

CONSERVATION EDUCATION FOR PRIMARY SCHOOLS  
IN BOGOR REGENCY  
TO SUPPORT THE CONSERVATION OF SALAK MOUNTAIN  
AS PART OF MOUNT HALIMUN-SALAK NATIONAL PARK



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**EDY SUTRISNO  
NANDA DWANASUCI  
SUPRIHATIN**

**SUPPORTED BY:  
RUFFORD SMALL GRANT FOR NATURE CONSERVATION**

**BIODIVERSITY CONSERVATION INDONESIA**

**2007**

## PREFACE

In year 2006, Biodiversity Conservation Indonesia conducted series of environmental activities with three partner schools in order to support the conservation of Salak Mountain as part of Gunung Halimun Salak National Park that supported by Rufford Small Grant for Nature Conservation.

Series of activities were conducted within this project by using school-based approach with the active participation and involvement of the school members, from the headmaster, teachers, and the students.

This report consist of information about the partner schools, participating teachers and students, the activities that conducted both with teachers and students, result from the activities and output that had been produced within this project.

## ACKNOWLEDMENT

Biodiversity Conservation Indonesia (BCI) is very grateful to the Rufford Small Grant for Nature Conservation for the full support to this project and to Headmaster, teachers and students in SD Ciasmara 05, SD Ciasihan 01 and SD Muara 03 for their full cooperation during the project were conducted.

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## I. BACKGROUND

Salak Mountain that is located about 40 km southern of Jakarta (capital city Indonesia) plays strategic ecology, economic and hydrologic role, both direct and indirect, to support the livelihood of people who live in its surrounding urban area, especially in Bogor and Sukabumi regency. As a conservation area and part of the greater Mount Salak-Halimun National Park, Salak Mountain is also considered to be an important area in West Java province. It has high biodiversity with 796 plant species (128 of it are endemics), and 175 birds species with 15 species categorizes as endangered species.

However, the conservation of Salak Mountain is being challenged by vast deforestation. Illegal logging, mining, human settlements, agricultural activities and road construction has increased the rate of deforestation in the area and threatened its ecological role. Although the central government tried to reduce the threat by strengthening its legal conservation status as part of the national park through the Ministry of Forestry Decree NO.175/Kpts-II/2003, many action and initiatives is still needed to save this important area.

Schools are an agent of change and should be actively involved in solving environments problems in their surrounding neighbourhoods. School could provide a "learning arena" for its members, both teachers and students, to comprehend and understand about the environment problems in their surrounding. Therefore, placing schools as target groups and conducting conservation education activities to increase the appreciation of the school's students toward the value of nature such as Salak Mountain is very important in supporting the conservation of the area.

## II. AIMS, OBJECTIVES, AND OUTPUTS

The approach used in this project is a school-based approach with the active participation and involvement of the school members, from the headmaster, teachers, and the students. The approach has several advantages: first, the participation will ensure the sustainability of the promoted activities as it is integrated in the school educational activities; secondly, by targeting school students as its primary focus, the impact of the project could be longer as it effect and change the children's perception about the environment; thirdly, the impact could be broader as the student will have adequate capability to transfer the knowledge at school to their parents (transmission of knowledge) and people that surround them.

The aims of this project is to enhance conservation awareness of the community around Salak Mountain

The objectives of the project are:

- To conduct a series of conservation campaign for three primary schools around Salak mountain through school visit program
- To enhance the incentive system as reward for schools and students who has commitment in environmental educations
- To develop commitment to Salak Mountain sustainability since early ages through environmental education

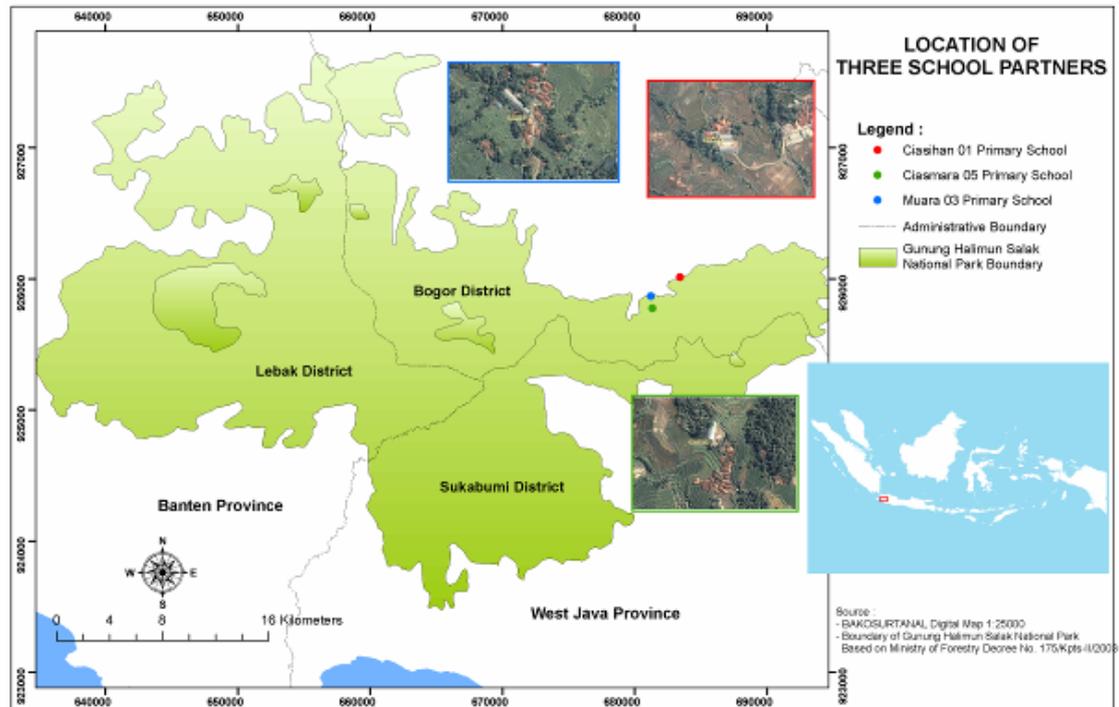
Outputs from this project are:

- Environmental education socialisation media,
- Three primary school with additional knowledge of environmental and conservation.

### **III. PARTNER SCHOOLS**

Site location was chosen based on information of deforested area in Salak Mountain. Based on spatial data analysis from Bogor Agricultural University (IPB), it was identified that the most deforested area in Salak Mountain is located in Pamijahan district, Bogor regency. Within Pamijahan district, three primary schools were chosen based on assessment result from 13 existing schools in the area. The assessment involved series of field visit and interviews with the headmaster and two teachers in each school. The assessment was intended to reveal their perception, motivation and expectation towards environmental and education matters. Based on the result, each school was valued, and then three schools with the highest point were chosen to become partner for the project. Those three primary schools are SD Ciasihan 01, SD Muara 03, and SD Ciasmara 05.

Picture



1.

Location of Three School Partners

## IV. ACTIVITIES

### 4.1. Teacher Meetings

The meetings were held after three schools partners were selected. First meeting with the three schools were carried out in order to explain and discuss the aims of the project, detail implementation technique, phase of activities, and gaining schools institutional commitment in implementing the project.

Meeting with teacher were conducted once in a month. The meeting served as 'enrichment forum' for teachers by inviting presentation and discussion between the teachers and various experts and practitioners on different subject in environmental fields. The topics in each meeting were selected based on teachers need and interest. The time for the monthly meeting was decided based on agreement among the teachers on the previous meeting. Location on monthly meeting decided used rolling mechanism between three schools partners.

The number of teachers who participated with this project was 28 teachers; consist of 14 teachers from SD Ciasihan 01, 8 teachers from SD Muara 03, and 6 teachers from SD Ciasmara 05.

**Table1.** The Result of Teacher Monthly Meeting

NO.	MONTH	TOPICS	SPEAKER	LOCATION
1.	February	Explanation of Environmental Education activities	Environmental Education team	Ciasihan 01
2.	March	School with environmental interest	Nandi Koesmaryandi, Lecturer in Bogor Agricultural university	Muara 03

3.	March	Information about National Park	Ismirza, Forest Ranger from Gunung Halimun-Salak National Park	Muara 03
4.	April	Experience sharing in managing green school	Enjam, Teacher on Sukamantri 01	Sukamantri 01
5.	May	Medicinal Plant	Agus Hikmat, Lecturer in Bogor Agricultural University	Ciasmara 05
6.	June	Inserting environmental education onto school curriculum	Burhanuddin Masy'ud, Lecturer in Bogor Agricultural University	Ciasihan 01
7.	July	Biodiversity surrounding school area as teaching media	Mulyadi Kamad, Staff PEKA NGO's	Muara 03
8.	August	Schools environmental healthy	Rosyad, staff on Public Health Centre	Ciasmara 05
9.	August	Visiting geothermal activities	Asrul, PR Chevron Geothermal	Chevron Geothermal site
10.	September	School and Traditional wisdom	Halim, Staff TELAPAK NGO's	Ciasihan 01
11.	October	Environmental with Religion perception	Wasto, Assembly at Bogor regency	Muara 03
12.	November	Planting activities	Environmental Education team	Ciasihan 01, Ciasmara 05, Muara 03

13.	December	Evaluation and reward presented	Environmental Education team	Gunung Sari resort
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## 4.2. Students Meetings

Based on agreement in the first teacher meeting, student meetings were conducted twice a month in each school, and within each school the meeting only involved one class in the project. Each schools recommended that students at the fifth grade which joining the project with 52 partners students in SD Ciasihan 01, 11 partner students in SD Ciasmara 05, and 50 partner students in SD Muara 03.

In student meeting, the project used combined presentation and practical methods towards the students. During the first meeting in each school, the meeting was focused more on the presentation about specific subject, while in the second meeting; the focus was more in practicing related activities with the subject that presented in the previous meeting. Subjects that were given to the students were arranged and prepared by conducting literature study and assessment to class teacher on subjects that the students should know.

Table 2. The Result of Students monthly meeting

NO.	MONTH	TOPICS	PRACTICE	RESULT
1.	March	Rubbish	Made rubbish tray	On each schools, students made two rubbish tray each by using bamboo materials
2.	April	Composting	Made simple composting	Composting didn't successfully because composting

				media were dry
3.	May	Flora diversity	Seedling activities	Students collected seed from surrounding schools area and put it in to poly bag
4.	June	Forest	Continuing seedling activities	Mostly seed in the poly bag was die cause students put it in the class and seldom in watering it
5.	July	Fauna diversity	Fauna observation	Students asked in field observation in toad and frogs in paddy field around school area at the night and birdwatching in the morning
6.	August	Ecosystem	Rice field ecosystem observation	Student made drawing of their environment
7.	September	Water	Water observation	Students asked to observe the water depth, river wide and also animals which lived in the river.
8.	October	Air	Air experiment	By using candle and glass, students made experiment of the existence of air
9.	November	Planting	Planting	Students with

			activities	teachers had planted various fruit seed in their schools
10.	December	Evaluation	Examination of subject that had been gave before	Percentage of participant students who understand and remembering the subject are 63.56% in Ciasihan 01, 61.40% in Ciasmara 05 and 68.70% in Muara 03

### 4.3. Rewards

As rewards for teachers who joining the project, BCI in cooperation with the local government of Bogor regency provided them with incentives and rewards. The local government, through the Bogor Education Bureau, awarded the participant certificate that signed by the head of the bureau that can be used to raise the teachers rank. As reward for the students, at the end of project they received schools bag with environmental massage in Sundanese local language. As rewards for the schools, the project distributed 200 tree seedling consist of three variety of fruits tree namely *Garcinia mangostana*, *Citrus nobilis*, and *Syzygium malaccense* and one variety of hard wood *Swietenia spp* to each school.

## V. THE RESULT AND THE CONTINUATION OF THE PROJECT

### 5.1. Result of the Project

The project has succeeded in producing several outputs, namely:

- **Teacher's modules.** About 100 exemplars consist of all writing materials that presented during teacher meeting distributed to school partners and other existing schools in Pamijahan district, Bogor education bureau and National Park management.
- **Student's handbooks.** About 180 exemplars consist of all writing materials and exercise that presented during students meeting distributed to school partners and other existing schools in Pamijahan district, Bogor education bureau and National Park management.
- **Water cycle poster.** About 190 exemplars distributed to school partners and other existing schools in Pamijahan district, Bogor education bureau and National Park management. These posters told about water cycle in the world.
- **School bag.** About 150 pieces distributed to all participating students in the project.
- **Monthly bulletin called "bokor".** Distributed to the existing primary schools in Pamijahan district consists of information related to Salak mountain biodiversity, medicinal plant, green tips and other environmental activities.

As expected before, teachers who participated in this project has additional knowledge in environmental education and teaching techniques and also can optimize school potency as teaching media. So that aim of this project in enhancing conservation awareness of the community around Salak Mountain still continues through the teachers.

## **5.2. Continuation of the Project**

Through this project, not only schools partners but also all primary schools in Pamijahan district and the Bogor Education Bureau received teachers module consist of subject that gave by the speakers during the project and students handbooks that consist of series of activities that conducted with student's partners during this project. This distribution has aims that each schools which receiving it has guidance and examples in inserting environmental education to their teaching activities, so that aims of this project can be continued by the teachers.

## VI. BUDGET EXPENSE

This project was used £5000.00 of the grant received from Rufford Small Grant for Nature Conservation. These expenses have some correction and additional items from the budget proposed before. Detail budget expense shown in Table 3.

Table 3. Detail Budget Expense

<b>N o</b>	<b>ITEM</b>	<b>PROPOSED</b>	<b>REAL</b>	<b>BALANCE</b>
<b>1</b>	<b>Stationary</b>			
	A4 paper	£ 15.00	£ 8.60	£ 6.40
	Ink printer B&W Desk jet HP 610C	£ 30.00	£ 28.60	£ 1.40
	Ink printer colour Desk jet HP 610C	£ 40.00	£ 2.28	£ 37.72
	Diskette	£ 5.00	£ -	£ 5.00
	Film (including processing)	£ 150.00	£ 138.40	£ 11.60
	Schools bag	£ 1,000.00	£ 426.60	£ 573.40
	Flash Disk	£ -	£ 10.00	-£ 10.00
<b>2</b>	<b>Environmental education activity</b>			
	Educational and activity material developing	£ 750.00	£ 333.23	£ 416.77
	Teacher & Students Meeting	£ 1,440.00	£1,334.20	£ 105.80
	Teacher module and Students Hand book	£ -	£ 656.20	-£ 656.20
	Nursery and planting activities	£ 270.00	£ 164.45	£ 105.55
	Production & Distribution "Bokor"	£ -	£ 239.70	-£ 239.70
<b>3</b>	<b>Salaries</b>	£ 1,200.00	£1,557.74	-£ 357.74
<b>4</b>	<b>Report writing, photocopying and dissemination</b>	£ 100.00	£ 100.00	£ -
<b>TOTAL</b>		<b>£ 5,000.00</b>	<b>£5,000.00</b>	<b>£ 0.00</b>

# APPENDIX

## Appendix 1. Documentation of Teacher Activities



## Appendix 2. Documentation of Students Activities

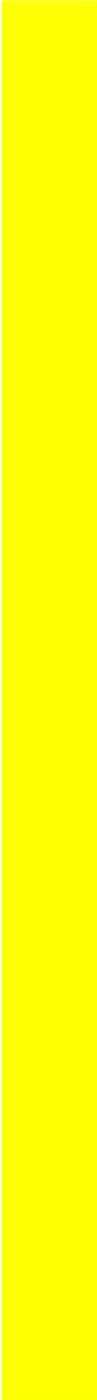


### Appendix 3. Documentation of Tree Planting



Appendix 4. (a) & (b) School Bag; (c) Water Cycle Poster; (d) Moduls; (e) Bulletin "Bokor"; (f) Certificates for Teachers





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