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Issues left	Critical	Advanced

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161	**Correctness**	
22	Misspelled words	
5	Unknown words	
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67	Improper formatting	
26	Determiner use (a/an/the/this, etc.)	
1	Redundant words	
1	Wrong or missing prepositions	
2	Incorrect noun number	
9	Punctuation in compound/complex sentences	
1	Misuse of semicolons, quotation marks, etc.	
1	Misplaced words or phrases	
1	Pronoun use	
1	Incomplete sentences	
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14	**Engagement**	
14	Word choice	
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1	Intricate text	
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rare words

Word Length

4.7

Measures average word length

characters per word

Sentence Length

9.1

Measures average sentence length

words per sentence

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Modelling[1] rice production in Central Java using semiparametric regression of local polynomial kernel approach

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Modelling rice production in Central Java using semiparametric regression of local polynomial kernel approach

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Abstract. Indonesia is an agricultural country with rice as one of the staple foods. Production of rice in the province of Central Java is the highest in Indonesia. The purpose of this study was to model rice production in 31 districts/ cities in Central Java Province using semiparametric regression. Semiparametric regression is a combination of parametric and nonparametric regression. Parametric regression curves have a patterned, for example linear, quadratic, and cubic. Nonparametric regression has a smooth curve of the unknown pattern, so in this case required smoothing technique used to smooth curves that one of them is the local polynomial kernel approach and the election of bandwidth the optimal using method Generalized Cross Validation (GCV). Variables used in the study of the production of rice as the response variable, while the predictor variables that harvested area and rainfall. The data used are secondary data from the official website of Central Bureau of Statistics (BPS) of Central Java. Based on the results obtained by applying the model the optimal bandwidth values is 0.43 and polynomial order p =2 when the minimum GCV so the results of the estimation model R2 is 0.968

1. Introduction

Regression analysis has long been developed to investigate the relationship patterns and effect of predictor variables on response variable by estimating the regression curve. In relation to estimating
regression curves, there are three regression models that can be used; parametric, nonparametric, and semiparametric regression models.
In some cases, a response variable is recognized for its pattern with one of its predictor variables, but with other predictor variables the pattern of

relationship is not recognized[46]. In the state, [10] suggested using a[47] [48] semiparametric regression approach[49][50]. Some popular[51] semiparametric regression[52] [53] models are kernel[54], spline, local polynomial, Fourier series and[55] others. Semiparametric regression is a combination of parametric and nonparametric regressions. One of[56] advantage[57] of Semiparametric is able to[58] model the data with two component[59,60] such[61] as parametric and nonparametric,[62] so that the modelling[63] will be optimal.

According to [7] and [6], one of the advantages of using Local[64] Polynomial estimator is that they are

theoretically easy to analyze. Besides, the other advantage[65] is that it is able to[66] reach the level of convergence. The previous study uses a nonparametric approach of Local Polynomial was [4] who

2

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conducted a study on the estimation of confidence interval of nonparametric regression curve with lognormal errors based on Local Polynomial estimator. [12] investigated local polynomial nonparametric regression estimates on longitudinal data, and [13] conducted a research on sea tide modelling using nonparametric regression of Local Polynomial. The previous study using Local Polynomial Semiparametric regression approach was conducted by [11] on longitudinal data

Paddy is a rice-producing plant used as the main foodstuff for almost 90% of the Indonesian population. The main problem faced in increasing rice production is that still relies on Java Island as the main producer of rice in Indonesia. The rice production in Java reached 56 percent. Java Island serves as a buffer for national rice production [8]. Rice production in Java Island from year to year shows an unstable condition, and it even tends to decline. The decline in rice production was mainly due to a decrease in harvested area and unsupportive weather. In fact, Central Java is one of the largest rice producing provinces in Indonesia with 97 percent of its total rice production as wet land paddy and the rest is dry land paddy. The decrease in harvested area can be explained by population growth every year which causes the demand for housing and infrastructure lands and the changes in the function of agricultural land for industrial development and others [9].

The research on the models and factors that influenced the production of rice in Central Java had been widely conducted. [1] conducted a research on rice production modelling in Central Java using an approach of Fourier series. This study discussed the modelling of wetland rice production in Central Java in 2015. The variables used in this study were: wetland rice production as the response variable and harvested area and rainfall as the predictor variables. The predictor variable with linear relationship with the response variable was harvested [100] area, and the predictor variable with unknown pattern form with the response variable was rainfall.

2. Local polynomial kernel

The method of nonparametric regression is the regression method used when the curve is relationship [101]

between dependent [102] and independent variable [103], and Independent [104] variable is not known for the form and pattern. The common nonparametric regression model is as follows [5]:

= dependent variable

= independent variable

yi [105] (xi) ei [106] ;i 1,2,..n

(1)

The function curve of (xi)

is assumed to be smooth in certain function spaces. According to [11], the regression model of Semiparametric Regression Local Polynomial Kernel as in the equation: (2).

(xi)

function [107] is a function of unknown shape called regression function. Suppose x is a predictor

variable where the function be [108] estimated by local polynomial kernel estimators [1]

.

0 i [110] 1 [111] i [112] 2 [113] i

i [114]

p

y t t 2 ... t [115]

 p (xi) ei , ;i 1,2,...,n . (2) [116] [117]

With,

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doi:10.1088/1742-6596/1217/1/012108 [118]

; ; ; . [119] [120] [121]

With,

1 (x x)

(x x)2

.

.

(x x) p

1

1 1

4

2 p

4

1 (x x)

1

(x4 x)

 (x x)

1

1 (x5

 x)

(x5

 x)2

(x5

 x) p

C

1 (x10

 x)

(x10

 x)2

(x10

 x) p

1 (x15

 x)

(x15

 x)2

(x15

 x) p

1 (xn x)

2

(xn x)

p

(xn x)

The kernel function K with bandwidth (h) is defined as follows: K

(x) 1 K (x)

With Gaussian Kernel: K (x)

ex

1 1 p

2 2

h h h

x2 , x

3. Rice production

Indonesia Ministry of Agriculture data indicates that from 1981 to 1985 and from 1998 to 1999, the

conversion of paddy in Indonesia is an agricultural country with one of the staple food in Indonesia is rice [3]. The majority of rice field conversion took place in Java, which had accounted for 60% of national rice production. Production of rice in the province of Central Java is the highest in Java. In Central Java according to the Central Bureau of Statistics paddy crop production is fluctuating [2].

This results in the need for modelling to predict and know how to change productivity wetland paddy in Central Java. The result of the modelling is expected to help the concerning parties the strategic steps is needed to be done so that not suffering significant losses. Therefore, the appropriate statistical method[130] for[131] modelling[132,133] productivity[134] wetland[135] paddy[136] in[137] Central Java is[138] using[139] the[140] semiparametric regression approach of Local Polynomial Kernel.

4. Research method

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4.1 Data source and research variable

The data used in this study was the secondary data obtained from the Central Bureau of Statistics of Central Java Province in 2015. In this study, a research unit of 31 districts/ cities in Central Java Province in 2015 was used[142]. The variables examined in this study consisted of response and predictor variables. The response variable was the production of wetland rice, and the predictor variables were harvested area and rainfall.

4.2 Analysis method

The analysis stages used in this study were:

1) Making a plot of rice production data with the factors deduced to influence it

2) Creating an algorithm and program for determining the polynomial order and optimal bandwidth using the GCV method

3) After obtaining polynomial order and optimal bandwidth, the next step was to create an algorithm and estimation program for semiparametric regression models using Local Polynomial Kernel approach

Modeling rice productivity in Central Java with the factors deduced to influence it using a semiparametric regression approach of Local Polynomial Kernel

5. Results and discussions

4.1 Rice Production Plot and the Influencing Factors

Rice production is influenced[143] by several factors,such[144] as harvested area and rainfall. The relationship of these factors with rice production had a patterned curve, and some curves had unknown patterns. Therefore, the modeling that could be applied was semiparametric regression of kernel local polynomials. The first step to get a semiparametric regression model was to create a scatterplot to determine the[145] parametric[146] and[147] nonparametric[148] components[149]. The following is a scatterplot of rice production with the influencing[150] factors:

Figure 1. Scatterplot harvested area versus rice production

Figure 2. Scatterplot rainfall versus rice production

Based on the scatterplot above, it can be seen that figure 1 shows the rice production with harvested[151] area included in parametric components, and the variable of rice production with rainfall included in nonparametric components.

4.2 Making algorithm and programming the rice production modelling[152] in Central Java using semiparametric regression approach of Kernel Local Polynomial

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doi[153]:10.1088/1742-6596/1217/1/012108

The algorithm was used [154] to make the program in software R used to obtain the estimator of the semiparametric regression model of population [155] mean based [156] on the the estimator [157] of local [158] polynomial kernel as follow as:

A. The algorithm of optimal bandwidth (h) and polynomial order.

The steps to determine the optimal bandwidth (h) and polynomial order with the criteria of GCV were as follows:

1) Defining the response, parametric and nonparametric predictor variables

2) Determining the Gaussian Kernel function

3) Determining the polynomial order of p

4) Determining the set of Bandwidth h Є [bb, ba]

5) For each h Є [bb, ba] and the polynomial order of p, the GCV was calculated [159] using the following

steps:

a. Getting the matrix of

b. Getting the matrix [160] of . [161][162] c. Getting the matrix of

d. Getting the matrix of

e. Determine the value of

6) Based on step 5, the minimal [163] GCV was selected. The value [164] of corresponding bandwidth and polynomial order to minimal GCV is optimal bandwidth and polynomial order

B. Algorithm of semiparametric regression model estimates based on the estimator of local [165] polynomial kernel

The steps to estimate the model used polynomial order and optimal bandwidth

obtained from

algorithm [166] in part A as follows:

1) Defining the response variable Y and the predictor variable X

2) Determining the Gaussian Kernel function

3) Inputting the [167] optimal bandwidth value and polynomial order obtained from

algorithm [168] in part A.

4) Getting the matrix of

5) Getting the matrix of [169] . [170]

6) Getting the matrix of

7) Calculating the error value of e y yˆ

n

i

8) Calculating the value of MSE(h) , with MSE(h) n1 (y

i1

□

i

yˆ)2

4.3 Selection of optimal bandwidth (h)

Before making the model, the optimal bandwidth and polynomial order were determined in advance using the GCV method. table [171] 1 shows the results of GCV values for each bandwidth value and polynomial order.

The selection of optimal bandwidth (h) and polynomial order was seen [172] from the minimum GCV

value. Based on Table 1, the minimal GCV value is 1442709112, so the optimal bandwidth is 0.43 and [173] the polynomial order is 2.

Table 1. GCV value in bandwidth and polynomial order

Polynomial Order	Bandwidth	GCV
1	0.33	1442709725
2	0.43	1442709112
3	0.16	1442709725
4	0.16	1442709725

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doi[174]:10.1088/1742-6596/1217/1/012108

4.4 Rice production modelling[175] using the semiparametric regression of local polynomial kernel

To obtain the parameters, both parametric and nonparametric components, can form a semiparametric regression modeling of local[176] polynomial kernel as follows:

)))

y = xβ + TM + ε

The following is the equation of the semiparametric model of local[177] polynomial kernel:

i

i

y (-2.42x10-11) 6.23x

- 5490.13 (ti

137.6)185.62 (ti

137.6)2 565.09 / 2!

4.5 The comparison of rice production prediction results with the actual data

Having known the modeling of rice production[178], the next step was to compare the predicted results[179] of rice production based on the results of semiparametric[1] regression of local polynomial kernel modeling with actual data. The following is the figure of the data plot as the prediction results with the raw data:

Figure 3. Comparison of rice prediction with raw data

Based on the graph, it can be stated[181] that the actual response data with the predictive response data have the same data pattern. Then, the obtained modelling[182] is suitable for predicting rice production. The region with the lowest prediction value of rice production is in the city of Salatiga. The average rice production in Central Java is 354432.6 kg, while the average prediction of rice production using the local polynomial kernel semiparametric model is 356368.2 kg.

4.6 Model goodness of fit

The model goodness of fit can be seen in the coefficient of determination (R2) and Mean Square Error (MSE). The higher the coefficient of determination[183], the better the model, and the smaller the MSE value the[184] better the model. The results of the R program show that the coefficient[185] of determination and MSE are 0.9681 and 1262558130. It means that 96.81% of the predictor variables can explain the variance of the response variable, while the remaining 3.19% is influenced by other factors.[186]

5. Conclusion

The Rice Production Modelling using Semiparametric Regression of Kernel Local Polynomial as

follow as[187]:

i

i

y (-2.42x10-11) 6.23x

- 5490.13 (ti

137.6)185.62 (ti

137.6)2 565.09 / 2!

The regression model has the coefficient of determination (R2) of 0.9681 and MSE value of

1262558130. It shows that the predictor variables of harvest area and rainfall have the ability to[188] explain the variance of rice production by 96.81% and[189] the remaining 3.19% is explained[190] by other variables which are[191] not included[192] in this study.

Acknowledgment

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doi[193]:10.1088/1742-6596/1217/1/012108

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of
Muhammadiyah Semarang.

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Matematika UNDIP.

1.	~~Modelling~~ → Modeling	Mixed Dialects of English	Correctness
2.	~~et al~~ → et al.	Comma Misuse within Clauses	Correctness
3.	*was downloaded*	Passive Voice Misuse	Clarity
4.	~~doi~~ → DOI	Misspelled Words	Correctness
5.	~~Modelling~~ → Modeling	Mixed Dialects of English	Correctness
6.	~~Soedharto~~ → Soeharto	Misspelled Words	Correctness
7.	~~was to~~ → was to	Improper Formatting	Correctness
8.	~~to model~~ → to model	Improper Formatting	Correctness
9.	~~model rice~~ → model rice	Improper Formatting	Correctness
10.	rice production	Improper Formatting	Correctness
11.	~~production in~~ → production in	Improper Formatting	Correctness
12.	~~cities in~~ → cities in	Improper Formatting	Correctness
13.	~~Province using~~ → Province using	Improper Formatting	Correctness
14.	semiparametric regression	Improper Formatting	Correctness
15.	Semiparametric regression	Improper Formatting	Correctness
16.	~~regression is~~ → regression is	Improper Formatting	Correctness
17.	~~combination of~~ → combination of	Improper Formatting	Correctness
18.	~~of parametric~~ → of parametric	Improper Formatting	Correctness
19.	~~parametric and~~ → parametric and	Improper Formatting	Correctness
20.	example,	Punctuation in Compound/Complex Sentences	Correctness

21.	case,	Comma Misuse within Clauses	Correctness
22.	polynomial kernel	Improper Formatting	Correctness
23.	kernel approach	Improper Formatting	Correctness
24.	~~approach and~~ → approach and	Improper Formatting	Correctness
25.	~~and the~~ → and the	Improper Formatting	Correctness
26.	~~the election~~ → the election	Improper Formatting	Correctness
27.	~~election of~~ → election of	Improper Formatting	Correctness
28.	~~of bandwidth~~ → of bandwidth	Improper Formatting	Correctness
29.	~~bandwidth the~~ → bandwidth the	Improper Formatting	Correctness
30.	~~the optimal~~ → the optimal	Improper Formatting	Correctness
31.	~~optimal using~~ → optimal using	Improper Formatting	Correctness
32.	~~using method~~ → using method	Improper Formatting	Correctness
33.	Cross-Validation	Misspelled Words	Correctness
34.	the Central	Determiner Use (a/an/the/this, etc.)	Correctness
35.	The regression	Determiner Use (a/an/the/this, etc.)	Correctness
36.	*been developed*	Passive Voice Misuse	Clarity
37.	the response	Determiner Use (a/an/the/this, etc.)	Correctness
38.	~~In relation to~~ → About, To, With, Concerning	Wordy Sentences	Clarity
39.	~~estimating~~ → determining	Word Choice	Engagement

40.	three regression models can	Wordy Sentences	Clarity
41.	*be used*	Passive Voice Misuse	Clarity
42.	*is recognized*	Passive Voice Misuse	Clarity
43.	predictor variables	Improper Formatting	Correctness
44.	variables,	Comma Misuse within Clauses	Correctness
45.	~~pattern~~ → design	Word Choice	Engagement
46.	~~recognized~~ → known, identified	Word Choice	Engagement
47.	suggested using	Improper Formatting	Correctness
48.	~~using a~~ → using a	Improper Formatting	Correctness
49.	semiparametric regression	Improper Formatting	Correctness
50.	regression approach	Improper Formatting	Correctness
51.	~~Some popular~~ → Some popular	Improper Formatting	Correctness
52.	popular semiparametric	Improper Formatting	Correctness
53.	semiparametric regression	Improper Formatting	Correctness
54.	the kernel	Determiner Use (a/an/the/this, etc.)	Correctness
55.	, and	Comma Misuse within Clauses	Correctness
56.	~~of~~	Wrong or Missing Prepositions	Correctness
57.	the advantage	Determiner Use (a/an/the/this, etc.)	Correctness
58.	~~is able to~~ → can	Wordy Sentences	Clarity
59.	~~two component~~ → two-component	Misspelled Words	Correctness

60.	~~component~~ → components	Incorrect Noun Number	Correctness
61.	, such	Punctuation in Compound/Complex Sentences	Correctness
62.	nonparametric,	Punctuation in Compound/Complex Sentences	Correctness
63.	~~modelling~~ → modeling	Mixed Dialects of English	Correctness
64.	a Local	Determiner Use (a/an/the/this, etc.)	Correctness
65.	~~advantage~~ → power	Word Choice	Engagement
66.	~~is able to~~ → can	Wordy Sentences	Clarity
67.	*be used*	Passive Voice Misuse	Clarity
68.	~~licence~~ → license	Mixed Dialects of English	Correctness
69.	, and	Comma Misuse within Clauses	Correctness
70.	~~licence~~ → license	Mixed Dialects of English	Correctness
71.	~~doi~~ → DOI	Misspelled Words	Correctness
72.	the confidence	Determiner Use (a/an/the/this, etc.)	Correctness
73.	~~a~~ research	Determiner Use (a/an/the/this, etc.)	Correctness
74.	~~modelling~~ → modeling	Mixed Dialects of English	Correctness
75.	using nonparametric	Improper Formatting	Correctness
76.	nonparametric regression	Improper Formatting	Correctness
77.	~~regression of~~ → regression of	Improper Formatting	Correctness
78.	~~conducted~~ → done	Word Choice	Engagement

79.	it still	Incomplete Sentences	Correctness
80.	~~main~~ → leading, primary	Word Choice	Engagement
81.	~~In fact,~~	Wordy Sentences	Clarity
82.	~~rice producing~~ → rice-producing	Misspelled Words	Correctness
83.	, with	Punctuation in Compound/Complex Sentences	Correctness
84.	~~wet land~~ → wetland	Confused Words	Correctness
85.	, and	Punctuation in Compound/Complex Sentences	Correctness
86.	the harvested	Determiner Use (a/an/the/this, etc.)	Correctness
87.	, which	Punctuation in Compound/Complex Sentences	Correctness
88.	*been widely conducted*	Passive Voice Misuse	Clarity
89.	~~conducted~~ → did	Word Choice	Engagement
90.	~~a~~ research	Determiner Use (a/an/the/this, etc.)	Correctness
91.	~~research~~ → study	Word Choice	Engagement
92.	researched	Wordy Sentences	Clarity
93.	~~modelling~~ → modeling	Mixed Dialects of English	Correctness
94.	~~This study~~ → This study	Improper Formatting	Correctness
95.	~~modelling~~ → modeling	Mixed Dialects of English	Correctness
96.	~~of wetland~~ → of wetland	Improper Formatting	Correctness

97.	~~production in~~ → production in	Improper Formatting	Correctness
98.	~~Java in~~ → Java in	Improper Formatting	Correctness
99.	a linear	Determiner Use (a/an/the/this, etc.)	Correctness
100.	~~harvested~~ → collected	Word Choice	Engagement
101.	the relationship, or a relationship	Determiner Use (a/an/the/this, etc.)	Correctness
102.	the dependent	Determiner Use (a/an/the/this, etc.)	Correctness
103.	~~variable~~ → variables	Incorrect Noun Number	Correctness
104.	the Independent	Determiner Use (a/an/the/this, etc.)	Correctness
105.	~~yi~~ → Yi	Misspelled Words	Correctness
106.	*ei*	Unknown Words	Correctness
107.	the function, or a function	Determiner Use (a/an/the/this, etc.)	Correctness
108.	~~function be~~ → function be	Improper Formatting	Correctness
109.	local polynomial kernel estimators estimate the function	Passive Voice Misuse	Clarity
110.	~~i~~ → I	Misspelled Words	Correctness
111.	~~1~~ → one	Improper Formatting	Correctness
112.	~~i~~ → I	Misspelled Words	Correctness
113.	~~2~~ → two	Improper Formatting	Correctness
114.	i ~~i~~	Misspelled Words	Correctness

115.	...	Misuse of Semicolons, Quotation Marks, etc.	Correctness
116.	~~t p~~ → tp	Confused Words	Correctness
117.	*ei*	Unknown Words	Correctness
118.	~~doi~~ → DOI	Misspelled Words	Correctness
119.	;-;	Improper Formatting	Correctness
120.	;-;	Improper Formatting	Correctness
121.	;-.	Improper Formatting	Correctness
122.	x2-,	Improper Formatting	Correctness
123.	Java,	Comma Misuse within Clauses	Correctness
124.	Statistics,	Comma Misuse within Clauses	Correctness
125.	*This*	Intricate Text	Clarity
126.	~~modelling~~ → modeling	Mixed Dialects of English	Correctness
127.	~~modelling~~ → modeling	Mixed Dialects of English	Correctness
128.	*is expected*	Passive Voice Misuse	Clarity
129.	*be done*	Passive Voice Misuse	Clarity
130.	statistical method	Improper Formatting	Correctness
131.	~~method for~~ → method for	Improper Formatting	Correctness
132.	~~for modelling~~ → for modelling	Improper Formatting	Correctness
133.	~~modelling~~ → modeling	Mixed Dialects of English	Correctness

134.	modelling productivity	Improper Formatting	Correctness
135.	productivity wetland	Improper Formatting	Correctness
136.	~~wetland paddy~~ → wetland paddy	Improper Formatting	Correctness
137.	~~paddy in~~ → paddy in	Improper Formatting	Correctness
138.	~~Java is~~ → Java is	Improper Formatting	Correctness
139.	~~is using~~ → is using	Improper Formatting	Correctness
140.	~~using the~~ → using the	Improper Formatting	Correctness
141.	~~doi~~ → DOI	Misspelled Words	Correctness
142.	*was used*	Passive Voice Misuse	Clarity
143.	*is influenced*	Passive Voice Misuse	Clarity
144.	, such	Improper Formatting	Correctness
145.	~~determine the~~ → determine the	Improper Formatting	Correctness
146.	~~the parametric~~ → the parametric	Improper Formatting	Correctness
147.	~~parametric and~~ → parametric and	Improper Formatting	Correctness
148.	and nonparametric	Improper Formatting	Correctness
149.	nonparametric components	Improper Formatting	Correctness
150.	~~the~~ influencing	Determiner Use (a/an/the/this, etc.)	Correctness
151.	the harvested	Determiner Use (a/an/the/this, etc.)	Correctness
152.	~~modelling~~ → modeling	Mixed Dialects of English	Correctness
153.	~~doi~~ → DOI	Misspelled Words	Correctness

154.	*was used*	Passive Voice Misuse	Clarity
155.	the population, or a population	Determiner Use (a/an/the/this, etc.)	Correctness
156.	~~based~~	Redundant Words	Correctness
157.	the ~~the~~ estimator	Misspelled Words	Correctness
158.	the local	Determiner Use (a/an/the/this, etc.)	Correctness
159.	*was calculated*	Passive Voice Misuse	Clarity
160.	~~matrix~~ → form, model, pattern, array	Word Choice	Engagement
161.	*of*	Inappropriate Colloquialisms	Delivery
162.	of-.	Improper Formatting	Correctness
163.	~~the~~ minimal	Determiner Use (a/an/the/this, etc.)	Correctness
164.	~~value~~ → amount, cost	Word Choice	Engagement
165.	the local	Determiner Use (a/an/the/this, etc.)	Correctness
166.	the algorithm, or an algorithm	Determiner Use (a/an/the/this, etc.)	Correctness
167.	~~Inputting the~~ → Inputting the	Improper Formatting	Correctness
168.	the algorithm, or an algorithm	Determiner Use (a/an/the/this, etc.)	Correctness
169.	*of*	Inappropriate Colloquialisms	Delivery
170.	of-.	Improper Formatting	Correctness

171.	~~table~~ → Table	Improper Formatting	Correctness
172.	*was seen*	Passive Voice Misuse	Clarity
173.	, and	Punctuation in Compound/Complex Sentences	Correctness
174.	~~doi~~ → DOI	Misspelled Words	Correctness
175.	~~modelling~~ → modeling	Mixed Dialects of English	Correctness
176.	the local	Determiner Use (a/an/the/this, etc.)	Correctness
177.	the local	Determiner Use (a/an/the/this, etc.)	Correctness
178.	*Having known the modeling of rice production*	Misplaced Words or Phrases	Correctness
179.	~~results~~ → effects	Word Choice	Engagement
180.	the semiparametric	Determiner Use (a/an/the/this, etc.)	Correctness
181.	*be stated*	Passive Voice Misuse	Clarity
182.	~~modelling~~ → modeling	Mixed Dialects of English	Correctness
183.	~~determination~~ → confidence, independence, judgment	Word Choice	Engagement
184.	, the	Punctuation in Compound/Complex Sentences	Correctness
185.	~~coefficient~~ → ratio	Word Choice	Engagement
186.	other factors influence the remaining 3.19%	Passive Voice Misuse	Clarity
187.	~~as~~ → us	Confused Words	Correctness

188.	~~have the ability to~~ → can	Wordy Sentences	Clarity
189.	, and	Punctuation in Compound/Complex Sentences	Correctness
190.	*is explained*	Passive Voice Misuse	Clarity
191.	~~which are~~ → that are	Pronoun Use	Correctness
192.	*are not included*	Passive Voice Misuse	Clarity
193.	~~doi~~ → DOI	Misspelled Words	Correctness
194.	~~Asrini~~ → Asrani	Misspelled Words	Correctness
195.	~~dalam~~ → Dalam	Misspelled Words	Correctness
196.	~~padi~~ → PADI	Misspelled Words	Correctness
197.	*tertinggi*	Unknown Words	Correctness
198.	~~dalam~~ → Dalam	Misspelled Words	Correctness
199.	*tahun*	Unknown Words	Correctness
200.	*terakhir*	Unknown Words	Correctness
201.	~~Dengan error~~ → Dengan error	Improper Formatting	Correctness
202.	~~Aplications~~ → Applications	Misspelled Words	Correctness
203.	~~Susianto~~ → Susanto	Misspelled Words	Correctness
204.	*Content from this work may be used under the terms of the Creative Commons Attribution 3.0 licence. Any further distribution of this work must maintain attribution to the author(s) and the title of the work, journal citation and DOI.*	Original content from this work may be used under the ... https://www.coursehero.com/file/phj0hh/Original-content-from-this-work-may-be-used-under-the-terms-of-the-Creative/	Originality