



## LOCAL GOVERNMENT READINESS IN DEVELOPING SIDA ROADMAP IN BANTEN, WEST SUMATERA, AND BALI

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### Abstract

Regional autonomy demands a creative and innovative local government. This paper sees the creativity of local government in preparing the roadmap. Basically, the readiness of local government in preparing SIDA roadmap is the overall condition of local government to understand the potential of the area in determining thematic roadmap. Some things that should be prepared by the local government is to prepare the regulation and mapping of SIDA personnel. Through this study, it comprehensively describes the stages that must be taken into account by the stakeholders in the region. The method used the explorative descriptive method. The results of the study are identified (1) Local Government readiness in preparing the SIDA roadmap by preparing the legal basis, coordinating with R & D institutions, integrating provincial and district/city programs, and preparing SIDA documents, (2) Elements prepared by the Provincial Government: Establishing TEAM Coordination Province, Identification of potency of local superior commodity, human resource identification, feasibility test, and identification of innovation of regency / city, (3) obstacles encountered in preparing SIDA roadmap are: still strong sectoral ego coordination team of province especially university and low commitment of local government Districts/municipalities in the implementation of innovation, the absence of SIDA actors in the implementation level of private sector/business world, budget allocation for innovation at various SKPD, and implementation of coordination team not yet run properly.

**Keywords:** Research and Development Agency, Local Government, Local Innovation System (SIDa)

### I. INTRODUCTION

The role of local government to improve the welfare of the community is greater through regional innovation. Soares, Nurpratiwi, & Makmur (2015) stated that the role of local governments as entrepreneurs, coordinators, facilitators and stimulators. In a Coordination Meeting for Research and Development of his ministry, Tjahjo Kumolo put his hope on the policy carried out by the local government to encourage the creation of innovation and creativity in the implementation of development programs. Garnida, Mankuprawira, Pasaribu, & Hermawan (2011, p. 10) also stated that the leadership of regional heads has a positive influence on the region. Similarly, Jusuf Kalla also added that regional autonomy requires leaders or regional heads who have the idealism, innovation,

and creativity for the welfare of the community.

Ministry of Home Affairs (MoHA) identified that in 2013 that 128 districts/cities already had innovation programs. This is not much when compared with the number of districts in 2014 (403) and City (98). It means not all regions had innovation programs. The initiative of local governments is the drive of innovation in their regions. As revealed by Mariana (2010), one of the performance indicators for an effective government is the existence of innovative public policy. The study only explains the role of public policy in the era of regional autonomy.

Muttaqin (2011) tried to see the involvement of local governments in innovation. He identified that only a maximum of 5% of the total number of local governments, consisting of 33 provinces and 472 districts / cities, that stands out in innovation. One the local innovation is the Regional Innovation

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System (SIDa). SIDa is the whole process in one system to foster innovation conducted by governmental institutions, local government, research and development institutions, educational institutions, innovation support institutions, the business community, and the local community in the region.

Muttaqien research is similar with the results of Santosa (2012) that saw SIDa from the role of the participants involved. Santosa stated that the implementation of SIDa is emphasized on the participants, institutions, network relationships, interactions and productive processes that affect the development and the speed of innovation, diffusion and learning process. Kanuna (2014) stated that one of the roles of local government is in Institutional Development Policy. Similarly, Ssenyonga (2012) research suggests that the success of organizational innovation lie in the utilization of team work, and good resource management, strong commitment, and strategy. This proves that the commitment of local government as a determinant of the success of regional innovation.

Ajak Moeslim in an online media stated that the local innovation system is an important part of the effort to explore and develop the potential of the region. With the support of science and technology of an innovation, the region competitiveness will be able to be improved and superior key products will be available. He also added that with the involvement of science and technology innovation, the key potential products in existence today will have added value and able to compete.

These conclusions are backed by Anggraini (2015) who stated that the strengthening of SIDa is the most important factor in building the community's economy and improve the competitiveness of the region itself. Handayani, Sophianingrum, & Nutriandini (2013) stated that SIDa Semarang priority sector is trading and services, as well as a strategy to develop a Roadmap.

Putera (2012) revealed that 64% science and technology policy and innovation period 2000-2011 in East Java Province have relevance and significance to development (research), diffusion and technology utilization in the area.

Most of the regulations in East Java emphasize institutional strengthening, and science and technology support programs and innovations.

Oktaviana, Widianty, & Amar (2014) identified that the institutional arrangement of SIDa in Banten Province was not optimal. This is due to the lack of stakeholders understanding of the urgency of SIDa to accelerate the achievement of the regional development goals.

Implementation of SIDa begins with the preparation of SIDa roadmap. The fundamental issues encountered in preparing the SIDa Roadmap

are on determining the potential key products by taking into account the market and marketing aspects, technical and production aspects, social, economic and environmental aspects, management and legality aspects, and financial aspects. Balitbangda South Kalimantan revealed various technical and non-technical obstacles in preparing SIDa Roadmap, such as lack of supporting data to set the theme. Rahmawati, Murni, Supeni, Sriyanto, & Eko (2014) stated the draft of Wonogiri's SIDa covers regional economic development, strengthening of SIDa policy, determination of coordination team, theme setting, SIDa Strengthening Roadmap, and synchronization, harmonization and synergy of policies.

Although it is necessary to show the steps of preparing the SIDa roadmap as the initial steps before the SIDa is implemented for non-SIDA regions, the many studies have not touched this area. Of the many studies cited, the majority discussed the aspects of SIDa implementation such as the involvement of participants and the prospect of the region for the development of SIDa.

It becomes interesting to see SIDa from the perspective of the preparedness of the apparatus. Not only at the level of implementation, but the most important issues are what the local government should prepare for the development of the SIDa Roadmap. The local government's ignorance of this issue often became the excuse of not implementing SIDa.

This paper discusses (1) the readiness of local government in preparing the SIDa Roadmap, (2) Elements to be prepared to develop the SIDa roadmap, (3) Obstacles in formulating the SIDa Roadmap.

Albury (2003) stated that innovation is closely related to useful new ideas. Innovation with its novelty properties must have benefits. The novelty of the innovation will mean nothing if it does not have any benefits of its presence. Coyne (2004) says that innovation is aimed to lower the cost, improve efficiency, deliver good quality. Joint Decree of Minister of Research and Technology and Minister of Home Affairs Number 3 of 2012 and Number 36 of 2012 on Strengthening SIDa stated that innovation is research, development, implementation, assessment, engineering, and operation activities hereinafter referred to as development and research, which aims to develop practical application and context of new science or new way to apply science and existing technologies into products or production processes.

The SIDa Roadmap should accommodate all programs and activities funded by the state revenue and expenditure budgets and legitimate and non-binding revenue and expenditure budgets. The preparation of the SIDa roadmap, integrated into

the RPJMD should be in sync with the vision and mission of the Regent. While local action plans are integrated into RKPDP so that regional development can be sustainable. Hastiyanto (2014) states that development planning in Kabupaten Tegal uses SIDA approach, which is a system approach designed to answer development needs, including stages and prerequisite requirements in development cycle that must be fulfilled. The stages and prerequisites requirements in the development cycle are needed to ensure an effective and sustainable development.

Activities performed in the preparation of the initial draft of roadmap include data and information collection and analysis, and the preparation of the Roadmap Preliminary Design document. The formation of SKPD and other relevant stakeholders Forum are also one of the important stages to develop the roadmap. The activities of the Forum include the discussion of the initial roadmap design by SKPD and the stakeholders, and drafting a memorandum of understanding on the initial draft of the roadmap.

## II. METHOD

The method being used in this study is descriptive explorative method which aims to describe the readiness of local government in coordination with SKPD, readiness to determine current SIDA condition, SIDA challenge and opportunity, SIDA condition to be achieved, policy and strategy of SIDA strengthening, SIDA's focus and priority programs, and SIDA's strengthening action plan.

Interviews conducted with Litbangda Banten Province, Bappeda West Sumatra Province, Litbangda Bali Province and Bappeda Jembrana Regency, 2 persons each. In addition to the interviews, documentation reviews also being performed on the annual report of SIDA, RPJMD, several written documents such as official reports, Jembrana Regent's Decree Number 400/Kep. KDH/A/2012 regarding Regional Research Agenda 2011-2015, Master Plan of SME Development Jembrana Regency 2011-2015 J, Action Plan of SIDA Strengthening of Jembrana Regency, Decision Letter of SIDA Coordination Team Jembrana Regency, Roadmap SIDA, and so forth.

Data analysis technique being used is qualitative data analysis through the objective presentation of the findings in the field, and linking the findings into the theories and interprets it to meet the data validity requirements.

Data validity conducted by researchers includes: (1) Comparison of observations data with interviews data, (2) Comparison of what is stated in public about SIDA with what is stated personally, (3) Comparison of interviews result with the contents of documents related to SIDA strengthening

## III. RESULTS AND DISCUSSION

### A. Regional Government Readiness in Preparations of SIDA Roadmap

Local government as an element of governance is a benchmark to assess the performance of local governments, especially to see the aspect of readiness of local governments in preparing the SIDA roadmap. Basically, readiness is the overall condition of a person or individual to perform an activity that contains the mental, skills and attitudes that must be possessed in conducting certain activities. In this case the readiness in the sample area can be analyzed from SIDA conditions at the sample area, local government initiatives and local government readiness.

The development of SIDA in the Province of Bali, in particular, Jembrana regency, is currently not so good. Due to the change of the Regent, it no longer experienced developments such as the period of 2004 - 2006. Of course, SIDA in Jembrana Regency is still a hot issue in the discussion because Jembrana current progress cannot be separated from its SIDA. While the province of West Sumatra can be categorized as one of the local governments that have a very good readiness as seen from the preparation of SIDA roadmap document although in it involve local research councils in its preparations. Banten is currently preparing SIDA roadmap. Please refer to Table 1 for the state of SIDA in the sample area.

SIDA's condition in Sample area varies greatly. West Sumatera and Banten had established SIDA roadmap and will be synergized into RPJMD 2017. Bali does not implement SIDA, innovation was done in the form of other innovation programs such as home renovations, Jamkrida, JKBM, Simantri and Sadu Mandara Gate, and others.

Local government initiatives to innovate the region basically due to the commitment of its regional head in developing regional innovation, since the regional head as the user and the policy maker, has a demand to develop its region. Regional policies started from the presence of bureaucrats who are able to map the regional advantage. Not only as the originator of SIDA development, but also in implementing SIDA to accommodate the community need. The results of the study reveal that local governments as policy makers have the competencies as shown in Table 2.

Table 2 implies that local governments in principle seek to improve the welfare of its people. Promoting development in creating and innovating is the ultimate goal of regional innovation. Local innovation by the Provincial Government of Bali are to improve local government performance indicator, measured through 3 criteria: People Welfare, which includes prosperity and equity of economy,

**Table 1.**  
The State of SIDA in Sample Areas

Province	The State of SIDA
West Sumatra	SIDA Roadmap is formed. The obstacle in implementation since no private sector involvement in the implementation stage.
Bali	Province have not performed SIDA, Regent/City has innovated apart from the province
Banten	SIDA is formed, waiting for approval

Source: Result of 2015 Study

social welfare, art and sport, Public Service, which indicators are based on compulsory and optional services, and Regional Competitiveness, which indicators includes the economic capability, facilities/infrastructure and investment climate. Based on these three elements, the provincial government of Bali in develops innovation programs for the benefit the people of Bali.

SIDA implementation cannot be separated from the persons who implement the SIDA, including the local government who act a coordination team that accommodates the needs of the Regent/City SKPD. The coordination team bridges the needs in the regions, develop the issues in the fields into themes which can be put forward as point of discussion to determine the SIDA roadmap. In SIDA's roadmap determination, the ability to read the potential of the region, understanding the problems and human resource support are the first step in SIDA

road mapping process. Basically, every region has various potentials. Some would propose farming theme, fisheries, and so forth. To see the readiness of local government in preparing the SIDA roadmap, the Team will outline as described in Table 3.

Readiness of local government in implementing SIDA, is measured in its inclusion of SIDA into RPJMD. Not only that, the local leader's view of the importance of SIDA is an important indicator of the SIDA implementation of the region. Based on our observation, Banten has a high commitment in SIDA although the SIDA roadmap is still in draft form. In contrast to West Sumatra which still requires full commitment from the government because the SIDA roadmap already exist but the government had implement it in the community. For Bali, SIDA had been conducted by Jembrana Region since 2004, and with SIDA it had been able to develop its region due to its effective and efficient access and coordination.

**Table 2.**  
Government Inisiative in Local Innovation Table

Province	SIDA State	Documents
West Sumatera	<ul style="list-style-type: none"> <li>To accelerate the economic growth and economic of scale of the community for the welfare of the people</li> <li>The background of Government initiatives is its low competitiveness, low access to technology and low access to marketing.</li> </ul>	SIDA Strengthening Roadmap West Sumatera
Bali	No plan for SIDA yet, however other innovations are currently in progress.	Bali Membangun
Banten	SIDA strengthening policy, the local government realize the importance to explore its potential.	Final draft of SIDA Roadmap Banten 2013 – 2017

Source: Result of 2015 Study

**Table 3.**  
Local Government Readiness in SIDA Implementation

Province	Local Government Readiness
West Sumatra	Not sufficient, need more coordination and synchronized movements of all stakeholders to coach and empowers the industrial user to use the innovation.
Bali	Governor has no plan to put the innovation plan in RPJMD. The province is only bestowing appreciations to the head of regions conducting innovations in their regions.
Banten	Ready, with the support of the Governor and training of the local innovations management personnel.

Source: Result of 2015 Study

## B. Elements to Be Prepared in Development of SIDA Roadmap

Aspects that must be prepared in the implementation of SIDA in the sample area in principle are the same, namely the regulation, the establishment of Coordination Team of Province, Regency/City and Mapping of key products in accordance with existing local wisdom. The explanation is as follows:

- West Sumatera, from the aspect of regulation, the commitment to implement regional innovation was included in RPJMD. This is evidenced by the SIDA roadmap which was prepared by the Regional Research Council. The commitment was also aligned with the Governor's Decree Number 050-300-2014 on the establishment of the Coordination Team for the strengthening of SIDA of West Sumatera in 2014. The Regional Research Councils had been working properly in West Sumatera Province, SKPD had been well coordinated. It's just for coordination team of West Sumatra, the involvement of business entrepreneurs in implementing SIDA is still low. Based on the interview conducted by the team, legally the coordination team has been formed in the form of a Decision Letter. However, the Decision Letter only explains the task of the team without mentioning the incentive system for those involved.
- Bali Province, from the aspect of regulation, the provincial government had produced the local innovation as stated in "Bali Membangun 2014". Some excellent programs include home renovation, Jamkrida, JKBM, Simantri and Sadu Mandara Gate. However, The Provincial Government has not implement SIDA, this is known based on interviews conducted to Jembrana Regency that the regent carries out

its own SIDA. The overall implementation of SIDA, was initiated from the initiative of the previous Regent who was concerned with the progress of development in Jembrana Regency.

- Banten, from the aspect of regulation, had prepared SIDA roadmap and will be incorporated in the amendment of RPJMD 2017 and had been reinforced by Governor Decree Number 075.05/Kep. 221-Huk/2013. Similar with Bali, Banten faces obstacles in the implementation of the task of Coordinating Team, especially from universities. This is due to sectoral ego and the low understanding of the academicians regarding the importance of SIDA. From 4 regencies in Banten only two regencies implementing SIDA, which are Serang (is still in draft stage of SIDA roadmap) and Pandeglang (SIDA roadmap available).

Regulation is an important requirement of SIDA implementation. Both provinces of Banten and West Sumatera had SIDA backed with the Governor's decision on the formation of Coordination Team. The role and task of the coordination team are not an easy matter since they are charged with a responsibility for formulating the SIDA roadmap. The coordination team involves various SKPDs, the business community, and universities. Bali is the only sample which does not have a Coordinating Team because the innovations are carried out in the form of other programs, Bali only forms an Expert Team that serves as an Assessment Team.

As a catalyst, the provincial coordinating team is tasked with (1) development of the SIDA roadmap document (2) integrating the SIDA program in the RPJMD document of Banten Province, (3) Synchronizing, harmonizing and synergizing SIDA, (4) preparing the SIDA elements, (5) developing SIDA expansion, (6) formulating the SIDA strengthening

policy, (7) coordinating the preparation of SIDA strengthening programs and activities; (8) monitoring and evaluating the implementation of SIDA strengthening policies and programs; (9) reporting the implementation of activities to the Governor through the Regional Secretary.

SIDA's roadmap is aimed at determining direction and providing a planning context, a long-term approach, determining the priority of resource to be used efficiently to improve regional competitiveness. Based on the interviews, not all of the sample areas have SIDA roadmap. From the field data, not all regencies have SIDA roadmap, this becomes an illustration to provide enlightenment to areas that do not have SIDA roadmap yet. The elements that the local government must prepare in preparing the SIDA roadmap are essentially related to SIDA's challenge and opportunity indicators, focus and priority programs of SIDA, RPJMD, RKPD, Research and Development, and others.

### C. Obstacles in Sustaining Roadmap SIDA

The obstacles faced by the local government in the development of SIDA became a stumbling block for provincial governments. The obstacles faced by the local government are mainly on the Coordination Team and commitment of the local government. In the aspect of coordination team, it is mainly due to a sectoral ego where the interests of entrepreneurs and universities are more dominant. This can be found in the provinces of Banten and West Sumatra. The role of the Regional Research Council is enormous, especially in developing the regional needs into the SIDA roadmap. From the commitment aspect, the local government of West Sumatera Province is less assertive in implementing SIDA roadmap. This occurs because various SKPDs in West Sumatera already have its own priority scale in preparing SIDA roadmap. However, the role of DRD West Sumatera Province has been effective in preparing the roadmap SIDA. Because of them, the SIDA roadmap in the Province level can run well.

Our overall analysis shows that SIDA is the process of regional planning in developing the key potential product in the region. By promoting potential natural resources, SIDA can drive the development progress in the region. SIDA cannot be separated from the role of local government either Province, Regency / City. The SIDA Strengthening Roadmap is devoted to determining the direction and providing a planning context, long-term approach, determining the priority of resource to be used efficiently in order to improve the competitiveness of the region.

SIDA became an indicator to assess the performance of local government. Local governments continuously implement SIDA in a sustainable manner. This can be seen from the West

Sumatra government which innovates starting from 2012. Bali Province Jembrana Regency since 2006. Based on the findings, it was identified that the development of SIDA in the sample area shows a variety of SIDA progress, from the preparation of the SIDA roadmap to the performance level of the coordination team.

In the implementation of SIDA in general, the readiness of local government begins with:

1. First: the commitment of the regional government in accordance with the amendment of Law Number 23 of 2014 regarding the Regional Government by emphasizing on the principle of efficiency improvement; effectiveness improvement; service quality improvement; no conflict of interest; public interest orientation; openness of operations; fulfill propriety values; and accountable results;
2. Second: preparing SIDA roadmap with the mechanism as illustrated in Figure 1.

Readiness of local government as depicted in the picture above, are as follows:

- Regulation: steps that need to be prepared: (1) Provincial Government prepares the legal basis on SIDA in the form of a Regional Regulation; (2) Preparing District / City Coordination Team; (3) Establish competent Work Groups that directly address SIDA themes raised, (not available in Banten and West Sumatra); (4) Making R & D Body Effective; (5) Integrating existing programs in the province with existing programs in the Regency / City.
- Preparation of Documents: documents to be prepared by the regions include RPJMD, RKPD, Key products of the Regency / City, Mapping of SIDA challenges, opportunities and threats, SIDA action plans, SIDA conditions, SIDA's priority focus and programs;

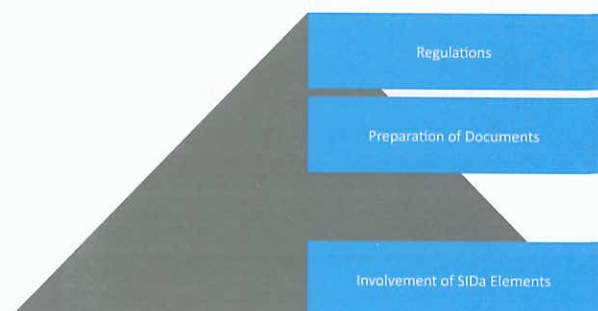


Figure 1. Readiness of Local Government

**Table 4.**  
Impact of SIDA Elements

SIDA Elements	Policy Support	Output
Universities: Coordination between private, government or between universities	<ul style="list-style-type: none"> <li>Support by inclusion in RPJMD, RPKD of the Regency/City. The Readiness are seen from:                             <ul style="list-style-type: none"> <li>Effectivity and efficiency</li> <li>Key potential product</li> <li>Consistency</li> <li>Coherent</li> <li>Openness and accountability</li> <li>Commitment</li> </ul> </li> <li>SIDA Mapping through:                             <ul style="list-style-type: none"> <li>Potential Key product of Regency/City</li> <li>Mapping of challenges, opportunities and threats of SIDA</li> <li>SIDA Action Plan</li> <li>SIDA Conditions</li> <li>SIDA Priority Focus and Program</li> </ul> </li> </ul>	SIDA based on: <ul style="list-style-type: none"> <li>Local Wisdom</li> <li>Social Capital</li> <li>Innovation Diffusion</li> </ul>
Research and development activities, supporting infrastructure for the research and development, the benefit of research and development activities		
Business community: Commitment to support local innovation by providing new job opportunities, increase of opportunities, increase product value, the creation of new business owners, agreement to use the local innovation by SME or government.		
Government: Support by using the government budget to develop innovation, issue policies in support of innovations, coordinates with various SKPD to use the innovations, coordination with other elements to promote the innovation, providing supportive infrastructure.		
Community: Existence, Contribution to community welfare, use of innovation technology		
Banking Sector: source of fund		

- Involvements of SIDA Elements: innovations to suit the development of Science and Technology; Involves the business world through development of new products, development of marketing techniques, market analysis, and so on;

3. The third stage is monitoring and evaluation conducted by the Provincial Government;

Local government preparedness described above, in principle, can be adopted and applied by other regions. Similarly, the elements that should be prepared by the local government at the sample areas such as the establishment of Coordination Team and Identification of the key potential commodities, human resource identification, feasibility test, identification of regency innovation by regency/city can be a reference to reflect SIDA in the development program.

The formation of SIDA Coordination team should be directed to accelerate the achievement of six strategic policy agenda of innovation as conveyed

by Taufik (2005) of the Research and Adoption of Technology Body (2012), namely: 1) Developing a conducive framework for development of innovation and business; 2) Strengthening the institution and technological support of R & D unit and enhancing the adoption of the business world, particularly SMEs; 3) Growing collaboration for innovation and enhancing innovation diffusion, good/best practices and/or R & D results and improving technology-based services; 4) Encouraging a creative - innovative culture; 5) To develop and strengthen the integration of innovation and cluster of national and regional industry 6) Alignment with global developments.

The implementation of SIDA in the sample area is basically aimed at improving competitiveness in the regions. Iwan Dermawan Hanafi stated that the region should be able to develop its economy to contribute positively to the national economy, and provides job opportunities to improve the welfare of the community. Region Competitiveness according to him is one of the parameters in the concept of sustainable regional development. In general, the

level of competitiveness of a region, is in line with the level of community welfare. Competitiveness would increase the economic capacity of local communities to face the domestic and international competition. Some indicators show the increase of competitiveness are seen from economic growth, price stability, labor and balance of export and import.

The involvement of SIDA elements is something that is interconnected with each other, with the SIDA outcome regarding the fulfillment of the needs of the community, as shown in Table 4.

Based on Table 4, SIDA output is based on five aspects: Local Wisdom, Social Capital, Natural Resources Asset, Commitment and Innovation Diffusion.

1. Local wisdom is the noble local ideas embedded and followed by members of the community. It is important to know how to synchronize between SIDA with the cultural order of the local community and be accepted by the community. This can be seen in a very heavily cultural area. As happened in West Sumatra and Jembrana Regency. SIDA goes hand in hand with moral values in the region;
2. Social capital, is believed to be one of the main components in mobilizing togetherness, ideas, mutual trust and mutual benefit to achieve mutual progress. Six Elements of Social Capital by Hasbullah (2006) are:
  - Participation in a network. SIDA can be implemented with a strong network within the community, the participation system dominates the implementation of SIDA.
  - Reciprocity. Here SIDA provides socially effective communication between SKPD and Provincial Government. Especially in the discussion of the program to be developed in SIDA.
  - Trust. In the preparation of SIDA roadmap, mutual trust of SIDA elements in determining the theme is an essential value in the implementation of SIDA. The attitude of cooperating for the progress of regional development is a positive manifestation of SIDA.
  - Social norms. A set of rules that the community bound to obey and follow in a particular social entity. These rules are usually institutionalized, not written but understood as the determinants of good behavioral patterns in the context of social relationships with a social sanction afforded if violated. Social norms will determine the strength of relationships between individuals because it stimulates social cohesiveness that positively impacts the

development of society.

3. Values. SIDA is not an unregulated program, many things must be obeyed in SIDA. Especially regulations that do not conflict with social manners in a region.
4. Proactive action. The Local Government is committed to implementing SIDA and the Coordination Team prepares SIDA roadmap based on local key potential products and facilitating the region to identify the Natural Resources Asset as reference material in implementing SIDA.
5. Innovation Diffusion is how an idea and new technology spread in a culture. Innovation is an idea, practice, or object that is considered new by society. Stages of events that create the process of diffusion are:
  - Learning Innovation: This stage is an early stage when society begins to see and observe new innovations so they can capture the innovation.
  - Adoption: The SIDA process in is a learning process for the community, where they can adapt to innovation. Specially to apply SIDA to towards improvement of welfare and improvement of competency. Not only for the community, but also the human resources who manage SIDA, either at the level of Province or Regency/City.
  - Development of social network: As happened in Banten, from four regencies only two regencies took the initiative to form SIDA roadmap. The decision made by the two regencies (Serang and Pandeglang) can be an inspiration for other regencies located in Banten.

Universities and the business community may create a breakthrough to enable new job opportunities and create new products that can improve people's welfare. This is in contrary to what happened in the province of West Sumatra and Banten. Both provinces are heavily dominated by local research boards and bureaucrats. Although the Decree of the Governor of West Sumatera already recognizes the existence of a business community that has gained public recognition, they are not properly involved in the SIDA activities. The same thing happened in Banten, which less empower the business community and universities. This phenomenon is in contrast to the concept of SIDA in the Joint Regulation that SIDA is the whole process in one system to foster innovation conducted by governmental institutions, local government, institutions of education institutions, innovation support institutions, the business community, and society in the region. When the involvement of the



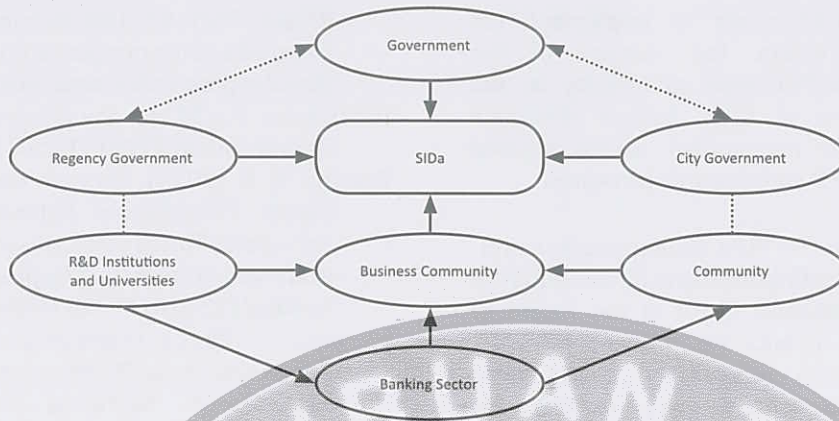


Figure 2. Classified Elements

elements is ideally classified, it will be shown in Figure 2.

Coordination of SIDa with the various elements empirically affects the sustainability of SIDa. Interconnection and collaboration with of SIDa leads to the improvement of people's welfare. Especially when associated with the role of each of these elements. Provincial/Regency/City Government plays an important role in the implementation of SIDa. The policy to commit to improving competitiveness becomes an indicator of SIDa's success. While the universities provide input to SIDa, to prepare the young generation to have the mental strength to issue new concepts and ideas in innovating. The business community can be a place to form new products, know the market needs and analyze the right marketing strategy. Research institutions facilitate and synergize the coordination between Provincial and Regency/City.

Based on the results of field studies, findings in the three provinces can be identified as illustrated in Figure 3.

Based on Figure 3, the strategy of preparation of SIDa roadmap are: First, the commitment of the local government in applying SIDa. Next, the existence of R & D as a policy framework that will mobilize SIDa, especially in collecting data related to the potential of natural resources, human resources potential, the threats, opportunities, challenges,

and others. Sectoral coordination is crucial for the Coordination Team in the province, regencies, and cities. Part of the coordination team consists of representatives of related SKPD, business, and universities. Key Potential Mapping is to map the potential of natural resources and Human resources that can be maximized. The objective is to earliest detection of possible SIDa opportunities to be developed in the three provinces.

#### IV. CONCLUSION

- The readiness of local government at sample area, (is shown) by preparation of document containing a mapping of the key potential area, and involvement of SIDa Officer either from governor/regent/city, regional research council, private element (business) and academic element.
- The elements to be prepared are establishing a Provincial Coordination Team and identify potential key products for regency, identify human resources, feasibility studies, and identify local innovations performed by the regencies.
- The obstacles encountered in preparing the SIDa roadmap are strong sectoral ego of in the provincial coordination team, especially universities and low commitment of regency/

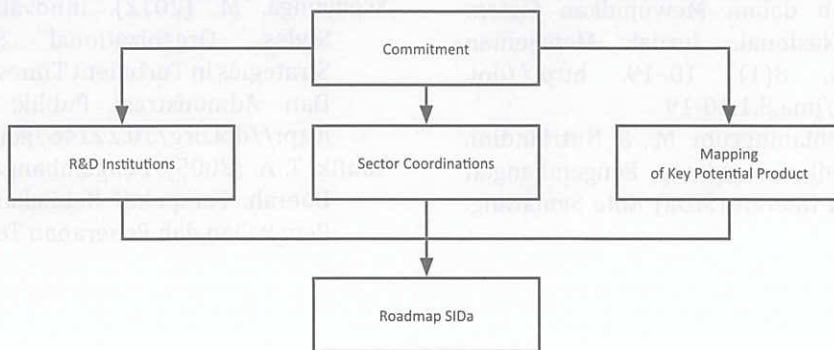


Figure 3. Strategy of SIDa Roadmap Formulation

municipal governments to implement the regional innovation, the absence of the private sectors/business community in the implementation of SIDA, budget allocation for innovation are spread across various province's SKPD and research institutes.

Our suggestions for SIDA implementation are:

- Establish a Coordination Team by involving the business community, SKPD of the Regency/City, and the community, as well intensify the Coordination Team as stipulating it in the Decision Letter of the Head of Region by preparing SIDA Roadmap document.
- Establish competent Work Groups to handle SIDA directly in Banten, West Sumatra, and Bali cq. Jembrana Regency.
- Intensive assistance to be carried out by the Provincial Government in the preparation of the SIDA roadmap, in particular, the Bali Province to Jembrana Regency which facilitates the implementation of SIDA.

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