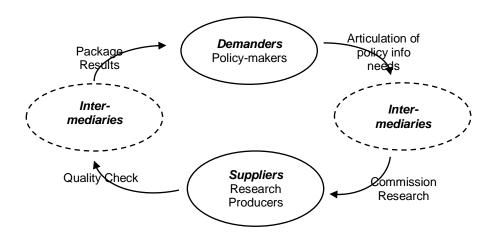
Sutmuller, P., "Diagnostic on Evidence Based Policy Making under Decentralization" April 2011.
 Research Producers in 3 August 2012

# Structure and methodology

As noted previously, there are three main purposes of this study:

- a. Identify the range of actors involved in knowledge production in Kalimantan and Eastern Indonesia
- b. Obtain a better understanding of how research is produced and used at the subnational level
- c. Summarize the key issues facing research organizations and researchers in Kalimantan and Eastern Indonesia

Figure 1: The Knowledge-to-Policy Cycle<sup>3</sup>



While the primary focus of this study was on research producers, in order to better understand their position in the knowledge-to-policy cycle in Figure 1, we also have to know how they link to the other actors in the cycle. These include policy-makers who form the demand for research through their need for evidence and information. In this category, we interviewed Heads of Regional Planning & Development Agencies (Kepala BAPPEDAs), elected members of local legislatures (DPRD members), and senior Dinas staff.

We also interviewed intermediaries linked to the processes highlighted in Figure 1. The first intermediary role is in processing the articulated needs for information into research activities and subsequently commissioning the activities. The second intermediary role is in verifying the quality of the product, and turning the basic research products into pieces of information that are directly usable by policy makers. These roles were played mainly by government research and development bodies, BPP (Badan Penelitian dan Pengembangan).

In fact, none of the actors or the roles are as clear-cut as described above, and institutions can't practically be identified as sitting in just one position in the cycle above. In reality, institutions often play a variety of roles around the knowledge-to-policy cycle. For example, the BAPPEDA in the executive branch of local government may have a role as a policymaker and demander of research, articulate the need for information as a member of the Regional Research Council (DRD), commission external research, undertake research internally, package research results, convey the content of the research results to local legislative members, and provide recommendations on relevant policy responses. In another example, CSOs may design a local development program to address community

Kalimantan and Eastern Indonesia

<sup>&</sup>lt;sup>3</sup> Taken from Diagram 1.4 in "Revitalizing Indonesia's Knowledge Sector for Development Policy". Research Producers in August 2012

welfare issues, incorporate an action research agenda to facilitate program design, package the results of their research product, and undertake an advocacy strategy with local government and other stakeholders to generate appropriate policy changes.

The study team began by interviewing research organizations in Jakarta who were known to work with research partners in the regions. The objective of these interviews was to find out how they identified and selected individual or organizational research partners, their contractual arrangements, their methods for working with partner individuals or organizations, and their impressions on capacity and challenges.

The team constructed a contact database beginning with information collected from The Asia Foundation and BaKTI, and added names to this during interviews in Jakarta, from internet searches, and through personal networking.

The sample was limited to six provinces for budgetary and time reasons. Criteria for selecting the provinces included:

- the broadest possible range of research producers
- locations that will help fill current gaps in information
- at least one region which is socially sensitive or which has a history of conflict
- provinces with relatively strong and weak cultures of knowledge production and utilization
- at least one province with a strong BAPPEDA who is known to use evidence in local budgeting and/or policy development.

Selected provinces included Central Kalimantan (post-conflict, and the location for AusAID's Forest Carbon Project (AIFCP)), Gorontalo (new province with strong JiKTI participation), North Sulawesi (fast growing, a strong BAPPEDA, with an established knowledge culture), and NTT (home of many well-known researchers, but a weak development record). Papua and West Papua were initially included in the sample, but security issues resulted in AusAID's requesting the team to select alternative locations. Southeast Sulawesi and NTB were substituted – both have strong university research capacity, and NTB has an extensive network of established CGOs.

A total of 227 respondents were interviewed as part of the study, either individually or in groups. As shown in Table 1, this includes 18 members of national-based organizations interviewed prior to travel to the field. The numbers of field respondents are too small to have any statistical validity, but yield a rich range of information about knowledge production in Kalimantan and Eastern Indonesia. The core field interviews were distributed over the six main provinces and seven districts/cities visited, ranging from 31 to 39 respondents in each province. Interviews at the provincial level included the widest range of respondents, and the district/city discussions tended to be more selective. One interview with a Papua NGO member was conducted in Jakarta, and an additional group interview was scheduled with the South Sulawesi Balitbangda to explore responses provided during field interviews.

Research Producers in Kalimantan and Eastern Indonesia

<sup>&</sup>lt;sup>4</sup> The objectives of the preliminary interviews were to obtain information on provincial researchers and methods they used to conduct field research. The results of those interviews are contained in a separate report.

The study focus on knowledge producers is reflected in the abundance of academic and NGO respondents – 68 percent of the non-Java total. Legislators were the most difficult to interview directly: only five agreed to meet with the team, and two of those cancelled at the last minute. The seven members of the Regional Research Councils (DRD) the team met with are not identified in the total by type because they were also academics or government officials. Moreover, we believe a number of respondents neglected to mention their membership in the DRD, particularly where the Councils were not active.<sup>5</sup>

Table 1: Respondents by Type and Location

By Type		By Location	
National	18	Java	18
Provincial Gov	41	NTT	39
Kabupaten/Kota Gov	17	NTB	31
Academics	82	Kalteng	31
NGOs	60	Gorontalo	31
Legislators	3	Sulut	39
Donor Programs	5	Sultra	33
Total	227	SulSel*	4
		Papua**	1
		Total	227

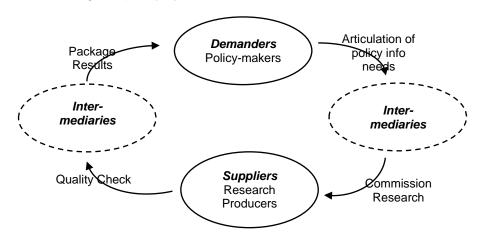
<sup>\*</sup> Supplemental interviews were conducted with the Balitbangda in Makassar, South Sulawesi (see Annex 4)

<sup>\*\*</sup> One respondent from Papua was interviewed before the decision to postpone the team's visit to that province.

<sup>&</sup>lt;sup>5</sup> The team often heard about officials' membership in the DRD from third parties. Research Producers in

# **Actors in the Knowledge-to-Policy Cycle**

Figure 1: the knowledge-to-policy cycle<sup>6</sup>



Starting at the top of the cycle reprinted above for convenience, we have key demanders of knowledge, the policy-makers:

- Officials of the **executive branch** of government: governors, district heads, mayors, heads of government agencies charged with coordinating or carrying out programs.
- Officials of the legislative branch of government: popularly elected members of the
   *Dewan Perwakilan Rakyat Daerah (DPRD)* whose responsibilities include
   approving all local regulations and development plans, and approving the annual
   budget.

They are assisted in this process by the Dewan Riset Daerah (DRD).

## Dewan Riset Daerah (DRD)

The subnational parallel body at the provincial and district/city levels to the Dewan Riset Nasional (National Research Council) is the Dewan Riset Daerah, a non-structural advisory body. The DRD is made of up senior officials from the government, experienced academics, and representatives from the private sector, and their task is to help develop a master plan for research activities that will support the realization of the medium term development plan (RPJMD), and to advise the government on the execution of the research plan. The formation of a DRD requires an official letter (SK) from the head of local government which appoints the specific individuals to the body, after which the DRD is tasked with developing a research master plan based on the RPJMD and local conditions, and annually advising the government on research. Members of the provincial DRD participate in an annual national coordination meeting.

## **BAPPEDA**

The BAPPEDA, or the *Badan Perencanaan dan Pembangunan Daerah* is the regional agency for planning and development in each province and district/city. This agency is responsible for all planning, budgeting and program coordination within the region. The provincial head of this agency is an echelon II position, serves as the governor's key liaison with the DPRD on budget and planning issues, and overall plays a key role in making government work.

<sup>&</sup>lt;sup>6</sup> Taken from Diagram 1.4, "Revitalizing Indonesia's Knowledge Sector for Development Policy" AusAID, August 2011.

#### **SKPD**

An SKPD is the Satuan Kerja Perangkat Daerah, or a regional government working unit, and the collective SKPDs include the broad range of regional government service delivery agencies and offices.

#### The BPP

The BPP, or *Badan Penelitian dan Pengembangan*, is the general name for a government agency or office responsible for research and development. Under the structures instituted since decentralization, the BPP is responsible for all subnational government research activities. The legal framework has provided limited flexibility for agency research (see Annex 1), and other government agencies have very limited funding or authorization to conduct or manage research activities – usually based on technical requirements. After 2013, local government's ability to undertake research outside the BPP will be even more strictly limited. The BPP has the task of coordinating information and research needs among all the SKPD and relevant agencies, guided by the DRD master plan.

#### Central Research

Some central agencies retain deconcentrated institutions which undertake regular or occasional activities in the regions through APBN funding sources. Some of these include:

- The Ministry of Agriculture maintains an applied research facility in each province, the Badan Pengkajian Teknologi Pertanian (BPTP). They also have specialized research institutes distributed throughout the country, for example, the main research institute for animal husbandry is located in Maros, South Sulawesi.
- The Ministry of Health's Litbangkes undertakes multi-region health research activities
- The Ministry of Education and the Ministry of Health have special funds for targeted research by the local service agencies (dinas)
- The Ministry of Research and Technology, LIPI, and others periodically do research in the regions.

#### **University Researchers**

All faculty members in Indonesian universities are individually committed to fulfill the University's obligation of *Tridharma*, the three-part responsibility to provide teaching, research and community service. (See Annex 2 for more details on the legal framework of university research.) All faculty are default members of the university's research agency, the *Lembaga Penelitian* universally called the Lemlit. Within the Lemlit, they are typically grouped into research centers (*pusat studi*) which are sometimes cross-sectoral. Universities organize their own study centers according to faculty interests, and the level of activities within study centers may change over time.

All provinces have at least one main public university. Some provinces have additional public and private universities which typically grew out of colleges – Gorontalo and North Sulawesi both have examples of these.<sup>8</sup>

<sup>&</sup>lt;sup>7</sup> Some (but not all) universities have bodies which combine management of university research and community service activities, and some separate the two functions. Lemlit is the common short name for both the combined body and the separate research body.

<sup>&</sup>lt;sup>8</sup> Universitas Gorontalo began as a Sekolah Tinggi Ilmu Ekonomi, and Universitas Negeri Manado (UNIMA) was an IKIP.

In addition, there are private universities (Ministry of National Education oversight) and religious universities (registered with the Ministry of Religious Affairs) in many of the provinces. These tend to be smaller institutions, but in many cases (for example, the Universitas Gorontalo) play important roles.

Faculty members of all accredited universities (public, private and religious) are eligible to participate in the Ministry of National Education research grant programs.

# NGOs9

There are large numbers of non-government organizations (NGOs) in all provinces. NGOs can be formal (registered with the government) or informal, and provide a variety of services or carry out tasks, sometimes working with government and sometimes independently. The description of the NGO environment in Gorontalo provided by several active NGO participants is typical of all the six provinces: there are many NGOs listed in the province – many form around a specific issue and disappear after a short while – except for a name board; the number of NGOs which remain active over time is much smaller. NGOs that have maintained activities over several years have usually have better developed institutional structures and processes for human resource and financial management. Minimum levels of administrative competence are usually required to work with donors, which can be an important factor in institutional longevity. Moreover, donors will often invest in administrative capacity-building.

#### **Donors**

Bilateral and multilateral donors in Indonesian undertake a variety of activities in the regions. Directly funded development programs can work with communities, with sectors or with governments, and they can provide services, advice and guidance. They typically work directly through dedicated consultant teams of national and sometimes international staff, or work indirectly through local or international NGOs.

#### The Framework for Decentralized R&D

A reasonably complete picture of the regulatory structure of regional autonomy or decentralization of government affairs from the central government to local governments in Indonesia is provided in Sutmuller (2011) pages 8-10. Included there are descriptions of areas of authority and responsibility, regulations on planning, decentralized fiscal mechanisms, and procurement regulations, among others. This analysis builds on the information presented there.

The institutional and regulatory framework for decentralized institutions<sup>10</sup> for research and development (*Badan Penelitian dan Pengembangan, or BPP*) falls primarily under the Ministry of Home Affairs (Mendagri), but with some developing links to the Ministry of Research and Technology (MenRistek). This is detailed in Annex 1.

On the supply, or knowledge production, side, the Ministry of National Education (MenDiknas) through the Directorate General of Higher Education (Dikti) issues rules on research requirements for academics, and provides support to researchers through the Dikti

<sup>&</sup>lt;sup>9</sup> The term NGO in this study is synonymous with civil society organization, or CSO.

Decentralized institutions or activities are funded through local government budgets, the APBD.
 Research Producers in
 9
 August 2012

research grant programs.<sup>11</sup> The framework for research and development in higher education – the regulatory structure and funding sources – is outlined in Annex 2.

# **Findings**

# The Demand Side – articulating information needs and forming the policy research agenda

#### **Government's Perceived Need**

Overall, government officials stated that research was supposed to support the vision & mission of the head of local government. Officials often expressed concerns that research was used to justify the vision & mission ex post, and admitted there was little research on how to effectively implement the vision & mission. Most officials prioritized making sure the budget was spent and accounted for - and avoiding any issues with the KPK. University researchers contracted by local governments to complete the work also complained about the focus on providing receipts and little-to-no interest in substantive results. Research funding is an easy source of side income for civil servants, with 30 to 50 percent kickbacks most commonly mentioned by researchers. No government official could cite an example of government-commissioned research having policy impact – except a link<sup>12</sup> between the Mayor of Tomohon's research trip to the Pasadena Rose Parade and to the Netherlands to study flowers, and Tomohon's bi-annual flower festival. Heads of BPPs frequently complained that research was not valued and were frustrated by its lack of integration into government discussion and strategy building.

A genuinely high level of demand for research appears to be coming from new districts – although the team received these reports second-hand, from researchers who had worked with new district officials on issues of institutional organization and medium and long term planning. Officials in these areas seem to understand they need some baseline information and advice in creating government structures and policies, and researchers noted these could be rewarding areas in which to work in that they actually used the advice offered to them.

Discussions with DPRD members and feedback from officials on the DPRD had two main themes. First, there is a thirst for information among DPRD members genuinely interested in governance, but no way to fund research or obtain information. One (minor) party used their own funds for a research budget to inform members on key issues. One head of a provincial legislature lamented that while democracy means that all citizens with a high school education are eligible to hold positions in the legislature and make important decisions, there were no resources to build their capacity nor to provide them with information needed to make good decisions.

From the other side, officials complained that the DPRD made research funding decisions based on political considerations, ignored the work of the DRD, weren't interested in research results, and used kickbacks from research in the Dana Aspirasi to supplement their income. Both perspectives probably contain some truth, but Sultra demonstrated (see

<sup>&</sup>lt;sup>11</sup> Grants under national programs are funded at the central level through the APBN.

<sup>&</sup>lt;sup>12</sup> More correlation than causality.

section on funding, below) that a good consultation process can result in a better outcome – at least as far as budgeting is concerned.

## Leadership

Despite the generally dismal picture of research under decentralization, there are some government leaders who are working to use evidence to improve the policy environment. The demand for and utilization of research is critically dependent on the top levels of leadership in local governments. The governor, district head or mayor's practice of using evidence in policy-making sets the terms for the rest of government. In regions where the leadership was *not* publicly committed to evidence-based decision making, there was little-to-no effort by underlying government offices to produce or use real information – it just didn't matter. In some regions where there had previously been a strong emphasis on building knowledge but the top leadership was now changed, there was still some residual momentum in some key offices.<sup>13</sup>

While strong top leadership is a necessary criteria, it is not sufficient – in order to follow an evidence-based strategy, top executives need implementation support from their BAPPEDAs who play key roles in organizing research and in supporting an evidence-based decision-making process. Thus, the most pro-research provinces all had Heads of BAPPEDAs with strong research backgrounds.

Solid support from the top is still not enough to ensure the production of sound data and research to underpin policy when there is no budget. Government offices are also expected to produce basic information and analysis for planning and other purposes, and their ability to do this is greatly constrained by lack of resources. For example, several provincial BAPPEDAs complained that investors need good, comprehensive data on which to base even preliminary explorations for investment, and were frustrated not by the lack of a onestop shop where they could steer investors, but more by the underlying absence of good, basic data – forestry offices admitted their maps weren't accurate and didn't reflect real resources, and mining land use maps often overlapped with forest conservation areas. The most common complaint from BAPPEDAs was the lack of a sensible and comprehensive database, and no resources to build or maintain one.

Policies for basic service delivery are also affected by lack of accurate data, much less analysis or research. Local governments are responsible for developing and implementing effective strategies to deliver services to meet the needs of constituents, and this requires accurate information as well as the ability to analyze that information. Subnational agencies for health and education, in particular, depend on flows of information they have very limited authority or capacity to collect under decentralized structures and budgets, and this weakens their ability to form effective strategy responses. For example, BPS' figures for maternal and child mortality in NTB obtained through sampling procedures rank it among the worst in Indonesia. Yet conscientious attempts by the health agency to verify the data through real data tracking exercises (for which they have no budget) yield very different figures. They don't trust the BPS data, BPS isn't interested in helping them resolve the questions, they have no budget to reconcile the information gap, and yet they are responsible for developing

<sup>&</sup>lt;sup>13</sup> This momentum is likely to dissipate quickly as new political leaders are tending to make a clean sweep of bureaucratic appointments during the first one-to-two years.

policies and programs (with scarce, real resources) to address a problem without a clear shape or form.

# **Funding**

Funding approved for research is generally microscopic at the provincial and district/city levels, regardless of the structure of the BPP (addressed in the following section). The median budget allocation was 500 million rupiah, with the smallest being 170 million (Kota Tomohon) and the largest at 2.2 billion (Sultra), and this typically includes the budget for the DRD. BPP research allocations up to the median were divided between two projects The average budget share for research among all provinces and districts/cities visited was 0.07%, or seven one-hundredths of one percent. The two largest budgets were found in NTB and Southeast Sulawesi, both of which realized *Dana Aspirasi* in their research activities.

# Box 1 Two Examples of Supporting Research with *Dana Aspirasi*

The Governors of NTB and Southeast Sulawesi have both followed the model established by the Central Government and Parliament in Jakarta, and have set aside funds called Dana Aspirasi for each individual member of the local parliament, the DPRD. Each DPRD member has the authority to allocate these funds to meet the needs of their local constituents that are not funded elsewhere in the budget, for example, to rehabilitate schools or health centers, build roads, support cultural activities, etc. *Dana Aspirasi* in both provinces can also be used to support research activities through the BPP, but the implementation procedures provide a useful contrast.

In NTB, individual research "packets" were set at a value of 50 million rupiah, and the DPRD members have full authority to determine the title of the research project, write the terms of reference, designate the academic institution and appoint the researcher to carry out the work which is administered by the *Badan Lingkunan Hidup dan Penelitian (BLHP)*. Overall, this has resulted in a provincial research budget of 1.25 billion – the second largest in the sample – consisting of 25 research packets. Only two of the 25 projects originated in the DRD master plan for research, and 23 projects were submitted by DPRD members – the Head of the BLHP complained bitterly that most of the topics were inappropriate and that their role had been reduced to collecting receipts. The Head of the BAPPEDA informed the team that this process would be modified next year, and the BLHP would review and prioritize the proposals submitted by the DPRD using *Dana Aspirasi*, but he remained unenthusiastic over this source of research funding.

Southeast Sulawesi is also seeing *Dana Aspirasi* allocated to the research budget. The Head of the Balitbangda reports that the initial 2012 budget allocation for research managed by the provincial Balitbangda (with 64 staff) was 100 million rupiah<sup>17</sup>. After an intensive lobbying effort, he succeeded in organizing a stakeholder consultation process involving the DPRD, DRD, universities and SKPD to jointly review and prioritize all research proposals.

Research Producers in

<sup>&</sup>lt;sup>14</sup> Only two BPPs knew the budget amounts for DRD support, but they all acknowledged they were included in the BPP budget.

<sup>&</sup>lt;sup>15</sup> One exception to this was Kota Palangkaraya which divided its 300 million rupiah budget among five research topics and DRD support.

<sup>&</sup>lt;sup>16</sup> Examples include "Studi Situasi dan Kondisi NTB Tahun 1966-1978" ("Study of the Situation and Conditions in NTB 1966-1978") and "Studi Kebijakan Pembangunan Pariwisata di NTB Tahun 1988-1998" ("Study of Tourism Development Policies in NTB 1988-1998").

<sup>&</sup>lt;sup>17</sup> This amount does not include recurrent staff and operational costs of the Balitbangda, but is intended to cover the costs of implementing specific research project(s). That's an overhead burden of one employee per 1.5 million rupiah (AUD 150) of research funds.

The end result was a budget of 2.2 billion rupiah to fund six research topics at 200 to 300 million each, and 1 training on research and development.<sup>18</sup> This was by far and away the best funding result encountered in the six provinces visited – a sharp exception to the research funding trend.

#### Coordination

Coordination in developing the public research agenda is a problem in every region visited. The BPPs are acknowledged as having authority and control over research activities, although a few research activities are undertaken by other local agencies with APBD funding. Four out of six heads of provincial BPPs stated central ministry Litbangs were responsible for supporting sectoral Dinases with research, and one thought sectoral dinases had their own research budgets. In practice, consultation and coordination are minimal, if they occur at all, and its absence is likely linked to the very small size of the research budget – it is difficult to gather much enthusiasm for a complicated consultation and prioritization process when everyone involved knows the budget and resulting activities will be insignificant.

# Box 2 North Sulawesi: Challenges in Coordinating Agricultural Research

Like most provinces in Eastern Indonesia, agriculture is a key source of income for the citizens of North Sulawesi. Responsibilities for agricultural planning and service delivery are distributed across a variety of agencies in the province:

- The provincial Dinas Pertanian has a strong coordination role, while services and activities are funded at the district level. The provincial Dinas' role is to lead farmers to utilize services provided by the districts, supervising infrastructure provision, and coordinating the expansion of cultivation area. They do not undertake research.
- The Dinas Tanaman Pangan coordinates food production activities, including the coordination of provincial and district extension service providers.
- The BPTP works on applied research, testing practical ways to improve farmer productivity. The BPTP is funded through the national Ministry of Agriculture budget and not the APBD, and their planning and budgeting is finalized at the central level.
- Overall planning and coordination of all provincial research and development is the responsibility of the UPTD Balai Litbang within the provincial BAPPEDA.

As in all provinces, the core challenges are a) building a research agenda that meets priority needs, and b) disseminating and using the end results.

Proposals for research are submitted annually to the Balai Litbang primarily by individual researchers at the local universities. A seminar is organized to review and prioritize proposals, to which officials and the governor's expert staff are invited. The DRD was described as existing in name only, and plays no active role. During 2012, the province is funding two projects for a total of 500 million rupiah on: a) an adaptive research project on improving paddy productivity in one Sulut district, and b) an analysis of planning related to the province's role in the MP3EI strategy developed by the central government. The one agricultural research project is constrained by the administrative requirement that all activities be completed and accounted for by December 1, regardless of seasonal planting

<sup>&</sup>lt;sup>18</sup> This is LIPI training to convert one structural position to a functional researcher position.

<sup>&</sup>lt;sup>19</sup> Some central ministries provide APBN funding for specialized research at the local level, including agriculture, health and education. The largest example of this included 300 million rupiah for a Dinas Pertanian contract to UGM to assist with an agricultural master plan in Kota Palangkaraya – other examples were all very small.

#### issues.

When the projects are completed, the researchers will present their results at a completion seminar organized by the Head of the Balai Litbang, as required. The results seminars are seldom very exciting nor well-attended. Copies of the final results paper are sent to relevant government agencies and filed. The Head of the Balai Litbang believes the Ministry of Agriculture has its own research agenda, but isn't familiar with it.

The BPTP staff report they work hard to include a large number of proposals on priority issues suggested by local agencies in their annual work planning process, but they are consistently disappointed: most are removed at the central level from their final budget, with a relatively large portion of activities being driven by national priorities. When they do have good results they need to test at scale, there are no local resources to do so – they submit a field test proposal to the Ministry in Jakarta and have to wait in a long queue. They always organize seminars/workshops/fairs on research results and invite all local stakeholders. However, these seminars rarely have the hoped-for impact since the invitations are extended by the Head of the BPTP (Echelon III), and the heads of the local government agencies are Echelon II – they will typically send a lower level official with no decision-making authority and little ability to leverage results. They were wistful for the good old days of the Kanwil Pertanian with its comprehensive sectoral authority at the central, provincial and district levels – and headed by someone who knew how to make the system work.

#### Conclusions:

- Budget is a real constraint. One research project per year will not generate the impact needed to raise local farmer incomes.
- Central government mandates absorb significant portions of limited resources for research and are not always consistent with local priorities or needs.
- Fragmented authority and the lack of overall accountability that came with decentralization make it more difficult to coordinate and fund sectoral research, and to leverage any uptake of useful results.

Research agendas at the district or city level tend to be developed internally within the BAPPEDA, and are less extensively consulted or coordinated than at the provincial level. The team found that district/city BAPPEDAs and BPPs were fairly evenly divided into two groups. The first group has a poor appreciation for research, and little-to-no understanding

of the function of central research and development agencies – some erroneously assume that BPP divisions within central line ministries provide services to regional offices. The second group appreciated the potential value of research, but were unable to generate support for adequate budgets. District/city research budgets ranged from 170 – 500 million rupiah, and the average share of total APBD budget was a bit lower than the total

"The line dinases get research support from their ministry Litbang divisions, so there is little left for us to do here at the city level."

Kepala BAPPEDA Kota explaining the small BPP budget

sample average at 0.06 percent (six one-hundredths of one percent).

The politicization of the dinas system has also made effective research coordination more complicated. Incoming heads of government typically appoint their supporters as heads of local government agencies during the first year, and we heard a steady stream of reports about lack of technical qualifications or experience as well as frequent rotations. This

situation is amplified in provinces creating new administrative units (pemekaran) where staff are frequently reassigned to newly created districts or subdistricts. University researchers in one province described their experience in improving slaughterhouse practices and management: the project concept was developed with one head of the provincial *Dinas Peternakan*, designed with a second *Kepala Dinas*, piloted under the supervision of a third, and a new regulatory framework was drafted and promoted to the DPRD under a fourth *Kepala Dinas*. Each leadership change meant they had to educate the new incumbent from zero and gain his support to move forward, causing substantial time delays. Some researchers have developed an effective strategy to mitigate that cost – make sure you involve working-level officials in all stages of the activities. They will be able to help "educate" their new boss about the substance and the process, and they will be stronger advocates if they have understanding and ownership.

# **Dewan Riset Daerah (DRD)**

The formation of a DRD requires an official appointment letter (SK) from the head of local government, after which the DRD is tasked with developing a research master plan based on the RPJMD and local conditions, and advising the government on research. All provinces have followed requirements to appoint DRDs, and these are funded from the APBD BPP budget. Among the six provinces, one DRD was described as active, one was thought to be active but hadn't yet developed a masterplan, and the other four were generally described as active in name only – including by members. Frustration was expressed by officials and academics over the lack of meaningful budget, impact, and/or political manipulation of the agenda, and the result is an institution that has been effectively marginalized.

At the district/city level, only one (city) out of seven regions had appointed the members of the DRD, and that one had not yet developed a research masterplan. Sub-provincial governments generally saw DRDs as a not very relevant bureaucratic requirement, and this is reflected in the level of activity.

The heads of BPPs complain that the DRD takes a large portion of their extremely limited budget. Two BPPs knew the specific amounts of their DRD allocations:

			percent of
Level	BPP Budget	DRD allocation	budget
Province	400 million	120 million	30%
City	300 million	60 million	20%

Heads of BPPs said the DRD budget allocation is typically adequate to cover travel costs for DRD leaders to attend the annual national meeting.

## Structure and Functions of BPPs

The original, pre-decentralization concept for the regional BPPs replicated central research bodies with resident specialized (functional) research staff to carry out research (following the LIPI model), but this model doesn't fit well with the subnational reality. A provincial BPP with functional staff covering a full range of priority policy areas would mean APBD support for a very large and expensive body with specialized skills, and this is simply inconsistent with budget realities. In contrast, the team could find only one functional research staff in the six provinces visited. Sultra is qualifying one functional researcher this year, and next year NTT is requesting budget to train six and Sultra for four more — these were the only examples of interest in developing functional staff. The cost of LIPI training and certification to convert structural staff to functional researchers was estimated at about 25 million rupiah,

and sourcing funds for this was a problem – with such small budgets for research, governments were generally unwilling to invest in functional research staff.

Moreover, the role and future value of functional researchers was very unclear, both to the institutions and to the individuals themselves. Functional researchers are subject to different evaluation and promotion criteria than structural staff, including conducting research, writing and publication, and these will be difficult to fulfill if all research activities are contracted out. BPPs do need competent technical staff with the capacity to formulate and manage research, but these skills don't necessarily fit within a functional position (see the experience of the South Sulawesi Balitbangda in Annex 4). The one often-stated advantage to being a functional staff is an additional five years of employment – functional civil servants retire at age 60, while structural civil servants retire at 55. Indeed, the one functional researcher the team encountered was working in the provincial BPP, and had already completed a structural career including serving as the head of a district mining & natural resources agency and a district tourism agency.

BPPs have a variety of institutional structures. All district/city BPPs in the regions visited are divisions within the BAPPEDA. At the provincial level, three types of structures have developed:

- a. The pre-decentralization model of stand-alone Regional Research and Development Agencies (Balitbangda) led by an echelon II, such as in Southeast Sulawesi and South Sulawesi<sup>20</sup>
- b. Units within the BAPPEDA led by an echelon III, for example, the UPTD Balai Litbang in Sulawesi Utara, and the Bidang under the BAPPEDA in Central Kalimantan
- c. Part of a hybrid agency such as the BP4D<sup>21</sup> in NTT, the Balihristi<sup>22</sup> in Gorontalo and BLHP<sup>23</sup> in NTB, which can also include environmental laboratories. While these agencies are headed by an echelon II official, the research component is led by an echelon III.

Staffing of these bodies ranges from seven (Kalteng) to 64 (Sultra), depending on the level of activities. District/city BPP were all bunched around the lower end of the staffing scale, while the stand-alone provincial BPP was the largest.

In several provinces the BPP was an independent *Balitbangda* up to 2007, which was then downgraded into an R&D Bidang. In every province where this happened, government officials (incorrectly) stated they were required to do so under PP 41/2007 on rationalizing subnational government structures (see Annex 1 on Legal Framework for Research and Development for a discussion of the regulation). One common tangible result of this change in government structure is the physical loss of all research products produced by the old

<sup>&</sup>lt;sup>20</sup> South Sulawesi BPP is included in this report as a special illustration because it was consistently mentioned as the best functioning BPP in Indonesia by respondents. See Annex 4.

21 Badan Pendidikan, Penelitian, Pelatihan dan Pengembangan Daerah

<sup>&</sup>lt;sup>22</sup> Badan Lingkungan Hidup, Riset dan Teknologi

<sup>&</sup>lt;sup>23</sup> Badan Lingkungan Hidup dan Penelitian

Balitbangda – the products were in hard copy only<sup>24</sup>, and no one knows what happened to these archives when the offices were closed and moved into the BAPPEDA.

"It doesn't make any difference whether it's a *Badan* or a *Bidang*, what matters is how well it's managed."

A Kepala BAPPEDA

Some officials felt this downgrading of research

leadership from echelon II (equivalent to a head of agency, or *dinas*) to an echelon III has real operational impact. In a government hierarchy sensitive to issues of protocol, an echelon II official can invite the counterpart heads of agencies to a meeting (for example, to plan research or implementation of research results), and they will feel some obligation to show up. If an echelon III official invites the heads of agencies to a meeting, their attendance as an echelon II sends a message of weakness and they are far more likely to send their lower ranking staff – who have no authority or decision-making ability.

On the other hand, some officials thought it really didn't matter how research was organized institutionally or what was the echelon rank of the BPP leader. The more important questions were how it was funded, and how effectively it was managed. They also felt pretty strongly this was a matter of leadership. Support for this view is contained in the description of the South Sulawesi BPP in Annex 4.

In reality, since BPPs do not have functional research staff, their main purpose is to commission research – they are, in effect, specialized procurement agencies. Projects are almost all sized below 100 million rupiah which enables the BPP to avoid competitive bidding if it chooses and to complete the work by appointment. Eight of the regions reported they establish MOUs with university faculties, thus enabling universities to bring their best array or resources to the task. The other portion of the work is carried out through contracts with individual researchers. With the contracts generally falling under the 100 million rupiah competitive bid floor, universities are not generally affected by the GOI procurement requirement limiting bidders to corporations. Nearly all provincial governments have some experience with competitive bidding, and academics reported that the firms tended to hire the same local academics who would have been the likely candidates for direct contracts. The most common report of the impact of competitive bidding was an additional split in the available resources from a two-way split (half of research funds going back to officials) to a three-way split (officials-firm-researchers), giving them even less to work with.

BPP leaders were either unable to discuss how commissioned research results were used in policy discussions or admitted they had little impact.<sup>25</sup> They were under strong pressure to ensure the funds were properly accounted for, and this was reflected in the frustration of university researchers working on these projects – they felt officials managing research were more focused on protecting themselves from the KPK than they were interested in gaining knowledge, and were generally certain the results would just sit on a shelf.

# Supply Side – implementing research and follow up

The team talked with 140 academics and members of non-government organizations – with roughly 10-15 percent of the academics also having NGO links. For example, it is not

<sup>&</sup>lt;sup>24</sup> The new head of research in NTT knows there were 42 products collected over the years, but doesn't have copies or even a list of titles – the office files are simply gone.
<sup>25</sup> The results from the West Library to the control of the control

<sup>&</sup>lt;sup>25</sup> The results from the World Bank-funded PEACH research often prompted a different response, as discussed in the section on Donors.

uncommon for an academic to lead or act as a researcher for a local NGO, and others might serve as a director of an NGO they initiated during their activist student days. This figure of 10-15 percent should not be interpreted as an average, as these researchers tended to have a more active interest in policy and our interview networking process was undoubtedly biased towards these individuals. The results for university and non-university groups differed in many ways, and these are described separately below.

#### **Universities**

The team met with seventeen university-related groups, and the overwhelming reason they gave for conducting research is for salary and rank increases (top reason given for all research activities). The groups estimated that while all lecturers have a professional obligation to undertake research (and the link to salary and rank increases), only about 10-15 percent are actually interested in research. In general, public universities were more active in research than private universities, which tended to be smaller, more focused on teaching, and not as well funded.

The discussion groups and individual interviews revealed that committed researchers are motivated by intellectual curiosity, a desire to contribute to their discipline and to practical policy solutions that benefit their communities, and as an instructional tool for working with students.

# **Funding University Research**

There are two main sources for funding for university research – the largest proportion comes from research grants from the Directorate General for Higher Education (Dikti) in the Ministry of National Education (see Annex 2) supplemented by internal research grants funded by the individual universities. Dikti grants are awarded to teams of researchers, so resources (maximum 50 million rupiah for a competitive grant) are typically divided among three contributors. Local government funds for research are considered insignificant. Only two universities<sup>26</sup> had total research resources totaling more than around 1.5 billion<sup>27</sup>, and most individual researchers had small annual grants in the range of 3-10 million rupiah. Researchers without grants were "self-funding."

International research funding (as distinct from donor funding to support local programs or projects) was uncommon, although the very best researchers in all provinces have fairly regular access to it. International funding was targeted to the environment (most common), natural resource management, and agriculture.

#### Dikti Grants

Most universities are heavily dependent on Dikti grants, with proposal submissions ranging from zero to 172 (UNRAM) and an average of thirty proposals. The number of proposals correlates roughly on the size of the university and level of research interest. Most universities interviewed received five or fewer Dikti grants each year; Universitas Nusa Cendana (UNDANA) in Kupang has generally better results, averaging 12-14 successful Dikti grants. UNRAM was the successful outlier, <sup>28</sup> described more fully in Box 3.

<sup>&</sup>lt;sup>26</sup> Universitas Sam Ratulangi (UNSRAT) in Manado has a large internal research fund (four billion) and UNRAM has large and diverse sources (see Box 3).

<sup>&</sup>lt;sup>27</sup> Approximately AUD 150,000 for a thousand or more faculty members, or less than AUD 150 per faculty member.

UNRAM was the only Lemlit visited with any comprehensive database on research grant activities.
 Research Producers in 18 August 2012
 Kalimantan and Eastern Indonesia

There are limited attempts to diversify grant funding to include MP3EI or Menristek research opportunities (see Annex 2 for results). UNRAM (NTB) and UNDANA (NTT) were the only institutions with pro-active Lemlits, and UNRAM has been successful in increasing the range and overall size of research funding (see Box 3 for a more detailed description). Tables 2.1 and 2.2 in Annex 2 show good results for universities in Papua and Papua Barat, and it would be useful to talk with those organizations about their research activities and funding strategies.

Most universities employ regular strategies to improve their proposal-making capacity. The lemlits typically organize workshops and training on writing and proposal preparation, and training on research methodology – not just for proposals but to improve the overall quality of their work. Dikti provides trainers for these activities, and lemlits often rely on their own successful senior researchers to coach others, as well.

A number of complaints were offered about Dikti's award process. There is strong suspicion of bias against off-Java research. One researcher recounted that after a string of failures, he offered his proposal to a colleague at a university on Java who simply changed the cover page, and it was immediately accepted. Others said they were sometimes surprised to find their proposals (with a changed cover page) awarded to Java-based researchers. A very few researchers complained about receiving less than the full amount of the grant, but the majority said the transfer of the grant was full and transparent. For some small universities far from Jakarta and with limited budgets, the cost for administrators to travel to Jakarta to complete the award administration procedures was a big budget item.

## **Box 3: Research at UNRAM**

The University of Mataram (UNRAM) in the capital of Nusa Tenggara Barat province has 1,100 faculty spread over eight faculties teaching 16,000 students. It was the most active research university in our sample, although UNHAS in Makassar is undoubtedly bigger.

UNRAM Lemlit submitted 172 proposals to Dikti for various types of research grants – more than five times the average of our six province sample. They have an internal university grant fund of 600 million rupiah which is allocated primarily to young researchers in grants of 5-10 million to build their skills. They are active partners with international universities and organizations, and they estimate 5-10 UNRAM faculty members have the capacity to publish internationally.

The Lemlit organizes workshops to build capacity in writing, proposal preparation and methodology, taught by experienced professors and by Dikti trainers – the same strategy reported by most universities visited. They also regularly invite visiting foreign researchers to make presentations on methods for publication – the only example the team found of this.

In 2011, UNRAM faculty received a total of five billion rupiah for research from all sources (reported to the Lemlit) – triple the sample average – and in 2012 this jumped to 9.5 billion. Where did this increase come from? First, the President's MP3EI program has a big research budget, and UNRAM received a large portion of it for proposals submitted for the Bali-Nusa Tenggara corridor (see Annex 2: Research and Development in Higher Education). Second, UNRAM is the fourth largest beneficiary of Menristek's Sistem Inovasi Nasional (SINas) program. The Lemlit is pro-active, has developed a comprehensive strategy for supporting faculty research, and contributes to researchers' success.

## Domestic and International Training

Most university faculty had S2 and S3 degrees from Indonesian universities, and Java is clearly an important source of academic training for all of the universities in Kalimantan and Eastern Indonesia. Typical progressions would be:

degree	example 1	example 2	example 3
S1	home province	home province	Java
S2	home province	Java	Java
S3	Java	Java	Java

Many academics "came home" to teach at the university in their home province. The more active researchers were more likely to have had higher amounts of training at a university in Java, and among the best researchers, Institute Pertanian Bogor (IPB) and Universitas Gadjah Mada (UGM) were common factors. Universitas Kristen Satya Wacana in Salatiga has played a key role in developing university and researcher capacity in NTT, and in Sulawesi, Universitas Hasanuddin (UNHAS) in Makassar was also played a role.

Four public universities had any number of faculty with international training – UNDANA in NTT, UNRAM in Mataram, UNSRAT in Manado, and UNHALO in Kendari. In rough numeric order, academics there have utilized scholarships to Australia, the US, Canada, and Europe (the Netherlands and Germany). The team found less-than-expected interest in international scholarships in some areas, with the most common reasons given:

- Poor English language skills
- Lack of information
- Reluctance to be away from families for long periods this was an especially strong factor for women

In nearly every province, there were a handful of very active, exceptional academic researchers. These academics were not especially dependent on Dikti grants - some thought they were too small to bother with, others used them to involve undergraduates in research. They had a much more diverse set of research funding sources, including collaboration with international researchers and NGOs, and were better networked within Indonesia and internationally. Almost all of them had studied overseas, most often in Australia, <sup>29</sup> and some had masters and doctorates from two countries.

At the far end of the scale was Universitas Palangkaraya in Central Kalimantan, where faculty interest in research is more limited, and very little (if any) government interest in research results. But even here there is some hope: the local government IS interested in donor attention being focused on the environment<sup>30</sup>, and all of the high-potential young researchers we met there were actively involved in Monash University's capacity building program – an important investment for Kalimantan.

<sup>&</sup>lt;sup>29</sup> Flinders University in Adelaide was most common in this group, with Charles Darwin University, University of Tasmania, Queensland University of Technology, University of Queensland, Monash University and Australian National University also represented.

30 We also met with some heads of local government agencies who were determined to get useful

information for their work.

Gorontalo sits somewhere in-between these two extremes. The team met with many good, capable researchers, but all of them were constrained by limited networks and lack of exposure. Almost none had studied overseas, although some had worked on World Bank, CIDA or JICA projects locally. They were working hard to expand their networking skills through JiKTI, and they have strong moral support from senior government officials with research backgrounds. Overall, they have good potential, but are unlikely to reach that breakthrough point without some assistance.

# **Research Agendas and Local Government Needs**

Most public university lemlits describe their relationship with government as good. RPJMD formulation plays an important role in strengthening links between university and government, as evidenced by the BAPPEDAs in NTB and Sulut both starting as academic contributors to the RPJMD and other policy-linked work, and later being "borrowed" by the governors.

However, these relationships are mainly personal ones – universities have few institutional links to local government and are surprisingly isolated from the local policy environment. In each province, there were a handful of effective university researchers who had good personal linkages to government, but these were not reflected in institutional relationships. Membership in the DRD would normally be one linking mechanism, but these function only marginally, if at all. Universitas Mataram (UNRAM) had probably the strongest working relationship with government, but even there researchers expressed frustration over being ignored or underutilized.<sup>31</sup>

Academic research agendas cover the full range of inquiry expected in large universities, and faculty members reported they were independent in setting their individual research agendas. Overall, there is a sharp disconnect between academic research agendas and local government information needs. The team met with more than eighty academics in seventeen organizations, and only two groups mentioned policy impact as a top research priority. Academics consistently expressed frustration over persistent lack of interest by

local government or appreciation for their potential contribution, and not disinterest. None of the sectoral dinases (health, education, agriculture) we spoke with had collaborative research relationships with universities, despite these being

"Our job is to do the research. If government wants to use it, then that's up to them."

Frustrated FISIP faculty member

their prime sources of knowledge. Not one academic group could identify an advocacy strategy to encourage government (executive or legislative) to utilize their research results.

There is one clear exception to this identified by researchers: there is a strong demand for research related to new districts and subdistricts. University researchers prefer not to undertake feasibility studies for new regions despite the demand, saying they were increasingly subject to "tailoring" by those commissioning the research – who are effectively shopping for researchers willing to reinforce their desired conclusions. On the other hand, academics were usually happy to work with newly-established regions because they found real interest in the results of their research and efforts to put recommendations into practice.

<sup>&</sup>lt;sup>31</sup> A universal lament of academics, no doubt. Research Producers in Kalimantan and Eastern Indonesia

#### **NGOs**

Over the course of the field research, the team met with representatives of 31 non-government organizations in search of knowledge producers, ranging from a local branch of WALHI, to a group of researcher-priests, to an NGO working on community-based mercury-mitigation strategies. These groups generally found it easy to identify their constituents and often had strong working links to them, for example, the poor who no longer had access to traditional resources, communities suffering from degraded environments, or marginalized women and children. To the extent these groups undertake research, they are typically interested in targeted knowledge-building primarily to support and advance their programs, projects, or advocacy agendas. The team found some variation in the institutional environment by NGOs which conduct research, in relative order of strength:

- a. An NGO has a strong vision & mission it is acting on it determines its own agenda and research and advocacy activities directly support program implementation.
- b. An NGO has a clear vision & mission, but the need for external funding means that design and implementation activities are at least partially shaped by the funder.
- c. An NGO has a vision & mission but has no internal resources, and funders determine the program agenda.

The strength of the vision & mission – their internal agenda – is the key factor for NGO knowledge producers. Those without a focused agenda are much less likely to undertake research, to successfully lobby funders to incorporate research in their activities, or to build the skill base required. It is possible for an NGO to move among the three strategies or conditions above over time, and more detailed assessments might reveal times when they use all three approaches simultaneously.

Does this mean that NGOs who do not undertake research don't have a strong vision & mission, or aren't committed to it? No, it indicates that a strong vision & mission is a necessary but not sufficient condition – it means that other NGOs with similarly clear commitment just don't do research for a variety of reasons: they don't feel the need for it, feel it is tangential to their main mission, don't feel they have the experience or the skills, or don't have the ability to fund it.

Some of these groups have demonstrated capacity not only for producing quality research results, but have employed advocacy strategies to leverage the results for policy change. The team identified five groups which it felt had completed sound research activities and which could identify impact from their research. The analysis here focuses on the commonalities (and sometimes differences) of those five groups.

Group	Location	Focus
Forum Daerah Aliran Sungai	NTT	Watershed and water resource
Propinsi Nusa Tenggara Timur		management
(ForDAS NTT)		
Lembaga Pengkajian	Gorontalo	Reviews and evaluates development
Pengembangan Gorontalo		progress in Gorontalo province.
(LP2G)		Currently focusing on education.
Woman Institute for Research	Gorontalo	Focuses on the welfare of women and
and Empowerment of Gorontalo		children, including a focus on health
(WIRE-G)		issues

Group	Location	Focus
Training and Facilitation for	NTB	Community-based environmental
Natural Resource Management		management
(Transform)		
Lembaga Studi Partisipasi dan	NTB-based,	Poverty reduction and general
Demokrasi (Mitra Samya)	working from	development
	Java to Papua	·

## Key aspects and characteristics:

- 1. They each have developed their own agenda, consistent with their vision and mission. Four of the organizations are strongly focused on local issues. Mitra Samya has a broader range of activities, and is the only NGO we met with activities in more than one province.<sup>32</sup> Forum DAS's success has been replicated in other regions, and its approach is now being supported by the central government.
- 2. They are focused on practical applications, and policy changes which correct problems or support greater success. Each of the groups wants to see problems solved on the ground, and the research work is targeted to developing ways to achieve that. Advocacy for evidence-based policy change is integrated into program activities where it is appropriate.
  - For Transform, policy issues sometimes emerge from working with communities, and they bring working-level local government officials into the picture as early as possible so they can participate in developing a strategy for the solution, and are integrated into the advocacy strategy.
  - WIRE-G has found it most effective to start by building a partnership with government, getting them to clarify their goals and objectives, and then working with them to develop the information they need to get there. Sometimes that new information can lead to logical changes in policies, but it always informs strategy.
  - Mitra Samya differs somewhat it works directly on policy issues under contract to third parties, for example, participating in the evaluation of the School Block Grant (Bantuan Operasional Sekolah, BOS) program for the World Bank.
  - ForDAS has a broader range of stakeholders, though its activities lean strongly towards a policy focus. The key is that they are looking for practical strategies that can be managed sensibly on the ground and then building consensus and advocating for policies that support them. Practicality is key, and advocacy strategies are fully integrated into program work.
- 3. They work with international donors. Donor support has played an important, and sometimes critical, role in their development. All of these organizations have relied on funding from a variety of sources, including the Ford Foundation, the Asia Foundation, UNDP, JICA, WWF, DFID, CIDA, Unicef and others. Donors have also played an important role in individual and institutional capacity building. Mitra Samya was originally started as a regional branch of LP3ES (with funding from Ford Foundation). They generally felt that donors did not interfere in their programs or cause changes in overall direction, although the team heard other views that donor and local priorities might be ranked differently.

 $<sup>^{32}</sup>$  Some organizations were part of a national group, but the branches worked on local issues – for example, WALHI.

- 4. They have good links to universities and/or academic researchers. Four were founded by university activists (WIRE-G is the exception), with some of those activists later going back to join the university. Those ties have continued to develop. All five groups can rely on advice or input from experienced academic researchers when needed.
- 5. They have good working relations with local government. All of these organizations have developed operational strategies which include consultation, if not collaboration, with local government. A relationship of respect and/or trust means research results are more quickly accepted and are more likely to be acted upon. LP2G's research results mean it is currently quite critical of one subdistrict and relations there are currently a bit rocky, but they report good relations over the long term. Partnership is more effective than confrontation it means better understanding and ownership, and advocacy for changes in policy is easier if government has participated in devising the solution.
- 6. They have good local networks. This is not surprising, considering they have good links within universities and local governments. Mitra Samya offers its office as an open meeting place for smaller NGOs, and Transform has shared its office space with other groups. On the other hand, they weak networks outside their province only Mitra Samya and ForDAS have networks that extend outside the home province.
- 7. They have questionable sustainability this was common to nearly all NGOs we met with<sup>33</sup>, and was no different for the best of them. Mitra Samya and Transform both have a good list of donor clients, although neither has an endowment or substantial reserves to work from and the extent to which donors contribute to core costs is unknown. ForDAS is supported by regional networks, but their financial position is not strong. LP2G and WIRE-G are small, local organizations and operate on very thin budgets sheer determination is already an important resource, but it is not clear how long they could survive without donor support.

# Capacity Building

NGOs rely on donors for institutional and individual capacity building, particularly short courses and workshops.

Nearly all NGO researchers the team met with had an S1 degree. The only NGO researchers with S2 or S3 degrees were also university staff, and a fair number of these had international qualifications.

When the team asked non-university NGO researchers about opportunities for graduate study, they often commented that they had offers for international scholarships they had decided not to pursue. The common reasons for this were:

- Lack of English language skills
- Reluctance to leave their organization for an extended period they were committed
  to making a contribution and didn't want to create a gap the organization would have
  a hard time covering.

## **Common Issues**

<sup>&</sup>lt;sup>33</sup> The only non-university group without a sustainability issue was the Catholic Church group, Candraditya.

All actors in the knowledge-to-policy cycle share two critical common issues.

#### **Weak Networks**

Information and support networks are very poorly developed in Kalimantan and Eastern Indonesia. The issue is not technical communications – nearly everyone the team met with had adequate access to the internet, although service in government offices was more variable and slower <sup>34</sup>

Government networks are very limited and those that exist don't function well. There is a Forum Balitbangda under the Ministry of Home Affairs and an annual meeting, but no BPP reported using this as a vehicle for information or consultation outside that one annual meeting. Similarly, there is an annual national meeting for the DRDs, but there is effectively no support from the center beyond guidelines on how to develop the research master plan. The BPTPs benefit from being a deconcentrated agency and have good links into the Ministry of Agriculture networks.

<u>University networks</u> are often based on personal connections or alumni associations. Formally, Dikti sponsors the Forum PEKERTI (Penelitian Kerjasama Antarperguruan Tinggi) as part of a grant program supporting cross-university research work, but no university group or researcher mentioned it when asked about active networks. JARLIT (Jaringan Peneliti) is a network for university researchers supported by Menristek, but again, was never identified by respondents as an active network.

NGO networks, when they do exist, tend to be province based and informal. Both NTB and NTT had coordinated NGO forums in the past, but these stopped operating some years ago when donor funding was withdrawn. None of the 31 groups is a member of INFID, the largest national-level NGO forum, and very few noted any regular connections, communications or information sharing outside their home province.

JiKTI is a an open network under BaKTI for researchers in Eastern Indonesia, and includes members from all types of organizations across all sectors. The team was especially interested in learning how this was functioning as a network, and found the results varied widely across the provinces. Some government officials remembered reading JiKTI's "Smart Practices". The team also found that JiKTI had become an important group identity for researchers, especially in Gorontalo. While this could just be the result of an effective and pro-active JiKTI focal point in Gorontalo, it was a point of pride and could indicate an opportunity to build the status of researchers. The fact that JiKTI (and BaKTI, its umbrella organization) has government, university and NGO members might also provide options for developing research partnerships.

# Box 4 Networks in NTT

NTT is an interesting case study in the evolution of networking. It experienced an NGO "boom" in the mid-1990s, and a number of networks have formed within and around them since then.

<sup>&</sup>lt;sup>34</sup> Note the team worked in provincial and some district/city capitals which tend to have the best infrastructure. We spoke with a few researchers from remote areas, and communications was a real constraint. One researcher in the Sitaro Islands District in North Sulawesi schedules periodic trips to Manado (12 hours by boat) so he can access the internet.

WALHI NTT was an early network, starting in Maumere, Flores in 1996 with 14 member organizations, and by its peak in 2008 had a network membership of 41 groups on all three major islands (Flores, Sumba and Timor). The Mining Advocacy Network was one of Walhi's key efforts with broad support from NGOs and church groups, and had a significant provincial voice and attracted national attention. The decision by WALHI's Central Board in recent years to decline funds from donors in order to avoid conflicts of interest has eliminated WALHI NTT's access to external funds, and activities have greatly diminished.

International organizations including Ford Foundation and Oxfam were active supporters of NGOs and NGO networks in NTT during the 1990s and into mid-2000s, promoting policy dialog and debate through a number of local platforms in Flores, Sumba and Timor. Many NGOs still active in NTT today cite Oxfam and/or Ford as an early supporter. Together with other international NGOs, Oxfam was instrumental in responding to the refugee influx from East Timor in 1999 and channeling donor resources down to the grass roots level. A more detailed history of Oxfam's experience in NTT would provide good insight on successful support for networks – many of the people who worked with Oxfam in NTT during that period are still working in Indonesia.

Forum Akademia NTT was formed in 2004 by a group of students who completed graduate studies overseas. The goal of the Forum is to support the development of broad based knowledge about NTT, and it aims to become a clearing house for research, discussion and debate on issues and knowledge related to NTT. It is an ambitious group, using a webbased approach to communication. It has supported a popular award program for creative knowledge building (including traditional knowledge), and has an irregular working paper series. It is currently struggling – the founders are being pulled in different career directions and they lack financial and institutional support.

Forum Daerah Aliran Sungai (Water Catchment Areas) (ForDAS NTT) was established with WWF support in 2004 and was quickly appointed by the governor to help manage water catchment areas in NTT – a critical issue in water-scarce NTT. They developed a practical, effective strategy for regional coordination, drafted a regulatory structure to support it, which quickly became the national model. They were honored nationally for their efforts in 2012.

Veco has supported a number of district-level farmers organizations over the past decade, mainly in Flores and TTU. Their support has also included the formation of the Aliansi LSM Kedaulatan Pangan in 2008 focused on food self-sufficiency. This group has enjoyed strong support from the current Governor, and has begun activities in a limited number of districts with APBD support.

NTT Policy Forum is the most recent forum to emerge in 2008, reportedly with Oxfam support. This forum promotes dialog and discussion between communities and the government, and its goal is to encourage communities to take a more active role in improving their standard of living.

# **No Knowledge Management**

Knowledge management is non-existent in every location and for every type of group. No government agency, university or NGO had copies of knowledge products online – with the exception of the four 2011 product summaries published by the BLHP in NTB – and very few had organized hardcopy archives. Virtually no local research is available online, there are no digital archives and the few paper archives of research collections, student theses (skripsi), faculty journals, individual research papers and government products are scattered in decaying stacks. It is easier to search VOC archives than it is to obtain recent research on Kalimantan or Eastern Indonesia.

## **Role of Donors**

During the course of the discussions, a few consistent points began to emerge on the local experience with donor-led or funded research over the past decade.

First, donor-funded or donor-led research was instrumental in directly building the capacity of good local researchers. For many, it was their first introduction to professional research, and they can still list the skills they acquired and important lessons learned. Successful experience on a good research project can lead a smart young person onto a research career path.

A second key point on the influence of donors is the important role they can provide in supporting the development of capable and responsible civil society organizations and networks which in turn can play a key role in long term knowledge production and the overall policy discussion. The team found examples of NGO members who had moved into local legislatures, and the reverse process – former legislators who later joined NGOs. Direct and indirect funding by donors (i.e. direct implementation of donor programs and donor funding of, for example, Oxfam) has been critical in establishing an open environment for policy dialog and discussion in NTT, in particular.

On the other hand, there is often very little government follow up on donor-led or funded research. Most local governments are unaware of research activities integrated into or accompanying regional donor programs or projects. Consultation, design and collaboration on these research activities seemed to be limited<sup>35</sup>, and as a result there was very little ownership of the research results -- or long term impact. Officials identified some clear exceptions to this, namely, the activities under the SUMMIT program in NTB, and some of the World Bank-BaKTI PEACH projects.

The NTB provincial health agency cited the SUMMIT project<sup>36</sup> as being closely designed together with government, targeted to NTB needs (reducing maternal and child mortality), and well-documented in formats that were usable by policy makers. They were able to use the results of that work to change policy and budgets (and they still remember it eight years after it closed).

The World Bank and BaKTI collaborated on the PEACH (Public Expenditure Analysis and Capacity Harmonization) process in several of the provinces the team visited. These activities had not been identified as a priority by the local government (except Gorontalo, which actively sought participation) but the donors were able to present a convincing argument – not usually a strong basis for success. The process involved training and supervising local university researchers to analyze data provided by local government officials, and this inevitably required more extensive collaboration than the government anticipated. Ownership grew. Strategic presentation of results was important. In North Sulawesi, the World Bank Country Director made a well-crafted summary presentation at the Governor's annual provincial coordination meeting with the head of each district/city in

\_

<sup>&</sup>lt;sup>35</sup> From the local government's description – the team did not have the opportunity to verify any information with the relevant donors.

<sup>&</sup>lt;sup>36</sup> A community-based execution of a controlled trial on supplementation with multiple micronutrients in 353 villages (Helen Keller International, 2000-2004).

attendance. The head of the provincial BAPPEDA feels the strong results, clear messages, and the overall strategy led to trickle-down demand by the heads of districts/cities for their own in-depth analysis of local expenditures. Key elements of successful impact:

- Important people deliver important messages.
- Strong, clear take-away messages
- Backed up by good documentation
- Local ownership by the university researchers and local officials who were on the ground resources long after the activity finished
- Good timing product delivered at the beginning of the Governor's second term, ready to be incorporated into the RPJMD

In Gorontalo, the research team confirmed that timing for their results had been optimal, as well. The team was seen as neutral and their views were trusted, and the new governor elected just after the study was completed was ready to incorporate the results into the new RPJMD. The research team were confident that whoever won the election would have used their results to leverage the policy and budget formation process – it would have been impossible to ignore.

In NTB, there was strong evidence of positive impact of the PEACH results at the district level, with a specific example in one new district. The lead PEACH researcher used the results to explain to the first elected head of Lombok Utara district how district funds could be committed long term in hiring civil servants, or for service delivery. With concrete data in front of him, the district head moved away from his (popular) plan to expand the civil service towards a strategy of streamlining bureaucracy and delivering programs.

# **Conclusions and Recommendations**

Overall, the study team found the knowledge-to-policy cycle to be largely dysfunctional in the provinces visited, but with some variation. Despite the dysfunctional system, there were individual bright spots sprinkled throughout the processes. For purposes of discussing the kinks and obstacles in the cycle, the general processes have been divided into four areas noted in Figure 2 below. The conclusions and recommendations targeted to the new Knowledge Sector Program are organized around the team's findings in the knowledge-to-policy cycle.

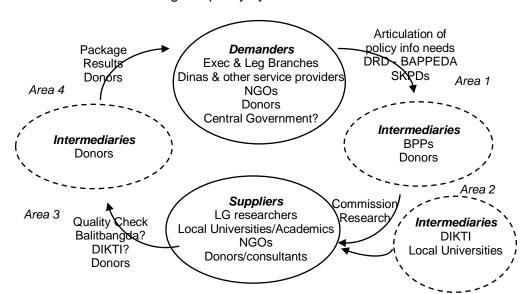


Figure 2: The actual knowledge-to-policy cycle

# The Government Side

The government system to organize and fund knowledge production in areas 1 and 2 doesn't work – the institutions are very weak and underfunded, and the processes are fragmented and often subject to political interference and corruption. Regional governments have some understanding that they need information but have little ability to manage the production – the constraints are both institutional and financial.

On the institutional side, government is constrained by national regulations designed to enhance operational and cost efficiency by consolidating research functions into a single agency, the BPP. First, this structure excludes the production of knowledge by local service agencies – often the most knowledgeable and efficient producers – from building the knowledge they need to design good service delivery. Second, the model of the predecentralization BPP staffed by an array of skilled functional researchers is expensive and skill-intensive in an environment that is generally marked by budgets that already lack adequate resources for service delivery combined with heavy staff burdens, and an unimpressive record in recruiting and developing skilled researchers. Moreover, it is difficult to identify a sensible career path as a functional researcher in local government.

The system of DRDs doesn't work well overall, and they work less-well below the provincial level where there are fewer academic resources. These advisory boards typically exist in name only, and in provinces where they are active, they have been frustrated by political interference.

Funding for research is seen as a luxury in provinces that are struggling to deliver basic services. Very small research budgets can be stretched even further by unfunded central government research priorities. Resources are required to make any institutional system work, and when participants understand that resources are not adequate to generate meaningful outputs, this can result in an already-weak system effectively breaking down in Area 1. There is no benefit in managing a complex series of consultations when budgets mean you won't be able to implement more than a token level of activity. A centrally mandated allocation of 1% of APBD expenditures for research and development is not going to solve the problems – it will infuriate local governments, draw scarce resources away from program delivery, and won't solve the institutional problems.

Some provincial governments are experimenting with changing their approach to research, and with mechanisms to leverage increased resources. These are yielding variable results: the short term results in Southeast Sulawesi seem positive but will have to monitored over time; the experience in NTB highlights the potential for negative results in an easily-manipulated system. South Sulawesi is re-crafting the whole process (see Annex 4) with a focus on building practical results that can be incorporated into markets, and the progress of this process should be closely monitored.

#### Recommendations

At the national level, the Knowledge Sector Program should work with Mendagri and MenRistek to review the regulatory framework for research and development. Local agencies (*dinas*) should have the authority to organize, manage, participate in research that is targeted to local needs. They know the subject areas best, and have stronger interest in the quality of the product.

The centrally-mandated BPP structure should be reviewed and re-thought in collaboration with the provinces. Provinces believe they will be required to re-establish stand-alone Balitbangdas<sup>37</sup>, but are not convinced these are a good use of resources. Will they meet the needs of local governments, and what are the resource and cost-benefit implications? The roles for functional vs. structural staff should also be reviewed and reconsidered, including costs and benefits of functional staff, and career path development.

Research mandates from the center (MDGs, MP3EI, food self-sufficiency, etc.) can overwhelm local government capacity and budgets. They should include a realistic budget impact assessment before they are issued, at a minimum.

Efforts should be made to identify all of the provinces using *Dana Aspirasi* to support research activities, document the strategies employed, and monitor and evaluate the results to determine what's working and what's not in terms of making funding for research more efficient and relevant, and more importantly, whether such a strategy can increase DPRD demand for evidence-based policy making. The results from the first year experimentation with this are not yet clear, and there might be some good models to build on or promote in other provinces.

Explore options for setting up research councils – although regional councils might be more effective and easier to connect to local priorities than national councils (for example, an

This was included in MOHA No. 20/2011, but implementing instructions have not yet been issued.
 Research Producers in 30 August 2012
 Kalimantan and Eastern Indonesia

Eastern Indonesia Research Council). This would require coordination, and possibly collaboration, with LIPI, Menristek or other national institutions. Competitive research funds should be targeted initially at the provincial level since this is where most of the capacity lies, and many activities can be opened to district application. Activities should focus on mechanisms to leverage high-priority government initiatives with an aim to reinforce government demand for research. Considering the common reports of corruption in government-funded research contracts, care would have to be taken in establishing a management process that strengthened governance and minimized this potential. Priorities should be established in consultation with local stakeholders – health, education and poverty issues would likely be the highest priority, although a range of environmental, agriculture and livelihoods projects could easily be included under a poverty reduction umbrella.

Some options for prioritizing competitive grant funding:

- Activities linked directly to current policy questions or challenges
- Activities including collaboration between or among government agencies, university researchers, and/or NGOs. Collaboration on targeted service delivery issues has the potential for good impact for a relatively small price.
- Co-funding for research initiatives with government collaboration, including the option
  of funding a second year of activities based on successful completion of the first year
  supported by government.
- Extracting lessons learned from recent activities/projects to apply to the next generation of design.
- Activities requiring collaboration across provinces. For example, Central Kalimantan, Gorontalo, North Sulawesi, Southeast Sulawesi and NTB are all trying to figure out ways to deal with small scale, informal gold mining activities which are having a very large social and long term environmental impact (mercury poisoning). None of them knows this is an issue in other regions, and each is struggling to deal with it on their own.
- Fund cross-province/cross-region learning, including research-to-policy successes (and failures?)

At the subnational level, operational guidelines will have to be developed to manage the opportunities and challenges found there. Specific strategies will have to be devised to manage the reality that DPRD members are going to change every election cycle and heads of government agencies could turn over regularly. Develop targeted strategies to reach midlevel officials in order to minimize losses from supervisory staff turnover, and to build operational-level understanding and ownership.

#### **Province or District**

A key question in undertaking subnational activities is the appropriate level to target, provincial or district? Central government agencies still look to the province as the next step, and with other recent development programs, BAPPENAS has placed a strong emphasis on the central role of provincial partnership. Core knowledge resources – universities and most NGOs -- are gathered in provincial capitals. Yet decentralization has decimated the province: provincial authority for programs has been reduced to almost nothing, the best civil servants have moved to Jakarta, and funds are scarce. District governments now own the budgets and authority and are anxious to demonstrate their independence from the

province, although they have generally lower capacity to design or implement and seemingly little interest in research.

What is the best investment target? There are three key factors to consider:

- a. The knowledge resources lie at the provincial level
- b. Increasing the demand for and utilization of research at the district level will probably yield the biggest impact
- c. There are a range of issues that are best managed through coordination and regulation at the provincial level<sup>38</sup>

## Recommendations

Taken together, these indicate the best strategy would be a multi-level one, including a focus on the supply side at the provincial level, focusing on demand at both the provincial and district/city levels. Thus, an operational program in a province should include the province and at least selected districts to start with, then expanding. Activities should be differentiated to meet the different aspects of demand and supply facing the regions. For example, basic data collection strategies and program evaluation in the districts, and issues of regulatory coordination at the province.

New regions should be carefully considered for inclusion in program activities. They will generally have weak capacity and limited budgets, but strategic research and advocacy could be an opportunity to avoid costly bad decisions at the outset. A good example was the use of the NTB PEACH analysis to demonstrate to the head of a new district that his resources were not adequate to provide minimum service delivery, and that his initial plan to expand the number of civil servants would make the district's long term prospects even worse. More detailed consultations with new districts would yield some good niche products, for example, research across new districts could develop conclusions about the best ways to provide service delivery and approach social welfare policies.

# Other Knowledge Producers

National institutions other than Diknas/Dikti have a minimal role in regional knowledge production or in producing knowledge that is used for policy decision-making at the regional level.<sup>39</sup> LIPI has a tangential role in knowledge production by certifying functional researchers, although the role and value of functional researchers is unclear to local government and to actual or potential government researchers.

Java-based universities are generally not part of <u>direct</u> knowledge production or policy-making in Kalimantan and Eastern Indonesia – when they do look, local governments look to advice from local sources. UGM is the clearest exception to this, along with IPB. There is limited recognition of Java-based research organizations such as SMERU, which is seen as working on national issues with results not directly applicable locally.

<sup>&</sup>lt;sup>38</sup> Some examples: management of water catchment areas (DAS) requires provincial level regulation and coordination of district strategies to be effective; some health prevention and treatment issues can only be effectively managed at the provincial level; and regulation of traditional gold-mining activities is probably most appropriately managed at the provincial level.

<sup>39</sup> The team had indicational LIDI allowed as a large of the provincial level.

<sup>&</sup>lt;sup>39</sup> The team had indications LIPI played a more active role in Papua and West Papua research, but was unable to visit those provinces to explore the possibilities.

**Recommendations:** Don't rely on Java-based organizations to expand their activities to the regions. However, using experienced, senior Indonesian researchers as mentors in the regions is a useful strategy for building supply capacity.

#### Universities

Local universities are the primary source of expertise and knowledge for local governments at the provincial and district level. Public universities tend to be stronger, but private and religious universities have the potential to make significant contributions.

University researchers vary widely in capacity and productivity. Twenty percent of faculty members (at most) are genuinely interested in research. The best, most active researchers have received at least part of their education on Java, and UGM and IPB are common elements. Most of the best, most active researchers have international training. The number of academics in these six provinces capable of publishing internationally is probably no more than ten, across all fields.

Diknas/Dikti play a critical intermediary role for university researchers – it writes the rules requiring research, accredits academic journals, and is the central source of funding for university research in Kalimantan and Eastern Indonesia. However, as far as the team can determine, the grant process is completely detached from local government – they have been separated out of the general process in Figure 2. Dikti also manages the application and award process for MP3EI grants for the central government, and there is no evidence that any of these process are linked to local needs or priorities.

University researchers develop their agendas independently and typically focus on local issues, but are generally detached from the policy environment – they are rarely consulted and generally feel that government isn't interested in their research results. The absence of local linkages in Dikti's grant programs may contribute to or reinforce this tendency. Where there are connections between academics and local policy-makers, the RPJMD process has been a common mechanism for establishing those connections. In two current cases, links between the university and local government have led senior academic researchers to take temporary positions as heads of BAPPEDAs.<sup>40</sup>

**Recommendations:** Pairing good national and international research teams will help build capacity to publish and participate internationally, and improve the utilization of knowledge being built by internationally researchers. Australian researchers, in particular, are building good data sets and local collaboration would help them expand and improve their utilization. Knowledge Sector Program activities at the local level should focus on enhancing collaboration between academics and local governments. One mechanism might be a triplet program, including a young academic researcher, say, in health, working in collaboration with the Dinas Kesehatan, with a senior national or international mentor to provide quality control and guidance through the publication stage.

<sup>&</sup>lt;sup>40</sup> Historically, this is a relatively common practice. The impact of the recent ruling that civil servants can no longer hold both academic and executive positions simultaneously might change this dynamic. An example of this is Vice President Boediono who has had a long career in government in Jakarta (Ministry of Finance, BAPPENAS, Bank Indonesia) and simultaneously held an academic position at UGM where he is a full professor.

<sup>&</sup>lt;sup>41</sup> The Field Research Director for Helen Keller International's SUMMIT program in NTB (2000-2004) reports that the data sets collected under the program are still being used by Indonesians for dissertation research in Australia.

#### **NGOs**

The strongest NGOs produce policy-relevant research, typically as part of or a by-product of their work towards core objectives. Many NGOs have good working relationships with local government without receiving funding from them. NGO research can have an impact with local government when sound research is combined with a good advocacy strategy, particularly when working-level government counterparts are involved early.

#### Recommendations

Include NGOs in individual and institutional capacity building activities. Don't be too concerned about wasting resources on organizations who won't play a role in research or policy – they know their agendas and will self-select quickly.

Facilitate links between donor programs and local NGOs. Successful NGOs have built valuable skills (research and administration) by working on international donor programs, and making sure donors participate in regional discussion and debate activities is a good way to provide exposure.

Encourage collaborative research projects between academic researchers and NGOs. These are not eligible for funding under Dikti rules, yet can add value to both sides: NGOs can use advice or input from experienced academic researchers, and researchers can take advantage of NGOs' skills in working with communities or other specialized skills. And once established, those relationships tend to persist over time.

NGOs should be included in advocacy capacity building, but can be a strong local resource in that same activity. A subset of NGOs consistently incorporate advocacy strategies into program activities, have good working relations with local government, and can provide valuable insight on the local context.

Networking issues are important for NGOs, too. See the section below on networks.

# **Processes:** from production to use

The analysis of the left side of the knowledge-to-policy cycle in Figure 2 is simple because it barely exists. Quality checks on academic research processes or products are nearly non-existent: only the top academic journals in Indonesia (out of 245 Indonesian journals accredited by Dikti) have a peer review system; Dikti does not appear to exercise quality checks on outputs from research grants; research papers are rarely available electronically and thus are not subject to public scrutiny. Donors (or international funders) were the only actors interested in checking the quality of research output. Serious weakness in the processes in Area 1 is a good indicator that research products will come to a stop as they enter Area 3 in the cycle – regardless of output quality.

University researchers generally have no idea how to push good research results through Area 3 and Area 4, and into policy and programs – packaging results, advocacy and lobbying are rarely viewed as appropriate activities for academic researchers. NGOs understand advocacy, but often have weak quality checks and would benefit from better packaging and communications of results. Academics who work with NGOs sometimes do so in order to have impact at the program and policy levels, and can provide quality checks on the broader range of NGO outputs.

**Recommendations:** This whole range of activities typically has a lower priority in development programs, but is crucial – good quality knowledge is a necessary but not sufficient condition for policy impact, it has to be accompanied by effective packaging and a communications strategy. BPPs generally do not consider strategic approaches for information sharing and are particularly weak in communication and policy advocacy skills. They don't see this as part of their responsibilities, and changing this mind set would be challenging – starting at the central level in MOHA. If MOHA can be convinced to support this aspect for BPPs, building communications and policy advocacy skills overall is an area where BaKTI/JiKTI could usefully build their own strength and provide valuable services.

#### **Donors**

Donors can play an important role in creating the space and platforms for policy dialog. This was most striking in NTT, where longstanding donor support (Ford, Oxfam/donors) has helped to create an environment of active dialog and debate. However, donor support doesn't always result in sustainability: formal NGO networks in NTT broke down quickly without donor support, and are missed – but they have not re-formed organically.

**Recommendations:** Creating space for policy dialog takes resources, and should be explicitly included in the operational strategy. BaKTI has the potential to provide the space for dialog and debate through the development and expansion of existing platforms such as KTI Forum, BAPPEDAs Forum, JiKTI, etc.

Donors have demonstrated policy impact is possible but requires strong follow through to complete the knowledge-to-policy cycle. Helen Keller International used a classic strategy of government partnership in design, getting consensus on results, and packaging the results so they were usable. But they reported that building government partnership at each stage was very labor- and time-intensive. In the PEACH experience, the donor came into the cycle in Area 1 and built enough government buy-in to move down into Area 2 and invested heavily in local production capacity and built ownership. They pulled the process through Area 3 and Area 4, providing external quality checks, and were instrumental in crafting messages that were easy to use along with a strategic delivery process. They result was a good product and in some cases it had impact, but they carried a lot of the process.

**Recommendations:** Meaningful, sustainable change at the local level will require interventions at all points in the knowledge-to-policy cycle described in this section, from changing the national strategy and restrictions on research, through the development of organizations who can effectively design and carry out advocacy and communications strategies. The Knowledge Sector Program should include an outreach program for all donors to ensure the lessons can be broadly incorporated across all programs.

# Indigenous Knowledge

The design document for the Knowledge Sector Program includes a suggested small grant program for linking indigenous knowledge to policy discussions. Information gathered during survey discussions indicates there is broad scope for incorporating these types of activities into the program across all of the provinces visited. Some real examples of researchers and communities who might benefit from such a grant program include:

 Academics working with communities to gather information on traditional species of tubers and their use as food stocks for enhanced food security

- NGOs working with communities to strengthen traditional social networks and mechanisms that were marginalized during the New Order in order to build resilience and coping mechanisms for disasters linked to climate change
- NGOs working to document effectiveness of indigenous veterinary medicines so they
  could be utilized freely by farmers instead of expensive and generally unavailable –
  commercial medicines
- Academics working to document the effectiveness and scientific mechanisms in indigenous medicines to establish intellectual property rights
- NGOs documenting practices in community forest management to facilitate formal long term legal rights to manage resources

#### **Overall Issues**

Provincial level networks are informal and generally don't provide platforms for dialog, debate, or knowledge sharing (NTT is the possible exception). The networks that do exist are primarily among NGOs and academics, with little interaction or linkages to government (executive or legislative).

There are few-to-no functional **networks** – formal or informal – to link researchers or officials outside their own province. University researchers and governments work in isolation, and while they have the technical capacity to communicate through internet and mobile phones, they do not work together on common issues.

The team found two regional knowledge organizations, both international and both focused on Kalimantan:

- The Borneo Research Council<sup>42</sup> was established in 1968 in the US, and the main drivers tend to be foreign researchers.
- KABOKA (Konferensi Antar-Universitas Se Borneo-Kalimantan) was established in the past decade and is intended to link universities in Malaysia, Brunei and Kalimantan-Indonesia. Based at the Institute for East Asia Studies of the University Malaysia Sarawak,<sup>43</sup> the Secretariat has organized six conferences beginning in 2005 – respondents commented that the network is being strongly promoted by Malaysia.

JiKTI is the one domestic regional network with a presence, but does not include Kalimantan and is the early phases of development. Experience in Gorontalo shows that it can be an active and positive force for promoting research and discussion.

Network sustainability will always be an issue. Experience from the past twenty years in NTT and more recently with BaKTI indicates that donor support for NGO capacity building and general networking functions are useful and welcome, but it also shows that these organizations are highly vulnerable to collapse once donor support is withdrawn.

#### Recommendations

Communications and networking should be a high priority for capacity building in the Knowledge Sector Program. Consider establishing regular regional workshops by sectors for peer feedback and debate on ongoing activities. Establish cross-province research

\_

<sup>42</sup> http://www.borneoresearchcouncil.org/index.htm

<sup>43</sup> www.ieas.unimas.my

themes, for example, managing informal gold-mining activities, which might include several sectors. Support sustained debate through online listserves and explore options for using social networking to promote public debate and discussion. JiKTI, or an organization like it, would play a key role in building this capacity locally, and coordinating it across Eastern Indonesia. JiKTI currently operates as an umbrella network, and some effort would have to be spent for it to develop a practical, feasible business plan and then to build the organization's ability to provide a range of platforms and services, and build others' capacity.

Explore the potential for using existing organizations such as the Borneo Research Council or KABOKA to strengthen international linkages and the capacity for Indonesian researchers to publish internationally.

Accepting the likelihood that formal networks will continue to be active only as long as resources are made available, plan around that – use the networks to the maximum extent possible to build skills and capacity that will remain with members and which they can carry forward into whatever informal network remains in the long run.

**Knowledge management** is almost completely absent from the region, and is barely visible at the national level. Broad access to research products would reduce duplication of research, provide motivation to improve quality, and reduce the incidence of plagiarism. Dikti has a list of grant awards, but no online publication system or searchable database. University journals are not digital (with a few exceptions), and no research materials are searchable. Donors are marginally better. The Borneo Research Council maintains a webbased catalog (only) of Borneo-related publications through the University of Nevada, Reno. PapuaWeb.org was ambitious in its efforts to make information available online, including abstracts of all theses from UNIPA, and had a good start, but lack of funding led to its inability to maintain activities after 2005 or so — ANU provides continued access to their database. BaKTI had online access to the beginnings of a basic library on Eastern Indonesia in its early days, but this seems to have fallen off their website.

#### Recommendations

Establish a strong electronic publication environment. The new MONE requirement that publication is required for university graduation will generate large numbers of new online journals – leverage this to help MONE develop guidelines and requirements for online publication of <u>all</u> accredited university journals and theses (*from skripsi up*) and ensure databases are searchable.

The program could usefully provide support to re-start PapuaWeb.org, and link it to a broader, searchable online library for Kalimantan and Eastern Indonesia, possibly through BaKTI. Forum Academia NTT has a strong desire to improve knowledge management but lacks the resources or institutional organization to do so – explore their potential to expand this and link to a regional information base. KABOKA has published proceedings from the first four conferences, and this may be a useful vehicle for broader knowledge management on Kalimantan-based research.

Are there **strategic points of influence** which could be effectively targeted in the upcoming Knowledge Sector Program? Universities are the key source of advisory capacity – not government officials – and that capacity flows to government through external advisory processes (for example, contracted research), temporary transitions into government

positions (for example, as a Head of BAPPEDA), and advisory services to individuals (for example, expert staff to a governor or DPRD).

Lasting value can be created through an inclusive, multi-layered effort which addresses the needs of the various actors: building the capacity of younger academics and NGO researchers, expanding the scope and opportunity for meaningful work of mid-level faculty (including in collaboration with government), and providing regular platforms for discussion and debate which give researchers and officials experience with public exposure. An overemphasis on just one layer or group (for example, the governor's expert staff) risks giving the program an "exclusive" and/or political identity, which should be avoided. An organization such as JiKTI has the potential to effectively support this range of activities, but would need to develop their own institutional capacity first, including expanding their staff and adding to the depth and range of their skills.

The risk of a real or perceived political affiliation is worsened by the potentially short effective lifespan of such an investment. Political leadership can change quickly, and incoming leaders like to bring their own advisors – who is "in" today, might be "out" tomorrow.

## **Annex 1: The Legal Framework for Research and Development**

The national system for research and development is established in Law Number 18/2002 on the National System of Research, Development, and Application of Science and Technology, commonly referred to as Sisnas P3 lptek.<sup>45</sup>

Sisnas P3 Iptek aims to strengthen the capacity of science and technology to accelerate development and to establish coordinated elements of control, utilization, and promotion of science and technology. The law provides a general legal framework for research and development (R&D) and the application of Science and Technology carried out in institutions of higher education, R&D institutions, the private sector, and supporting institutions.

## **Ministry of Home Affairs**

Additional regulations regarding R&D institutions of local government are contained in the Ministry of Home Affairs Regulation No. 33/2007 and No. 20/2011, Guidelines on Research and Development in the Ministry of Home Affairs and Local Government.<sup>46</sup>

## Box 5 Conflicting Regulations

The basic outline of R&D institutions, authority and responsibility are established in MOHA Regulation No. 33/2007, and further refined in No. 20/2011. However, there are some significant differences between the two regulations which have created confusion and controversy in the field, mainly because of elements included in No. 33/2007 and omitted (but not negated) from No. 20/2011.

- Permendagri No. 33/2007 provides for "swakelola" (self-management) in the implementation of research and development, a technical bureaucratic term which allows BPP staff to manage research activities and also involve third parties with specialized skills. Permendagri No. 20/2011 does not include any mention of self-management, and specifies that research is to be conducted by an Executive Team of: 1) functional official researcher/engineer; 2) structural officials, and 3) experts/specialists/professionals.
- Permendagri No. 33/2007 was reinforced in the President's original PerPres No. 32/2011 establishing the MP3EI that specified local governments should allocate "at least 1% of the budget" for R&D activities, approximately 14 times the current average budget allocation. Permendagri No. 20/2011 does not discuss any target for local R&D budgets, but does not negate the earlier 1% commitment.

According to Permendagri No. 20/2011, all government agencies involved in R&D within the Ministry of Interior environment are called *Badan Penelitian dan Pengembangan* (BPP, Agency for Research and Development). This applies at the central level (BPP Kemendagri), Provincial (Provincial BPP) and the District/City (BPP District/City) level.

39

<sup>45</sup> UNDANG-UNDANG REPUBLIK INDONESIA NOMOR 18 TAHUN 2002 TENTANG SISTEM NASIONAL PENELITIAN, PENGEMBANGAN, DAN PENERAPAN ILMU PENGETAHUAN DAN TEKNOLOGI

http://www.hukumonline.com/pusatdata/download/fil19961/parent/17451, See also PENJELASAN UNDANG-UNDANG REPUBLIK INDONESIA NOMOR 18 TAHUN 2002 TENTANG SISTEM NASIONAL PENELITIAN, PENGEMBANGAN, DAN PENERAPAN ILMU PENGETAHUAN DAN TEKNOLOGI.

http://www.hukumonline.com/pusatdata/download/fl19962/parent/17451

<sup>46</sup> PERATURAN MENTERI DALAM NEGERI NOMOR 20 TAHUN 2011 TENTANG PEDOMAN PENELITIAN DAN PENGEMBANGAN DI LINGKUNGAN KEMENTERIAN DALAM NEGERI DAN PEMERINTAHAN DAERAH. <a href="http://www.depdagri.go.id/produk-hukum/archieve/peraturan-menteri/tahun/2011/000006">http://www.depdagri.go.id/produk-hukum/archieve/peraturan-menteri/tahun/2011/000006</a> which is a refinement of the previous regulation, PERATURAN MENTERI DALAM NEGERI NOMOR 33 TAHUN 2007 TENTANG PEDOMAN PENYELENGGARAAN PENELITIAN DAN PENGEMBANGAN DI LINGKUNGAN DEPARTEMEN DALAM NEGERI DAN PEMERINTAHAN DAERAH.

#### BPP's main activities include:

- research
- development
- assessment
- application
- engineering
- operation

#### Supporting activities include:

- institutional capacity building
- management
- human resources
- other organizational resources

The areas of authority and responsibility of the BPP include:

- 1. general government
- 2. provincial autonomy
- 3. administration and management of the provincial government
- 4. nation unity and local politic
- 5. arrangement of the region
- 6. population and civil registration
- 7. village government and community empowerment
- 8. management of regional development
- 9. financial management
- 10. education and training of human resources personnel
- 11. policy of the provincial government administration
- 12. other local government areas according needs and authority of the province/district/city.

The BPP has 12 areas of authority and responsibility, where 11 of these are the typical business areas of the Ministry of Interior plus one field that involves other local government tasks - including agriculture, health, education, infrastructure, etc. as included in the regional development policy contained in the medium term development plan (RPJMD) and other strategic documents.

Innovation and technology diffusion within Law 18/2002 is not included as a function of BPP in Permendagri No. 20/2011, and has been assigned to the Ministry of Research and Technology. To encourage the BPPs to integrate this function into their regular activities and to support the development of the Regional Innovation System (SIDa), a joint regulation was recently issued by the Minister of Research and Technology together with the Minister of Home Affairs on Regional Innovation Systems Strengthening (SIDa), and which is closely tied to the MP3EI.47 This will require the province and district/city to develop a roadmap for

 $<sup>^{</sup>m 47}$  PERATURAN BERSAMA MENTERI NEGARA RISET DAN TEKNOLOGI REPUBLIK INDONESIA DAN MENTERI DALAM NEGERI REPUBLIK INDONESIA Nomor: 03 TAHUN 2012 Nomor: 36 TAHUN 2012 TENTANG PENGUATAN SISTEM INOVASI DAERAH. http://litbang.bantenprov.go.id/2012/wp-content/uploads/SKB-Mendagri-Menristek-SIDa.pdf. This regulation is closely associated with the Masterplan of Acceleration and Expansion Economic Development of Indonesia (MP3EI) Peraturan Presiden Republik Indonesia Nomor 32 Tahun 2011tentang Masterplan Percepatan dan Perluasan Research Producers in

strengthening the regional innovation system, or SIDa, in line with the medium term development plan (RPJMD) and the annual government work plan (RKPD).

Sisnas P3 Iptek Act no. 18/2002 requires regional governments to establish a Regional Research Council (DRD) with representatives of science and technology institutions in the region." The DRD is not an implementing agency or institution of research and development, but is a non-structural advisory organization designed to assist local governments and regional R&D institutions to develop the direction, priorities and policy framework, to implement and coordinate research, development and the application of science and technology. The DRD is intended to be a bridge in the cross-sectoral, cross-departmental, central-local, provincial-district, and multi-stakeholder (government, academics, private sector) environment. Once formed, the DRD is charged with developing an R&D roadmap to facilitate the implementation of the RPJMD.

#### The shape and position of BPP

R&D institutions under the Ministry of Home Affairs are generically called *Badan Penelitian* dan *Pengembangan* (*BPP*, or Agency for Research and Development), but a variety of names are used in the regions depending on their position within the structure of local government (provincial/district/city). Three types of structures have developed:

- d. The pre-decentralization model of stand-alone Regional Research and Development Agencies (Balitbangda) led by an echelon II
- e. Units within the BAPPEDA led by an echelon III
- f. Part of a hybrid agency such as the BP4D<sup>48</sup> in NTT, the *Balihristi*<sup>49</sup> in Gorontalo and *BLHP*<sup>50</sup> in NTB, which can also include environmental laboratories. While these agencies are headed by an echelon II official, the research component is led by an echelon III.

Guidelines for the size of the organization include consideration of the number of inhabitants, area, and the overall budget, revenues and expenditures.

#### The structure of BPP

In Permendagri No. 20/2011, BBPs should consist of the following elements:

- Advisory Board: the Governor, echelon I, echelon II of structural bureaucrats; and experts, specialists and professionals in other fields
- Quality assurance team: structural bureaucrat in the BPP or other R&D agency; and experts, specialists and professionals in other fields (academics from universities).
- Facilitation team: the BPP Secretary or other agency that performs R&D functions; structural echelon IV officers in the BPP; and experts, specialists and professionals in other fields (academics from universities).

Pembangunan Ekonomi Indonesia (MP3EI) 2011-2025,

http://portal.mahkamahkonstitusi.go.id/eLaw/mg58ufsc89hrsg/1d385cd64b518d8d5950267240e723c9f17fa049d.pdf, as an integral part of the National Development Planning System (National Long Term Development Plan 2005 to 2025 (Law no. 17 of 2007), and the National Medium Term Development Plan).

<sup>&</sup>lt;sup>48</sup> Badan Pendidikan, Penelitian, Pelatihan dan Pengembangan Daerah

<sup>&</sup>lt;sup>49</sup> Badan Lingkungan Hidup, Riset dan Teknologi

<sup>&</sup>lt;sup>50</sup> Badan Lingkungan Hidup dan Penelitian

• Implementation team: functional researcher/engineer; structural officials, and experts, specialists and professionals in other fields.

In the field, this structure is difficult to implement. In most areas the team found:

- A Regional Research Council (DRD) exists, with a role roughly equivalent to the Advisory Board in Permendagri No. 20/2011. All provinces have established DRDs through a Governor's decree, though not all are active.
- No Quality assurance team has been found in any province.
- In South Sulawesi province found a team of experts that serves as a facilitation team, providing R&D support in each SKPD. The expert team is drawn from experts, specialists and professionals in other fields (mainly academics). Relevant Dinases can propose individuals to be added to the Expert Group established by the Decree of the Governor.
- Very few provinces or districts/cities have functional staff involved in research.<sup>51</sup>
   Research is typically conducted by experts, specialists or professionals in other fields from universities or companies.

## Results of the National Research and Development Coordination Meeting 2012<sup>52</sup>

Officials of BPPs throughout Indonesia met at their annual meeting in July 2012 and presented several key points to the Kemendagri BPP for consideration.

- A. They recommended Permendagri No. 20/ 2011 be revised to:
  - provide more space for local BPP activities in science and technology fields
  - financing for R&D of at least 1% of the regional budget/APBD (referring to the Presidential Decree Number 32 Year 2011 on MP3EI)
- B. Requested adjustments to resources for BPPs to:
  - craft exemptions to the current moratorium on Central and Regional civil service recruitment for researchers and engineers
  - standardize the recruitment of researchers
  - prioritize functional researcher placement at the BPPs
  - facilitate LIPI training of functional researchers

<sup>51</sup> Among all *Balitbangda* in Indonesia, South Sumatra province has the largest number of functional staff, 19 out of a total 82 staff, or 22%. <a href="http://www.balitbangdasumsel.net/?mod=2&id=2">http://www.balitbangdasumsel.net/?mod=2&id=2</a>. Sulsel has 3 functional staff out of 64, or 6%. <a href="http://www.litbangda-sulsel.go.id/sambutan-dan-profil/balitbangda/struktur-organisasi.html">http://www.litbangda-sulsel.go.id/sambutan-dan-profil/balitbangda/struktur-organisasi.html</a>

<sup>&</sup>lt;sup>52</sup> RUMUSAN HASIL KESEPAKATAN PELAKSANAAN RAPAT KOORDINASI NASIONAL PENELITIAN DAN PENGEMBANGAN PEMERINTAHAN DALAM NEGERI TAHUN 2012 DI MAKASSAR PROVINSI SULAWESI SELATAN, Tanggal 3 – 5 Juli 2012. http://bpp.depdagri.go.id/index.php?action=content&id=2012070915521046.

## **Annex 2: Research and Development in Higher Education**

## **Regulatory Framework**

Research in universities is managed under Law Number 20/2003 on the National Education System<sup>53</sup> wherein universities are obliged to provide education, research, and community service (the university's *Tridharma*).

These objectives are realized through the individual members of the university community, the lecturers. The responsibilities of university lecturers is specified in Law Number 14/2005 on the Teacher and Lecturer. Lecturers are professional educators and scientists with the main task of transforming, developing, and disseminating science, technology, and art through the university's Tridharma of education, research, and community service. In order to conduct research obligations, lecturers are required to have a competency and to be able to prepare a research proposal, conduct research, disseminate research findings and ultimately produce a variety of processes and products of technology, art, and culture.

Ministry of National Education (Depdiknas) is responsible for governing the development, implementation and monitoring of university research and development throughout Indonesia through the Directorate of Research and Community Services (Ditbinlitabmas), Directorate General of Higher Education (DG-DIKTI).55

#### **Implementing Mechanisms for Research**

Research requirements at universities are implemented through two main mechanisms:

- A. A competency certification process for lecturers (*Sertificasi Dosen, or Serdos*)<sup>56</sup>. This certification aims to (1) assess the professionalism of lecturers in order to determine the feasibility of a lecturer in performing the tasks, (2) protect professional lecturers as agents of learning in higher education, (3) improve the processes and outcomes of education, (4) accelerate the realization of national educational goals, and (5) increase lecturers' awareness of the obligations of upholding academic honesty and ethics, especially the prohibition against plagiarism.
- B. Incorporating research criteria into requirements for advancement.<sup>57</sup> Research publication is one criteria for assessment by the Ministry of Education to determine faculty promotions. Various points are assigned to research products based on

<sup>&</sup>lt;sup>53</sup> http://www.inherent-dikti.net/files/sisdiknas.pdf

<sup>&</sup>lt;sup>54</sup> UNDANG-UNDANG REPUBLIK INDONESIA NOMOR 14 TAHUN 2005 TENTANG GURU DAN DOSEN. http://luk.staff.ugm.ac.id/atur/UU14-2005GuruDosen.pdf

Direktorat Pembinaan Penelitian dan Pengabdian Kepada Masyarakat. Referring to the Decree of the Minister of National Education No. 176/O/2001.
 The legal basis for this program is contained in (1) of Law Number 20 Year 2003 on National Education

System, (2) of Law Number 14 Year 2005 on Teachers and Lecturers, (3) Government Regulation No. 37 of 2009 on the Lecturer, and (4) Regulation of Minister No.47 of 2009 on Certification of Educators or Lecturers.

57 KEPUTUSAN MENTERI PENDIDIKAN NASIONAL Nomor: 36/D/O/2001 Tentang PETUNJUK TEKNIS PELAKSANAAN PENILAIAN ANGKA KREDIT JABATAN DOSEN. <a href="http://luk.tsipil.ugm.ac.id/atur/Kepmen36-D-O-2001PenilaianKredit.pdf">http://luk.tsipil.ugm.ac.id/atur/Kepmen36-D-O-2001PenilaianKredit.pdf</a>, See also KEPUTUSAN BERSAMA MENTERI PENDIDIKAN DAN KEBUDAYAAN DAN KEPALA BADAN KEPEGAWAIAN NEGARA NOMOR: 61409/MPK/KP/99 NOMOR:181 TAHUN 1999 TENTANG PETUNJUK PELAKSANAAN JABATAN FUNGSIONAL DOSEN DAN ANGKA KREDITNYA . <a href="http://qac.ums.ac.id/files/Jabatan fungsional.doc">http://qac.ums.ac.id/files/Jabatan fungsional.doc</a>

publications in accredited journals, books (ISBN registered), magazines, newspapers, etc.<sup>58</sup>

#### **Publication of Research**

Both the Ministry of National Education and LIPI have accreditation programs for journals, with MONE's Dikti overseeing university journals and LIPI managing government and other non-university professional and scientific journals.

The Ministry of National Education's standard for scientific journals is contained in Dikti Regulation No.49/DIKTI/Kep/2011 on Accreditation Guidelines for Scientific Periodicals.<sup>59</sup> A useful summary of LIPI accreditation procedures can be found in: http://www.scribd.com/doc/45478098/Indonesian-Journal-Accreditation

According to the Center for Scientific Information and Documentation (DPII) in LIPI, there are a total of 380 accredited journals in Indonesia.

- The 245 journals accredited by Dikti with quality classifications A through C can be found at: <a href="http://jurnal.pdii.lipi.go.id/index.php/Daftar-Jurnal-Hasil-Akreditasi-DIKTI.html">http://jurnal.pdii.lipi.go.id/index.php/Daftar-Jurnal-Hasil-Akreditasi-DIKTI.html</a>
- The 135 journals accredited by LIPI can be found at: http://jurnal.pdii.lipi.go.id/index.php/Daftar-Jurnal-Ilmiah-Akreditasi-LIPI.html

## **Research Support**

## **Dikti Research Grant Programs**

Ministry of National Education and Culture, Directorate General of Higher Education (Dikti) through the Directorate of Research and Community Service (Dit. Litabmas) has the responsibility to encourage and facilitate the lecturer in carrying out research activities. Dit. Litabmas covers all fields of science, religion, economics, law, health, sports, mathematics, education, agriculture, psychology, engineering, letters, philosophy, social-humanities, arts, and culture.

To support research activities, Dikti offers a variety of programs for single- and multiple-year research grants – Decentralization Research Grants and National Competitive Research Grants. The guidelines for all grants are published annually and available online. <sup>60</sup> Overall results for 2012 have not yet been published online.

A. The Decentralization Research Grant program is designed to delegate duties and authority to the universities for research management in order to create an academic climate that is conducive to conducting quality research, programmed and continuous. The objective of the decentralized research program for universities to manage research in a transparent, accountable and objective manner and ultimately for universities to achieve institutional independence in research. To assist universities in their progress,

http://www.dikti.go.id/files/Diktendik/Dosen/Panduan%20Pelaksanaan%20Penelitian%20di%20Perguruan%20Tinggi%20Edisi%20VIII.pdf

<sup>&</sup>lt;sup>58</sup> Operational guidelines for evaluating research and awarding points for promotion can be found in PEDOMAN OPERASIONAL PENILAIAN ANGKA KREDIT KENAIKAN JABATAN FUNGSIONAL DOSEN KE LEKTOR KEPALA DAN GURU BESAR. DIREKTORAT JENDERAL PENDIDIKAN TINGGI DEPARTEMEN PENDIDIKAN NASIONAL JAKARTA, 2009. <a href="http://pak.dikti.go.id/portal/wp-content/plugins/downloads-manager/upload/PEDOMAN%20OPERASIONAL%20AK%202009.pdf">http://pak.dikti.go.id/portal/wp-content/plugins/downloads-manager/upload/PEDOMAN%20OPERASIONAL%20AK%202009.pdf</a>

<sup>&</sup>lt;sup>59</sup> PERATURAN DIREKTUR JENDERAL PENDIDIKAN TINGGI KEMENTERIAN PENDIDIKAN NASIONAL REPUBLIK INDONESIA NOMOR 49/DIKTI/Kep/2011 TENTANG PEDOMAN AKREDITASI TERBITAN BERKALA ILMIAH.

research universities have been classified into six groups: *mandiri, utama, madya, binaan, politeknik non-binaan* and *politenik binaan*. This grouping is used as the basis for the granting differing levels of authority and allocation of research funds. The university mapping is updated every three years through a research performance evaluation. Categories for Decentralization Research Grants include:

- 1. Penelitian Unggulan Perguruan Tinggi,
- 2. Hibah Bersaing,
- 3. Penelitian Fundamental,
- 4. Penelitian Tim Pascasarjana,
- 5. Penelitian Kerjasama antar Perguruan Tinggi (PEKERTI)
- 6. Penelitian Disertasi Doktor
- 7. Penelitian Dosen Pemula
- B. National Competitive Research Grants are designed to answer broad strategic challenges facing the country. Categories for National Competitive Research Grants include:<sup>61</sup>
  - 1. Penelitian Unggulan Strategis Nasional
  - 2. Riset Andalan Perguruan TInggi dan Industri (RAPID)
  - 3. Penelitian Kerjasama Luar Negeri dan Publikasi Internasional
  - 4. Penelitian Kompetensi
  - 5. Penelitian Strategis Nasional

#### C. Student Creativity Program

The Student Creativity Program<sup>62</sup> (PKM) was established in 2001 to strengthen the university experience and introduce students to practical research principles through the integration of education, research and community service activities.

## MP3EI

Masterplan for the Acceleration and Expansion of Economic Development in Indonesia (Masterplan Percepatan dan Perluasan Pembangunan Ekonomi Indonesia, MP3EI)

In May 2011, the Government of Indonesia announced the Master Plan for the Acceleration and Expansion of Indonesia's Economic Development (MP3EI). The plan aims to propel Indonesia into the top ten economies and raise per capita from US\$3000 to US\$15,000 by 2025. The policy package consists of three main elements: establishing six economic corridors based on the comparative advantage of the different regions of Indonesia; promoting connectivity within Indonesia and the ASEAN region; and strengthening human resources and science and technology. 63

## 8 MP3El Main Sectoral Programs: 64

- 1. Agriculture
- 2. Mining
- 3. Energy

#### 22 MP3EI Major Economic Activities:

- 1. Transportation Equipment
- 2. Shipping
- 3. Telematics

The specific descriptions of these grants can be found at: <a href="http://www.lppm.itb.ac.id/?page\_id=19">http://www.lppm.itb.ac.id/?page\_id=19</a>

Pedoman Program Kreativitas Mahasiswa Direktorat Penelitian dan Pengabdian Masyarakat. Direktorat Jenderal Pendidikan Tinggi, Kementrian Pendidikan Nasional. Jakarta, 2011. http://www.dikti.go.id/files/Litabmas/Pedoman%20Program%20Kreativitas%20Mahasiswa%202011.pdf

http://www.dikti.go.id/files/Litabmas/Pedoman%20Program%20Kreativitas%20Mahasiswa%202011.pdf

63 For a more complete analysis of MP3EI, see Strategic Asia, "Implementing Indonesia's Economic Master Plan (MP3EI): Challenges, Limitations and Corridor Specific Differences," June 2012.

<sup>64</sup> Masterplan Percepatan dan Perluasan Pembangunan Ekonomi Indonesia. Kementerian Koordinator Bidang Perekonomian. 2011 <a href="http://www.depkeu.go.id/ind/others/bakohumas/BakohumasKemenKo/MP3EI\_revisicomplete">http://www.depkeu.go.id/ind/others/bakohumas/BakohumasKemenKo/MP3EI\_revisicomplete</a> (20mei11).pdf

- 4. Industry
- 5. Marine

- 6. Tourism7. Telematics8. Development of strategic areas
- 4. Textiles
- 5. Food and Beverage
- 6. Main Devices of Weapon System
- 7. Palm oil
- 8. Rubber
- 9. Cocoa
- 10. Livestock
- 11. Timber
- 12. Oil and Gas
- 13. Coal
- 14. Nickel
- 15. Bauxite
- 16. Fishery
- 17. Tourism
- 18. Food Agriculture
- 19. Greater Jakarta Area
- 20. KSN Sunda Strait
- 21. Copper
- 22. Iron Steel

#### The six economic corridors and their themes are:

1	Sumatra Corridor	Agricultural Production and Processing Center and National Energy Barn
2	Java Corridor	National Industrial and Services Driver
3	Kalimantan Corridor	Mining Production and Processing Center &
		National Energy Barn
4	Sulawesi Corridor	Fishery, National Agricultural, Plantation, Oil,
		Gas and Mining Center
5	Bali-Nusa Tenggara Corridor	Tourism Main Gate and National Food
		Supporter
6	Papua Moluccas Corridor	National Food, Fishery, Energy and Mining
		Development Center

#### **MP3EI Research Grants**

The MP3EI program includes a large<sup>65</sup> budget for research which is managed through the Ministry of National Education's Dikti. According to the 2012 guidelines for proposals, <sup>66</sup> budgets for multi-year individual research projects have a ceiling of 200 million rupiah (AUD 21,000) per year, and can be planned for a 2-3 year duration. As with the competitive research grants, awards are implemented by teams of up to three researchers. The goals of research grants in 2012 were listed as:

- a. The development of key sectors in the corridors.
- b. Identification of manpower needs, needs for expanded access, and additional areas of study that need to be developed.
- c. Identification of opportunities and strategies for utilizing existing resources.
- d. Development of academic capacity to support growth in the corridors.
- e. Creation of roadmaps to develop expanded access and academic research critical to the natural resources and needs within the targeted economic growth sectors.

<sup>&</sup>lt;sup>65</sup> A budget for research clearly exists, but a value has not been located in public documents.

<sup>&</sup>lt;sup>66</sup> Panduan Penprimas MP3EI 2012

In 2012, the second year of the program, MONE approved 295 projects for a maximum possible budget of 59 billion rupiah, or approximately AUD 6.2 million.<sup>67</sup> The awards for universities in the study area are listed in Table 2.1, together with some useful comparators.

Table 2.1: MP3El Research Grant Awards 2012

	Total Awards	% total		Number of Awards	% of Corridor Grants
ALL CORRIDORS	295	100%			
Sumatera	46	16%			
Jawa	118	40%			
			Institut Teknologi Bandung	27	23%
			Universitas Indonesia	7	6%
			Universitas Gadjah Mada	13	11%
			Institut Pertanian Bogor	5	4%
Kalimantan	20	7%			
			Universitas Palangkaraya	0	0
Sulawesi	34	12%			
			Universitas Haluoleo	6	18%
			Universitas Gorontalo	0	0%
			Universitas Negeri Gorontalo	0	0%
			Universitas Sam Ratulangi	5	15%
			Universitas Negeri Manado	0	0%
			Universitas Hasanuddin	15	44%
Bali-Nusa Tenggara	45	15%			
			Universitas Nusa Cendana	4	9%
			Universitas Kristen Artha Wacana	2	4%
			Universitas Katolik Widya Mandira	0	0%
			Universitas Mataram	20	44%
			Universitas 45	0	0%
			Universitas Muhammadiyah Mataram	0	0%
			Universitas Udayana (Bali)	7	16%
			Universitas Pendidikan Ganesha (Bali)	10	22%
Maluku & Papua	32	11%			
			Universitas Cenderawasih	3	9%
			Universitas Negeri Papua	7	22%
			Universitas Pattimura	20	63%

#### Menristek

The Ministry for Research and Technology (Menristek) is increasing its role in regional research activities through two key mechanisms:

 Increasing collaboration with the Ministry of Home Affairs (MOHA) on management issues for the BPPs

<sup>&</sup>lt;sup>67</sup> Individual grant amounts were not included in the list of awards, and no total value of grants awarded was included in the announcement.

 Integrating competitive research grants in the Sistem Inovasi Nasional (SINas) with the MP3EI priorities<sup>68</sup>

#### **SINas Grants 2012**

First, SINas research awards are relevant to the study's overall emphasis on socio-economic knowledge production, and many are focused on economic issues. For example, the grant approved for the Universitas Palangkaraya, "Development of Methods to Reclaim Gold Mining Lands for the Cultivation of Plantation Crops in Central Kalimantan" is directly linked to health (mercury contamination) and economic development policies.

Nationally, in 2012 Menristek awarded 285 Grants to 77 research organizations for a total value of 89,989 billion rupiah, with an average grant size of 316 million rupiah. SINas research grants awarded to organizations in the six study provinces (organized by MP3El Corridor) together with some useful comparators are listed in Table 2.2 below. The University of Mataram was the clear leader in SINas grants for the study provinces, a strong competitor together with the larger Universitas Hasanuddin and the four major universities on Java.

Table 2.2: SINas Grants 2012<sup>69</sup>

			% total
Corridor	Organization	# grants	grants
Bali-Nusa			
Tenggara	Universitas Mataram	9	3.2%
Kalimantan	Universitas Palangkaraya	1	0.4%
Sulawesi	Universitas Haluoleo	1	0.4%
	Universitas Hasanuddin	8	2.8%
	Universitas Sam Ratulangi	1	0.4%
Maluku dan Papua	Universitas Negeri Papua	2	0.7%
	Universitas Cendrawasih	3	1.1%
	Universitas Pattimura	1	0.4%
Jawa	Institute Teknologi Bandung	19	6.7%
	Universitas Indonesia	7	2.5%
	Universitas Gadjah Mada	5	1.8%
	Institut Pertanian Bogor	10	3.5%
	Big 4 total	41	14.4%

<sup>&</sup>lt;sup>68</sup> For an overview of all grant activities, see: <a href="http://pkpp.ristek.go.id/index.php/sekilas\_pkpp">http://pkpp.ristek.go.id/index.php/sekilas\_pkpp</a>. Priorities are outlined in the Buku Panduan 2012: <a href="http://pkpp.ristek.go.id/">http://pkpp.ristek.go.id/</a> assets/upload/repo/PANDUAN Insentif PKPP 2012.pdf

<sup>69</sup> Calculated from http://jdih.ristek.go.id/?g=perundangan/konten/3781

# Annex 3: Learning from Southeast Sulawesi – trends in evidence-based policy-making and budgeting for research

Southeast Sulawesi offers a range of experience – some good, and some not-so-good – in government use of evidence to make policy decisions, and in budgeting for research.

In 1999, Yusuf Abadi submitted a proposal to the Governor of Southeast Sulawesi to fund his M.A. thesis on "basing regions in Southeast Sulawesi on developing economic centers" – he prepared a concept and a presentation to seek a research grant for 125 million rupiah. The result surprised him and other researchers in Southeast Sulawesi: the governor doubled the amount and asked him to expand the research area. "Many people in government agencies were surprised by the Governor's decision – it was not common. Usually when a researcher asked for funds they receive only half the amount requested, but in my case I received double. The Governor later used the thesis results as a baseline for the Pemekaran program in Southeast Sulawesi."

Yusuf followed the same strategy for his dissertation topic, "developing a people-based economy in Southeast Sulawesi" the results of which became the basis for provincial government strategy.

Based on his experience in influencing development progress, Prof. Dr. Yusuf Abadi is now widely recognized as a prominent researcher and serves as the Head of the Dewan Riset Daerah. Past success makes the current situation that much more frustrating for him and other members of the DRD: political – not

"The DRD has a role to supervise research at the local level, and to ensure there is no overlap by creating a research road map."

Prof. Dr. Yusuf Abadi
Head of the Sultra DRD

economic – factors now dominate decision-making in creating new districts, and research is becoming politicized with the DPRD disregarding the research road map, changing research priorities and allocating funds.

H. Bachrun is the Head of *Balitbangda* in Southeast Sulawesi. This is one of the few provinces which maintained a stand-alone research agency after 2007 and there are 63 staff under his leadership. However, all of these are structural staff and he has no functional researchers. To fill that need, Bachrun is encouraging one of his most talented staff to follow the LIPI course this year. "Next year, we are budgeting to send three more staff which cost 16 million rupiah each<sup>70</sup>."

Bachrun sees the same political trend as Yusuf, and notes that whether or not research is valued and policy is evidence-based depends on the Governor. But in the short term, Bahrun needs to work with the legislature to ensure Balitbangda maintains a reasonable funding level. For 2012, the proposed budget for research was only Rp.100 Million. "What can we possibly do with that amount?" Balitbanda organized a research topics seminar and invited DPRD members, DRD members, Universities, SKPD and related government institutions. In this forum every participant could provide input on research topics and discuss the priorities. As a result of this lobbying and consultation process, "we now have 2.2 billion rupiah to fund six research topics with a budget of 200 to 300 million each and one training on research and development".

Research Producers in Kalimantan and Eastern Indonesia

This does not include the living costs for staff in training. Officials in several provinces estimated the total cost at approximate 25 million rupiah for each candidate.

To build the research teams, Bachrun used the DRD network and encourages collaboration between external researchers and *Balitbangda* staff. The research teams have external-internal compositions of 3:4, 4:3 and sometimes 5:2, depending on the topics. Bachrun relies on this collaboration strategy to ensure that *Balitbangda* staff will have firsthand experience in conducting research while also supporting the government's work.