2(b). Crop production risks and their management

(Dr.T.N. Balasubramanian)

Crop production is under the control of climate and weather, and both are beyond human control and hence crop production under open condition carries high risks

Crop Production Risks

Risk is defined as the quantum of physical and economical crop production losses with events of probability in occurrence

Type of crop production risks

- Inherited risks
- Transferable risks
- Risk that can be minimized through technology introduction

Inherited risk

Name of inherited risk	Crop production loss(%)
Soil related risk(saline,s odium,marginal etc.,)	30
Dry land agriculture risk	40
Conventional farming risk	30

Transferable risks

Name of the risks	Crop production loss(%)
Drought	60 to 100
Flood	100
Dry spell more than 15 days(based on crop stages)	40 to 60
Wet spell more than 15 days(based on crop stages)	60 to 80
Pest and disease out break	30 to 40
Cyclone	80 to 100
Hail storm	60 to 80
Abnormal wind speed for banana,sugarcane	80 to 100

Risks can be Minimized by Technology Introduction

Name of the risks	Crop production loss
Non adoption of timely sowing(sowing window)	30
Poor weed control	30
Non adoption of plant protection	30
Unsustainable soil fertility management	30

Management of crop production risks

Name of the risks	Management Options
Inherited risks	Land improvement
Transferable risks	Crop insurance and weather based farm decision
Risks can be minimized through technology introduction	Integrated crop Management(integrating sustainable technologies) and weather based farm decision