

“COMPARATIVE STUDY ON HYBRID SEED VERSUS TRADITIONAL SEED: A CRITICAL ASSESSMENT OF FARMING PROFITABILITY”



Guided by:

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CONTENT

- Introduction
- Various Projects
- Intro about Study
- Aim and Objectives of the study
- Research Questions
- Methodology
- General Findings
- Major Findings

INTRODUCTION

- Prayatna Samiti is a voluntary organization registered in 1989 under Rajasthan State Societies Registration Act (1958).
- At present it is working intensively in 12 panchayats of Girwa, Salumbar and Bhinder Tehsil of Udaipur.
- Prayatna Samiti aims to enhance self-reliant institutional building at the block level to address food insecurity.
- Prayatna Samiti started partnership with Actionaid in January 2008 as part of the Tribal Self Rule Initiative Network.
- With the support of Actionaid, Prayatna Samiti is currently working mainly focusing on: Empowerment through capacity building of the tribal peoples, Advocacy and lobby for protection and promotion of tribals rights, Empowerment for Self Rule, Institution building and campaign for solidarity of the Tribal People.

PROJECTS

- Sawna Macro Watershed
- Makri River Basin
- Agriculture and Livestock
- Kunwa Parivar (Well Families)
- Sustainable Livelihood Group (SLG)
- Local Right Programme (LRP)

INTRODUCTION ABOUT STUDY

Hybrid seed is the product of crossing inbred lines and hybrid seed does not produce seed for the next generation. Traditional seed is the seed where farmer keeps a part of her/his own crop for seed. It means that the crop is capable enough to produce a seed for the next generation. Seed is one of the fundamental inputs of technological intervention in agriculture. Seed security is the foundation of food security. Seed is the first link of food chain and ultimate symbol of food security.

From last 2-3 years Government of Rajasthan, in collaboration with some private seed companies, distributing hybrid maize seed free of cost to the farmers. Prior to the free distribution of the hybrid seed the farmers of the area were using traditional seed.

AIM OF THE STUDY

To make a better understanding on the effectiveness of both seeds in the life of a farmer.

OBJECTIVES OF THE STUDY

- To know the impact of hybrid seed on the quality of soil and production.
- To know the perception of the farmers towards both type of seeds.
- To know the priority of the farmer behind doing agriculture.
- To identify the factors that encourages farmers to use hybrid seed or traditional seed.
- To access the impact of Government intervention in traditional seed management.

RESEARCH QUESTIONS

- What is the impact of using hybrid seed and traditional seed?
- What is the experience of the farmers?
- What factors motivate a farmer to use hybrid seed or traditional seed?
- Is farmer aware about advantages and disadvantages of both seed?
- Which seed is good for agriculture in the view point of farmers?

METHODOLOGY

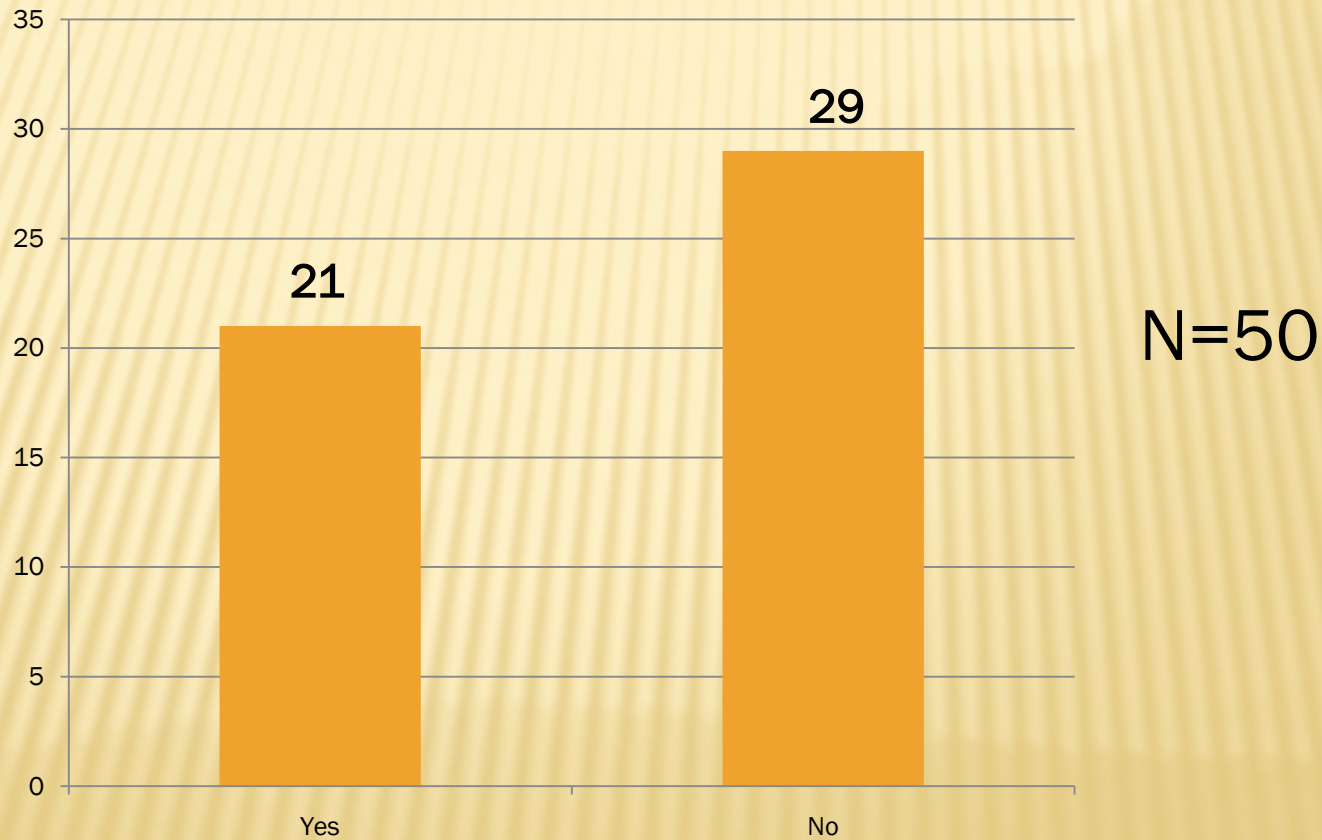
Research Type	Descriptive & Exploratory
Sampling Type	Judgmental & Convenient
Study Type	Qualitative and Quantitative
Study Area	Salumber block of Udaipur dist, Rajasthan
Data Type	Primary and Secondary
Target Group	Farmers who have used both type of seed
Sample size	50 farmers
Tool & Technique	Semi-structured Questionnaire, Face to Face interview

GENERAL FINDINGS

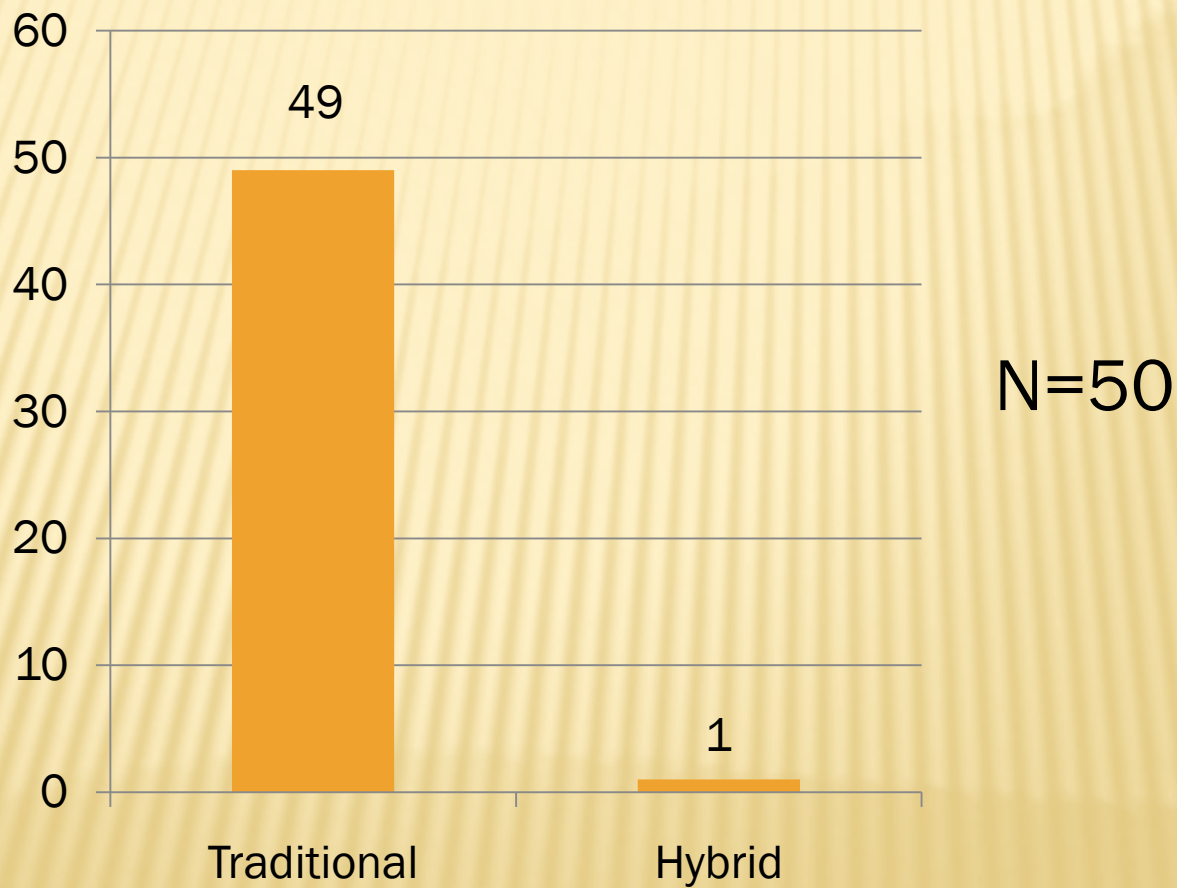
S.N .	Particular	Traditional	Hybrid
1	Average Typology of Land	Plain (6.6) per farmer	Sloppy (3.32) per farmer
2	Average seed used/Bigha	4.82 kg/bigha	4.92 kg/bigha
3	Average input cost	2194.5/ bigha	2472.8/bigha
4	Average output	4.5 q	5.3 q
5	Average net revenue	2075/bigha	2429/bigha
6	Average time taken by crop	96 Days	99 days
7	Devoted hours	5.48/day	6.24/day

MAJOR FINDINGS

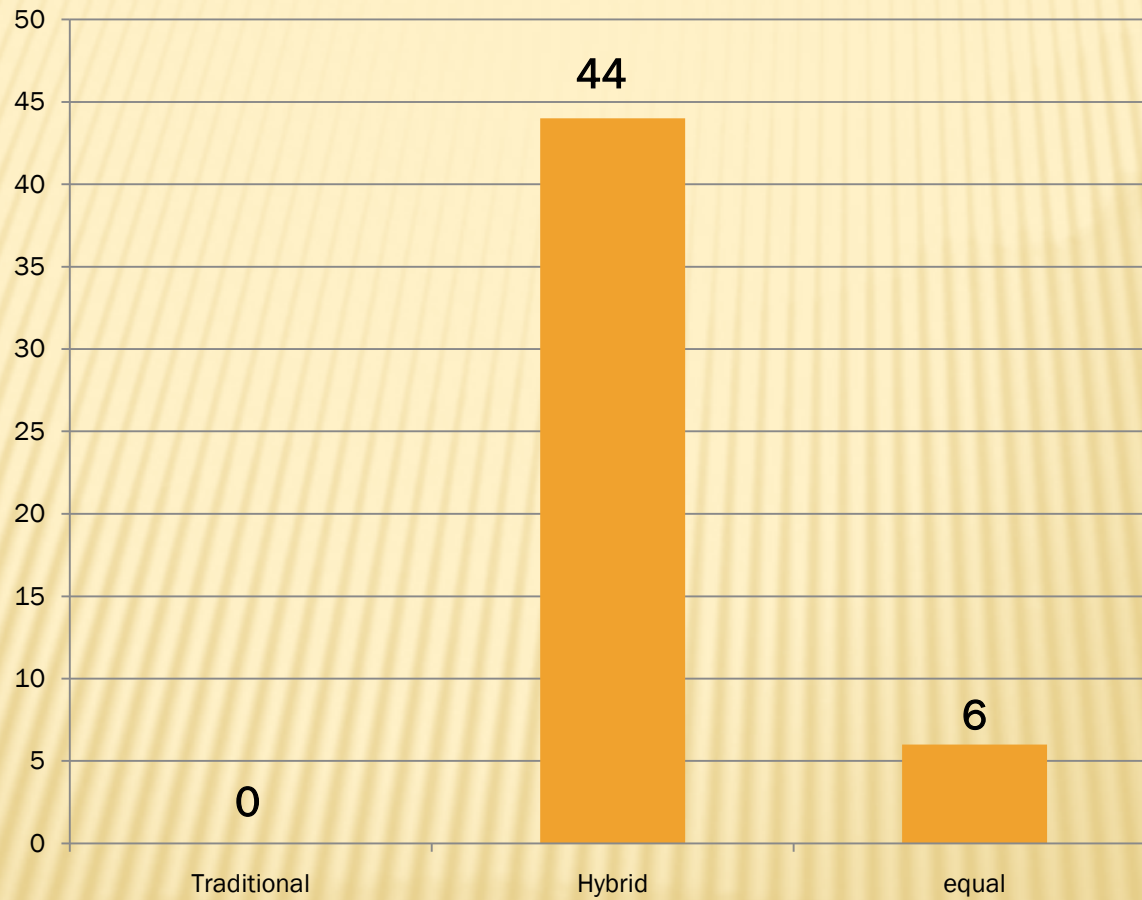
GET SURPLUS TO SELL FROM TRADITIONAL SEED



KEEP FOR OWN FOOD PURPOSE

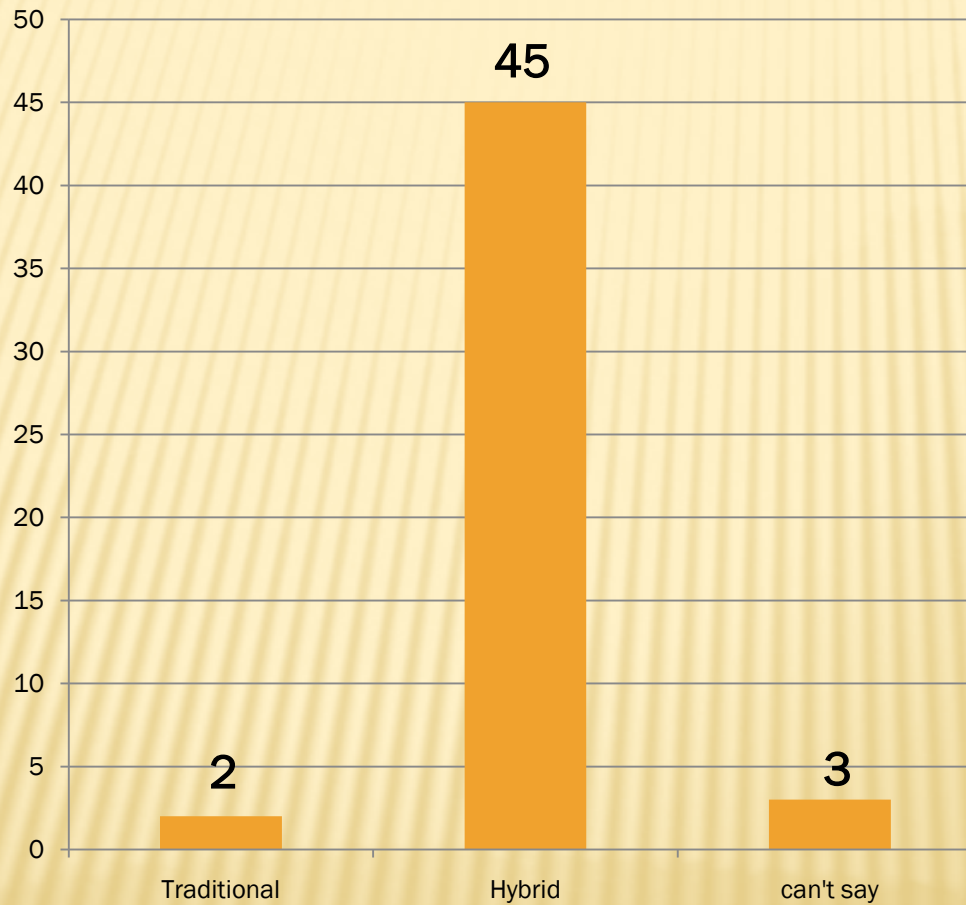


REQUIRE MORE WATER



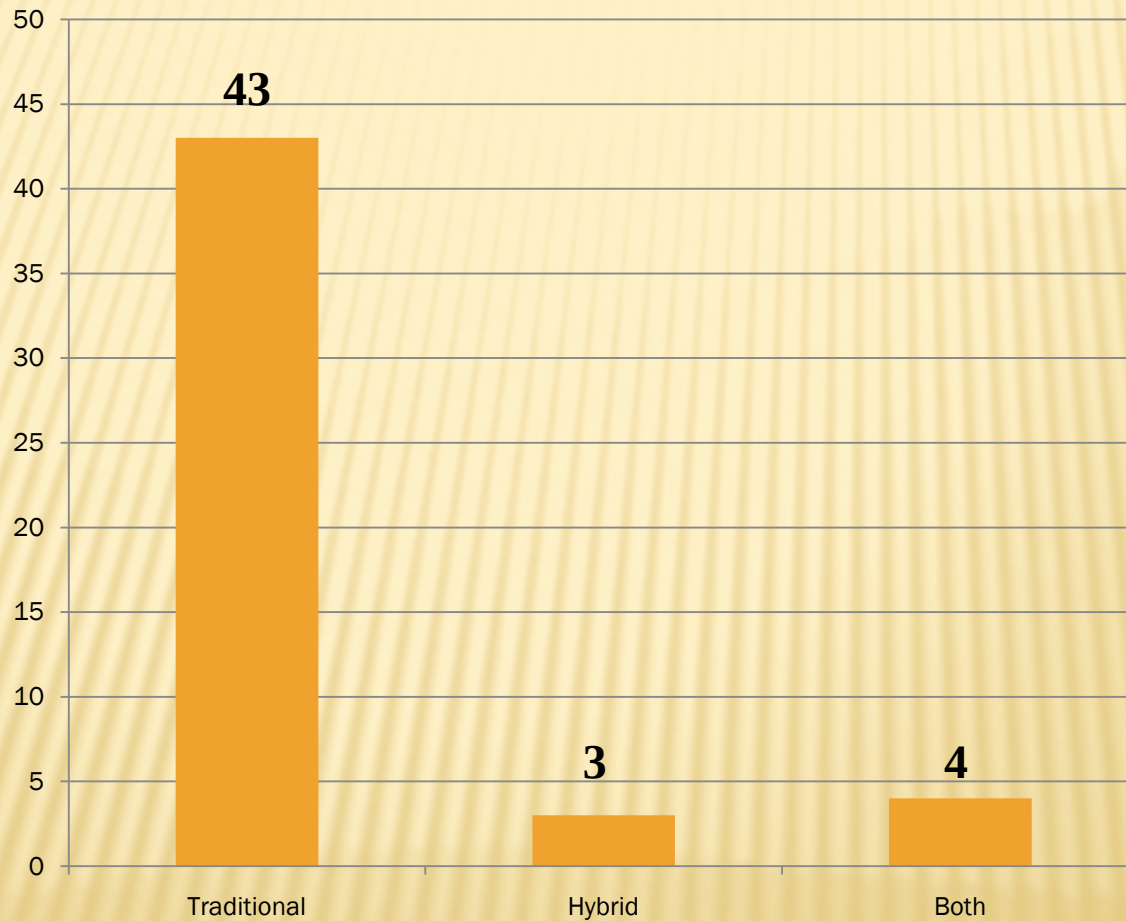
N=50

REQUIRE MORE FERTILIZER



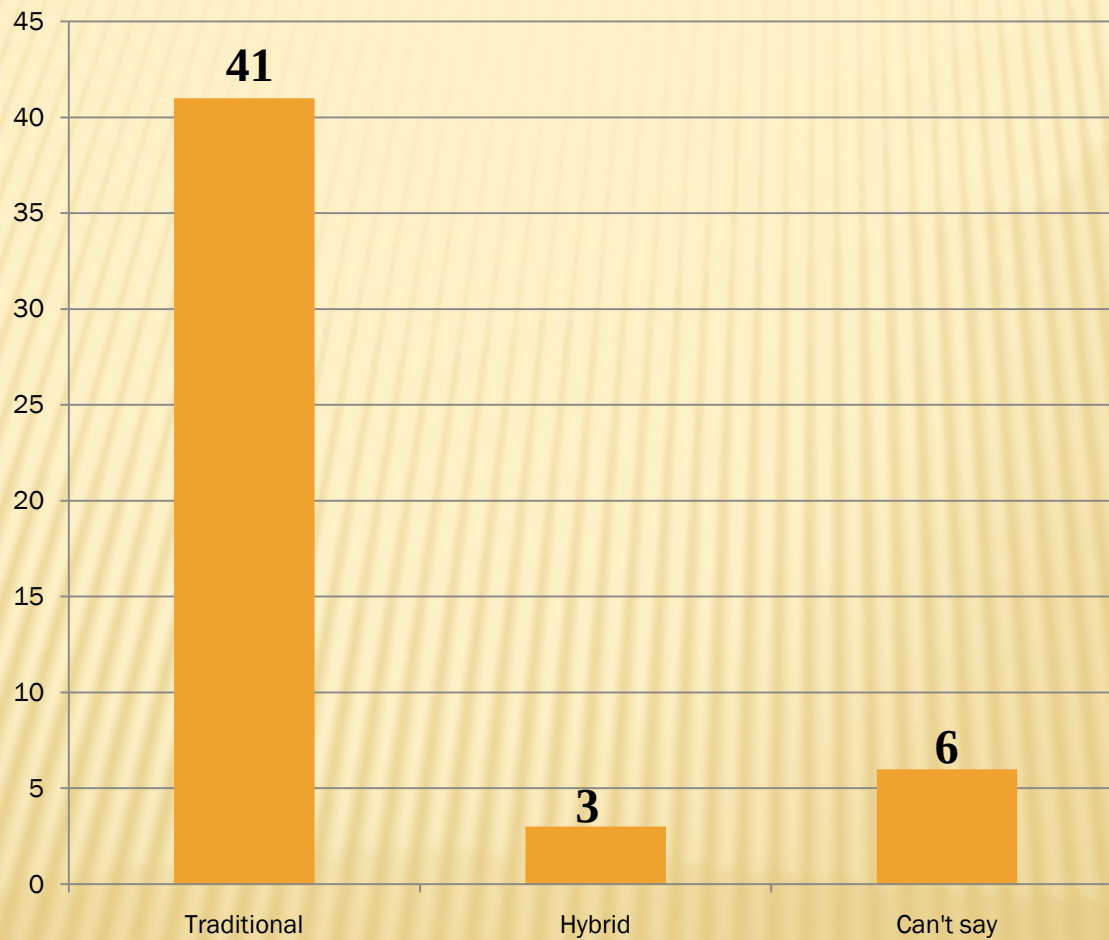
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BEST FOR AGRICULTURE IN THIS AREA



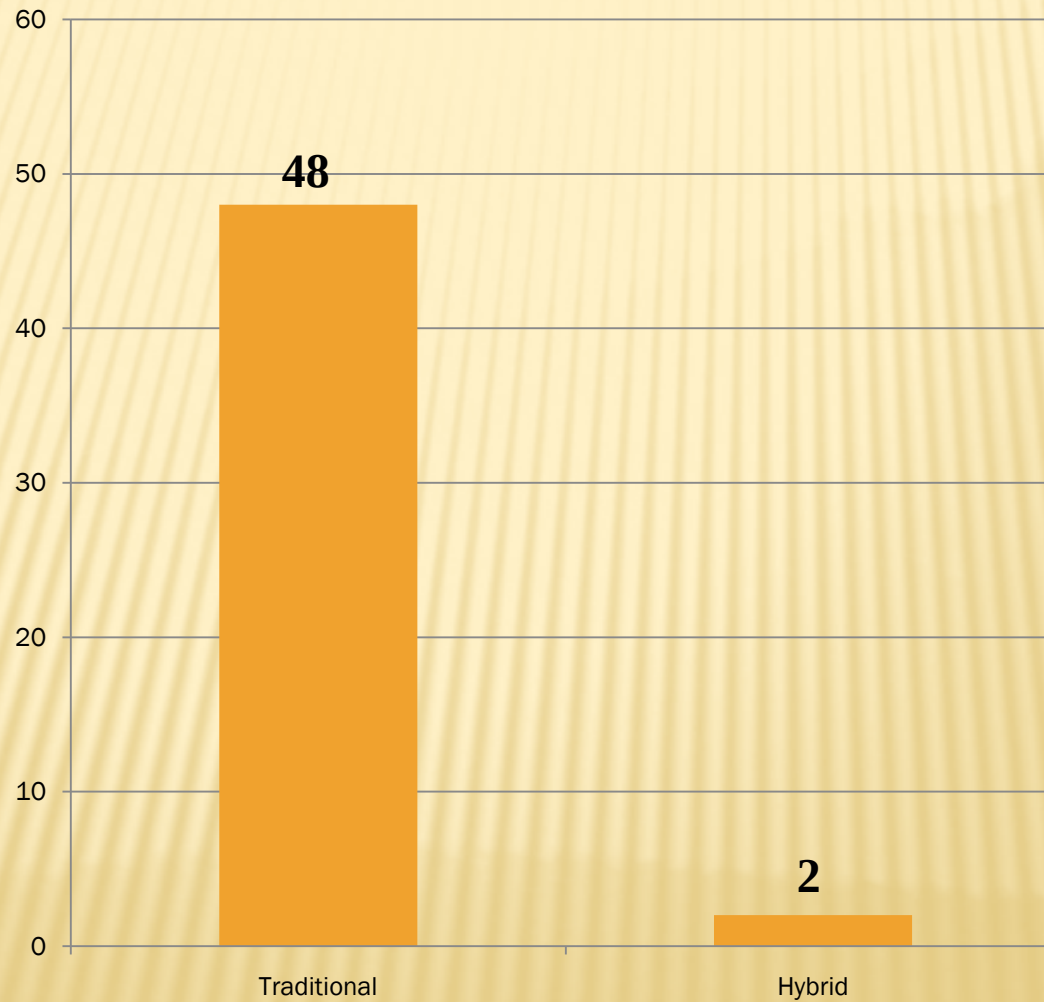
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GOOD FOR HEALTH



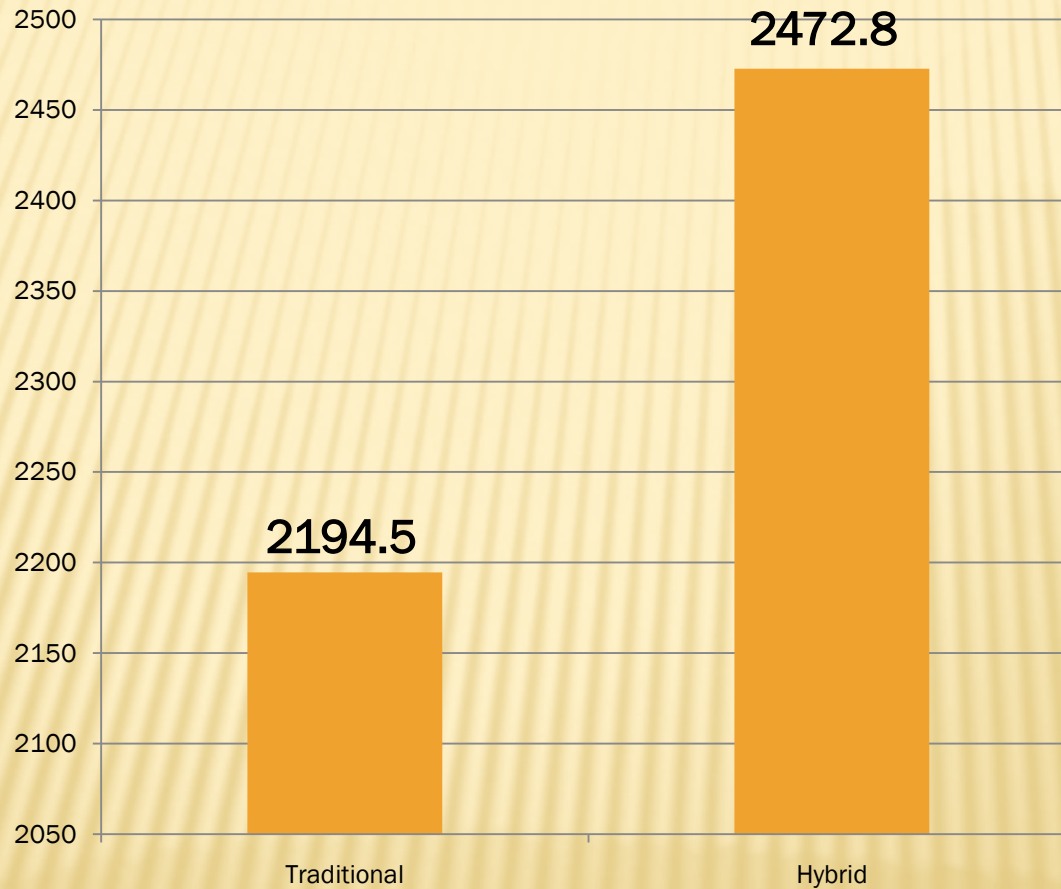
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BEST IN STORAGE

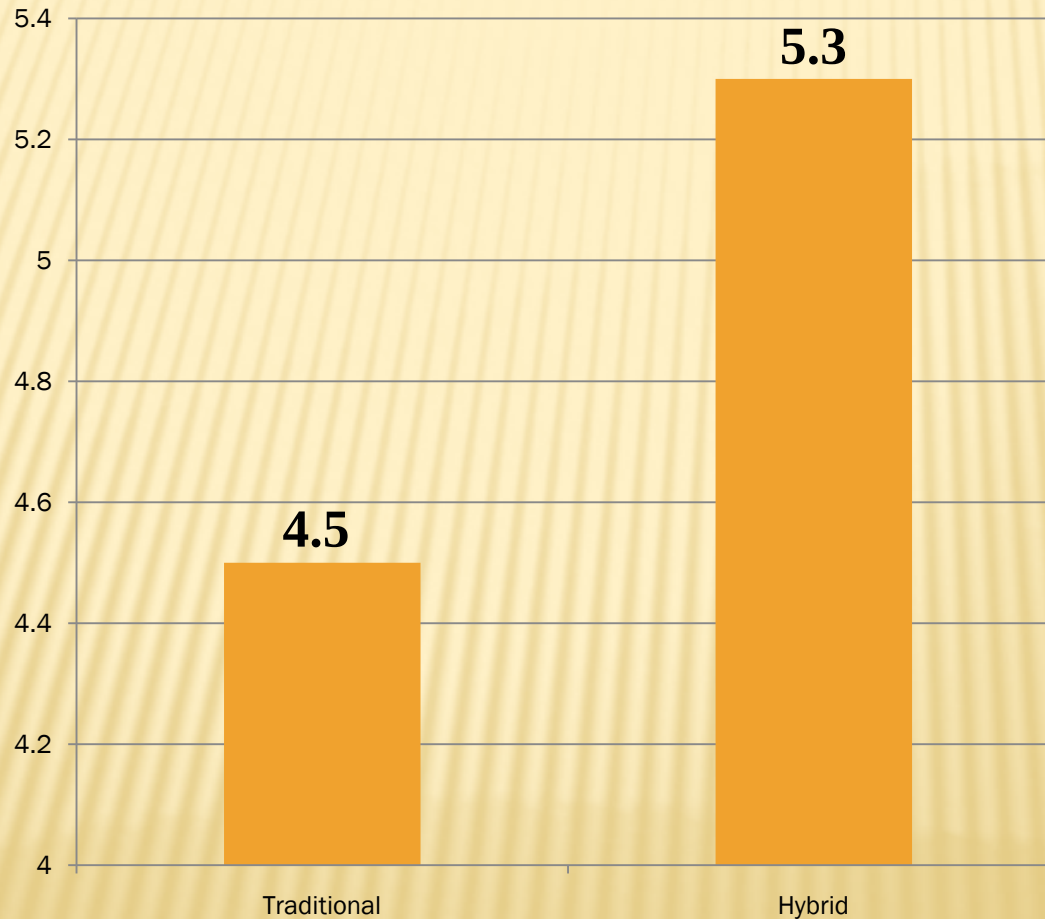


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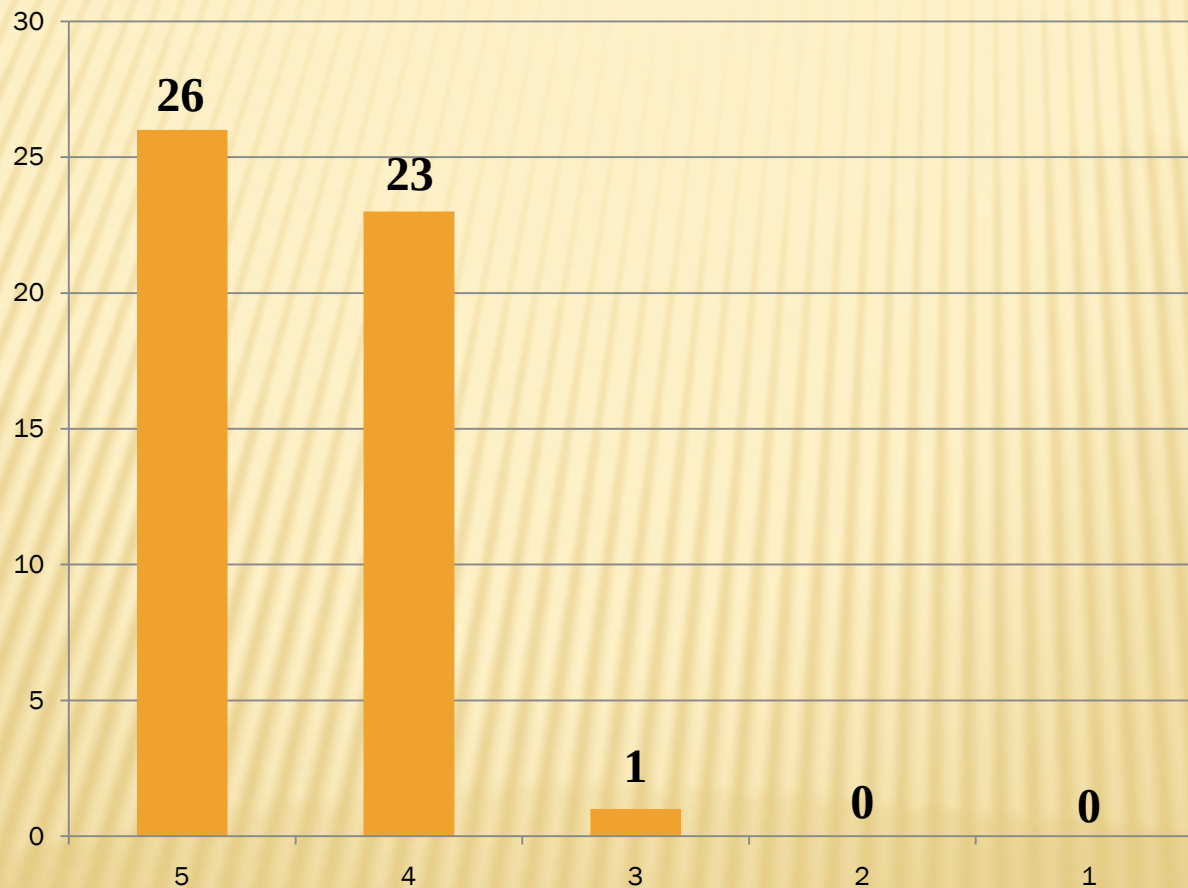
AVERAGE INPUT COST



AVERAGE OUTPUT PER BIGHA (IN Q.)

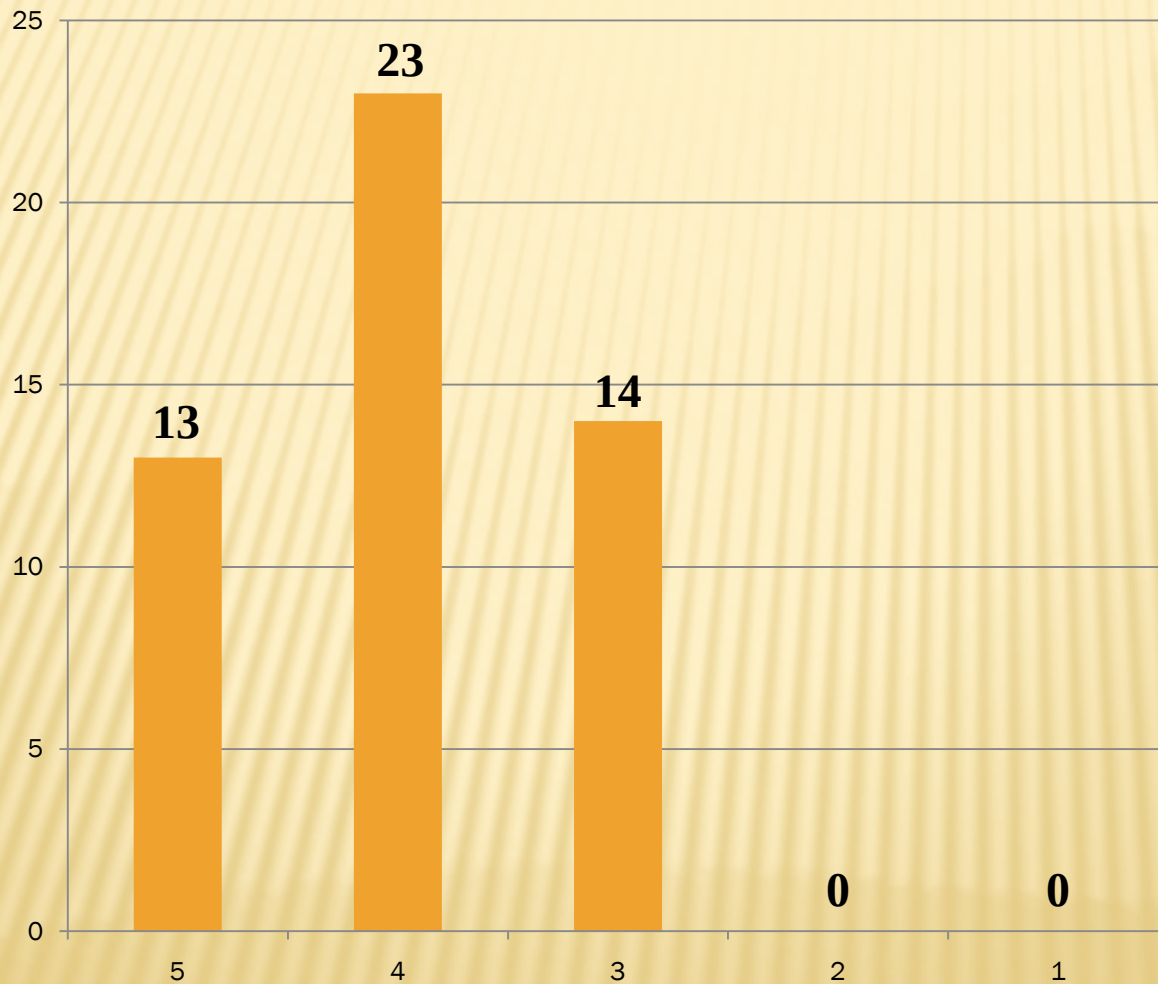


5 POINT LIKERT SCALE FOR TRADITIONAL SEED



5	Excellent
4	Good
3	Average
2	Poor
1	Very Poor

5 POINT LIKERT SCALE FOR HYBRID SEED



5	Excellent
4	Good
3	Average
2	Poor
1	Very Poor

ADVANTAGES AND DISADVANTAGES OF TRADITIONAL SEED

Advantages	Disadvantages
▪ Good for own food purpose	• Low yield
▪ Good in taste	• Doesn't give good surplus to sale
▪ No need to purchase/borrow new seed every year	• Can't survive in high rainfall
▪ Best for agriculture in this area	
▪ Need less care	

ADVANTAGES AND DISADVANTAGES OF HYBRID SEED

Advantages	Disadvantages
•High yield	•Require high rainfall
•Good for sale purpose	•Not good in taste
	•Doesn't suit our area
	•Don't give good quality of seed for next year

QUALITATIVE FINDINGS

- The yield from traditional seed get less effect by disease than hybrid.
- The animal/birds/cattle like the byproducts of traditional seed rather than hybrid.
- Many farmers grew equal amount of seed in one bigha but got more production than traditional seed.
- Farmers were able to grow more numbers of traditional plants per bigha.
- In some cases urea is good for land; it kills many pests like “anchi.”

COUNT.....

- The maize crop takes 60 to 70 days to complete in summer season and 120 days in winter season.
- The farmers devote more hours at the time of growing and cutting but give less time in middle time of the crop.
- Crop from hybrid will get harm in less than one year but farmer use to keep crop of traditional seed two years without any medicine.
- Farmers are using traditional seed, the seed that their grandfather has used many years ago, is still generating seed every year and they are getting equal yield every year in good rainfall.

COUNT.....

- Traditional seed doesn't need to much care and manure as compare to hybrid. One farmer said “desi beej mai agar accha desi khad dalo fir bar-bar sambhalna nai padta, lekin sarkari beej(hybrid seed) ko bar-bar khad dena padta hor dekhrekh bhi jyada karni padti h.
- In case if farmer doesn't have traditional seed, they borrow it from other farmer by promising him/her to return double amount of seed from crop.
- If it will be low rainfall than traditional seed crop would survive and hybrid would not give good output.
- If it will be high rainfall than hybrid seed crop would survive and crop of traditional seed will get destroyed.

CONCLUSION

- Farmers have very good knowledge about merits and demerits of both seeds.
- Traditional seed's major disadvantage is low yield and biggest advantage is that it is able to produce sufficient food grain for food security of farmer.
- Hybrid seed's biggest advantage is that it is able to produce high yield and it is good for business purpose. On the other hand it can't survive in low rain fall.

SUGGESTIONS

- Instead of distributing free hybrid seed govt. must promote good quality of traditional seed and organic farming.
- There must be a strong supply chain management, so that farmer can be benefited.

FIELD CAPTURE



Thank You!

