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Land Conservation Program Paddy Fields

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Abstract- This study discusses the conversion of paddy fields in the village Sekarsuli Berbah District of Sleman which continued to increase from time to waktu. Kabupaten Sleman establish areas of productive agricultural centers to maintain the ability to produce food, especially rice. For research purposes; (1) identify the value of land and land development rights value fields and, (2) identify the response of farmers to estimate the value of land development rights if it is offered as a basis for determining the value of conservation programs. Subjects were farmers in the Sekarsuli as many as 35 people using primary sampling. Data snowball of observations using instruments terbuka. Data questionnaire secondary use of data from BPS. Paddy land conservation programs will be sustained when the value of the program is received and in accordance with the expectations of land owners. One model for determining the conservation program is the value of land development rights. The value of land development rights is the difference between the expected value of optimal land to the value of land. Estimated value of the subsequent land development rights offered to landowners if they agreed that if the value was used as the basis of determining the value of land conservation programs. Response data analysis techniques landowners using logit regression. The estimation results concluded (1) obtained an average value of land use by 55% of the estimated value of optimal land. The amount of excess is an average of 45%, referred to as the value of land development rights (Value Development Right). (2) Respondents agree with the conservation program as many as 24 respondents, disagree as much as 11 responden.Luas land and public facilities Distance lands to be an influential factor on the farmer's decision to accept or reject the offered programs.
Keywords: conservation of paddy fields, and the value of land

Abstrak- Penelitian ini membahas tentang alih fungsi lahan persawahan di Desa Sekarsuli Kecamatan Berbah Kabupaten Sleman yang terus mengalami peningkatan dari waktu ke waktu.Kabupaten Sleman menetapkan kawasan sentra pertanian produktif untuk menjaga kemampuan memproduksi pangan khususnya padi. Tujuan penelitian untuk;(1)mengidentifikasi nilai guna lahan dan nilai hak pengembangan lahan persawahan dan,(2)mengidentifikasi respon petani terhadap estimasi nilai hak pengembangan lahan jika ditawarkan sebagai dasar penetapan nilai program konservasi. Subjek penelitian adalah petani di Desa Sekarsuli sebanyak 35 orang menggunakan *snowball sampling*.Data primer dari observasi menggunakan intrumen kuesioner terbuka.Data sekunder menggunakan data dari BPS. Program konservasi lahan persawahan akan berkelanjutan ketika nilai program diterima dan sesuai dengan harapan pemilik lahan. Salah satu model penentuan nilai program konservasi adalah nilai hak pengembangan lahan. Nilai hak pengembangan lahan adalah selisih antara ekspektasi nilai lahan optimal dengan nilai guna lahan. Estimasi nilai hak pengembangan lahan selanjutnya ditawarkan kepada pemilik lahan apakah mereka setuju jika nilai itu digunakan sebagai basis penentuan nilai program konservasi lahan. Teknik analisis data respon pemilik lahan menggunakan regresi logit. Hasil estimasi disimpulkan (1) diperoleh rata-rata nilai guna lahan sebesar 55% dari estimasi nilai lahan optimal. Besarnya kelebihan adalah rata-rata sebesar 45%, disebut sebagai nilai hak pengembangan lahan (*Value Development Right*). (2) Responden setuju dengan program konservasi sebanyak 24 responden,tidak setuju sebanyak 11 responden.Luas lahan dan Jarak lahan ke fasilitas umum merupaka faktor yang berpengaruh terhadap keputusan petani untuk menerima atau menolak program yang ditawarkan.
Kata kunci : konservasi lahan persawahan, dan nilai guna lahan

Background

Sectoral approach in the improvement, planning and control in the aspect of economic development is the effort made in improving kesejatraan each individual which is the smallest in a component within a region. Determination of the leading sectors in improving the livelihoods of the main factors that must be considered by the government ranging from the center to the regions by adjusting the culture and local culture.

The agricultural sector is the livelihood livelihoods for the people of Asia, especially Indonesi. Nearly 70% of Indonesian society berusahan in agriculture from start to agriculture agri-food

industry. However, in its development of agricultural sector began excluded from the development of other sectors, is visible from land requirement distracted pressure kesektor other functions. This problem is a problem faced kompel in Indonesia, from provincial to district level.

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Based on data from the Department of Agriculture and Forestry Sleman, the effect of the conversion of land to productive agricultural land, especially paddy, were really the case, as has been experienced in most of the other regions in Indonesia. The following data shows the rate of change of the growth of paddy fields and yards in Sleman district during the period of 2005 - 2008, as shown in table 1.

Table 1. Developments Land Rice fields and Land courtyard in Sleman

No	Year	Paddy Fields (ha)	Fields (ha)
1	2006	25.135,4370	18.578,9791
2	2007	25.127,0193	18.587,2869
3	2008	25.003,3464	18.636,0952
4	2009	24.983,2721	18.657,4358
5	2010	24.889,6127	18.429,6855

Source: BPS, Courtyard Sleman in Figures, 2007-2011

BPS data from the years 2006-2011 directing that a change of productive land use for approximately 2 percent per year, while the area of yard area showed a tendency to rise an average of 0.74 percent annually based on table 1.1. The ratio of the rice fields in Sleman district with a total area of paddy province reached 41 percent. Terlihan decrease of the total land area of rice fields in Sleman especially and general DIY Province The influence of the expansion of the city of Yogyakarta that suppress the change of land use in Sleman. Sleman regency which has an area of 24889.61 hectares of paddy fields. Included in the green area and affordable technical irrigation systems. Sekarsuli village threatened this land conversion terliahat with the number of land began to be land ready for habitation. Sustainable agricultural land conservation program productive central region is expected to run and reduce the rate of conversion of paddy fields. The big question, remember there is no basis for the application mechanism of the value of land development rights. The problem is not land conservation program based on the value of land development rights.

Research Purposes
1. Identify the value of land and development rights value of rice fields.
2. Identify the land owner's response to the estimated value of the land development rights if it is offered as a basis for determining the value of conservation programs.

Literature Review
Profile Rice fields in Sleman

Sleman district is an area mainstay agricultural pengahsil for DIY Degradation of agricultural land lost due to economic transformation (of agricultural land to non-agricultural land) can disrupt the agricultural activities in Sleman. Classic problem faced unresolved as the decline in soil fertility, fertilizer scarcity in the market, and the availability of water resources is a cause of the decline in results pertania (Widjanarko et al, 2006: 21). Picture of declining agricultural area in Kabupaten Sleman can be seen in table 2.

Table 2. Rice production in Sleman 2004 -2010

No	Commentary	Year						
		2004	2005	2006	2007	2008	2009	2010
1	Rice Area (ha)	23,255	23,191	23,121	23,062	23,005	22,914	22,819
2	Production (ton)	252,518	241,209	250,375	242,759	267,607	226,140	294,500
3	Productivity (kg/m)	0,6	0,6	0,6	0,6	0,6	0,6	0,6
4	Productivity DIY (kw/ha)	57,7	57,32	57,36	58,2	62,61	60,50	63,23

Source: BPS, Sleman In figures, from 2005 to 2011

Benefits of paddy fields

According to Agus and Irawan (2006: 312-313) that multifunctional rice fields is very difficult to measure from an economic point of which is, namely the ability to withstand the flood mitigation or rainwater harvesting and water flow housing, erosion control and sendimentasik that natural disasters such as landslides, mitigation air temperature increases, recycling of water resources, organic waste reservoir and pad-reducing groundwater nitrate levels.

Conversion of paddy fields

The conversion of paddy fields, often caused by economic factors such as the farmer, the high cost of agricultural oprsiaonal compared to proceeds received, which forces farmers to sell land persawahannya, although that result in loss of livelihood resources (Irawan et al, 2001, Winoto 2005 see Abdurachman, 2010: 78).

Changes in spatial plan, the policy direction of development and market mechanisms is another factor that led to the conversion of rice fields. In the past what happens is more due to two things that the last, due to the lack of understanding of the community and government officials about the spatial, or spatial plan that is difficult to realize. In line with the development policy that emphasizes the aspects of ease of facility growth through investment, both to local and foreign investors in the provision of land, then the change of land use from agricultural to non-agricultural widespread (Widjanarko et al, 2006: 22-23).

Theory of the value of agricultural land

According Hidayati and Hardjanto (2003: 52-55) states that in analyzing a highest and best use of the asset value of land there are four (4) criteria must be met, namely: (1) physically possible; (2) is permitted by the regulations; (3) financially feasible; (4) provide maximum results. So based on the highest and best use, the area that has the physical condition of the infrastructure that has been good pertanaian field, supported with local regulations, and has result in food production, it should be retained as an agricultural area or where agricultural cultivation.

Fiechtiger and Salhofer (2011: 1-3) NPV method or methods of pricing of land as the basis for judging the basis for compensation of agricultural land conservation program. One of the land capability is menghasilkana pendapaatan until the time is not up. Therefore, the application of this method can be described in a systematic difference. Referring model of NVP, the maximum price payment to farmers (willing to pay) to a farm at the time period t is equal to the discount summing expectations in the future of agriculture. In general it can be written.

$$L_t = \frac{E_t(R_{t+1})}{(1+r_{t+1})} + .. + \frac{E_t(R_{t+1})}{(1+r_{t+1})...(1+r_{t+i})} + .. + \frac{E_t(R_{t+1})}{(1+r_{t+1})...(1+r_{t+n})}$$

Where L_t is the maximum NPV or agricultural land bersedian price paid for each unit of land at the end of period t. Idikasi E_t expectations during a time t and $r_t + 1$ relationship of discount in period $t + i$ is used for the payment of income $R_t + i$. in this situation without government interference, $R_t + i$ can be interpreted value of the lease, the land revenue stream for the land after the cost of all factors of production, including opportunity costs, after reducing semuanaya. Equation (1) generally means different assumptions and different land rent discount rate of each period n. For simplicity, but without menghilankan in general, assume that $r_t + i = r$ and $E_t(R_t + i) = E_t(R)$ for all $i = 1,2, .. n$. Therefore, the discount rate is constant at all periods n. Explaining $b_i = (1 + r)i$ corresponding rules.

Analysis Tools

The analytical tool used to determine the response estimation process landowners against ditawakan conservation program is logit ratio test procedures and analysis logit econometric equation, there are four (4) test, namely:

1. Test Wald / Test Z. At the same regression with MLE method to test the function of t on OLS regression method. Wald test / Z Test is used to determine the influence of the independent variable on the dependent variable partially.

2. Test likelikhood ratio (LR). In the regression with MLE method is the same function F test on the OLS regression. LR test is intended to measure the overall significance of the independent variable (x) is able to explain the dependent variable (y).

3. Test McFadden R2. In the regression with MLE method is the same function on the OLS regression R2 test. R2dimaksudkan McFadden test to measure how much the dependent variable can be explained variance across the independent variables.

4. Logit ratio. Interpretation of coefficients - the coefficients in the logit regression model conducted in the form of logit ratio (ratio of inclination), written with symbols B or Exp (B). Logit ratio is used to determine the chances of a variable inclination. Logit each variable ratio are used for interpreting the dependent variable variable relationship with the rest of the variables.

Research Methods
Types and sources of data

Data used in the study consisted of two types, according to the way of acquiring it, ie primary data and secondary data. Qualitative data includes patterns of working on the land, education, irrigation systems and land tenure. Quantitative data is wide, the distance, the value of the harvest, the harvest, production costs, and the value (price) of land markets, while secondary data are all quantitative data. All quantitative primary data is a cross section data in 2010, while secondary data is data time series which started from 2010. Data collected through direct observation and interviews with the instrument a questionnaire containing open questions to the respondents in the study area, aiming a direct interview obtain relevant information.

Validation is done to ensure the accuracy of the data according to the conditions and the availability of information in 2010. Cross check is done primarily for market data that occur in the object of study, such as the amount of the estimated value of optimal land, productivity and production costs. Validation is done in groups of farmers where respondents shelter as members. Validation of primary data available also in the form of secondary data such as land productivity, wet paddy price and index BPPBM taken from BPS.

The following figure shows the relationship between variables and the steps to obtain the estimated value of land, land development rights value and the value of conservation programs that try to offer to the landowner.
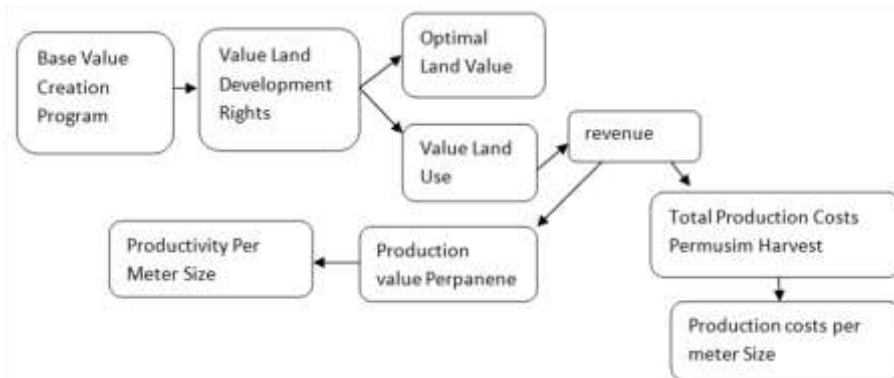

Figure 1: The relationship between the variables

Analysis and Discussion

Revenue projections. Projections of income is the income of farmers dihasilakan of each harvest of agricultural land owned .. Large annual income is affected component of production and costs, the level of prices of unhusked rice in the hands of farmers and the addition of capital goods index (BPPBM).

Dry grain crop price projections. The determination of the price of unhusked rice harvest projections at the farm level is an input variable revenue projections. The available data is secondary data from BPS from January 2009 to December 2010 (BPS Sleman in Figures, 2010-2009). Furthermore, the projection using the application program QM For Window version 2.

The value of crop production per season. The value of production is the result received by farmers from every season penen with mengkakulasikan all income components. Dikakulasikan components into the total production value is multiplied by the price of unhusked rice harvest breadth multiplied the productivity of land and land owned by farmers. Dry Grain harvest price at the farm level is monthly data Price wet paddy output BPS from January 2009 to December 2010.

Productivity is the ability of a factor of production, such as land area for memproleh yield per square meter. Production is determined by many factors, such as fertility, seed varieties were planted, adequate use of fertilizers, both the type and dosage, the availability of water in sufficient quantities, proper farming techniques, the use of the means of agricultural production are inadequate, and tersediannya labor. The effect of different production values dihasilk. Assumed that the land is owned not changed, the level of productivity according to Agriculture Department data on average Sleman land produces dry grain production volume per square meter according to the tile (1 tile = 2.5 mx 2.5 m) is relatively constant at 0.6 kilograms per square meter (see table 2.3). Seed varieties used are IR 64, the harvest is three (3) times in one (1) year and did not experience crop failure due to pests or weather (Dewi, 2008: 135-136).

Produksi.Biaya projected costs of production are capital issued to finance agricultural activities permusim each harvest. Permusim huge production costs of planting in the can of Production Cost Index and Addition of Capital Goods (BPPBM) which is a secondary data from BPS (BPS DIY Province in Figures, 2009-2010). Furthermore ideks BPPBM in estimation with application program QM For Window versi2.

The next crop production value permusim deducted with the total cost of production to generate gross revenues of farmland permusi harvest (gross income). Gross farm income is gross income because it reduces the tax burden has not pertain (Dewi, 2008: 135-136). After the input components required in calculating earnings met. From the start of the projected price of unhusked rice farmer level, production value, and the value of the production cost of data processing performed by the process skario as beriktuk.

Tabel 3 Scenario Calculation of Earnings

No	Name	Size	Year	2014		
1	Priyatno	400	Harvest Moon	4	8	12
			Price Prediction	3,265.36	3,363.25	3,461.15
			Average Crop Production	0.6	0.6	0.6
			Permeter Cost	472	482	492
			Result	783,686	807,180	830,676
			Cost	188,800	192,800	196,800
			Income of Projections	594,886	614,380	633,876
			Income of Projection Per Year	1,843,142		

Source: Data processed

Table 3 shows one example of a scenario for which data are processed with the calculation of earnings per year belongs to one of the respondents. Calculations start from the year 2014 who experienced three times the harvest that is months 4 (April), 8 month (August), and the month 12 (December). Prediction Dry Grain prices at farm level (HGKP) obtained from BPS data monthly price

forecast in April, August, and December 2014, then the data HGKP in projection with application program QM For Window version 2 Multiplicative Decomposition Method Forecasting. The same is done for the projected production costs of BPPBM index (BPS 2010: 72 and BPS Sleman, 2010: 56).

Productivity is the average production volume of dry grain per square meter according to the land area in Sleman is data tile.

Productive value per production = Land x HGKP x Meter

Production costs = Land x Cost of Production

Revenue = Value of Production - Production Costs

Analysis of revenue projections. Once the revenue projections for the period of 10 years is obtained, then the next step is to estimate the value of land by the NPV method conducts the conversion process / capitalization to present value. , The value of land is the income stream during the period of 10 years plus a 1 year horizon value value (Hanson, 1999: 2-3 and Fiechtiger and Salhofer, 2011: 1-3). Flow projections made to the opinion of 35 respondents. The level of discounting factor follows the formula (Jefferies, 2009: 20), namely: k = (1 + R) (1 + i) - 1. Where R = average interest rate on conventional bank deposits by group of banks that is equal to 0.12, or 12 percent. While i is a symbol of the average rate of inflation last year from January 2013 to January 2014 in the amount of 6 percent.The rate of discount is thus 0.18, or 18 percent per year. Notation land value estimation method income stream (I) undiscounted can be expressed as follows;

$$\text{Nilai guna Lahan 2014} = \frac{\text{Et 2014 +}}{(1+0.18)1} \quad \frac{\text{Et 2015 +..}}{(1+0.18)2} \quad \frac{\text{Et 2024}}{(1+0.18)n}$$

Another element that must be met is the revenue projections after the 10th year, these projections were used to estimate the value of land after year 10 to infinity (horizon value). In the estimation of this data required is the average rate of growth of income per harvest for 1 year (g) to determine the amount of revenue in year 11. The average rate of growth of income per harvest for 10 years from 35 respondents gained 0.03, or 3 percent, and assumed to be constant forever. Formula for estimating the revenues 11th year is revenue during the 10th year plus 3 percent divided 18 percent - 3 percent the result is discounted by 18 percent or divided (1 + 0.18). If expressed by the notation is:

$$\text{horiszon value (n=\&)} = \frac{\text{Et 2024}}{(0.18-0.03)}$$

The above process is carried out in 35 respondents to note the estimated value of the land use (agriculture use value) of each respondent.

The value of land development rights

Here is a recapitulation of the portion of land value and the value of land development rights to the land value estimate optimal.

Tabel 4. Recapitulation Value Calculation Land Development and Land Use Values

No	Name	The Avarege Value of Land (%)	The Avarege VDR (%)	Optimal Land Value
1	Priyantoyurano	83	37	100
2	Pujasukarto	62	38	100
3	Yusmano	92	8	100
4	Partowiarjo	41	59	100

Source: Data processed

Here we can see that the value of land of 35 respondents to the optimal proportion of land value relative safety of urban expansion development disorder. Instead the low proportion of the value of

land development rights to the land value in the area of optimal shows that the expectations of people on the utilization of paddy land is not so low. Rice cultivation with the value of the low land development rights will require compensation fund smaller when compared with the value of rice cultivation higher land development rights. However, the response to the offer of land owners need to know the value of conservation programs directly to verify whether the theoretical calculation of the value of the program in line with expectations and the perception of the land owners.

Willingness to accept the value of conservation programs

Of the 35 respondents obtained respondents who agree and can receive the value of land development rights as a base value of paddy land conservation programs by 24 respondents, while as many as 11 respondents disagreed.

Logit regression analysis was used to identify the model of responden. Model logit regression was used to identify factors that affect and how likely respondents to receive (1) or reject the bid value of the program (0). Once the data is obtained landowners acceptability response to the survey into two, include data on land characteristics and personal characteristics of respondents which were acquired during the first survey, the data are then estimated by regression equation as follows;

$$\ln[P_i/(1-P_i)] = \alpha + \beta_1 \text{Size} + \beta_2 \text{Distance} + \beta_3 \text{Age} + \beta_4 \text{Education} + \beta_5 \text{Garapan} + \varepsilon$$

Given the logit models using the method of estimation MLE (Maximum Likelihood Estimation) which does not require the assumption of normality, linearity in the explanatory variables like the method of OLS (Ordinary Least Square) then the estimation results of the above model can be analyzed directly. Here is a summary table the estimation results with program Eviews.

Tabel 5. Results Regression Model Willingness Receive Conservation Program Value

Variable	Coefficient	Std. Error	z-Statistic	Prob.
C	-6.782507	3.690818	-1.837671	0.0661
Size	0.003282	0.001311	2.503230	0.0123
Distance	0.001043	0.000498	2.092832	0.0364
Age	0.015738	0.047975	0.328051	0.7429
Education	-0.219704	0.212373	-1.034521	0.3009
GARAPAN	2.634289	1.574430	1.673171	0.0943
McFadden R-squared	0.395286			
LR statistic	17.22423			
Prob(LR statistic)	0.004094			

Source: Data processed

Here is a model representation of a willingness to accept the offer of land development rights value as a base value of conservation programs paddy fields in the village Sekarsuli Berbah District of Sleman.

$Ln [P_i /(1 - P_i)] = $ -6.782507+ 0.003282 Size – 0.001043 Distance 0.015738 Age - 0.219704 Education + 2.634289$Garap$

Analysis and interpretation. Analysis phase includes tests of significance independent variable on the dependent variable and Goodness of Fit test models.

ests of significance. Of the five independent variables, including constants, variables that have a significant effect on the log odds ratio at the level of α = 0.05 was (area) land area to 2.50 good value for Z statistic with ap value of 0.012. The second variable that significantly is within the statistical Z value of 2.09 at the level of α = 0.05.

Thus of the five independent variables, variables influencing the Log Odds Ratio willingness to accept the offer value of conservation programs, only two variables, namely land and distances.

However, as a whole all the variables simultaneously have an influence on the dependent variable proved of value LR of 17.224 with a significant probability of 0.0041, both at the α = 0.01, respectively.

Goodness of fit test. Goodness of Fit test include covering Test Hosmer Lemeshow (HL) and McFadden R2. HL test measures the difference between the estimated value (fitted) with actual values, the model said to be good when the difference between the estimated value of the actual value is small. Given the value of each variable consists of continuous variables, discrete and dichotomous grouping base Test procedure is Randomize Ties HL. The test results are summarized in the following table:

Tabel 6. Results Uji HL *Randomize Ties*

	Quantile of Risk		Dep=0			Dep=1	Total	H-L
	Low	High	Actual	Expect	Actual	Expect	Obs	Value
1	0.0544	0.1112	3	2.76277	0	0.23723	3	0.25761
2	0.2263	0.3263	3	2.95869	1	1.04131	4	0.00222
3	0.3487	0.5166	2	1.63186	1	1.36814	3	0.18211
4	0.5263	0.6056	0	1.71044	4	2.28956	4	2.98825
5	0.7167	0.7540	1	0.77941	2	2.22059	3	0.08434
6	0.7830	0.8756	1	0.63603	3	3.36397	4	0.24766
7	0.8766	0.8964	1	0.34834	2	2.65166	3	1.37922
8	0.9431	0.9793	0	0.13152	4	3.86848	4	0.13599
9	0.9814	0.9959	0	0.03227	3	2.96773	3	0.03262
10	0.9962	0.9998	0	0.00867	4	3.99133	4	0.00869
		Total	11	11.0000	24	24.0000	35	5.31872
H-L Statistic		5.3187		Prob. Chi-Sq(8)		0.7230		
Andrews Statistic		19.7713		Prob. Chi-Sq(10)		0.0315		

Source: Data processed

Based on the table above obtained value of 5.3187 with a statistical HL Chi Square value of 0.723. Since the value of chi square is greater than 0.05 and even 0.10 may imply no significant difference between the estimated value (Fitted) with actual values.

McFadden R2 figures of 0.395 can be interpreted variation of the value of the dependent variable can be explained by the independent variable of 39.5 percent. Based HL test and Mc Fadden R2 can be inferred probability estimation model landowners to accept the offer value conservation program is quite good (good).

Interpretation coefficient signs. Widely variable coefficient of 0.003 can be interpreted any change in land breadth 1 meter wider than the breadth of the respondents belonging cause logg value odds ratio changed (unidirectional) of 0,003. The chances of the respondents accept the value of conservation programs compared other respondents were more narrow land amounting to e0,003 = 1.003 times larger. In general it can also be concluded that the respondents who have more land area, the greater the opportunity to receive the value of land development rights if used as a base value of conservation programs. Distance variable coefficient of 0.001 has meaning any decline in farm income portion of the total revenue by 1 percent would cause the value of the log odds ratio increased by 0,001, or any additional distance of 1 percent probability of respondents received an offer conservation programs e0,001 value = 1.001 times larger from the farthest distance. The literal meaning is the owner of land which has close proximity to roads or easy public access tend to not accept the offer value of conservation programs. Conversely the far distance land with public access greater the opportunity to accept the offer value of conservation programs.

Conclusion

The conclusion that can be drawn from the study willingness to accept the value of paddy land conservation program by the owners of land in agricultural areas Sekarsuli village of Sleman District of Berbah is:

1. Based on the estimated present value of the projected stream of income per year for the next ten years on a sample of paddy fields in the village Sekarsuli obtained the concept of value to land (Agriculture Use Value). Based on the estimate obtained on average land value by 55 (fifty-five) percent of the estimated value of optimal land. The amount of expected utilization of non-agricultural land values (Non-Agriculture Use) is an average of 45 (forty-five) percent, hereinafter referred to as the value of land development rights (Value Development Right).

2. Respondents agreed with paddy land conservation programs offered are as many as 24 people. 11 (eleven) of respondents disagree with the program offered from 35 (thirty five). However, all respondents did not approve the amount of compensation offered. Land area and land distance to public facilities are factors that influence the decision of the land owner to accept or reject the offered programs. Because respondents think the more land the share of agricultural income earned greater acceptance of the value of development land compensation. Distance affects the threat from the expansion of urban development, because the closer to the roads, the conservation program is threatened and the greater the distance, the land conservation program could survive.

Suggestion

1. Disclosure of the valuation of land use in paddy fields in Sleman must be done to protect the loss of productive agricultural land degradation, as well as knowing the potential paddy fields to be used as a conservation area. Rice cultivation with the proportion of land value to the value of land could potentially be a larger optimal conservation area. Instead of rice cultivation with the proportion of land value to the value of optimal land small, requiring a more expensive cost of conservation.

2. The government in this case Sleman expected to support and ease the burden of farmers in carrying out agricultural activities.

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