

Analyzing indian rice farms

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1 Introduction

The present data set includes production data for 171 indian rice farms. The dataframe contains the following variables:

variable	description	expressions
id	unique identifier for a farm	unique id
time	unique identifier for a specific growing season	1 - 6
size	total production area in hectares	0.01 - 5.322
status	status of property rights	“owner”, “share”, “mixed”
varieties	rice seed varieties	“trad”, “high”, “mixed”
bimas	bimas-status of the farmers	“no”, “yes”, “mixed”
seed	seed in kilogram	1 - 1250 kg
urea	urea in kilogram	1 - 1250 kg
phosphate	phosphate in kilogram	0 - 700 kg
pesticide	pesticide cost in Rupiah	0 - 62600 r
pseed	price of seed in Rupiah per kg	40 - 375 r/kg
purea	price of urea in Rupiah per kg	50 - 100 r/kg
pphosph	price of phosphate in Rupiah per kg	60 - 120 r/kg
hiredlabor	hired labor in hours	1 - 4536 h
famlabor	family labor in hours	1 - 1526 h
totlabor	total labor (excluding harvest labor)	1 - 4774 h
wage	labor wage in Rupiah per hour	30 - 175.35 r/h
goutput	gross output of rice in kg	42 - 20960 kg
noutput	gross output minus harvesting cost	42 - 17610 kg
price	price of rough rice in Rupiah per kg	50 - 190 r/kg
region	region of the farm	6 regions in Indonesia

2 First Model

3 Third Model

4 Comparision

5 Conclusion