LAMPIRAN

Lampiran 1. Data Tingkat Kematian Dari Dinas Kesehatan Provinsi Bali

PEMERINTAH PROVINSI BALI

DINAS KESEHATAN

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Bali, 21 Desember 2021

Kepada

Yth. Kepala Dinas Komunikasi, Informatika dan Statistik Provinsi Bali
di-
Denpasar

SURAT PENGANTAR
Nomor : B.18.049/10954/Umum.Kepeg/Diskes

NO	JENIS SURAT YANG DIKIRIM	BANYAKNYA	KETERANGAN
1	Data prosentase tingkat kematian akibat Covid-19 tiap Kabupaten/Kota di Provinsi Bali dari Bulan Maret 2020 sampai September 2021	1 (satu) gabung	Dikirim dengan hormat untuk dapat dipergunakan sebagaimana mestinya.

Ditandatangani secara elektronik oleh :
KEPALA DINAS
Ketut Suarjaya
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Prosentase Kematian Covid-19 per Kabupaten/Kota di Provinsi Bali dari Bulan Maret 2020 sampai dengan September 2021

No	Nama Kabupaten/Kota	2020											
		April			Mei			Juni			Juli		
		Positif	Kematian	%Kematian	Positif	Kematian	%Kematian	Positif	Kematian	%Kematian	Positif	Kematian	%Kematian
1	Jembrana	11	0	0.0%	6	0	0.0%	18	0	0.0%	24	0	0.0%
2	Tabanan	9	0	0.0%	11	0	0.0%	48	0	0.0%	52	2	3.8%
3	Badung	15	0	0.0%	38	0	0.0%	134	2	1.5%	295	10	3.4%
4	Denpasar	52	2	3.8%	38	0	0.0%	449	7	1.6%	777	5	0.6%
5	Gianyar	23	0	0.0%	11	0	0.0%	75	1	1.3%	193	5	2.6%
6	Bangli	39	0	0.0%	51	0	0.0%	59	0	0.0%	202	2	1.0%
7	Klungkung	16	0	0.0%	8	0	0.0%	138	0	0.0%	143	1	0.7%
8	Karangasem	21	0	0.0%	10	0	0.0%	49	0	0.0%	159	7	4.4%
9	Buleleng	23	0	0.0%	66	0	0.0%	38	0	0.0%	52	2	3.8%
10	Kabupaten Lainnya	5	0	0.0%	4	0	0.0%	11	0	0.0%	12	0	0.0%
11	Warga Negara Asing	8	2	25.0%	0	0	#DIV/0!	9	0	0.0%	5	0	0.0%
	BALI	222	4	1.8%	243	0	0.0%	1028	10	1.0%	1914	34	1.8%

No	Nama Kabupaten/Kota	2020															
		Agustus			September			Oktober			November			Desember			
		Positif	Kematian	%Kematian	Positif	Kematian	%Kematian	Positif	Kematian	%Kematian	Positif	Kematian	%Kematian	Positif	Kematian	%Kematian	Posi
1	Jembrana	86	1	1.2%	157	5	3.2%	155	5	3.2%	172	1	0.6%	265	12	4.5%	69
2	Tabanan	164	2	1.2%	302	21	7.0%	232	9	3.9%	306	9	2.9%	920	20	2.2%	112
3	Badung	228	2	0.9%	675	21	3.1%	624	9	1.4%	413	4	1.0%	771	16	2.1%	170
4	Denpasar	311	4	1.3%	796	32	4.0%	823	26	3.2%	581	10	1.7%	932	21	2.3%	288
5	Gianyar	241	3	1.2%	518	34	6.6%	412	24	5.8%	440	8	1.8%	468	6	1.3%	81
6	Bangli	203	3	1.5%	182	23	12.6%	99	5	5.1%	47	2	4.3%	62	4	6.5%	35
7	Klungkung	182	1	0.5%	168	7	4.2%	203	7	3.4%	82	4	4.9%	55	2	3.6%	11
8	Karangasem	144	1	0.7%	406	31	7.6%	137	11	8.0%	96	1	1.0%	51	1	2.0%	17
9	Buleleng	241	3	1.2%	458	33	7.2%	196	16	8.2%	115	5	4.3%	189	8	4.2%	44
10	Kabupaten Lainnya	0	0	#DIV/0!	3	0	0.0%	4	0	0.0%	8	0	0.0%	3	1	33.3%	21
11	Warga Negara Asing	0	0	#DIV/0!	6	0	0.0%	1	0	0.0%	3	1	33.3%	2	0	0.0%	30
	BALI	1800	20	1.1%	3671	207	5.6%	2886	112	3.9%	2263	45	2.0%	3718	91	2.4%	855

2021																									
Januari		Februari			Maret			April			Mei			Juni			Juli			Agustus			September		
Kematian	%Kematian	Positif	Kematian	%Kematian	Positif	Kematian	%Kematian	Positif	Kematian	%Kematian	Positif	Kematian	%Kematian	Positif	Kematian	%Kematian	Positif	Kematian	%Kematian	Positif	Kematian	%Kematian	Positif	Kematian	%Kematian
23	3.3%	336	21	6.3%	265	4	1.5%	85	5	5.9%	52	1	1.9%	151	4	2.6%	1376	40	2.9%	1791	68	3.8%	387	17	4.4%
23	2.0%	575	27	4.7%	443	31	7.0%	344	20	5.8%	204	30	14.7%	176	6	3.4%	2549	123	4.8%	3356	167	5.0%	641	55	8.6%
30	1.8%	1451	56	3.9%	1297	45	3.5%	795	34	4.3%	386	23	6.0%	606	9	1.5%	4542	82	1.8%	5285	226	4.3%	1220	70	5.7%
34	1.2%	3080	58	1.9%	1686	59	3.5%	1726	62	3.6%	814	27	3.3%	872	9	1.0%	9870	148	1.5%	9957	357	3.6%	1719	96	5.6%
22	2.7%	945	24	2.5%	344	2	0.6%	589	1	0.2%	264	9	3.4%	285	2	0.7%	1875	14	0.7%	3150	102	3.2%	555	45	8.1%
6	1.7%	523	15	2.9%	272	20	7.4%	203	15	7.4%	181	21	11.6%	98	5	5.1%	730	19	2.6%	1369	61	4.5%	378	32	8.5%
3	2.6%	213	11	5.2%	278	12	4.3%	121	19	15.7%	59	11	18.6%	47	1	2.1%	748	15	2.0%	1159	48	4.1%	175	27	15.4%
5	2.9%	259	11	4.2%	169	17	10.1%	160	10	6.3%	90	17	18.9%	51	6	11.8%	594	37	6.2%	1297	129	9.9%	242	43	17.8%
13	2.9%	560	14	2.5%	568	24	4.2%	649	25	3.9%	436	25	5.7%	237	15	6.3%	2869	105	3.7%	2883	188	6.5%	422	50	11.8%
1	0.5%	115	2	1.7%	122	1	0.8%	130	6	4.6%	68	1	1.5%	393	1	0.3%	872	8	0.9%	244	11	4.5%	9	0	0.0%
1	3.3%	6	0	0.0%	25	0	0.0%	33	1	3.0%	34	1	2.9%	42	0	0.0%	77	0	0.0%	24	0	0.0%	0	0	#DIV/0!
161	1.9%	8063	239	3.0%	5469	215	3.9%	4835	198	4.1%	2588	166	6.4%	2958	58	2.0%	26102	591	2.3%	30515	1357	4.4%	5748	435	7.6%

Ditandatangani secara elektronik oleh :
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Lampiran 2. R Codes Data Provinsi Bali

```
#BALI
#B.1. R Code for Analysis. The following code has been used to calculate the values of the model parameters. Note: Here, pm is used for proposed model.
library(AdequacyModel)
library(readxl)
Data_Persentase_Kematian <- read_excel("E:/LULUS 2022!!!!!!/Weibull/Data Persentase Kematian.xlsx")
View(Data_Persentase_Kematian)
kematian = Data_Persentase_Kematian$BALI
data = sort(kematian)
data
################# PDF of the proposed model
pdf_pm = function(par,x)
{
  theta = par[1]
  eta = par[2]
  theta*2*eta*(x^(theta-1))*exp(-eta*x^theta)*((1-exp(-eta*x^theta)))*(2-((1-exp(-eta*x^theta))^2))*(1/(exp((1-exp(-eta*x^theta))^2)))
}
################# CDF of the proposed model
cdf_pm = function(par,x)
{
  theta = par[1]
```

```
  eta = par[2]
  1-((1-((1-exp(-eta*x^theta))^2))/(exp((1-exp(-eta*x^theta))^2)))
}
set.seed(0)
goodness.fit(pdf=pdf_pm, cdf=cdf_pm, starts = c(1,1), data = data, method =
"SANN",domain = c(0,Inf),mle = NULL, lim_inf = c(0,0),lim_sup = c(2,2),
prop=0.1)

#B.2. R Code for Plotting the Estimated Distribution Function.
theta=0.6154765
eta=-0.2343602
x=data
F1=ecdf(x)
ecdf=F1(c(x))
proposedcdf=1-((1-((1-exp(-eta*x^theta))^2))/(exp((1-exp(-eta*x^theta))^2)))
plot(x,ecdf,lty=1,lwd=4,type="s",xlab="BALI",ylab="G(x; 0.6154765, -
0.2343602)",ylim=c(0,1),xlim=c(min(x),max(x)),col="black")
par(new=TRUE)
plot(x,proposedcdf,xlab="BALI",ylab="G(x; 0.6154765, -0.2343602)",
ylim=c(0,1),xlim=c(min(x),max(x)),col="red",lty =5, lwd=4,type="l")
par(new=TRUE)
legend(4, 0.4,c("Real Data","Proposed Model"),col=c(1,2), lty =c(1,5), bty="n",
cex=1.2)
```

#B.3. R Code for Plotting the Fitted Survival Function.

```
summary(data)

library(survival)

x=data

delta=rep(1,length(x))

km = survfit(Surv(x,delta)~1)

plot(km,conf.int=FALSE,ylab="S(x;0.6154765, -0.2343602)",xlab="BALI", lty
=1, col="black",pch=19,lwd=4)

theta=0.6154765

eta=-0.2343602

ss = function(x)

{

  ((1-(1-exp(-eta*x^theta))^2)/(exp((1-exp(-eta*x^theta))^2)))

}

lines(seq(1.000, 7.600 ,length.out =100),ss(seq(1.000, 7.600,length.out =100)),
col="red",lty =5,lwd=4)

legend(4, 0.8,c("Real Data","Proposed Model"),col=c(1,2), lty =c(1,5),
bty="n",cex=1.2)
```

Lampiran 3. R Codes Data Kabupaten/Kota Jembrana

```
#Jembrana
#B.1. R Code for Analysis. The following code has been used to calculate the values of the model parameters. Note: Here, pm is used for proposed model.
library(AdequacyModel)
library(readxl)
Data_Persentase_Kematian = read_excel("E:/LULUS 2022!!!!!!/Weibull/Data Persentase Kematian.xlsx")
View(Data_Persentase_Kematian)
kematian = Data_Persentase_Kematian$Jembrana
data = sort(kematian)
data
################# PDF of the proposed model
pdf_pm = function(par,x)
{
  theta = par[1]
  eta = par[2]
  theta*2*eta*(x^(theta-1))*exp(-eta*x^theta)*((1-exp(-eta*x^theta)))*(2-((1-exp(-eta*x^theta))^2))*(1/(exp((1-exp(-eta*x^theta))^2)))
}
################# CDF of the proposed model
cdf_pm = function(par,x)
{
  theta = par[1]
```

```
  eta = par[2]
  1-((1-((1-exp(-eta*x^theta))^2))/(exp((1-exp(-eta*x^theta))^2)))
}
set.seed(0)
goodness.fit(pdf=pdf_pm, cdf=cdf_pm, starts = c(1,1), data = data, method =
"SANN",domain = c(0,Inf),mle = NULL, lim_inf = c(0,0),lim_sup = c(2,2),
prop=0.1)

#B.2. R Code for Plotting the Estimated Distribution Function.
#NAPTW
theta=0.7494007
eta= -0.1994116
x=data
F1=ecdf(x)
ecdf=F1(c(x))
proposedcdf=1-((1-((1-exp(-eta*x^theta))^2))/(exp((1-exp(-eta*x^theta))^2)))
plot(x,ecdf,lty=1,lwd=4,type="s",xlab="JEMBRANA",ylab="G(x; 0.7494007, -
0.1994116)",ylim=c(0,1),xlim=c(min(x),max(x)),col="black")
par(new=TRUE)
plot(x,proposedcdf,xlab="JEMBRANA",ylab="G(x; 0.7494007, -0.1994116)",
ylim=c(0,1),xlim=c(min(x),max(x)),col="red",lty =5, lwd=4,type="l")
par(new=TRUE)
legend(3.5, 0.4,c("Real Data","Proposed Model"),col=c(1,2), lty =c(1,5), bty="n",
cex=1.2)
```

#B.3. R Code for Plotting the Fitted Survival Function.

```
summary(data)

library(survival)

x=data

delta=rep(1,length(x))

km = survfit(Surv(x,delta)~1)

plot(km,conf.int=FALSE,ylab="S(x;0.7494007, -

0.1994116)",xlab="JEMBRANA", lty =1, col="black",pch=19,lwd=4)

theta=0.7494007

eta=-0.1994116

ss = function(x)

{

  ((1-(1-exp(-eta*x^theta))^2)/(exp((1-exp(-eta*x^theta))^2)))

}

lines(seq(0.600, 6.300,length.out =100),ss(seq(0.600, 6.300,length.out =100)),

col="red",lty =5,lwd=4)

legend(3.5, 0.8,c("Real Data","Proposed Model"),col=c(1,2), lty =c(1,5),

bty="n",cex=1.2)
```

Lampiran 4. R Codes Data Kabupaten/Kota Tabanan

```
#Tabanan
#B.1. R Code for Analysis. The following code has been used to calculate the
values of the model parameters. Note: Here, pm is used for proposed model.
library(AdequacyModel)
library(readxl)
Data_Persentase_Kematian = read_excel("E:/LULUS 2022!!!!!!/Weibull/Data
Persentase Kematian.xlsx")
View(Data_Persentase_Kematian)
kematian = Data_Persentase_Kematian$Tabanan
data = sort(kematian)
data
################# PDF of the proposed model
pdf_pm = function(par,x)
{
  theta = par[1]
  eta = par[2]
  theta*2*eta*(x^(theta-1))*exp(-eta*x^theta)*((1-exp(-eta*x^theta)))*(2-((1-
exp(-eta*x^theta))^2))*(1/(exp((1-exp(-eta*x^theta))^2)))
}
################# CDF of the proposed model
cdf_pm = function(par,x)
{
  theta = par[1]
```

```
  eta = par[2]
  1-((1-((1-exp(-eta*x^theta))^2))/(exp((1-exp(-eta*x^theta))^2)))
}
set.seed(0)
goodness.fit(pdf=pdf_pm, cdf=cdf_pm, starts = c(1,1), data = data, method =
"SANN",domain = c(0,Inf),mle = NULL, lim_inf = c(0,0),lim_sup = c(2,2),
prop=0.1)

#B.2. R Code for Plotting the Estimated Distribution Function.
#NAPTW
theta= 1.3533597
eta= 0.1084903
x=data
F1=ecdf(x)
ecdf=F1(c(x))
proposedcdf=1-((1-((1-exp(-eta*x^theta))^2))/(exp((1-exp(-eta*x^theta))^2)))
plot(x,ecdf,lty=1,lwd=4,type="s",xlab="TABANAN",ylab="G(x; 1.3533597,
0.1084903)",ylim=c(0,1),xlim=c(min(x),max(x)),col="black")
par(new=TRUE)
plot(x,proposedcdf,xlab="TABANAN",ylab="G(x; 1.3533597, 0.1084903)",
ylim=c(0,1),xlim=c(min(x),max(x)),col="red",lty =5, lwd=4,type="l")
par(new=TRUE)
legend(6, 0.4,c("Real Data","Proposed Model"),col=c(1,2), lty =c(1,5), bty="n",
cex=1.2)
```

#B.3. R Code for Plotting the Fitted Survival Function.

```
summary(data)

library(survival)

x=data

delta=rep(1,length(x))

km = survfit(Surv(x,delta)~1)

plot(km,conf.int=FALSE,ylab="S(x;1.3533597, 0.1084903)",xlab="TABANAN",

lty =1, col="black",pch=19,lwd=4)

theta= 1.3533597

eta= 0.1084903

ss = function(x)

{

  ((1-(1-exp(-eta*x^theta))^2)/(exp((1-exp(-eta*x^theta))^2)))

}

lines(seq( 1.200, 14.700,length.out =100),ss(seq( 1.200, 14.700,length.out =100)),

col="red",lty =5,lwd=4)

legend(6, 0.8,c("Real Data","Proposed Model"),col=c(1,2), lty =c(1,5),

bty="n",cex=1.2)
```

Lampiran 5. R Codes Data Kabupaten/Kota Badung

```
#Badung
#B.1. R Code for Analysis. The following code has been used to calculate the
values of the model parameters. Note: Here, pm is used for proposed model.
library(AdequacyModel)
library(readxl)
Data_Persentase_Kematian = read_excel("E:/LULUS 2022!!!!!!/Weibull/Data
Persentase Kematian.xlsx")
View(Data_Persentase_Kematian)
kematian = Data_Persentase_Kematian$Badung
data = sort(kematian)
data
################# PDF of the proposed model
pdf_pm = function(par,x)
{
  theta = par[1]
  eta = par[2]
  theta*2*eta*(x^(theta-1))*exp(-eta*x^theta)*((1-exp(-eta*x^theta)))*(2-((1-
exp(-eta*x^theta))^2))*(1/(exp((1-exp(-eta*x^theta))^2)))
}
################# CDF of the proposed model
cdf_pm = function(par,x)
{
  theta = par[1]
```

```
  eta = par[2]
  1-((1-((1-exp(-eta*x^theta))^2))/(exp((1-exp(-eta*x^theta))^2)))
}
set.seed(0)
goodness.fit(pdf=pdf_pm, cdf=cdf_pm, starts = c(1,1), data = data, method =
"SANN",domain = c(0,Inf),mle = NULL, lim_inf = c(0,0),lim_sup = c(2,2),
prop=0.1)

#B.2. R Code for Plotting the Estimated Distribution Function.
#NAPTW
theta= 0.7513755
eta= -0.2163008
x=data
F1=ecdf(x)
ecdf=F1(c(x))
proposedcdf=1-((1-((1-exp(-eta*x^theta))^2))/(exp((1-exp(-eta*x^theta))^2)))
plot(x,ecdf,lty=1,lwd=4,type="s",xlab="BADUNG",ylab="G(x; 0.7513755, -
0.2163008)",ylim=c(0,1),xlim=c(min(x),max(x)),col="black")
par(new=TRUE)
plot(x,proposedcdf,xlab="BADUNG",ylab="G(x; 0.7513755, -0.2163008)",
ylim=c(0,1),xlim=c(min(x),max(x)),col="red",lty =5, lwd=4,type="l")
par(new=TRUE)
legend(3.5, 0.4,c("Real Data","Proposed Model"),col=c(1,2), lty =c(1,5), bty="n",
cex=1.2)
```

#B.3. R Code for Plotting the Fitted Survival Function.

```
summary(data)

library(survival)

x=data

delta=rep(1,length(x))

km = survfit(Surv(x,delta)~1)

plot(km,conf.int=FALSE,ylab="S(x;0.7513755, -0.2163008)",xlab="BADUNG",
lty =1, col="black",pch=19,lwd=4)

theta= 0.7513755

eta= -0.2163008

ss = function(x)

{

  ((1-(1-exp(-eta*x^theta))^2)/(exp((1-exp(-eta*x^theta))^2)))

}

lines(seq(0.900, 6.000,length.out =100),ss(seq(0.900, 6.000,length.out =100)),
col="red",lty =5,lwd=4)

legend(3.5, 0.7,c("Real Data","Proposed Model"),col=c(1,2), lty =c(1,5),
bty="n",cex=1.2)
```

Lampiran 6. R Codes Data Kabupaten/Kota Denpasar

```
#Denpasar
#B.1. R Code for Analysis. The following code has been used to calculate the
values of the model parameters. Note: Here, pm is used for proposed model.
library(AdequacyModel)
library(readxl)
Data_Persentase_Kematian = read_excel("E:/LULUS 2022!!!!!!/Weibull/Data
Persentase Kematian.xlsx")
View(Data_Persentase_Kematian)
kematian = Data_Persentase_Kematian$Denpasar
data = sort(kematian)
data
################# PDF of the proposed model
pdf_pm = function(par,x)
{
  theta = par[1]
  eta = par[2]
  theta*2*eta*(x^(theta-1))*exp(-eta*x^theta)*((1-exp(-eta*x^theta)))*(2-((1-
exp(-eta*x^theta))^2))*(1/(exp((1-exp(-eta*x^theta))^2)))
}
################# CDF of the proposed model
cdf_pm = function(par,x)
{
  theta = par[1]
```

```
  eta = par[2]
  1-((1-((1-exp(-eta*x^theta))^2))/(exp((1-exp(-eta*x^theta))^2)))
}
set.seed(0)
goodness.fit(pdf=pdf_pm, cdf=cdf_pm, starts = c(1,1), data = data, method =
"SANN",domain = c(0,Inf),mle = NULL, lim_inf = c(0,0),lim_sup = c(2,2),
prop=0.1)

#B.2. R Code for Plotting the Estimated Distribution Function.
#NAPTW
theta=0.7019682
eta=-0.2465237
x=data
F1=ecdf(x)
ecdf=F1(c(x))
proposedcdf=1-((1-((1-exp(-eta*x^theta))^2))/(exp((1-exp(-eta*x^theta))^2)))
plot(x,ecdf,lty=1,lwd=4,type="s",xlab="DENPASAR",ylab="G(x;0.7019682, -
0.2465237)",ylim=c(0,1),xlim=c(min(x),max(x)),col="black")
par(new=TRUE)
plot(x,proposedcdf,xlab="DENPASAR",ylab="G(x;0.7019682, -0.2465237)",
ylim=c(0,1),xlim=c(min(x),max(x)),col="red",lty =5, lwd=4,type="l")
par(new=TRUE)
legend(3.5, 0.4,c("Real Data","Proposed Model"),col=c(1,2), lty =c(1,5), bty="n",
cex=1.2)
```

#B.3. R Code for Plotting the Fitted Survival Function.

```
summary(data)

library(survival)

x=data

delta=rep(1,length(x))

km = survfit(Surv(x,delta)~1)

plot(km,conf.int=FALSE,ylab="S(x;0.7019682, -
0.2465237)",xlab="DENPASAR", lty =1, col="black",pch=19,lwd=4)

theta=0.7019682

eta=-0.2465237

ss = function(x)

{

  ((1-(1-exp(-eta*x^theta))^2)/(exp((1-exp(-eta*x^theta))^2)))

}

lines(seq(0.600, 5.600,length.out =100),ss(seq(0.600, 5.600,length.out =100)),
col="red",lty =5,lwd=4)

legend(3, 0.8,c("Real Data","Proposed Model"),col=c(1,2), lty =c(1,5),
bty="n",cex=1.2)
```

Lampiran 7. R Codes Data Kabupaten/Kota Gianyar

```
#Gianyar
#B.1. R Code for Analysis. The following code has been used to calculate the values of the model parameters. Note: Here, pm is used for proposed model.
library(AdequacyModel)
library(readxl)
Data_Persentase_Kematian = read_excel("E:/LULUS 2022!!!!!!/Weibull/Data Persentase Kematian.xlsx")
View(Data_Persentase_Kematian)
kematian = Data_Persentase_Kematian$Gianyar
data = sort(kematian)
data
################# PDF of the proposed model
pdf_pm = function(par,x)
{
  theta = par[1]
  eta = par[2]
  theta*2*eta*(x^(theta-1))*exp(-eta*x^theta)*((1-exp(-eta*x^theta)))*(2-((1-exp(-eta*x^theta))^2))*(1/(exp((1-exp(-eta*x^theta))^2)))
}
################# CDF of the proposed model
cdf_pm = function(par,x)
{
  theta = par[1]
```

```
  eta = par[2]
  1-((1-((1-exp(-eta*x^theta))^2))/(exp((1-exp(-eta*x^theta))^2)))
}
set.seed(0)
goodness.fit(pdf=pdf_pm, cdf=cdf_pm, starts = c(1,1), data = data, method =
"SANN",domain = c(0,Inf),mle = NULL, lim_inf = c(0,0),lim_sup = c(2,2),
prop=0.1)

#B.2. R Code for Plotting the Estimated Distribution Function.
#NAPTW
theta= 0.8863001
eta= 0.4591658
x=data
F1=ecdf(x)
ecdf=F1(c(x))
proposedcdf=1-((1-((1-exp(-eta*x^theta))^2))/(exp((1-exp(-eta*x^theta))^2)))
plot(x,ecdf,lty=1,xlab="GIANYAR",ylab="G(x;0.8863001,
0.4591658)",lwd=4,type="s",ylim=c(0,1),xlim=c(min(x),max(x)),col="black")
par(new=TRUE)
plot(x,proposedcdf,xlab="GIANYAR",ylab="G(x;0.8863001, 0.4591658)",
ylim=c(0,1),xlim=c(min(x),max(x)),col="red",lty =5, lwd=4,type="l")
par(new=TRUE)
legend(3, 0.4,c("Real Data","Proposed Model"),col=c(1,2), lty =c(1,5), bty="n",
cex=1.2)
```

#B.3. R Code for Plotting the Fitted Survival Function.

```
summary(data)

library(survival)

x=data

delta=rep(1,length(x))

km = survfit(Surv(x,delta)~1)

plot(km,conf.int=FALSE,ylab="S(x;0.8863001, 0.4591658)",xlab="GIANYAR",

lty =1, col="black",pch=19,lwd=4)

theta= 0.8863001

eta= 0.4591658

ss = function(x)

{

  ((1-(1-exp(-eta*x^theta))^2)/(exp((1-exp(-eta*x^theta))^2)))

}

lines(seq(0.200, 8.100,length.out =100),ss(seq(0.200, 8.100,length.out =100)),

col="red",lty =5,lwd=4)

legend(3, 0.8,c("Real Data","Proposed Model"),col=c(1,2), lty =c(1,5),

bty="n",cex=1.2)
```

Lampiran 8. R Codes Data Kabupaten/Kota Bangli

```
#Bangli
#B.1. R Code for Analysis. The following code has been used to calculate the
values of the model parameters. Note: Here, pm is used for proposed model.
library(AdequacyModel)
library(readxl)
Data_Persentase_Kematian = read_excel("E:/LULUS 2022!!!!!!/Weibull/Data
Persentase Kematian.xlsx")
View(Data_Persentase_Kematian)
kematian = Data_Persentase_Kematian$Bangli
data = sort(kematian)
data
################# PDF of the proposed model
pdf_pm = function(par,x)
{
  theta = par[1]
  eta = par[2]
  theta*2*eta*(x^(theta-1))*exp(-eta*x^theta)*((1-exp(-eta*x^theta)))*(2-((1-
exp(-eta*x^theta))^2))*(1/(exp((1-exp(-eta*x^theta))^2)))
}
################# CDF of the proposed model
cdf_pm = function(par,x)
{
  theta = par[1]
```

```
  eta = par[2]
  1-((1-((1-exp(-eta*x^theta))^2))/(exp((1-exp(-eta*x^theta))^2)))
}
set.seed(0)
goodness.fit(pdf=pdf_pm, cdf=cdf_pm, starts = c(1,1), data = data, method =
"SANN",domain = c(0,Inf),mle = NULL, lim_inf = c(0,0),lim_sup = c(2,2),
prop=0.1)

#B.2. R Code for Plotting the Estimated Distribution Function.
#NAPTW
theta=  0.5845483
eta=  -0.1835690
x=data
F1=ecdf(x)
ecdf=F1(c(x))
proposedcdf=1-((1-((1-exp(-eta*x^theta))^2))/(exp((1-exp(-eta*x^theta))^2)))
plot(x,ecdf,lty=1,lwd=4,type="s",xlab="BANGLI",ylab="G(x;0.5845483, -
0.1835690)",ylim=c(0,1),xlim=c(min(x),max(x)),col="black")
par(new=TRUE)
plot(x,proposedcdf,xlab="BANGLI",ylab="G(x;0.5845483, -0.1835690)",
ylim=c(0,1),xlim=c(min(x),max(x)),col="red",lty =5, lwd=4,type="l")
par(new=TRUE)
legend(7, 0.5,c("Real Data","Proposed Model"),col=c(1,2), lty =c(1,5), bty="n",
cex=1.2)
```

#B.3. R Code for Plotting the Fitted Survival Function.

```
summary(data)

library(survival)

x=data

delta=rep(1,length(x))

km = survfit(Surv(x,delta)~1)

plot(km,conf.int=FALSE,ylab="S(x;0.5845483, -0.1835690)",xlab="BANGLI",

lty =1, col="black",pch=19,lwd=4)

theta=  0.5845483

eta=  -0.1835690

ss = function(x)

{

  ((1-(1-exp(-eta*x^theta))^2)/(exp((1-exp(-eta*x^theta))^2)))

}

lines(seq(1.000, 12.600 ,length.out =100),ss(seq(1.000, 12.600 ,length.out =100)),

col="red",lty =5,lwd=4)

legend(7, 0.8,c("Real Data","Proposed Model"),col=c(1,2), lty =c(1,5),

bty="n",cex=1.2)
```

Lampiran 9. R Codes Data Kabupaten/Kota Klungkung

```
#Klungkung
#B.1. R Code for Analysis. The following code has been used to calculate the
values of the model parameters. Note: Here, pm is used for proposed model.
library(AdequacyModel)
library(readxl)
Data_Persentase_Kematian = read_excel("E:/LULUS 2022!!!!!!/Weibull/Data
Persentase Kematian.xlsx")
View(Data_Persentase_Kematian)
kematian = Data_Persentase_Kematian$Klungkung
data = sort(kematian)
data
################# PDF of the proposed model
pdf_pm = function(par,x)
{
  theta = par[1]
  eta = par[2]
  theta*2*eta*(x^(theta-1))*exp(-eta*x^theta)*((1-exp(-eta*x^theta)))*(2-((1-
exp(-eta*x^theta))^2))*(1/(exp((1-exp(-eta*x^theta))^2)))
}
################# CDF of the proposed model
cdf_pm = function(par,x)
{
  theta = par[1]
```

```
  eta = par[2]
  1-((1-((1-exp(-eta*x^theta))^2))/(exp((1-exp(-eta*x^theta))^2)))
}
set.seed(0)
goodness.fit(pdf=pdf_pm, cdf=cdf_pm, starts = c(1,1), data = data, method =
"SANN",domain = c(0,Inf),mle = NULL, lim_inf = c(0,0),lim_sup = c(2,2),
prop=0.1)

#B.2. R Code for Plotting the Estimated Distribution Function.
#NAPTW
theta= 0.5809058
eta=  -0.1823348
x=data
F1=ecdf(x)
ecdf=F1(c(x))
proposedcdf=1-((1-((1-exp(-eta*x^theta))^2))/(exp((1-exp(-eta*x^theta))^2)))
plot(x,ecdf,lty=1,lwd=4,type="s",xlab="KLUNGKUNG",ylab="G(x;0.5809058, -
0.1823348)",ylim=c(0,1),xlim=c(min(x),max(x)),col="black")
par(new=TRUE)
plot(x,proposedcdf,xlab="KLUNGKUNG",ylab="G(x;0.5809058, -0.1823348)",
ylim=c(0,1),xlim=c(min(x),max(x)),col="red",lty =5, lwd=4,type="l")
par(new=TRUE)
legend(7, 0.5,c("Real Data","Proposed Model"),col=c(1,2), lty =c(1,5), bty="n",
cex=1.2)
```

#B.3. R Code for Plotting the Fitted Survival Function.

```
summary(data)

library(survival)

x=data

delta=rep(1,length(x))

km = survfit(Surv(x,delta)~1)

plot(km,conf.int=FALSE,ylab="S(x;0.5809058, -
0.1823348)",xlab="KLUNGKUNG", lty =1, col="black",pch=19,lwd=4)

theta= 0.5809058

eta=  -0.1823348

ss = function(x)

{

  ((1-(1-exp(-eta*x^theta))^2)/(exp((1-exp(-eta*x^theta))^2)))

}

lines(seq(0.700, 12.600,length.out =100),ss(seq(0.700, 12.600,length.out =100)),
col="red",lty =5,lwd=4)

legend(7, 0.8,c("Real Data","Proposed Model"),col=c(1,2), lty =c(1,5),
bty="n",cex=1.2)
```

Lampiran 10. R Codes Data Kabupaten/Kota Karangasem

```
#Karangasem
#B.1. R Code for Analysis. The following code has been used to calculate the
values of the model parameters. Note: Here, pm is used for proposed model.
library(AdequacyModel)
library(readxl)
Data_Persentase_Kematian = read_excel("E:/LULUS 2022!!!!!!/Weibull/Data
Persentase Kematian.xlsx")
View(Data_Persentase_Kematian)
kematian = Data_Persentase_Kematian$Karangasem
data = sort(kematian)
data
################# PDF of the proposed model
pdf_pm = function(par,x)
{
  theta = par[1]
  eta = par[2]
  theta*2*eta*(x^(theta-1))*exp(-eta*x^theta)*((1-exp(-eta*x^theta)))*(2-((1-
exp(-eta*x^theta))^2))*(1/(exp((1-exp(-eta*x^theta))^2)))
}
################# CDF of the proposed model
cdf_pm = function(par,x)
{
  theta = par[1]
```

```
  eta = par[2]
  1-((1-((1-exp(-eta*x^theta))^2))/(exp((1-exp(-eta*x^theta))^2)))
}
set.seed(0)
goodness.fit(pdf=pdf_pm, cdf=cdf_pm, starts = c(1,1), data = data, method =
"SANN",domain = c(0,Inf),mle = NULL, lim_inf = c(0,0),lim_sup = c(2,2),
prop=0.1)

#B.2. R Code for Plotting the Estimated Distribution Function.
#NAPTW
theta= 0.4826871
eta=  -0.1912785
x=data
F1=ecdf(x)
ecdf=F1(c(x))
proposedcdf=1-((1-((1-exp(-eta*x^theta))^2))/(exp((1-exp(-eta*x^theta))^2)))
plot(x,ecdf,lty=1,lwd=4,type="s",xlab="KARANGASEM",ylab="G(x;0.4826871,
-0.1912785)",ylim=c(0,1),xlim=c(min(x),max(x)),col="black")
par(new=TRUE)
plot(x,proposedcdf,xlab="KARANGASEM",ylab="G(x;0.4826871, -
0.1912785)", ylim=c(0,1),xlim=c(min(x),max(x)),col="red",lty =5,
lwd=4,type="l")
par(new=TRUE)
```

```
legend(7, 0.5,c("Real Data","Proposed Model"),col=c(1,2), lty =c(1,5), bty="n",
cex=1.2)

#B.3. R Code for Plotting the Fitted Survival Function.
summary(data)
library(survival)
x=data
delta=rep(1,length(x))
km = survfit(Surv(x,delta)~1)
plot(km,conf.int=FALSE,ylab="S(x;0.4826871, -
0.1912785)",xlab="KARANGASEM", lty =1, col="black",pch=19,lwd=4)
theta= 0.4826871
eta=  -0.1912785
ss = function(x)
{
  ((1-(1-exp(-eta*x^theta))^2)/(exp((1-exp(-eta*x^theta))^2)))
}
lines(seq(0.700, 18.900,length.out =100),ss(seq(0.700, 18.900,length.out =100)),
col="red",lty =5,lwd=4)
legend(7, 0.8,c("Real Data","Proposed Model"),col=c(1,2), lty =c(1,5),
bty="n",cex=1.2)
```

Lampiran 11. R Codes Data Kabupaten/Kota Buleleng

```
#Buleleng
#B.1. R Code for Analysis. The following code has been used to calculate the values of the model parameters. Note: Here, pm is used for proposed model.
library(AdequacyModel)
library(readxl)
Data_Persentase_Kematian = read_excel("E:/LULUS 2022!!!!!!/Weibull/Data Persentase Kematian.xlsx")
View(Data_Persentase_Kematian)
kematian = Data_Persentase_Kematian$Buleleng
data = sort(kematian)
data
################# PDF of the proposed model
pdf_pm = function(par,x)
{
  theta = par[1]
  eta = par[2]
  theta*2*eta*(x^(theta-1))*exp(-eta*x^theta)*((1-exp(-eta*x^theta)))*(2-((1-exp(-eta*x^theta))^2))*(1/(exp((1-exp(-eta*x^theta))^2)))
}
################# CDF of the proposed model
cdf_pm = function(par,x)
{
  theta = par[1]
```

```
  eta = par[2]
  1-((1-((1-exp(-eta*x^theta))^2))/(exp((1-exp(-eta*x^theta))^2)))
}
set.seed(0)
goodness.fit(pdf=pdf_pm, cdf=cdf_pm, starts = c(1,1), data = data, method =
"SANN",domain = c(0,Inf),mle = NULL, lim_inf = c(0,0),lim_sup = c(2,2),
prop=0.1)

#B.2. R Code for Plotting the Estimated Distribution Function.
#NAPTW
theta= 0.6983563
eta= -0.1500912
x=data
F1=ecdf(x)
ecdf=F1(c(x))
proposedcdf=1-((1-((1-exp(-eta*x^theta))^2))/(exp((1-exp(-eta*x^theta))^2)))
plot(x,ecdf,lty=1,lwd=4,type="s",xlab="BULELENG",ylab="G(x;0.6983563, -
0.1500912)",ylim=c(0,1),xlim=c(min(x),max(x)),col="black")
par(new=TRUE)
plot(x,proposedcdf,xlab="BULELENG",ylab="G(x;0.6983563, -0.1500912)",
ylim=c(0,1),xlim=c(min(x),max(x)),col="red",lty =5, lwd=4,type="l")
par(new=TRUE)
legend(7, 0.5,c("Real Data","Proposed Model"),col=c(1,2), lty =c(1,5), bty="n",
cex=1.2)
```

#B.3. R Code for Plotting the Fitted Survival Function.

```
summary(data)

library(survival)

x=data

delta=rep(1,length(x))

km = survfit(Surv(x,delta)~1)

plot(km,conf.int=FALSE,ylab="S(x;0.6983563, -
0.1500912)",xlab="BULELENG", lty =1, col="black",pch=19,lwd=4)

theta= 0.6983563

eta= -0.1500912

ss = function(x)

{

  ((1-((1-exp(-eta*x^theta))^2))/(exp((1-exp(-eta*x^theta))^2)))

}

lines(seq(1.200,11.800,length.out =100),ss(seq(1.200,11.800,length.out =100)),
col="red",lty =5,lwd=4)

legend(7, 0.8,c("Real Data","Proposed Model"),col=c(1,2), lty =c(1,5),
bty="n",cex=1.2)
```

Lampiran 12. Perbandingan Nilai Fungsi CDF NFE-Weibull Dengan Nilai Fungsi CDF NFE-Weibull Menggunakan Nilai Estimasi

Kabupaten/Kota								
Jembrana			**Tabanan**			**Badung**		
CDF data	CDF Estimasi	**(Y-Y')^2**	CDF data	CDF Estimasi	**(Y-Y')^2**	CDF data	CDF Estimasi	**(Y-Y')^2**
						0.0625	0.4505	**0.1506**
			0.0667	0.3586	**0.0852**	0.1250	0.4811	**0.1268**
0.0714	0.3261	**0.0648**	0.1333	0.5129	**0.1441**	0.1875	0.5832	**0.1566**
0.1429	0.5058	**0.1317**	0.2000	0.5442	**0.1185**	0.3125	0.6045	**0.0853**
0.2143	0.5709	**0.1272**	0.2667	0.6363	**0.1366**	0.3125	0.6045	**0.0853**
0.2857	0.6406	**0.1259**	0.3333	0.6885	**0.1261**	0.4375	0.6605	**0.0497**
0.3571	0.7298	**0.1389**	0.4000	0.7237	**0.1048**	0.4375	0.6605	**0.0497**
0.4286	0.7590	**0.1092**	0.4667	0.7318	**0.0703**	0.5000	0.7065	**0.0426**
0.5714	0.7842	**0.0453**	0.5333	0.7868	**0.0642**	0.5625	0.8120	**0.0622**
0.5714	0.7842	**0.0453**	0.6000	0.7927	**0.0371**	0.6250	0.8338	**0.0436**
0.6429	0.7918	**0.0222**	0.6667	0.8038	**0.0188**	0.6875	0.8403	**0.0234**
0.7143	0.8249	**0.0122**	0.7333	0.8417	**0.0117**	0.7500	0.8635	**0.0129**
0.7857	0.8562	**0.0050**	0.8667	0.8832	**0.0003**	0.8750	0.8825	**0.0001**
0.8571	0.8607	**0.0000**	0.8667	0.8832	**0.0003**	0.8750	0.8825	**0.0001**
0.9286	0.9081	**0.0004**	0.9333	0.9201	**0.0002**	0.9375	0.9278	**0.0001**
1	0.9177	**0.0068**	1	0.9773	**0.0005**	1	0.9345	**0.0043**
MSE		**0.0596**			**0.0613**			**0.0558**

Kabupaten/Kota								
Denpasar			**Gianyar**			**Bangli**		
CDF data	CDF Estimasi	**(Y-Y')^2**	CDF data	CDF Estimasi	**(Y-Y')^2**	CDF data	CDF Estimasi	**(Y-Y')^2**
0.0588	0.3767	**0.1010**						
0.1176	0.5087	**0.1529**	0.0625	0.2711	**0.0435**			
0.1765	0.5595	**0.1467**	0.1250	0.4934	**0.1357**	0.0667	0.3291	**0.0689**
0.2353	0.5821	**0.1203**	0.2500	0.5302	**0.0785**	0.1333	0.4383	**0.0930**
0.2941	0.6226	**0.1079**	0.2500	0.5302	**0.0785**	0.2000	0.4756	**0.0759**
0.3529	0.6407	**0.0828**	0.3125	0.6614	**0.1218**	0.2667	0.6090	**0.1172**
0.4118	0.6577	**0.0605**	0.4375	0.6806	**0.0591**	0.3333	0.6437	**0.0963**
0.4706	0.6884	**0.0474**	0.4375	0.6806	**0.0591**	0.4000	0.7625	**0.1314**
0.5294	0.7392	**0.0440**	0.5000	0.7550	**0.0650**	0.4667	0.7751	**0.0951**
0.5882	0.8184	**0.0530**	0.5625	0.8219	**0.0673**	0.6000	0.8082	**0.0433**
0.6471	0.8251	**0.0317**	0.6250	0.8292	**0.0417**	0.6000	0.8082	**0.0433**
0.7059	0.8375	**0.0173**	0.6875	0.8361	**0.0221**	0.6667	0.8646	**0.0392**
0.8235	0.8433	**0.0004**	0.7500	0.8650	**0.0132**	0.8000	0.8902	**0.0081**
0.8235	0.8433	**0.0004**	0.8125	0.8746	**0.0039**	0.8000	0.8902	**0.0081**
0.8824	0.8540	**0.0008**	0.8750	0.9404	**0.0043**	0.8667	0.9139	**0.0022**
0.9412	0.8638	**0.0060**	0.9375	0.9517	**0.0002**	0.9333	0.9539	**0.0004**
1	0.9179	**0.0067**	1	0.9663	**0.0011**	1	0.9618	**0.0015**
MSE		**0.0576**			**0.0497**			**0.0549**

Kabupaten/Kota								
Klungkung			Karangasem			Buleleng		
CDF data	CDF Estimasi	**(Y-Y')^2**	CDF data	CDF Estimasi	**(Y-Y')^2**	CDF data	CDF Estimasi	**(Y-Y')^2**
0.0667	0.2468	**0.0324**	0.0667	0.1983	**0.0173**	0.0667	0.3169	**0.0626**
0.1333	0.3132	**0.0324**	0.1333	0.2660	**0.0176**	0.1333	0.5454	**0.1698**
0.2000	0.5886	**0.1510**	0.2000	0.4450	**0.0600**	0.2000	0.5973	**0.1579**
0.2667	0.6028	**0.1130**	0.2667	0.5616	**0.0870**	0.2667	0.6818	**0.1723**
0.3333	0.6645	**0.1097**	0.3333	0.6811	**0.1210**	0.3333	0.6908	**0.1278**
0.4000	0.7388	**0.1148**	0.4000	0.6957	**0.0875**	0.4000	0.6996	**0.0897**
0.4667	0.7538	**0.0824**	0.4667	0.7958	**0.1083**	0.5333	0.7241	**0.0364**
0.5333	0.7866	**0.0641**	0.5333	0.8000	**0.0711**	0.5333	0.7241	**0.0364**
0.6000	0.7924	**0.0370**	0.6000	0.8465	**0.0608**	0.6000	0.7317	**0.0174**
0.6667	0.7981	**0.0173**	0.6667	0.8581	**0.0366**	0.6667	0.8163	**0.0224**
0.7333	0.8279	**0.0090**	0.7333	0.9003	**0.0279**	0.7333	0.8425	**0.0119**
0.8000	0.8407	**0.0017**	0.8000	0.9038	**0.0108**	0.8000	0.8503	**0.0025**
0.8667	0.9780	**0.0124**	0.8667	0.9283	**0.0038**	0.8667	0.8741	**0.0001**
0.9333	0.9791	**0.0021**	0.9333	0.9717	**0.0015**	0.9333	0.9008	**0.0011**
1	0.9866	**0.0002**	1	0.9758	**0.0006**	1	0.9549	**0.0020**
MSE		**0.0520**			**0.0474**			**0.0607**

BALI		
CDF data	CDF Estimasi	**(Y-Y')^2**
0.1176	0.4836	**0.1339**
0.1176	0.4836	**0.1339**
0.1765	0.5086	**0.1103**
0.2353	0.6417	**0.1652**
0.2941	0.6563	**0.1312**
0.3529	0.6700	**0.1005**
0.4706	0.7066	**0.0557**
0.4706	0.7066	**0.0557**
0.5294	0.7176	**0.0354**
0.5882	0.7724	**0.0339**
0.6471	0.8301	**0.0335**
0.7059	0.8353	**0.0167**
0.7647	0.8402	**0.0057**
0.8235	0.8579	**0.0012**
0.8824	0.8975	**0.0002**
0.9412	0.9181	**0.0005**
1	0.9351	**0.0042**
MSE		**0.0599**

Lampiran 13. R Codes Data Probabilitas *Survival*

```
#Bali
library(AdequacyModel)
library(readxl)
Data_Persentase_Kematian = read_excel("E:/LULUS 2022!!!!!!/Weibull/Data Persentase Kematian.xlsx")
data= Data_Persentase_Kematian$BALI
theta= 0.794711
eta= 13.159838
x=data
x
survival=((1-((1-exp(-eta*x^theta))^2))/(exp((1-exp(-eta*x^theta))^2)))
survival

#Jembrana
library(AdequacyModel)
library(readxl)
Data_Persentase_Kematian = read_excel("E:/LULUS 2022!!!!!!/Weibull/Data Persentase Kematian.xlsx")
data= Data_Persentase_Kematian$Jembrana
theta= 0.8622685
eta= 16.4202818
x=data
x
```

```
survival=(1-(1-exp(-eta*x^theta))^2)/(exp((1-exp(-eta*x^theta))^2))
survival

#Tabanan
library(AdequacyModel)
library(readxl)
Data_Persentase_Kematian = read_excel("E:/LULUS 2022!!!!!!/Weibull/Data Persentase Kematian.xlsx")
View(Data_Persentase_Kematian)
data= Data_Persentase_Kematian$Tabanan
theta= 0.975679
eta= 16.827082
x=data
x
survival=(1-(1-exp(-eta*x^theta))^2)/(exp((1-exp(-eta*x^theta))^2))
survival

#Badung
library(AdequacyModel)
library(readxl)
Data_Persentase_Kematian = read_excel("E:/LULUS 2022!!!!!!/Weibull/Data Persentase Kematian.xlsx")
View(Data_Persentase_Kematian)
data= Data_Persentase_Kematian$Badung
```

```
theta= 0.9015264
eta= 21.3636526
x=data
x
survival=(1-(1-exp(-eta*x^theta))^2)/(exp((1-exp(-eta*x^theta))^2))
survival

#Denpasar
library(AdequacyModel)
library(readxl)
Data_Persentase_Kematian = read_excel("E:/LULUS 2022!!!!!!/Weibull/Data Persentase Kematian.xlsx")
View(Data_Persentase_Kematian)
data= Data_Persentase_Kematian$Denpasar
theta= 0.8259064
eta= 16.3927914
x=data
x
survival=(1-(1-exp(-eta*x^theta))^2)/(exp((1-exp(-eta*x^theta))^2))
survival

#Gianyar
library(AdequacyModel)
library(readxl)
```

```
Data_Persentase_Kematian = read_excel("E:/LULUS 2022!!!!!!/Weibull/Data Persentase Kematian.xlsx")
View(Data_Persentase_Kematian)
data= Data_Persentase_Kematian$Gianyar
theta= 0.714704
eta= 13.515230
x=data
x
survival=(1-(1-exp(-eta*x^theta))^2)/(exp((1-exp(-eta*x^theta))^2))
survival

#Bangli
library(AdequacyModel)
library(readxl)
Data_Persentase_Kematian = read_excel("E:/LULUS 2022!!!!!!/Weibull/Data Persentase Kematian.xlsx")
View(Data_Persentase_Kematian)
data= Data_Persentase_Kematian$Bangli
theta=  0.9312498
eta= 14.6926921
x=data
x
survival=(1-(1-exp(-eta*x^theta))^2)/(exp((1-exp(-eta*x^theta))^2))
survival
```

```
#Klungkung
library(AdequacyModel)
library(readxl)
Data_Persentase_Kematian = read_excel("E:/LULUS 2022!!!!!!/Weibull/Data Persentase Kematian.xlsx")
View(Data_Persentase_Kematian)
data= Data_Persentase_Kematian$Klungkung
theta= 0.849538
eta=  12.840099
x=data
x
survival=(1-(1-exp(-eta*x^theta))^2)/(exp((1-exp(-eta*x^theta))^2))
survival

#Karangasem
library(AdequacyModel)
library(readxl)
Data_Persentase_Kematian = read_excel("E:/LULUS 2022!!!!!!/Weibull/Data Persentase Kematian.xlsx")
View(Data_Persentase_Kematian)
data= Data_Persentase_Kematian$Karangasem
theta= 0.9491627
eta= 12.3127771
```

```
x=data
x
survival=(1-(1-exp(-eta*x^theta))^2)/(exp((1-exp(-eta*x^theta))^2))
survival

#Buleleng
library(AdequacyModel)
library(readxl)
Data_Persentase_Kematian = read_excel("E:/LULUS 2022!!!!!!/Weibull/Data Persentase Kematian.xlsx")
View(Data_Persentase_Kematian)
data= Data_Persentase_Kematian$Karangasem
theta= 1.023269
eta= 17.766438
x=data
x
survival=(1-(1-exp(-eta*x^theta))^2)/(exp((1-exp(-eta*x^theta))^2))
survival
```

Lampiran 14. Perbandingan Nilai *Survival* NFE-Weibull Dengan Nilai *Survival* NFE-Weibull Menggunakan Nilai Estimasi

Kabupaten/Kota								
Jembrana			**Tabanan**			**Badung**		
Survival Data	Survival Estimasi	**(Y-Y')^2**	Survival Data	Survival Estimasi	**(Y-Y')^2**	Survival Data	Survival Estimasi	**(Y-Y')^2**
						0.938	0.868	**0.0048**
			0.933	0.921	**0.0001**	0.875	0.847	**0.0008**
0.929	0.936	**0.0001**	0.867	0.822	**0.0020**	0.813	0.758	**0.0030**
0.857	0.828	**0.0009**	0.800	0.795	**0.0000**	0.688	0.736	**0.0023**
0.786	0.770	**0.0002**	0.733	0.700	**0.0011**	0.688	0.736	**0.0023**
0.714	0.695	**0.0004**	0.667	0.634	**0.0010**	0.563	0.671	**0.0117**
0.643	0.576	**0.0045**	0.600	0.585	**0.0002**	0.563	0.671	**0.0117**
0.571	0.530	**0.0017**	0.533	0.573	**0.0015**	0.500	0.610	**0.0120**
0.429	0.488	**0.0035**	0.467	0.483	**0.0003**	0.438	0.438	**0.0000**
0.429	0.488	**0.0035**	0.400	0.473	**0.0053**	0.375	0.396	**0.0004**
0.357	0.474	**0.0138**	0.333	0.453	**0.0143**	0.313	0.383	**0.0050**
0.286	0.413	**0.0163**	0.267	0.380	**0.0129**	0.250	0.335	**0.0073**
0.214	0.351	**0.0186**	0.133	0.293	**0.0254**	0.125	0.294	**0.0286**
0.143	0.341	**0.0394**	0.133	0.293	**0.0254**	0.125	0.294	**0.0286**
0.071	0.236	**0.0271**	0.067	0.207	**0.0198**	0.063	0.189	**0.0159**
0	0.213	**0.0454**	0	0.061	**0.0038**	0	0.172	**0.0296**
MSE		**0.0125**			**0.0075**			**0.0103**

Kabupaten/Kota								
Denpasar			**Gianyar**			**Bangli**		
Survival Data	Survival Estimasi	**(Y-Y')^2**	Survival Data	Survival Estimasi	**(Y-Y')^2**	Survival Data	Survival Estimasi	**(Y-Y')^2**
0.941	0.912	**0.0008**						
0.882	0.825	**0.0033**	0.938	0.957	**0.0004**			
0.824	0.781	**0.0018**	0.875	0.837	**0.0014**	0.933	0.935	**0.0000**
0.765	0.759	**0.0000**	0.750	0.807	**0.0033**	0.867	0.876	**0.0001**
0.706	0.716	**0.0001**	0.750	0.807	**0.0033**	0.800	0.851	**0.0026**
0.647	0.695	**0.0023**	0.688	0.670	**0.0003**	0.733	0.731	**0.0000**
0.588	0.674	**0.0074**	0.563	0.645	**0.0068**	0.667	0.691	**0.0006**
0.529	0.635	**0.0111**	0.563	0.645	**0.0068**	0.600	0.524	**0.0057**
0.471	0.561	**0.0082**	0.500	0.536	**0.0013**	0.533	0.503	**0.0009**
0.412	0.426	**0.0002**	0.438	0.419	**0.0003**	0.400	0.445	**0.0020**
0.353	0.413	**0.0036**	0.375	0.405	**0.0009**	0.400	0.445	**0.0020**
0.294	0.389	**0.0089**	0.313	0.392	**0.0062**	0.333	0.333	**0.0000**
0.176	0.377	**0.0403**	0.250	0.332	**0.0068**	0.200	0.277	**0.0060**

Kabupaten/Kota								
Denpasar			**Gianyar**			**Bangli**		
Survival	Survival	**(Y-Y')^2**	Survival	Survival	**(Y-Y')^2**	Survival	Survival	**(Y-Y')^2**
Data	Estimasi		Data	Estimasi		Data	Estimasi	
0.176	0.377	**0.0403**	0.188	0.312	**0.0154**	0.200	0.277	**0.0060**
0.118	0.355	**0.0565**	0.125	0.157	**0.0010**	0.133	0.222	**0.0079**
0.059	0.335	**0.0762**	0.063	0.129	**0.0044**	0.067	0.123	**0.0032**
0	0.213	**0.0452**	0	0.090	**0.0082**	0	0.102	**0.0105**
MSE		**0.0180**			**0.0042**			**0.0032**

Kabupaten/Kota								
Klungkung			**Karangasem**			**Buleleng**		
Survival	Survival	**(Y-Y')^2**	Survival	Survival	**(Y-Y')^2**	Survival	Survival	**(Y-Y')^2**
Data	Estimasi		Data	Estimasi		Data	Estimasi	
0.933	0.965	**0.0010**	0.933	0.978	**0.0020**	0.933	0.940	**0.000**
0.867	0.942	**0.0056**	0.867	0.959	**0.0085**	0.867	0.794	**0.005**
0.800	0.752	**0.0023**	0.800	0.872	**0.0052**	0.800	0.743	**0.003**
0.733	0.737	**0.0000**	0.733	0.779	**0.0021**	0.733	0.643	**0.008**
0.667	0.666	**0.0000**	0.667	0.644	**0.0005**	0.667	0.631	**0.001**
0.600	0.562	**0.0014**	0.600	0.625	**0.0006**	0.600	0.619	**0.000**
0.533	0.538	**0.0000**	0.533	0.467	**0.0044**	0.467	0.584	**0.014**
0.467	0.484	**0.0003**	0.467	0.460	**0.0000**	0.467	0.584	**0.014**
0.400	0.473	**0.0054**	0.400	0.371	**0.0009**	0.400	0.573	**0.030**
0.333	0.463	**0.0169**	0.333	0.347	**0.0002**	0.333	0.430	**0.009**
0.267	0.407	**0.0198**	0.267	0.254	**0.0002**	0.267	0.379	**0.013**
0.200	0.382	**0.0332**	0.200	0.246	**0.0021**	0.200	0.363	**0.027**
0.133	0.059	**0.0055**	0.133	0.187	**0.0029**	0.133	0.313	**0.032**
0.067	0.057	**0.0001**	0.067	0.076	**0.0001**	0.067	0.253	**0.035**
0	0.036	**0.0013**	0	0.065	**0.0043**	0	0.120	**0.014**
MSE		**0.0062**			**0.0023**			**0.0137**

BALI		
Survival Data	Survival Estimasi	**(Y-Y')^2**
0.882	0.845	**0.001**
0.882	0.845	**0.001**
0.824	0.825	**0.000**
0.765	0.694	**0.005**
0.706	0.676	**0.001**
0.647	0.659	**0.000**
0.529	0.609	**0.006**
0.529	0.609	**0.006**
0.471	0.594	**0.015**
0.412	0.508	**0.009**
0.353	0.403	**0.003**
0.294	0.393	**0.010**
0.235	0.383	**0.022**
0.176	0.347	**0.029**
0.118	0.260	**0.020**
0.059	0.212	**0.024**
0	0.171	**0.029**
MSE		**0.0107**