

CAPACITY BUILDING OF INSTITUTIONAL RESEARCH AND DEVELOPMENT IN BANDUNG CITY GOVERNMENT

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ABSTRACT: *In Indonesia, the role of R & D (Research and Development) at the level of bureaucracy has not been considered of strategic importance. Evidently a lot of policies that are not based on deep research and comprehensive. As a result, many failed policies implemented are likely to cause new problems even more complex. The lack of involvement of R & D in the formulation of Local Regulation resulted in many problems and eventually canceled. Based on the database Research Agency Ministry of the Interior, to date only 157 the Provincial / District / City which has 548 R & D institutions of the Provincial / District / City in Indonesia (or 28.6%). And of that number only 31.8% (50 prov / districts / cities) in the form of Board and 10.2% (16 prov / districts / cities) in the form of Office, and 57.96% (91 prov / district / city) the other is a field (equivalent echelon 3) even in Bandung City is the Sub Sector (equivalent echelon 4). This indicates that the commitment of the Regional Leadership in developing R & D in the region, there still exists the view that R & D was considered not yet able to contribute significantly to the formulation of policy planning and progress of the region. This paper is to review how the institutional form of research and development of Bandung City Government should be formed in order to be actively involved in policy formulation and development planning area in terms of (a) Commitments Regional Head; (b) Institutional: (c) Resources R & D; (d) Cooperation R & D.*

KEYWORDS: Capacity Building, Institutional, R&D, Policy Implementation, Planning

INTRODUCTION

In Indonesia, the role of R & D at the level of bureaucracy has not been considered of strategic importance. Evidently a lot of policies that are not based on deep research and comprehensive. As a result, many failed policies implemented are likely to cause new problems even more complex. The lack of involvement of R & D in the formulation of Local Regulation resulted in many problems and eventually canceled.

Based on the database Research Agency Ministry of the Interior, to date only 157 the Provincial / District / City which has 548 R & D institutions of the Provincial / District / City in Indonesia (or 28.6%). And of that number only 31.8% (50 prov / districts / cities) in the form of Board and 10.2% (16 prov / districts / cities) in the form of Office, and 57.96% (91 prov / district / city) the other is a field (equivalent echelon 3) even in Bandung City is the Sub Sector (equivalent echelon 4). This indicates that the commitment of the Regional Leadership in developing R & D in the region, there still exists the view that R & D was considered not yet able to contribute significantly to the formulation of policy planning and progress of the region so as not to be managed by a body similar second echelon.

The organizational structure of the small (equivalent echelon 3 or 4) will hinder the performance R & D, because the structure of a small organization has only a limited human

resources and budget of limited research according to its capacity. As a result, the performance generated becomes not optimal. Small organizational structure also led R & D institutions do not have enough power to push the other on education in order to take advantage of R & D as a policy formulation.

The existence of Act No. 18 of 2002 on the National System of Research and Application of Science and Technology who explained that the government acts to develop motivation, provide stimulation and facilities, as well as creating a conducive climate for the development of the National System of Research, Development and Application of Science and Technology in Indonesia, it was not enough made the local government found it necessary to the existence of R & D institutions. Whereas in Article 4 explained that the development of science and technology through the Research, Development and Implementation has the objective to accelerate the achievement of the country, as well as improving the competitiveness and independence in the interests of the state in the international arena.

This condition is exacerbated by the exclusion of R & D explicitly as Mandatory Affairs in the Law No. 23 of 2014 in lieu of Law No. 32 Year 2004 on Regional Government. Thus, local governments focus only run what became Affairs Mandatory and only choice. They do not understand that the real R & D inherent in all Mandatory Affairs and Affairs of the options.

Law No. 25 of 2004 on National Development Planning System, the role of R & D in the planning cycle is very clearly visible. A development plan should be formulated based on the results of the analysis of the problems, the needs analysis as well as analysis of the potential and opportunities of the Region. The analysis process would be done through a comprehensive scientific method and have high validity so that it can be accounted for righteousness.

The above description illustrates that all processes of policy formulation and development planning should be based on the results of research and development. Therefore, the institutional strengthening of research and development as an institution is required to provide results-based submit scientific studies to the Regional Head of the policy formulation process should be implemented.

This study will examine how the institutional form of research and development of Bandung City Government should be formed in order to be actively involved in policy formulation and development planning area in terms of (a) Commitments Regional Head; (B) Institutional: (c) Resources R & D; (D) Cooperation R & D.

LITERATURE

Capacity Building

Milen (2006: 12) defines capacity as the ability of individuals, organizations or systems to function as it should be effective, efficient and continuous (Yuswijaya, 2008: 87).

Meanwhile, Morgan (Milen, 2006: 14) formulated the understanding capacity as abilities, skills, understanding, attitudes, values, relationships, behavior, motivation, resources, and conditions that allow individuals, organizations, networks / sector, and the wider system to carry out their functions and achieve development goals set forth from time to time.

Furthermore, Milen (2001: 142) saw capacity building as a special task, because of the special task of dealing with the factors within an organization or system at any given time.

Furthermore, UNDP and the Canadian International Development Agency (CIDA) in Milen (2006: 15) provide an understanding of capacity building as: the process by which individuals, groups, organizations, institutions, and communities enhance their ability to (a) deliver the performance execution of basic tasks and functions (core functions), solve problems, formulate and realize the achievement of set objectives, and (b) understand and meet the needs of development in the broader context in a sustainable way.

This is in line with the concept of capacity building by Grindle (1997) which states that the development of capacity as ability to perform the task Appropriately effectively, efficiently and sustainable. Grindle even mentioned that capacity building refers to the improvement in the ability of public sector organizations.

Overall the above definition, essentially of similarity in three aspects as follows: (a) that the capacity development is a process, (b) that the process should be carried out at three levels / tiers, namely individuals, groups and institutions / organizations, and (c) that the process is intended to ensure the continuity of the organization through the achievement of the goals and objectives of the organization.

In the capacity building dimension, focus and types of activity. Dimensions, focus and type of these activities according to Grindle (1997: 1-28), and Bappenas (2007) are: (1) the dimensions of human development, with a focus: professional personnel and technical capabilities as well as the types of activities such as: training, practice immediately, climatic conditions of employment and recruitment, (2) the dimensions of strengthening the organization, with a focus on: governance management to improve the success of the role and functions, as well as the types of activities such as incentive systems, equipment personnel, leadership, organizational culture, communication, managerial structure, and (3) institutional reform, with a focus on: institutional and systems as well as macro-structure, the types of activities: rules of economic and political, policy and regulatory changes, and constitutional reform. Correspondingly, Grindle (1997: 1-28) stated that if the capacity building into a series of strategies aimed at improving the efficiency, effectiveness and responsiveness, then the capacity building should focus on dimensions: (1) the development of human resources, (2) the strengthening of the organization, and (3) institutional reform.

GIZ (Deutsche Gesellschaft für Technische Zusammenarbeit) in Milen (2006: 22) illustrates that the capacity building process there are three levels (level) that should be the focus of the analysis and the process of change in an organization. The three levels are: (a) the level of system / policy, (b) the level of organization / institution, and (c) the level of individual / human resources.

Similar to the concept of GTZ, Leavit also describe the level of capacity building as follows: (a) an individual level, include: knowledge, skills, competencies, and ethics, (b) the institutional level, include: resources, procedures, organizational structures, and the system retrieval decision, and (c) the level of the system include: legislation and supporting policies. Furthermore, in order to develop the capacity of local governments Bappenas (2007) states that the capacity development include: (1) the level of the system, establishes the conditions framework that enables and limits the (regulators) for local government, and where the various components of the system interact with each other, (2) the level of institutional (entity), the

level of the agency or institution, or agency introductory service (service delivery) with the structure of the particular organization, work processes and work culture, and (3) the individual level, skills and qualifications of individual form of description work, motivation and work ethic.

From the diversity of the capacity definition as above, can be observed on the elements of organizational capacity. First, the capacity of the organization is closely related to the ability (ability or capability and skill) which is owned by an organization. Second, organizational capacity is closely related to the process of transformation and conversion of resources within the organization to achieve a goal, in other words as a management capacity. Third, the capacity of the organization can be identified with the ability to implement a policy within an organization. Fourth, the capacity of the organization include the ability of both tangible and intangible. Fifth, organizational capacity has dimensions that vary according to field studies.

RESEARCH METHOD

This research is classified into qualitative research by its nature that tries to reveal the facts and give an idea objectively about the actual state of the object under investigation. The main object of this research is the Research and Development of the Government of Bandung. The main variables in this study is Commitments Regional Head, Institutional Forms, HR and R & D Cooperation.

DISCUSSION

R & D activities in the city government Bandung until now carried out by the Division of Research and Development at Bappeda Bandung. This institution is equivalent to an echelon 4. The organizational structure is a barrier for small R & D performance overall. Limited human resources, in terms of both number and competence / expertise to be important in conducting R & D. Until now the number of R & D human resources Bandung only eight people, consisting of 4 people educated S2, S1 4 people educated. Research institutions city of Bandung has Functional Researcher.

The low number of R & D results may indirectly cause Bandung R & D institutions can not have R & D results database covering all sectors, and thus difficult to give a quick response to the actual problems that developed in the community. Every year, the average amount of research done as many as 10 titles, 75% of which is self-managed partnership with PTN.

R & D results any less well publicized, so that the result cannot be used directly by the government and the wider community. During the publication of R & D is only done through colloquium. Research Bandung yet have R & D Journal as a publication tool of scientific standards.

Low institutional capacity cause activity R & D unenforceable One Door, each SKPD still conducting R & D. Low coordination authority causes R & D activities carried out by other SKPD can not coordinated properly. Consequently haunting R & D duplication of activities.

This small organizational structure also causes Bandung R & D institutions do not have the authority to push on education that would take advantage of R & D results as the formulation

of technical policy in the field. As a result, the level of implementation of the results R & D be low.

Commitment of Regional Heads: Regional Head of commitment in developing the use of science and technology to accelerate development through research and development activities is essential. As an institution that is required to be able to provide the formulation of policies for the Regional Head, the Institute for Research in Bandung should be supported by the Organizational Structure solid with authority that is strong in carrying out research and development in the Government of Bandung, so all research and development activities that carried out in the city government Bandung is only carried out by the Research and Development Institute of Bandung. This is to avoid duplication of activities and R & D results that are spatially, not comprehensive and less deep if done by a technical SKPD. It is also to minimize conflicts of interest among stakeholders related to the results of policy recommendations will be formulated. Results of research and development undertaken by the Research and Development Institute of Bandung to be valid, accurate, accountable and free of interests (neutral).

Furthermore, the Regional Head must push for output generated from R & D institutions is to serve as a reference in the development planning process in the city of Bandung and the process of policy formulation Regional Head and other officials. This is in accordance with the mandate of the Minister of the Interior No. 20 Year 2011 on Guidelines for Research and Development within the Ministry of the Interior and Local Government Article 7 paragraph (3), which explains that the BPP Regency / City or other designations shall provide recommendations policies and regulations to the Regent / Mayor and SKPD in the district / city .

Establishment of Research and Development Institute as the Institute for One Stop has been mandated by the Circular Letter of the Minister of the Interior No. 070/1082 / SJ Guideline of R & D Program Fiscal Year 2013, which states that the implementation of the activities R & D carried out with the Model One Door, ie activities R & D only be carried out by BPP provincial and regency / municipal or other designations that have duties and functions in the field R & D. R & D activities are financed and / or carried out by institutions / agencies / units from outside the Province, District / City involving regional organizations should include BPP Regency / City or other designations as the agencies responsible and competent in the field R & D. Therefore, it already should be, the Government of Bandung establish Single Window System in the implementation of research and development in the Government of Bandung.

Institutional: The complexity of the problems faced by the city of Bandung to be resolved through an approach that komprehentif, scientific and have a high validity. Therefore, R & D institutions Bandung should have a larger organizational structure that will be powered by fields of research and development. Fields of research and development will further R & D activities in accordance with his cultivated fields respectively. Eg for Research and Economic Development will examine the issues concerning the economy, both macroeconomic and micro review the impact of economic growth on the other aspects and others.

In addition to carry out tasks of coordinating activities in the city government R & D Bandung as mandated by the Minister of Home Affairs No. 20 Year 2011 on Guidelines for Environmental Research and Development at the Ministry of Interior and Local Government, the Institute for Research and Development also must have sufficient authority great. Similar

echelon Organizational Structure 2 is expected to have great authority for coordination among technical SKPD so there is no duplication of activities R & D. In addition to the Research and Development Institute of Bandung can oversee utilization of research results for further developed and implemented in the field by the relevant technical SKPD. Development and application of research results in the field can be done by technical SKPD with the assistance of the Research and Development Institute of Bandung. It is important to maintain the effectiveness, efficiency and sustainability of development programs are based on research results. It is also to support the implementation of research and development activities One Door.

R & D Resources: R & D resources include Human Resources and Budget. To support the performance of R & D institutions, it must be supported by adequate human resources, both in quantity and quality.

Research and Development Institute is an institution with the concept of Lean Functional Structure Wide Function. This means that the number of functional positions of researchers should be greater than the number of structural positions. Structural officers have authority as managerial governance of the agency's performance, while the functional officials authorized investigators in the conduct of research and development. Thus, the number of researchers as a think tank should be sufficient R & D institutions in accordance with the needs. Researchers are Civil Servants were given the duties, responsibilities, authority and rights in full by the competent authority, to conduct research and / or development of the units research organizations and development agencies (Joint Decree of the Head of LIPI and Chief BKN No. 3719 / D / 2004 and No. 60 of 2004). Workload Analysis Results in the year 2017 conducted by the Regional Secretariat of Organization identified Bandung No 18 (eighteen) area of expertise required by the Government of Bandung. Therefore, the Government of Bandung had to recruit researchers, either through mutation of structural positions and recruitment employess.

To increase the interest of employees to want a career as a researcher, then the Government of Bandung should facilitate the ladder his career. For example to include researchers in ladder Job Training, Technical Training Upgrades Researcher, colloquium / Workshop / Meeting of Scientific Work, Budget Allocation for Independent Research, the provision of Scientific Publications, etc.

In addition, the remuneration of the researcher should be used as a functional appeal. Ladder research career requires a fairly tough requirements. Performance of the researchers has been established in the Joint Decree of the Head of LIPI and Chief BKN No. 3719 / D / 2004 and No. 60 of 2004 on Implementation Guidelines Functional Researcher and credit figures. Factor levels of difficulty in work and profession scarcity is one point that must be considered in the formulation of remuneration for researchers. This is in accordance with Law No. 18 Year 2002 Article 12, that in improving the skills, expertise, and competence of people and its organization, every element of the institutional science and technology is responsible for developing the structure and level of expertise, career level human resources, and implement a system of rewards and sanctions are fair environment in accordance with the needs and progress of science and technology.

R & D Resources by Regulation No. 20 of 2011, consisting of:

1. Assembly consideration function is to provide general direction R & D policy. Chaired by the Mayor, and consists of officials from echelon 2 and 3 as well as the power of professional experts.
2. Quality Control Team, which serves as the team carrying out the assessment, control, provide advice and input on all activities R & D. Chaired by the head of the institution / BPP and structural environment consists of officials of the institution / BPP.
3. Tim facilitation function provides administrative and managerial support to encourage the smooth operation of R & D.
4. Implementation Team, serves implement R & D accordance with the norms, standards, procedures, and criteria stipulated and submit a report of activities. The design team provides the functional staff researchers and ranking officials.

To be able to carry out research and development activities that cover various sectors it must be supported by adequate budget. Law No. 18 of 2002 Article 27, paragraph 1 of the Systems Research Development and Application of Science and Technology explained that the government and regional governments must allocate a certain amount that is sufficient to advance the acceleration control, utilization and promotion of science and technology. Conditions R & D Activity Budget Allocation by Regulation No. 40 of 2000 and Regulation No. 33 Year 2007 is at least 1% of the budget, while based on Regulation No. 20 In 2011 the sources of financing the activities from the state budget, the budget, and other sources are considered valid according to the rules.

R & D Cooperation: To become an advanced R & D institutions and foremost, the Research Institute of Bandung should collaborate with other Research Institute, both PTN, PTS and the Research Institute of Government / private sector. This R & D cooperation will promote regional R & D performance, because in general the Regional Research and Development Institute does not have laboratories or development tools and technologies required in the creation and testing of a technology. Moreover, in general, the Regional Research Institute to focus more on research and development policy.

The division of roles elements such R & D in R & D cooperation described in Law No. 18 of 2002:

1. The Government encourages cooperation between all the institutional elements of science and technology in the development of network science and technology information (Article 13)
2. The College is responsible for promoting the ability of education and teaching, research and development, as well as community service in accordance with the progress of science and technology (Article 7).
3. R & D institutions responsible for finding a variety of inventions in the field of science and technology and to explore the potential usefulness (Article 8); and
4. Enterprises to work with the kind of engineering, innovation and diffusion of technology to produce goods and services that have economic value and utilization of

the benefits of responsible commercialize the output produced by universities and R & D institutions (Article 9).

This collaboration aims to mutually support and complement, strengthen, and avoid the overlap that is a waste. Some forms of R & D cooperation to do, namely:

Internal Cooperation in The Government of Bandung: R & D other forms of cooperation to be developed is the provision of advice on the implementation of the licensing process of research in the Government of Bandung. Law No. 18 of 2002 Article 22 explains that the government set the permissions for the implementation of the research, development, and application of science and technology high-risk and dangerous with due regard to national standards and regulations that apply internationally. Based on Regulation No. 12 of 2007 on the Organizational Structure and Work Procedure of the Government of Bandung, the authority to grant permission to research and development in the Government of Bandung issued by the National Unity, Protection and Empowerment (BKBPPM). The agency published a study permit, based on proposals. But in the implementation of the studies were not conducted supervision. Even then the research results were not reported. Therefore, coordination between BKBPPM the Research and Development Institute of Bandung is expected that the research activities conducted by other parties, both students, PTN / PTS, and the Research Institute of Foreign can monitor simultaneously. The results of their research can then be utilized by the Research and Development Institute of Bandung for the development or formulation of a policy. The coordination between these two institutions can be realized in the form of a special website submission process permits, monitoring and reporting R & D activities conducted by other parties.

R & D Cooperation between the Government of Bandung with other Parties: R & D cooperation with the Central Government should continue to be developed. For example R & D cooperation with the Ministry of Education through the Education Research and Development Network (Jarlitbangdik), in cooperation with the Ministry of Research and Higher Education through institutional strengthening of R & D activities and the Regional Innovation System (SIDA) and others. This collaboration aims to improve networking and capacity building of local R & D institutions.

R & D Cooperation inter District / City Government around Bandung also should be made to formulate a joint settlement of problems that occur in frontier districts / cities, as well as the problems that arise as a result of a seizure economics in districts / cities nearby, such as the problem of congestion and flooding.

R & D cooperation should also be developed is the cooperation with the Foreign especially with the Government of the Twin Cities (Sister City). Some Twin City Government has signed a Memorandum of Understanding (MoU) with the Government of Bandung and some of which have continued with the signing of the Cooperation Agreement, among others in the Research Field. Shenzhen, PRC is one of the Twin Cities who has been cooperating in the field of research and development of science and technology. Cooperation embodied in the form of a Joint Statement (Joint Declaration) signed on 2 September 2012 in the city of Bandung. The cooperation is carried out between private companies and research institutions in the fields of tourism, culture, textile industry and MICE industry. In the future, this cooperation should be followed up and developed by the Research and Development Institute of Bandung. Through this partnership, it will create a transfer of knowledge and technology transfer that can be utilized and developed to accelerate development in the city of Bandung. To that end, in

coordination with Section Bandung Cooperation Secretariat must do so together can inform each other and maximize the Cooperation Agreement that has been done by the foreign party. It should be considered in cooperation with the Foreign Affairs Minister of the Interior Regulation No. 3 of 2008 on Guidelines for Local Government Cooperation with Foreign Parties which mandates that Local Government Cooperation with Foreign Parties conducted with due regard to the principle: equality; benefit and mutual benefit; do not disturb the political stability and economic security; respect the sovereignty of the Unitary Republic of Indonesia; maintaining environmental sustainability; support gender mainstreaming; and in accordance with the legislation.

CONCLUSION

Strengthening the Research and Development Institute of Bandung should continue to be done in order to exercise its powers as the Institute for Research and Development of One Stop as mandated by the Minister of Home Affairs No. 20 Year 2011 on Guidelines for Environmental Research and Development at the Ministry of Interior and Local Government and the Minister of the Interior Circular Letter No. 070/1082 / SJ Guideline of R & D Program for Fiscal Year 2013. Strengthening Governance R & D Government of Bandung can be started from commitment Regional Director's strong R & D institutions to make Bandung as a think tank in the formulation of policies based on science and technology. It should be built next is the creation of R & D institutions similar echelon 2, multiply functional official investigators, R & D adequate budget allocation and improve cooperation R & D with all the R & D institutions that are competent in their respective fields.

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