

ภาคผนวก ข

การวิเคราะห์การถดถอยของ BOD
โดยใช้โปรแกรมสำเร็จรูปประมวลผลทางสถิติ

ตารางผนวกที่ ข1 Variables Entered/Removed (b)

Model	Variables Entered	Variables	
		Removed	Method
1	POP. TUR. TEMP. RAIN. PH. SAL. DEPTH(a)	.	Enter

a All requested variables entered.

b Dependent Variable: BOD

ตารางผนวกที่ ข2 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.356(a)	.127	.060	.92464

a Predictors: (Constant), POP. TUR. TEMP. RAIN. PH. SAL. DEPTH

ตารางผนวกที่ ข3 ANOVA (b)

Model		Sum of Squares	df	Mean	F	Sig.
				Square		
1	Regression	11.317	7	1.617	1.891	.080(a)
	Residual	77.801	91	.855		
	Total	89.118	98			

a Predictors: (Constant), POP. TUR. TEMP. RAIN. PH. SAL. DEPTH

b Dependent Variable: BOD

ตารางผนวกที่ ๗4 Coefficients (a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.698	1.398		1.214	.228
	DEPTH	-.162	.167	-.102	-.968	.335
	TEMP	3.429E-02	.033	.107	1.054	.295
	PH	-.115	.147	-.079	-.781	.437
	TUR	7.959E-04	.005	.016	.155	.877
	SAL	7.276	2.757	.275	2.639	.010
	RAIN	-.001	.001	-.116	-1.133	.260
	POP	-3.35E-005	.000	-.110	-1.072	.287

a Dependent Variable: BOD

ตารางผนวกที่ ๗5 Variables Entered/Removed (a)

Variables			
Model	Entered	Variables Removed	Method
1	SAL		Forward (Criterion: Probability-of-F-to-enter <= .050)

a Dependent Variable: BOD

ตารางผนวกที่ ๖ Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.260(a)	.068	.058	.92543

a Predictors: (Constant), SAL

ตารางผนวกที่ ๗ ANOVA (b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6.045	1	6.045	7.058	.009(a)
	Residual	83.073	97	.856		
	Total	89.118	98			

a Predictors: (Constant), SAL

b Dependent Variable: BOD

ตารางผนวกที่ ๘ Coefficients (a)

Model		Unstandardized		Standardized	t	Sig.
		Coefficients		Coefficients		
		B	Std. Error	Beta		
1	(Constant)	1.037	.101		10.275	.000
	SAL	6.892	2.594	.260	2.657	.009

a Dependent Variable: BOD

ตารางผนวกที่ ๗9 Excluded Variables (b)

Model		Beta In	t	Sig.	Partial	Collinearity Statistics Tolerance
					Correlation	
1	DEPTH	-.118(a)	-1.188	.238	-.120	.974
	TEMP	.095(a)	.967	.336	.098	.988
	PH	-.118(a)	-1.201	.233	-.122	.998
	TUR	.051(a)	.513	.609	.052	.983
	RAIN	-.129(a)	-1.301	.196	-.132	.976
	POP	-.120(a)	-1.202	.232	-.122	.960

a Predictors in the Model: (Constant), SAL

b Dependent Variable: BOD

ตารางผนวกที่ ๗10 Variables Entered/Removed (b)

Model	Variables Entered	Variables	
		Removed	Method
1	POP, TUR, TEMP, RAIN, PH, SAL. DEPTH(a)	.	Enter
2	.	TUR	Backward (criterion: Probability of F-to-remove >= .100).
3	.	PH	Backward (criterion: Probability of F-to-remove >= .100).
4	.	DEPTH	Backward (criterion: Probability of F-to-remove >= .100).

ตารางผนวกที่ ข10 (ต่อ)

Model	Variables		Method
	Variables Entered	Removed	
5		TEMP	Backward (criterion: Probability of F-to-remove >= .100).
6		POP	Backward (criterion: Probability of F-to-remove >= .100).
7		RAIN	Backward (criterion: Probability of F-to-remove >= .100).

a All requested variables entered.

b Dependent Variable: BOD

ตารางผนวกที่ ข11 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.356(a)	.127	.060	.92464
2	.356(b)	.127	.070	.91972
3	.347(c)	.120	.073	.91811
4	.331(d)	.109	.071	.91895
5	.318(e)	.101	.073	.91820
6	.290(f)	.084	.065	.92215
7	.260(g)	.068	.058	.92543

a Predictors: (Constant), POP, TUR, TEMP, RAIN, PH, SAL, DEPTH

b Predictors: (Constant), POP, TEMP, RAIN, PH, SAL, DEPTH

c Predictors: (Constant), POP, TEMP, RAIN, SAL, DEPTH

d Predictors: (Constant), POP, TEMP, RAIN, SAL

e Predictors: (Constant), POP, RAIN, SAL

f Predictors: (Constant), RAIN, SAL

g Predictors: (Constant), SAL

ตารางผนวกที่ ๗12 ANOVA (h)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	11.317	7	1.617	1.891	.080(a)
	Residual	77.801	91	.855		
	Total	89.118	98			
2	Regression	11.296	6	1.883	2.226	.047(b)
	Residual	77.822	92	.846		
	Total	89.118	98			
3	Regression	10.726	5	2.145	2.545	.033(c)
	Residual	78.392	93	.843		
	Total	89.118	98			
4	Regression	9.737	4	2.434	2.883	.027(d)
	Residual	79.381	94	.844		
	Total	89.118	98			
5	Regression	9.025	3	3.008	3.568	.017(e)
	Residual	80.093	95	.843		
	Total	89.118	98			
6	Regression	7.484	2	3.742	4.400	.015(f)
	Residual	81.634	96	.850		
	Total	89.118	98			
7	Regression	6.045	1	6.045	7.058	.009(g)
	Residual	83.073	97	.856		
	Total	89.118	98			

a Predictors: (Constant), POP, TUR, TEMP, RAIN, PH, SAL, DEPTH

b Predictors: (Constant), POP, TEMP, RAIN, PH, SAL, DEPTH

c Predictors: (Constant), POP, TEMP, RAIN, SAL, DEPTH

d Predictors: (Constant), POP, TEMP, RAIN, SAL

e Predictors: (Constant), POP, RAIN, SAL

f Predictors: (Constant), RAIN, SAL

g Predictors: (Constant), SAL

h Dependent Variable: BOD

ตารางผนวกที่ ข13 Coefficients (a)

Model		Unstandardized		Standardized	t	Sig.
		Coefficients		Coefficients		
		B	Std. Error	Beta		
1	(Constant)	1.698	1.398		1.214	.228
	DEPTH	-.162	.167	-.102	-.968	.335
	TEMP	3.429E-02	.033	.107	1.054	.295
	PH	-.115	.147	-.079	-.781	.437
	TUR	7.959E-04	.005	.016	.155	.877
	SAL	7.276	2.757	.275	2.639	.010
	RAIN	-.001	.001	-.116	-1.133	.260
	POP	-3.35E-005	.000	-.110	-1.072	.287
2	(Constant)	1.718	1.385		1.241	.218
	DEPTH	-.164	.166	-.103	-.992	.324
	TEMP	3.491E-02	.032	.109	1.087	.280
	PH	-.119	.145	-.082	-.821	.414
	SAL	7.212	2.712	.273	2.660	.009
	RAIN	-.001	.001	-.117	-1.148	.254
	POP	-3.30E-005	.000	-.109	-1.067	.289

ตารางผนวกที่ ข13 (ต่อ)

Model		Unstandardized		Standardized		t	Sig.
		Coefficients		Coefficients			
		Std.					
		B	Error	Beta			
3	(Constant)	.865	.912		.948		.346
	DEPTH	-.178	.165	-.112	-1.083		.282
	TEMP	3.603E-02	.032	.113	1.125		.264
	SAL	7.200	2.707	.272	2.660		.009
	RAIN	-.001	.001	-.120	-1.178		.242
	POP	-3.69E-005	.000	-.122	-1.212		.228
4	(Constant)	.756	.908		.833		.407
	TEMP	2.880E-02	.031	.090	.918		.361
	SAL	6.721	2.673	.254	2.514		.014
	RAIN	-.001	.001	-.145	-1.460		.148
	POP	-3.90E-005	.000	-.128	-1.280		.204
5	(Constant)	1.543	.299		5.155		.000
	SAL	7.024	2.650	.265	2.650		.009
	RAIN	-.001	.001	-.143	-1.440		.153
	POP	-4.10E-005	.000	-.135	-1.352		.180

a Dependent Variable: BOD

ตารางผนวกที่ ข14 Excluded Variables (g)

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics
						Tolerance
2	TUR	.016(a)	.155	.877	.016	.925
3	TUR	.029(b)	.286	.775	.030	.950
	PH	-.082(b)	-.821	.414	-.085	.959
4	TUR	.040(c)	.399	.691	.041	.961
	PH	-.092(c)	-.927	.356	-.096	.969
	DEPTH	-.112(c)	-1.083	.282	-.112	.884
5	TUR	.049(d)	.495	.622	.051	.972
	PH	-.094(d)	-.948	.346	-.097	.970
	DEPTH	-.088(d)	-.867	.388	-.089	.924
	TEMP	.090(d)	.918	.361	.094	.982
6	TUR	.040(e)	.407	.685	.042	.976
	PH	-.113(e)	-1.154	.252	-.118	.996
	DEPTH	-.094(e)	-.923	.359	-.094	.926
	TEMP	.099(e)	1.012	.314	.103	.987
	POP	-.135(e)	-1.352	.180	-.137	.949
7	TUR	.051(f)	.513	.609	.052	.983
	PH	-.118(f)	-1.201	.233	-.122	.998
	DEPTH	-.118(f)	-1.188	.238	-.120	.974
	TEMP	.095(f)	.967	.336	.098	.988

a Predictors in the Model: (Constant), POP, TEMP, RAIN, PH, SAL, DEPTH

b Predictors in the Model: (Constant), POP, TEMP, RAIN, SAL, DEPTH

c Predictors in the Model: (Constant), POP, TEMP, RAIN, SAL

d Predictors in the Model: (Constant), POP, RAIN, SAL

e Predictors in the Model: (Constant), RAIN, SAL

f Predictors in the Model: (Constant), SAL

g Dependent Variable: BOD

ตารางผนวกที่ ข15 Variables Entered/Removed (a)

Model	Variables	Variables	Method
	Entered	Removed	
1	SAL	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050. Probability-of-F-to-remove >= .100).

a Dependent Variable: BOD

ตารางผนวกที่ ข16 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.260(a)	.068	.058	.92543

a Predictors: (Constant), SAL

ตารางพจน์ที่ ๗17 ANOVA (b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6.045	1	6.045	7.058	.009(a)
	Residual	83.073	97	.856		
	Total	89.118	98			

a Predictors: (Constant), SAL

b Dependent Variable: BOD

ตารางพจน์ที่ ๗18 Coefficients (a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.037	.101		10.275	.000
	SAL	6.892	2.594	.260	2.657	.009

a Dependent Variable: BOD

ตารางผนวกที่ ข19 Excluded Variables (b)

Model	Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
					Tolerance	
1	DEPT					
	H	-.118(a)	-1.188	.238	-.120	.974
	TEMP	.095(a)	.967	.336	.098	.988
	PH	-.118(a)	-1.201	.233	-.122	.998
	TUR	.051(a)	.513	.609	.052	.983
	RAIN	-.129(a)	-1.301	.196	-.132	.976
	POP	-.120(a)	-1.202	.232	-.122	.960

a Predictors in the Model: (Constant). SAL

b Dependent Variable: BOD