

EC 151 Homework VI
Land
Due November 18th in class

1) Land Size & Optimal Production Structure

Chapter 12, Question 1

2) Cooperative Farming and Incentives

Chapter 12, Question 5

3) Risk

Say in an agricultural economy producing wheat there are two types of contracts: sharecropping and fixed rent. Under fixed rent contract, tenant gives R bushels of wheat to (risk-neutral) landlord. Under sharecropping, tenant gives “ s ” fraction of wheat harvest to landlord. There is also uncertainty/risk in the agricultural production due to the monsoon. A good monsoon will yield a high wheat harvest H and a bad monsoon season will yield a low wheat harvest L . The probability of a good monsoon is p .

- a. Show that if we consider sharecropping and fixed rent as two gambles with same expected outcome, sharecropping has a narrower spread
- b. Using diagrams similar Figure 12.6 show which contract would be preferred by tenant if he was risk-averse, risk-loving and risk-neutral.