

Strategies of Regency *Adiwiyata*(Green) School Management at Secondary Education Level in Sintang Regency

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Abstract

This study aims to identify the strengths, weaknesses, opportunities and threats (SWOT) and formulate coaching strategy of *Adiwiyata* schools in Sintang Regency. A qualitative descriptive method with IFAS and EFAS analysis technique were used. The results shows dominant strengths factor including vision, mission and objectives that are environmentally sound in *Adiwiyata* school team. Meanwhile dominant weakness factor involves the limited budget allocation for *Adiwiyata* development. The dominant factor of opportunity and threat including ability in following competencies in other activities in the field of environment and mutations of school principals or teachers, respectively. *Adiwiyata* regency school positions based on IFAS and EFAS analysis are in quadrant II (23,-5). Thus the coaching strategy includes (1) capacity building, skills and knowledge of *Adiwiyata* team through seminars and training funded by local government; (2) Budget allocation proportionally for supporting activities of *Adiwiyata* both from schools and local government that is regularly enrolled every year; (3) Vision, mission and school objectives must accommodate local wisdom of the community in protecting the environment; (4) school principal and teacher mutations should consider tracking not on a pragmatic basis. To realize the coaching strategy needs to be done continuous cooperation between the schools with various stakeholders so as to increase the predicate *Adiwiyata* at a higher level.

Keywords: Coaching strategy, Regency *Adiwiyata*, School management, Sintang Regency

INTRODUCTION

Environmental education is one of the government's efforts to overcome and suppress the rate of environmental damage. In 1996, the first cooperation was established between the two ministries, namely the Ministry of National Education and the Ministry of Environment) on environmental education in schools. The cooperation is expected to give a positive influence for the community's awareness and behaviours in managing the environment. In fact, there has not been any significant effect or change on the community's mindset in managing the environment [1]. In response, the government renewed the cooperation between the Ministry of National Education and the Ministry of Environment in 2005. As a follow up of the cooperation agreement, the Ministry of Environment issued *Adiwiyata* Program at the level of primary and secondary education [2].

Through the *Adiwiyata* program the government expects a change of mindset from all school residents in preserving the environment. The government's expectations are consistent with research conducted by Azhar, which concluded that there is a significant positive relationship between environmental knowledge with the attitude of preserving the environment [3]. In response to that, educational institutions are required to realize responsible environmental management. The form of responsibility in managing the environment in schools can be done through *Adiwiyata* program. Based on research conducted by Jumadil, cognitive abilities, affective and psychomotor schools that have implemented the program *Adiwiyata* higher when compared with the not yet *Adiwiyata* [4]. This can be interpreted that through the program *Adiwiyata* can form learners who are characterized and competitive in the learning process. Through the *Adiwiyata* program can initiate efforts towards sustainable development [5].

In practice *Adiwiyata* schools are classified into several levels namely *Adiwiyata* Independent, *Adiwiyata* National, *Adiwiyata* province and *Adiwiyata* regency. Independent and national *Adiwiyata* schools have greater strengths and opportunities compared to the provincial and

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regency *Adiwiyata* schools [6]. This phenomenon is due to *Adiwiyata* schools independently and nationally has a wide partnership and has been tested because it is able to pass various phases starting from the preparation phase *Adiwiyata* school.

At the beginning of the launch, *Adiwiyata* program was devoted to schools in Java. Since 2007, *Adiwiyata* program has been implemented thoroughly in all provinces in Indonesia. As a guide for schools and educational institutions in the implementation of *Adiwiyata* program, the Ministry of Environment issued a Regulation Number 5 of 2014 on Guidelines for *Adiwiyata* Program Implementation [7].

In order to realize regency *Adiwiyata* schools, the Environment Agency of Sintang Regency has made various efforts in forms of counselling, mentoring and socialization. However, the reality shows that the existence of *Adiwiyata* schools in Sintang Regency is still very minimal, especially at the level of secondary education. In particular, for the period of 2014-2015, *Adiwiyata* schools existing in Sintang Regency have not been able to compete in the higher level *Adiwiyata* program of West Kalimantan Province [8]. It can be seen in Table 1 below:

Table 1. List of Regency *Adiwiyata* Schools in Sintang

No	School Name	Year of Determination	Keterangan
1.	VHS 01 Sintang	2014	Joining the provincial level in 2015 but not yet qualified
2.	JHS 01 Tebelian	2015	Joining the provincial level in 2016 but not yet qualified
3.	JHS 03 Tebelian	2015	Joining the provincial level in 2016 but not yet qualified
4.	JHS 04 Sintang	2015	Joining the provincial level in 2016 but not yet qualified

Source: The Environment Agency of Sintang Regency (2017)

The conditions as seen in Table 1 should be minimized because *Adiwiyata* program has been implemented thoroughly in Indonesia since 2007. That is, the *Adiwiyata* program has been running for a decade but the management and development of *Adiwiyata* program in Sintang Regency are still minimal so it makes the schools in Sintang difficult to compete with other schools from other regions in Indonesia. The major problem arising from the *Adiwiyata* school implementation in Sintang Regency is the

nonoptimal school management and the minimum coaching from the Environment Agency. To answer the problems, the researchers conducted a study related to the management and development strategies of *Adiwiyata* schools in Sintang Regency. The purpose of this study was (1) to analyze the attainment of the status of regency level *Adiwiyata* schools; (2) to identify the SWOT (strength, weakness, opportunity and threat) factor of the regency *Adiwiyata* schools at the secondary education level in Sintang Regency.

RESEARCH METHOD

This research used descriptive-qualitative approach. The use of descriptive-qualitative approach in this research was in the form of description of the respondents' opinions interpreted according to the questions in the questionnaire and the interviews. The objective of this research was to identify the SWOT factor, to be then analyzed further to find out the regency *Adiwiyata* school position in the SWOT diagram and formulate the coaching strategies for the *Adiwiyata* schools based on the school position in the SWOT diagram. The variables being studied in this research were the policy aspect, curriculum aspect, participation aspect and infrastructure aspect. According to Sugiyono the sample of data sources should represent the number of population [9]. Referring to that statement, the researchers used a simple random sampling technique because the population member was considered homogeneous. Members of the population in this study were all educators at 04 Sintang Junior High School and Vocational High School 01 Sintang, amounting to 243 people. Of these the samples were taken randomly by inserting each of the names into the bottle, subsequently removed as many as 15 names in sequence while shaking the bottle.

Data Collection

Data of this research were collected using the following methods: (1) Observation, conducted to observe and examine the condition of the research site; (2) Questionnaire, used to know the weight and rate of each factor of SWOT based on the respondents' opinions/ perceptions; (3) Interview, applied to find out information related to the behaviors of the schools' communities and to determine the SWOT (strength, weakness, opportunity, and threat) factors faced by the regency *Adiwiyata* schools [10]. To get the information the researchers interviewed the principal, *Adiwiyata* school team and the

Environment Agency; (4) Documentation review, obtained by collecting information in forms of literature, reports, regulations, or other forms information deriving from official sources [9]. This research was conducted for 3 months starting from November 2017 to January 2018. During the period of time the researchers made observations in the first month as well as interviews and collect supporting documents. The next month the researchers distributed questionnaires to the respondents. In the third month to deepen the data that has been collected through the discussion for further poured in the results of research

The position of the regency *Adiwiyata* schools in the SWOT diagram was determined by means of weighting (a) on each factor. The total value of the overall weight of both the internal and external factors was no more than 100. Furthermore, the rating (b) of each SWOT factor was determined with the scale range of 1 – 4, sequentially meaning less important (1), quite important (2), important (3), and very important (4). The next step was multiplying the weight (a) by the rating (b) on each SWOT factor to determine the total value of each internal factor (*Internal Strategic Factor Analysis Summary – IFAS*) and external factor (*External Strategic Factor Analysis Summary – EFAS*). The determination of the position of the regency *Adiwiyata* schools in the SWOT diagram was then done with the following formula:

X = strength (S) – weakness (W)

Y = opportunity (O) – threat (T)

The last step was to create strategy formulations based on the resulting quadrant position.

RESULTS AND DISCUSSION

Referring to the research data that have been analyzed in accordance with the research methods, the results and discussion are explained as follows:

1. Internal and External Factors of Regency Adiwiyata Schools

The positive internal factors of the regency *Adiwiyata* schools are as follows: (1) the schools have environmentally sound visions, missions and objectives, (2) the schools have a solid *Adiwiyata* team, (3) the environment-based curriculum is taught in an integrated manner, (4) the schools have adequate and environmentally friendly infrastructure, (5) the schools have environment-based education curriculum and learning facilities.

These five points are the main requirements that must be owned by regency *Adiwiyata* schools. One point is not met then the school difficult to get predicate *Adiwiyata* regency [11]. By maximizing the positive internal factors, the schools have the opportunity to get the predicate of *Adiwiyata* at the provincial level.

On another side, the negative internal factors include as follows. (1) utilization of infrastructure facilities is not optimal, (2) partnerships between schools, government agencies and private parties are still lacking, (3) student habituation in protecting and managing the environment are also lacking, (4) budget allocation for the development of *Adiwiyata* program is limited, (5) ability of educators in utilizing information technology and social media to support environmental education learning is low, (6) participation of students in environmental actions outside schools is lacking. Negative internal factors occur because school residents have not fully understood the program *Adiwiyata* implemented by the school. This resulted in a cleanliness facility not well maintained and budget to support *Adiwiyata* program is not budgeted regularly. With *Adiwiyata* program, the knowledge, attitude and actions of the school community should ensure the formation of environmental caring behavior [12].

As for the positive external factors, the *Adiwiyata* schools have opportunities to (1) obtain assistance of infrastructure facilities supporting environmental education learning, (2) cooperate with government and private parties, (3) compete in other environmental activities, (4) generate environmentally qualified, characterized and cultural graduates, (5) improve the competence of educators through seminars and training. Schools are able to take opportunities in terms of obtaining outside non-binding assistance by establishing relationships and exposing the school's vision, mission to environmental stakeholders [13]. With these relations the school gets the ease in following the competition on environmental activities and educators who have the potential to participate in training held by stakeholders, so as to realize graduates who care about the environment.

Meanwhile, the negatif external factors include: (1) principal and educator mutations threatening the sustainability of *Adiwiyata* programs in schools, (2) perception of school communities that *Adiwiyata* school program is just for the sake of competition, (3) downgrading of *Adiwiyata* predicate for schools which do not

make efforts to defend it, (4) lack of support and coaching from the Office of Education and the Environment Agency, (5) threat from non-Adiwiyata schools with higher achievement, and (6) the consideration that Adiwiyata program is unimportant and burden educators. Lack of support from the society and related agencies can threaten the development of Adiwiyata regency as in the case of hygiene facilities and infrastructure support [14]. Thus, school that better achievement the opportunity to obtain predicate Adiwiyata regency. In the change of the principal must pay attention to the track record because the principal is the highest responsible in the implementation of Adiwiyata.

The emergence of various factors is inseparable from the level of understanding and insight from each informant. According Slalahi, easy access to sources of information both from television, internet and mass media greatly affect the knowledge in utilizing the environment [15]. Informants who easily gain access to information automatically the level of knowledge related to environmental management in schools is higher. Thus, the points contained in internal factors and external factors are the result of extraction from the thinking of each informant.

2. Weight, Rating and total value of each SWOT Factor

The position of regency Adiwiyataschools in the SWOT diagram was needed to formulate effective strategies for the growth and development of Adiwiyata program in schools. The regency Adiwiyata school position was known from the results of the questionnaire which were then analyzed based on IFAS and EFAS analysis. The weight, rating and total value of each SWOT factor were obtained from the questionnaire based on the perceptions of educators who were the study samples. The determination of the value is important to determine the points of each SWOT factor which further determines the position of the school regency Adiwiyata in the SWOT diagram.

Based on Table 2, the main strengths of regency Adiwiyataschools are that the schools have environmentally sound visions, missions and objectives as well as have a solidAdiwiyatateam. The other strengths include having integrated environmental education curriculum and adequate infrastructure. Potentials owned must be maximized so that schools can achieve the higher-level Adiwiyataaward.

Table 2. IFAS Analysis of Strength (S) Factor

No.	Strengths/S	W	R	T
1.	The schools have a solid Adiwiyatateam	21	4	84
2.	The school have environmentally sound visions, missions and objectives.	21	4	84
3.	The school have an adequate and environmentally friendly infrastructure.	20	3	60
4.	Environment-based education curriculum is taught in an integrated manner.	20	3	60
5.	The schools have an environmental education curriculum and learning facilities.	18	3	54
Total		100		342

Description: W (weight), R (rating), T (total)

Visions and mission compiled by the school is one manifestation of aspects of environmentally sound policy. Policy aspect is an important aspect in realizing Adiwiyata schools because all activities related to the program refer to vision, school mission [16]. This point is an important force that the school has. Nevertheless the vision has not been realized in the real behavior of all the citizens of the school, because there are still many students littering and bringing snacks into the classroom. Such behavior should be minimized by means of educational sanctions. For example, making artwork from garbage and fines triple the value of damaged goods.

Table 3. IFAS Analysis of Weakness (W) Factor

No.	Weaknesses/W	W	R	T
1.	Budget allocation for Adiwiyata development is still limited.	19	4	76
2.	Student habituation in environmental protection and management is still lacking.	18	3	54
3.	Participation of students in environmental actions outside schools is lacking.	17	3	51
4.	Utilization of infrastructure facilities is not optimal.	16	3	48
5.	School partnership with government agencies and private parties are still lacking.	15	3	45
6.	Educator' ability in utilizing information technology and social media to support environmental education learning is low.	15	3	45
Total		100		319

Description: W (weight), R (rating), T (total)

Based on Table 3, the main weaknesses in the management of regency *Adiwiyata* schools are the limited budget allocation for *Adiwiyata* development along with the school communities' unfamiliarity or low awareness in managing and preserving the environment. Based on the manual of *Adiwiyata* school program, regency *Adiwiyata* schools must allocate 15-20% of school budget plan.

In addition to the budget, the fundamental weakness in the management of regency *Adiwiyata* schools is the behavior of school residents who are not yet accustomed in preserving the environment. Environmental caring behavior can be formed if it meets the requirements of the willingness of individuals to get used to behave in accordance with the rules, have a sense of environmental conditions and the exemplary figure in maintaining the environment [17]. The most important example is the principal and followed by the entire school. For that the school needs to make a slogan and a positive invitation about environmental conservation attached to the wall magazine, so that students interested and responsible make it happen. This can build a basic foundation in forming environmentally friendly behavior.

Based on Table 4, to get the higher-level predicate *Adiwiyata*, regency *Adiwiyata* schools have the opportunity to actively participate in other environmental competitions such as healthy school competition, environmental creativity competition and etc.

In addition, the opportunity that must be maximized is the aid of waste management facilities and infrastructure from the government and private parties. According to Meiboudi, means of waste management is one of the criteria that must be met by school-oriented green school programs [18]. For VHS 01 Sintang already has a composting machine and has been utilized, but in JHS 04 Sintang does not have the facility so that the waste generated is discharged directly to a temporary garbage disposal. Things like this should be a serious concern from the government for schools to be empowered to perform waste management in a simple way. By doing waste management the school can get additional income from the products produced.

Based on Table 5, the threats faced by regency *Adiwiyata* schools are related to the mutations of school principals and educators. The mutation will be a serious threat if the transferred principals or educators do not have a high commitment to the development of *Adiwiyata* schools. This

phenomenon may lead to the downgrading of *Adiwiyata* predicate and even the schools may lose the title or award as regency *Adiwiyata* schools.

Table 4. EFAS Analysis of Opportunity (O) Factor

No.	Opportunities/ O	W	R	T
1.	The schools have an opportunity to compete in other environmental activities.	21	4	84
2.	The schools have environmentally qualified, characterized and cultural graduates.	20	3	60
3.	The schools have an opportunity to cooperate with private parties. The schools have an opportunity to improve the competence of educators through seminars and training.	20	3	60
4.	The schools have an opportunity to get an assistance of facilities and infrastructure supporting environmental learning.	20	3	60
5.	The schools have an opportunity to improve the competence of educators through seminar and training.	19	3	57
Total		100		321

Description: W(weight), R(rating), T(total)

Table 5. EFAS Analysis of Threat (T) Factor

No.	Threats/T	W	R	T
1.	Mutations of principals and educators that threaten the sustainability of <i>Adiwiyata</i> program in schools.	19	4	76
2.	The downgrading of <i>Adiwiyata</i> predicate for schools which do not make efforts to maintain it.	19	4	76
3.	Lack of support and coaching from the Office of Education and Environment Agencies.	18	3	54
4.	Threats from non- <i>Adiwiyata</i> schools with higher achievement.	17	3	51
5.	Perception of school communities that <i>Adiwiyata</i> school program is just for the sake of competition.	15	3	45
6.	The absence of local government policies requiring schools to participate in <i>Adiwiyata</i> program.	12	2	24
Total		100		326

Description: W(weight), R(rating), T(total)

The principal as the highest authority holder in the school has a big responsibility to maintain and even increase the predicate of *Adiwiyata* schools. In practice, the principal must implement a top

Adiwiyata school position in Sintang Regency in the SWOT diagram was in quadrant II. The position was based on the calculation of IFAS and EFAS analysis in which the data were obtained from the perceptions of educators in SMKN 01 Sintang and SMPN 04 Sintang. The regency *Adiwiyata* school position in quadrant II indicates that regency *Adiwiyata* schools in Sintang Regency have sufficient strength to survive, but at the same time have high potential threats. The greatest threat exactly arises from the internal of the schools because the regency *Adiwiyata* schools still rely on the policies ruled by the principals and schools' *Adiwiyata* teams. This condition is potentially a high threat because the principals and educators may be transferred or promoted to a certain position at any time by the Office of Education.

Strategy of coaching by related parties (Local Government from Environment Agency and Education Office) can be done through persuasive and interactive approach. Persuasive means to approach, invitation and advises the school in a polite way. Interactive means to make a two-way communication or dialogue between the school and the local government. In addition, it is necessary to consider the conditions and needs of each school that is appreciated as regency *Adiwiyata* schools so that the coaching process can run effectively and efficiently. It is intended to increase the performance of schools in developing a caring and cultured school environment, so as to achieve *Adiwiyata* award at a higher level.

In quadrant II, the influencing factors were strengths (S) and threats (T). Therefore, the coaching strategies were derived from the formulations between the two factors. Each of the formulations along with its coaching strategies is described as follows:

(1) Strengthening the schools' Adiwiyata teams to get supports from stakeholders.

From this formulation, the coaching strategies that can be used are to establish intense communication with various stakeholders; improve the capacity, skills and knowledge of the schools' *Adiwiyata* teams through government-provided organizations or institutions; and prepare rational activity proposals related to environmental management.

(2) Improving environmentally friendly school facilities and infrastructure in order to maintain the title or award as Adiwiyata schools

Based on this formulation, the coaching strategies to be used are to make socialization to all the

school communities about the importance of maintaining and preserving the existing facilities; impose sanctions to those who damage the cleanliness facilities; establish partnerships with stakeholders who care about the environment; and allocate proportional budget to supporting activities of *Adiwiyata* program.

(3) Having environmentally sound visions and missions rooting in all school communities so that the perception that Adiwiyata program is just for the sake of competition can be minimized.

According to this formulation, the coaching strategies that can be applied are to socialize and monitor continuously the schools' visions and missions to all the school communities; integrate the designed visions and missions with every learning process and accommodate the culture of the surrounding communities in protecting the environment.

(4) Building an integrated environment-based education curriculum so that the principal and educator mutations will not threaten the sustainability of Adiwiyata program.

Based on the formula above, the coaching strategies that can be made are to consider the track records of principals or educators before setting the mutations (whether they support and care of *Adiwiyata* program or not); and to provide training and mentoring to educators in preparing environmentally-sound learning facilities.

CONCLUSION

Based on the results of research that has been conducted at regency *Adiwiyata* schools in Sintang regency, it can be concluded as follows:

Dominant strengths factor including vision, mission and objectives that are environmentally sound in *Adiwiyata* school team. Meanwhile dominant weakness factor involves the limited budget allocation for *Adiwiyata* development. The dominant factor of opportunity and threat including ability in following competencies in other activities in the field of environment and mutations of school principals or teachers, respectively. *Adiwiyata* regency school positions based on IFAS and EFAS analysis are in quadrant II (23,-5). Thus the coaching strategy includes (1) capacity building, skills and knowledge of *Adiwiyata* team through seminars and training funded by local government; (2) Budget allocation proportionally for supporting activities of *Adiwiyata* both from schools and local government that is regularly enrolled every year; (3) Vision, mission and school objectives must

accommodate local wisdom of the community in protecting the environment; (4) school principal and teacher mutations should consider tracking not on a pragmatic basis.

SUGGESTION

- (1) Student behaviours must reflect the attitude and character that uphold harmony with nature so as to create environmental conditions with high aesthetic value. Thus, *Adiwiyata* program must be supported by all students.
- (2) Educators with high integrity, capability and competence are the main key to the establishment of cultural, characterized, and competitive civilization. Therefore, educators should be an example for learners in an effort to maintain environmental sustainability.
- (3) Regency *Adiwiyata* schools should have optimism to achieve *Adiwiyata* award at a higher level by establishing partnerships with interested stakeholders.
- (4) The local government's favour towards *Adiwiyata* program will increase the quantity and quality of *Adiwiyata* schools.

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