

A PROJECT REPORT ON
Hybrid Seed Market of Bihar and
Jharkhand

By

SANTOSH KUMAR SINGH
M.A.B.M.-01-18

MAJOR PROJECT SUBMITTED TO THE
SCHOOL OF AGRI-BUSINESS MANAGEMENT
ACHARYA N.G.RANGA AGRICULTURAL UNIVERSITY
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE AWARD OF THE DEGREE OF
MASTER OF AGRI-BUSINESS MANAGEMENT



SCHOOL OF AGRI BUSINESS MANAGEMENT
Acharya N.G.Ranga Agricultural University.
Rajendranagar, Hyderabad-500030
December- 2003

PREFACE

The present project titled “**Hybrid Seed Market of Bihar and Jharkhand potential and prospects for Advanta India Ltd.**”, has been carried out under the aegis of Advanta India Limited, corporate headquarter Bangalore. From being a leading hybrid seed producer clocking a sales figures of around 40mt to 650mt in Maize and 8mt to 35mt in sunflower from year 1994 to 2003(200mt sunflower in boon period of 1998). Apart from this, with the Introduction of Hybrid Paddy in year 1999, the sales figure has tremendously risen from 2mt to 170mt in years 2003; Thus, out of a total increase of 610mt (Hybrid Maize), 27mt (Sunflower) and 168mt (Hybrid paddy) in Bihar and Jharkhand has been reflecting a better gloomy prospects for this organisation.

This leads to a optimistic review of product performance and untapped potential in some district of Bihar and Jharkhand. Due of that Vice President-Marketing & Sales, Mr.K.S. Narayanaswamy and Crop Marketing Manager Mr.Ashutosh Kumar Sinha authorised me to look into the matter and meet the farmers, dealers and distributors in different district of Maize, Sunflower and Paddy growing area in order to elicit their perception and in the process unearth the reasons for the future growth of sales of hybrid seeds.For this purpose ,12 districts in Bihar and 6 districts in Jharkhand were selected for field survey with the help of Territory Development Business Manager Mr. N.K. Sharma, Mr. Ujjwal Kumar and Sales Officer of respective area. The information and data were collected through personal interview with the help of a schedule. Inspite of the acute constraint in travelling to

remote places, the survey and the entire project manages to provide valuable insight into the reasons for present sales of hybrid seeds and hints at the gradual shift from Low yielding disease sensitive variety to high yielding disease resistant hybrid and in different crops.

(Santosh Kumar Singh)

CERTIFICATE

This is to certify that **Mr. Santosh Kumar Singh**, student of Master of Agri-Business Management (MABM) at the School of Agri-Business Management, Acharya N.G.Ranga Agricultural University (ANGRAU), Hyderabad, has done the project work titled, “**Hybrid Seed Market of Bihar and Jharkhand potential and prospects for Advanta India Limited**”, during the period 13th October to 13th December , 2003.

The content and the execution of the project is very good as well as the insights and findings provided are useful. We wish Mr. Santosh Kumar Singh a bright and successful career.

K. S. Narayanaswamy
Vice President-Marketing &Sales
ADVANTA INDIA LTD.,
Bangalore- 560008

DECLARATION

I, Santosh Kumar Singh, student of school of Agribusiness Management, ANGRAU ,Hyderabad, hereby declare that the project report titled “**HYBRID SEED MARKET OF BIHAR AND JHARKHAND, potential and prospects** ” submitted to ADVANTA INDIA LIMITED will be a confidential report for organisation & the information collected during the project will not be discussed or disclosed to any person or any other organisation other than You.

Date:

Signature

ACKNOWLEDGEMENTS

With deep sincere gratitude and reverence I thank the Almighty for guiding me to complete this significant project work successfully.

*I gratefully record the benevolence of **Mr. P. M. Nanjappa**, Vice President-HRD, **Mr. N. K. Narayanaswamy**, Vice-President-Marketing and Sales, Advanta India Limited, for giving me an opportunity to undertake this project. I also offer my heartfelt thanks to **Mr. Ashutosh Kumar Sinha** (Crop Marketing Manager) for their moral support, immeasurable patience, valuable suggestions and above all their stimulatory guidance and advice on carrying out the task.*

*Our acknowledgement would be incomplete and meaningless without thanks to **Mr. Rajasen, Mr. Rituraj Sharma and Madam Sherry Patra.***

*I express my deep sense of gratitude and profound regards to Prof. **P. Maruthi Ram**, Special Officer and head, School of Agri-Business Management, ANGRAU, for his kind cooperation throughout my course.*

*My profound sense of reverence is due to **Dr. Seema**, Associate Professor, School of Agri-Business Management, ANGRAU, for her valuable guidance and cooperation throughout my project work.*

Grateful acknowledgement is also made to all the Managers, Sales Officers and field staff of Advanta India Ltd. for their heartfelt cooperation and for giving a crucial inputs during my project work . Thanks to all of them sincerely.

I would like to express thanks to all the respondents and those who have directly or indirectly helped me during the course of this project work.

(Santosh Kumar Singh)

EXECUTIVE SUMMARY

SEED BUSINESS : A BUSINESS OF TRUST

The Indian seed program is still in nascent stage and the seed industry in India is changing rapidly in response to policies and technologies . Of the 90 million hectare area under food crops, a mere of 10-12% area under quality or certified seeds. The use of hybrid seed is very low but awareness about the high yield and good quality of products from hybrid seeds have attracted the farming community to switch over to new high yielding varieties and hybrid seeds.

MNC'S have concentrated on MAIZE & SUNFLOWER as their access to international germplasm gives them a competitive advantage. Since, seed is a fundamental ,crucial, and yield enhancing input for sustained growth in farm production ,the role of seed sector has been becoming more popular to ensure the adequacy, seed quality and varietal diversity. It is also a truth that agriculture accounts 28% of GDP of India with a growth rate of 2.7% per annum since independence which is greater than the annual population growth rate of country.

The farmers acceptance of Hybrid seeds in different region of BIHAR and JHARKHAND is also a positive indication of the growth of seed industry .Due of that seed companies are also looking for new market to increase their shares by increasing the seed sales.

ADVANTA INDIA and PROAGRO are dominating in the sunflower market while MONSANTO is now the largest supplier of Maize. Besides that these MNC'S are not only playing in the field but also trying to analyse the seed market in different way like by volume, by value, by the nature of varieties available(hybrid or non-hybrid),by the source of variety (public or private), and by supplier etc.

Finally their main target is to increase the percentage of seed purchased each year ,but also to reduce the quantity of seed sown per unit area, because of high cost. By considering all these things like seed scenario, market situations etc. a seed business is a seasonal business. Therefore the existing situation of the cut throat competition to garner market share ,the company should give more importance to dealers , distributors , field staff who are dynamic , possess skill , persuasive attitude and convincing nature in dealing the farmers more trustfully.

CONTENTS

S. No.	Name of the chapter	Page No.
I.	INTRODUCTION	
II.	OBJECTIVE OF THE STUDY ❖ Scope of the study ❖ Limitations of the study	
III.	METHODOLOGY	
IV.	OBSERVATIONS AND FINDINGS.	
V.	OBJECTIVE WISE ANALYSIS OF THE PROJECT	
VI.	RECOMMENDATIONS, SUGGESTIONS AND STRATEGIES	
VII.	CONCLUSIONS	

CHAPTER I

INTRODUCTION

Advanta India Limited:

Mission Statement: To be leaders in developing market-focused products of superior value based on world class technology, which can enhance the Agricultural productivity and farmer prosperity, while creating a sound and profitable business for the Stakeholders by an entrepreneurial organization committed to total quality.

A brief profile:

Advanta India Ltd. (Formerly ITC Zeneca Ltd) is the Indian joint venture company of Advanta B.V; which is among top 5 seeds companies of the world. Advanta B.V. was formed by the merger of Zeneca seeds U.K. and Vanderhave seeds of Netherlands. Since the formation of ITC Zeneca through a joint venture between ITC Ltd. and Zeneca Plc. U.K. in 1994, the company has grown from strength to strength and today Advanta India Ltd. is a market leader in Sunflower with an excellent track record in Maize, Sorghum, Bajra , Cotton, Rice, SSG Sorghum Sudan grass and Mustard.

The prosperity of India's agriculture based economy is dependent on use of progressive technique by the Indian farmers. The use of hybrid seeds, which is the most cost effective way of improving productivity is one of such critical area.

It is backed by sound infrastructure which includes research stations in various agro-climatic zones, two state of art seed conditioning plants and national

sales and distribution network . Advanta India Ltd. is committed to serve this critical requirement of Indian agriculture with an assurance of total quality and service.

Since the launch of new seed policy on seed development in 1988, several research based international seed companies established their presence in India as a 50:50 joint venture between ITC and Zeneca Plc. U.K. with the private objective of conducting research, development , production and marketing of superior high yielding hybrid seeds of crops of national importance. Due to restructuring of promoters / shareholder businesses ITC Zeneca has changed its name to Advanta India Ltd. from October 1st, 1998 but continue to maintain the objective of latest technology promising prosperity.

Key products: Which is playing its role to increase Indian Agricultural productivity and enhancing rural prosperity.

1. Sunflower.
2. Maize.
3. Paddy.
4. Bajra.
5. Cotton.
6. Mustard / Hyola
7. Sorghum Sudan grass (SSG)
8. Grain sorghum

---XXX---

CHAPTER II

OBJECTIVE OF THE STUDY

The general study of the present project was to determine the market potential and prospects of hybrid seed (maize, sunflower, paddy) in different districts of Bihar & Jharkhand. However, the specific objectives of the project work are:

1. To map the season wise & crop wise market size for different crops (maize, sunflower and paddy.)
2. To study the preference for different hybrids. (Requirement for an ideal fit in different market segments with respect to duration, yield, quality of produce, disease pest reaction etc.)
3. Competitive scenario, market shares of different players, brand image of different players, rating of products.
4. Scope for current Advanta India Limited products & requirement of new products.
5. Expected growth of Advanta India Limited in different crops in different markets and suggested strategy for the same.

Scope of the study

The survey undertaken under this project reveals the opinion & perception, experiences and suggestions of the farmers, dealers & distributors regarding the usage of hybrid seeds. The study also throws light on the changing trends of shift towards using the high yielding, disease resistant hybrid in Bihar & Jharkhand.

Limitation of the study

Like any other challenging fieldwork or project this project had its share of bottlenecks and constraints, which invariably, come in the way of carrying out the study into all the minute aspect of project subject.

The constraining factors were

1. Limitation of conveyance facility in the absence of a two wheeler. The author had to travel by local buses , jeep, auto-rickshaw and even on foot to reach the interior places to interact with farmers .
2. A lot of time and energy was spent in the process.The unique daily routine to go near farmers and dealers in BIHAR, more or less I was the Ist candidate who visited for project work therein.
3. To get things out for 10 minutes , I had to spend 30 min.-1 hour to create own feelings.Due to lack of proper awareness and education among farmers as well as dealers , responses were not upto the expectations.
4. To get secondary data –getting sec. data from secretariat or block was very difficult due to – No proper maintenance of record .
5. Time allowed to reach and survey to each district was not sufficient to go from one district to other district and to cover a distance of 50 km ,sometime author had to waste full day due to improper road facility.
6. Field survey was possible only between 8 a.m. -2 p.m. during night , Neither I could travel nor carry any work. It was hindering the Potential of author.

Nevertheless , at the end of survey which involved interacting with total no. of 355 farmers , dealers and distribution . The objective of the project were invariably fulfilled as will be borne out after reading the analysis of the survey.

CHAPTER III

METHODOLOGY

This chapter deals with the selection of farmers and dealers for sampling, collection and analysis of the data and evaluation technique.

Sampling size :- 355 (270 farmers & 85 dealers)

Total 19 district (13 in Bihar and 6 district in Jharkhand)were allotted to make a field survey within 40days . These district were

BIHAR

1. CHAPRA
2. SIWAN
3. GOPALGANJ
4. MOTIHARI
5. BETTIAH
6. MUZAFFARPUR
7. SAMASTIPUR
8. BEGUSARAI
9. KHAGRIA
10. PURNEA
11. NAUGACHIA (Bhagalpur)
12. MADHEPURA
13. BHAGALPUR

JHARKHAND

14. DEOGHAR
15. BOKARO
16. HAZARIBAGH
17. RANCHI
18. PALAMU
19. GUMLA

In each district maximum number of farmers and dealers were interviewed in best possible way.

Sampling Method: Random sampling method has been adopted in this survey. A sample size of 355 (270 Farmers and 85 seed selling dealers) has been collected. The mode of collecting the data from respondent is personal interviewing method .

AREAS COVERED FOR THE STUDY

For the present study all the concerned crops growing area were covered .

1. A semi structured separate questionnaire has been designed and administered on the same to elicit their responses.
2. For secondary data purpose ,visited to concerned Agricultural offices in different districts, secretariat , & Internet provided the details about current seed trends in respective crops through different related website.
3. The data collected through questionnaire has been codified and appropriate statistical treatment like multiplication and percentage technique was carried out and the same has been presented in the format of graphs and tables..
4. Based on the collected information interpretation has been developed after analysis according to objective wise .
5. At the time of collecting secondary data, Joint Director of Agriculture (R.R. Mandal) and Agril. Production commissioner (Madan Mohan Singh) were also interviewed.

CHAPTER IV

OBSERVATIONS AND FINDINGS

While, I was interviewing with the farmers and dealers the things observed and found are as follows. Here I am putting my observations in my own word. My observation is fully linked with company, company's product, their way of dealing in the market with dealers & with farmers.

The gist of findings

1. Area under kharif MAIZE is growing @ 16.6 %.
2. Area under rabi Maize may decrease by 12 % & this might be shifting towards wheat and summer Maize due to untimely rain in the state before starting the Rabi season.
3. Chapra, Siwan, Gopalganj Motihari and Bettiah are the huge market for Kharif Maize but due to untimely rain, Farmers may switch towards short duration summer Maize, wheat, & others vegetable crop.
4. Deccan -103, A local variety in Chapra is being sold very high due to cheaper rate.
5. In Gopalganj, the Maize area is converting towards Tobacco.
6. In flood affected region of Gopalganj demand for sudan grass is increasing. There is very little awareness about Paddy in this area.
7. In Saryapara village of BETTIAH, farmers once grew hybrid paddy 2 yrs Back. They got very high yield and in next season they sold it as a basic seed to the farmers of neighbouring villages and it was failed. This is the main constraint behind not adopting the hybrid in that area.

8. In Muzaffarpur, Karma, Lalsar, Kanchi-Muslim and Punjabi variety is more popular. In Lohsari village of Muzaffarpur, the plucking of cob is not so smooth like competitors hybrid.
9. In Samastipur and Begusarai, White Maize is exclusively grown as Summer crop & in Rabi White Maize is grown with potato.
10. In samastipur, Bakaul & Chanao variety of paddy is more popular because it grows as much water level high up.
11. In samastipur, Muzaffarpur and Begusarai, sunflower has been totally wiped off due to a false rumour of Parrot snake (Sugwa saanp.) but actually there is an attack of 3-4'' long green colour sucking pest. Other rumour –sunflower decreases the fertilising capacity of soil.
12. On other hand Farmers grow sunflower with WHEAT and they think Owl sits on sunflower and kills mouse and other pest damaging the wheat.
13. Now the Farmers are trying to shift towards sunflower again. Begusarai is known as **seat of MAIZE** due to a very huge market for Kharif and Rabi Maize as well as white and yellow Maize both.
14. PAC-701, was failed in Teghra village of Begusarai, due to early cobbing.
15. In begusarai, Paddy is only grown as BAUG for animal feed purpose (scope for sudan grass). Hathiya jhoolan variety (150-160days)of paddy is more popular in Begusarai.
16. Demand for sunflower seed has started to grow up again in Begusarai.
17. In Khagaria, LALSITA, HATHIYAJHOOLAN, BAJRANGWALI , BAKAUL, BAROBER (GHIYODHA) variety in paddy is more popular and suitable for lowland water stagnant area upto 3-5''. This is nothing but a Jalmagan variety.

18. In Khagaria, Mungeria or Desla (White) Maize of 70-80 days duration variety is more popular due to cheaper price. Last year in Khagaria, due to stone falling most of the farmers shifted to banana from MAIZE.
19. In Purnea, farmers prefer sunflower over the Maize due to a good return. In Purnea, China –Pusa, Pansera, Chandanchur (160-180 days) is more popular like jalmagan variety.
20. In Naugachiya, Kanchan Maize (70-80days) is more popular. Kanchan Maize is the market leader during kharif in KOSHI and JHARKHAND. Penshali (150-160 days) is more popular in paddy.
21. Doot kalma variety in paddy is more popular in Bhagalpur. LAXMI (White Maize) is a long duration (150-175days) promising hybrid is grown in Rabi yields 25-30 q/ha.
22. Area under Rabi sunflower may decrease by 8 % from the last year due to late harvesting of Kharif paddy, but there may be increase in summer sunflower by 20% in KOSHI region mainly in KHAGARIA, PURNEA, NAUGACHIYA and MADHEPURA district because farmers wants to make more benefits & quick return at the less labour cost than others crop.
23. In case of paddy the adoption rate in hybrid is very less in BIHAR and JHARKHAND than others crop.(Awareness about ADVANTA INDIA LTD. is also very less. Farmers grow their hybrid but know them with their parent name ITC ZENECA.)
24. According to official person and dealers only 1-2% area is under hybrid paddy.
25. In Deoghar , Proagro is popularly growing in Hybrid Paddy.
26. In BOKARO, Lalat and Kalamdhan (150-160days) are popular in paddy with yield potential of 16-18 q/a with very good taste.

27. In Hazaribagh, Askalma, Dhoosri and Ratgoli variety of (140-160 days) is extremely grown with yield potential of 8-10 q/a , which is very tall and good in taste.
28. In JHARKHAND farmers may shift towards Yellow maize from White maize due to their high yield.
29. In Telgaon village of GUMLA, one farmer got 22Q Yield from 3Kg of PAC-801.
30. In Gumla & Palamu district of Jharkhand , Jhili , Gora (160-180days)Badshah rice (fine), Kapoorbhog and Kalajira is more popular variety. Hira- Moti was totally replaced by Apna Makka in Bihar.
31. In case of paddy the adoption rate in hybrid is very less.

- **About 1% of total paddy area is under hybrid paddy in BIHAR.**
- **80 % maize area is sown under Hybrid MAIZE.**
- Yellow Maize is mainly growing for marketing but White Maize is mainly for own consumption and animal feed.

Here I would like to highlight some Problems related with our products in what I observed in field , are as follows;

1. PRODUCT PROBLEM

MAIZE

- i) Powdered treated seed.
- ii) Different size of seed (not uniform) on the same dealers counter.
- iii) Packaging is not good attractive.
- iv) Plant height is known as charmahala (it is of 4-different height.)
- v) Cob comes out from upper part of the plant ,so easily bent down to

the ground after getting a blow of wind.

- vi) Yield is also not alike others competitors.
- vii) From starting onwards to two months plant looks sick.
- viii) % of germination is less in Maize and Sunflower, reason for low yield.
- ix) Plant is sensitive to stem borer.
- x) PAC-784, Early maturity & Early cobbing, very short height, weak plant in White maize Early flowering. less grain in cobs was reported by KHAGARIA and BEGUSARAI farmers.

(But most suitable in Muzaffarpur (60 mt.) and Samastipur (85-90mt.)

- xi) PAC-701 is preferred in JHARKHAND, because of its high price.
- xii) PAC-9112, takes longer duration than whatever mentioned on leaflet.
- xiii) PAC-9714, Plants height more, not uniform, falls easily, sensitive to stem borer.

SUNFLOWER

- i)** problem of pest attack just after bursting of the flower.
- ii)** spraying of pesticides is very difficult at maturity stage.
- iii)** gap in the middle of head (no seed) is the reason for less seed formation.
- iv)** Non -synchronous flowering.
- v)** Seed germination problem.

These all problems are associated **with short duration PAC-36.**

PADDY

A. PAC-801

- i) Earlier maturity within 100 days, sucking pest attack , chaffness, in transplanted rice, not suitable for lowland condition of soil in comparison to others. (in Gopalganj and Bhagalpur dist. of BIHAR).
- ii) Blast disease in paddy was reported in Khagaria dist. after opening of panicle.
- iii) not tolerant to flood.
- iv) taste was not good reported in Jharkhand.

B. PAC-832.

I. Drying up of plant

(Media rumour regarding taste of the Hybrid Paddy in general)

2. Estimated yield decreases due to lack of proper knowledge about crop and hybrids among the farmers. (Awareness about our products in paddy is very low in Bihar and in Maize also not upto the mark).
3. Recommended dose of fertilizers written in leaflet is not easily understood by farmers.
4. During off season no field staff in the field to provide the basic and timely knowledge about products.
5. No after sales service is provided by the company is major constraint behind low yield and less awareness.
6. Promotional material is not supplied timely and also not sufficient & information printed on leaflet is also not accurate. e.g. 115-days duration for PAC-9735 instead of 150-160 days. (30 banners /6-districts).

7. Quality of promotional material is not good .Its very difficult to make differentiation between YELLOW and WHITE MAIZE.
8. Lack of co-ordination among channel members.(Regularly changing the dealers.)
No proper maintenance of account from officers side reported by dealers.
And manager replied sales recovery is a problem so, we use to change the dealers / distributors.
9. Delayed product positioning complaint by dealers.
10. In sunflower no margin for dealers in ADVANTA INDIA seeds. Short supply of seeds in SUNFLOWER leads to grow the market of non- branded seeds.
13. **PADDY was not available at most of the dealers counter in Bihar.**
14. Heavy Black marketing in SUNFLOWER (PAC-8699 & PAC-36). REASON - Demand >supply.(Since last years also in proagro and syngenta – threat for company).
15. Problems of tagging the Maize with sunflower by dealers .
16. Duplicacy of seed of sunflower with the name of ADVANTA INDIA.Resulting the low yield and poor quality. (Serious problem in field to defame the company).
17. Selling of sunflower seed to farmers at double of the MRP. by dealer is creating BAD RAPPOR for company NAUGACHIYA, and they told Distributors are not giving any margin .
18. **Rate cutting / price cutting (particularly in MAIZE)is a major problem with ADVANTA.**
19. **Quota filteration & Area filteration is most common in Northern BIHAR.**
20. Product dealing with the help of biased dealers. (They sell our product but due to some personal problem with officers replied not dealing.)

21. Mixing of seeds (Lack of belief and ethics among dealers in Madhepura last yr. many dealers sold our PAC -9735 with the name of competitor's brand which was failed during cold & PAC-9735 was succeeded but credit went to competitors product.)

22. No organised sales due to regular fault coming in the product and every year we have to search a new pocket for sales. (problems to make the farmers loyal, reported by our sales officers in KHAGARIYA). He also told we are selling it with muscle force.

SOME OTHER ASPECTS.

1. **No separate TEAM for BIHAR and JHARKHAND.**
2. **Lack of sufficient sales force and officers in the field in comparison of competitors.**
3. **Fear and hesitation among officers as well as Manager to attend the district meeting called by DAO.**
 - i. **(One of the main constraint in fear free sale.)**
4. Lack of support from company personnel in against the product complaint made by farmers.

5. ADMINISTRATIVE PROBLEMS

No Renewal of licences since 2-Yrs.

These are some live problems associated with products & personality associated with organisation in particular region observed by author in the field.

Strength about our company, sales force and products;

1. Very neat and clean policy reported by 76 % Of the dealers.
2. Price of all the product is optimum in against of competitors.

3. Overall performance of PAC-9735 WAS GOOD IN LAST YEAR.
4. PAC-36 and PAC –8699 still have bright future and no need to put extra effort for sales.
5. **PAC-801 can be a market leader in Jharkhand if dealt skillfully with preplanned and according to suggested strategy But at the same time PROAGRO and PIONEER may be the serious competitor.**
6. Our sales team are fully devoted to do their assigned job and achieve the target within stipulated time.
7. They were very very cooperative and enthusiastic.

SOME NEWLY INTRODUCED PRODUCTS IN MARKET

During observation and survey, I too found some of the newly introduced product or first time is being to introduce in the market are as follows ;

CROP – MAIZE

COMAPNY	PRODUCT	DURATION	SOWING TIME
1.NUZEVIDU	1.NMH-909	XXX	May-June (K) Oct-Feb (R)
	2.Raja	140 –150days	XXX
2.JAI KISAN	1.C 1921	150- 160days	Oct –Dec.
	2.C 1837	140 –150days	Oct – Dec.
3.DHANYA	DMH –888	150- 155days	20 th Sept.-15 th Dec.
4.PIONEER	30 G 10 ***	XXX	Oct. – Feb.
WHITE MAIZE			
1.PIONEER	3024	XXX	XXX
2.BIOSEEDS	9681	130 –140days	XXX

*** TRIAL RESULT -Av. Yield =34 –36 q/a (170 Kg/ katha)

Others existing companies and their products in the MAIZE.

1.MONSANTO	900M, HISALE, ALROUNDER.
2.BISCO	KANAK, 740, 940, SUPER DLX BUMPER.
3.PIONEER	3056, 3054 (W)
4.PROAGRO	4640, 4794, Apna Makka.
5.J K	PUJA,1001
6.NATH	1122,1133
7.SRIRAM	9637, 9651, 9711.
8.MAHYCO	3816,3824.
9.GANGA KAVERI	103
10.NIRMAL	N-51, N-2, SONA,VISHAL.
11.KANCHAN	NUTAN, K-25, K-55, K-99, K-101. Etc.

CROP - SUNFLOWER

COMPANY	PRODUCT	DURATION	FEATURES
1.DHANYA	3395	95-100 days	XXX
2.NUZEVEEDU	XXX	90-100days	XXX
3.J K	CHITRA	90-100days	XXX
4.SHAKTI	XXX	85-90days	XXX
5.LAXMIBIOTECH	XXX	90-100days	XXX

Existing Hybrid in sunflower are –

- 1.PROAGRO Jwalamukhi.
- 2.PIONEER 6460
- 3.MAHYCO MSHF-17
- 4.SYNGENTA
- 5.NIRMAL
- 6.PARAS
- 7.VIJAY
- 8.LAXMI

Besides these total about 32 others non –branded companies are in the market.

CROP – PADDY

(NO ANY NEW HYBRID)

Most of the varieties grown in paddy is of long duration (140-170 days.)The existing Paddy grown in BIHAR and JHARKHAND are Saket-4, pant-10, pant-12 (preferred in less water area), S-52, Sona-Mansoori (in more water growing area).

Other varieties like IR-20 (145-150 days), vijaya (135-145days), swarna, mansoori, IR-64, IR-36 (110-115 days), sita (130-135 days), 1001, Kanak, Jaya, IR-8,BPT-5024, Pant-4, MTU-1001, Lalat , IET –5656, Narendra, MTU-7029 etc.

In JHARKHAND, From secondary sources, it was cleared that last year (2002-03), 74 % of targeted area in Paddy, 81% under Maize & 38% in sunflower was cultivated.

INCENTIVES AND HIDDEN SCHEMES offered by other company.

(A) FOR DEALERS.

1. MONSANTO A cellphone of worth 6000/- on 2mt. of any product.
2. SEEDTECH One CD 100 on 50 mt. Of any product.
3. NUZIVEEDU One CD 100 on sale of 50 mt. Of RAJA .
4. JAI KISAN One CD 100 on 50 mt. Of any product.
5. PIONEER One bicycle on sale of 1mt. Of any product.

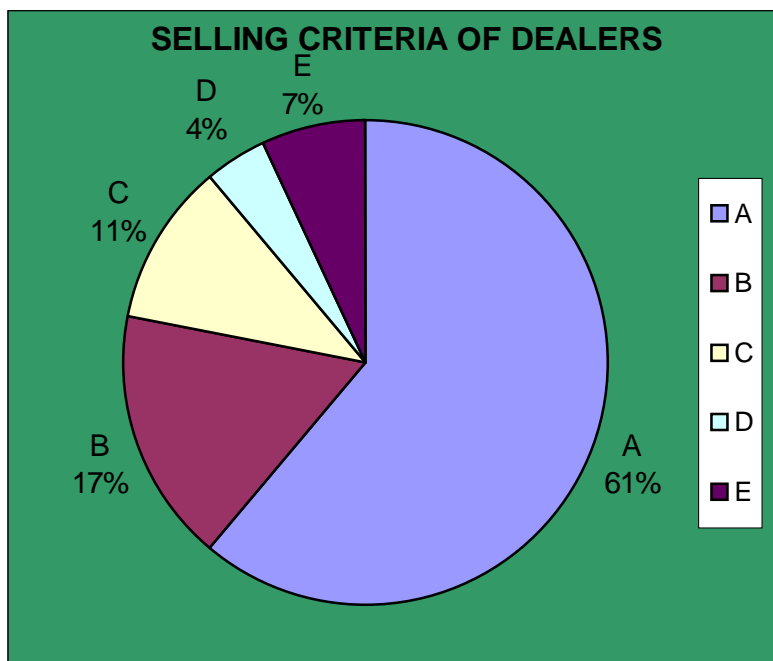
(B) FOR FARMERS.

1. PROAGRO One handbag, beside that many undisclosed scheme
2. PARRY One torch /2 kg pack.
3. SEEDTECH Coupon of 50, 100, 200 Rs/-.
4. MONSANTO 1 Towel /10Kg All rounder.
1 Schoolbag / 10Kg Hisale.

*****Selling criteria of the dealers

During selling of a product dealer considers following criteria according to their preference, which are as follows ;

- A -Product quality – 61 %
- B - Promotional campaign and company's work in the field - 17%
- C -Margin and schemes – 11%
- D -Price of the product - 4 %
- E - Image of the company. - 7 %



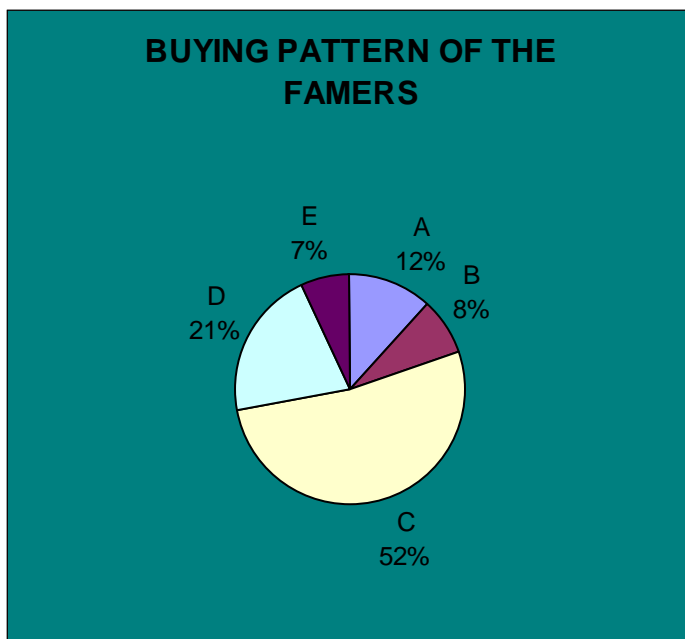
From this chart it is quite clear that 61 % dealers use to sell the good quality product and next importance is given to company work in the field. So a company has to consider a lot about their promotional activities and work in the field other than quality of the product.

Dealers opinion – Most of the dealers replied company, product, product price , Dealers margin are okay BUT sales promotion, Field work and Manpower in the field is not upto the mark in comparison to competitor's.

******* BUYING PATTERN OF THE FARMERS**

At the time of buying a seed , factors influencing the farmers like these.

A –OWN EXPERIENCE	12 %
B - SEEING OTHER FARMERS	8%
C – ON DEALERS ADVICE	52%
D – PROMOTIONAL CAMPAIGN	21%
E - PRICE OF THE PRODUCT	7%



Here it is clear that more than 50% of farmers are influenced by dealers. So Dealer is the one of the important force to promote the selling of a product.

CHAPTER V

OBJECTIVE WISE ANALYSIS OF THE PROJECT

Objectives:

I .To map the season wise and crop wise market size for different crops.

(Maize, Sunflower and Paddy).

II .To study the preference for different hybrids. (Requirements for an ideal fit in different market segments with respects to duration, yield, quality of produce, disease pest reaction, etc.)

III. Competitive scenario, market shares of different players, brand image of different players, rating of products.

IV. Scope of current ADVANTA INDIA LTD. PRODUCTS and requirements of new products.

V. Expected growth of ADVANTA INDIA LTD. in different crops in different markets and suggested strategy for the same.

OBJECTIVE-WISE ANALYSIS

I. .To map the season wise and crop wise market size for different crops.

(Maize, Sunflower and Paddy).

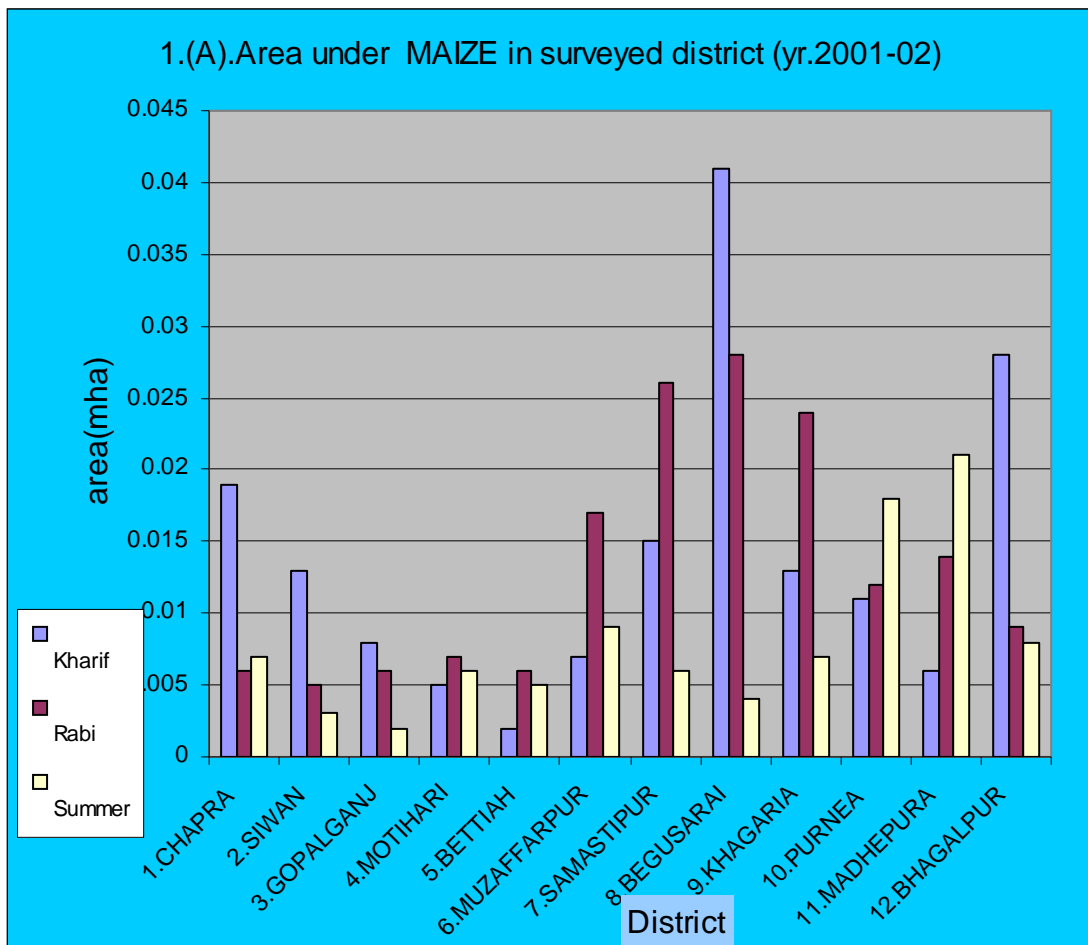
To make a real analysis of my findings and survey, I have categorized the assigned CROP WISE and SEASON WISE objective in two parts separately for different district of **Bihar and Jharkhand**. To analysis the Ist objective I took the support of Secondary sources .

BIHAR

MAIZE

Table 1.(A)

CROP - MAIZE, YEAR -(2001-02)				
AREA (mHa)				
DISTRICT	Kharif	Rabi	Summer	TOTAL
1.CHAPRA	0.019	0.006	0.007	0.032
2.SIWAN	0.013	0.005	0.003	0.021
3.GOPALGANJ	0.008	0.006	0.002	0.016
4.MOTIHARI	0.005	0.007	0.006	0.018
5.BETTIAH	0.002	0.006	0.005	0.013
6.MUZAFFARPUR	0.007	0.017	0.009	0.033
7.SAMASTIPUR	0.015	0.026	0.006	0.047
8.BEGUSARAI	0.041	0.028	0.004	0.073
9.KHAGARIA	0.013	0.024	0.007	0.044
10.PURNEA	0.011	0.012	0.018	0.041
11.MADHEPURA	0.006	0.014	0.021	0.041
12.BHAGALPUR	0.028	0.009	0.008	0.045
TOTAL	0.169	0.159	0.096	0.424
TOTAL (BIHAR)	0.244	0.188	0.149	0.581

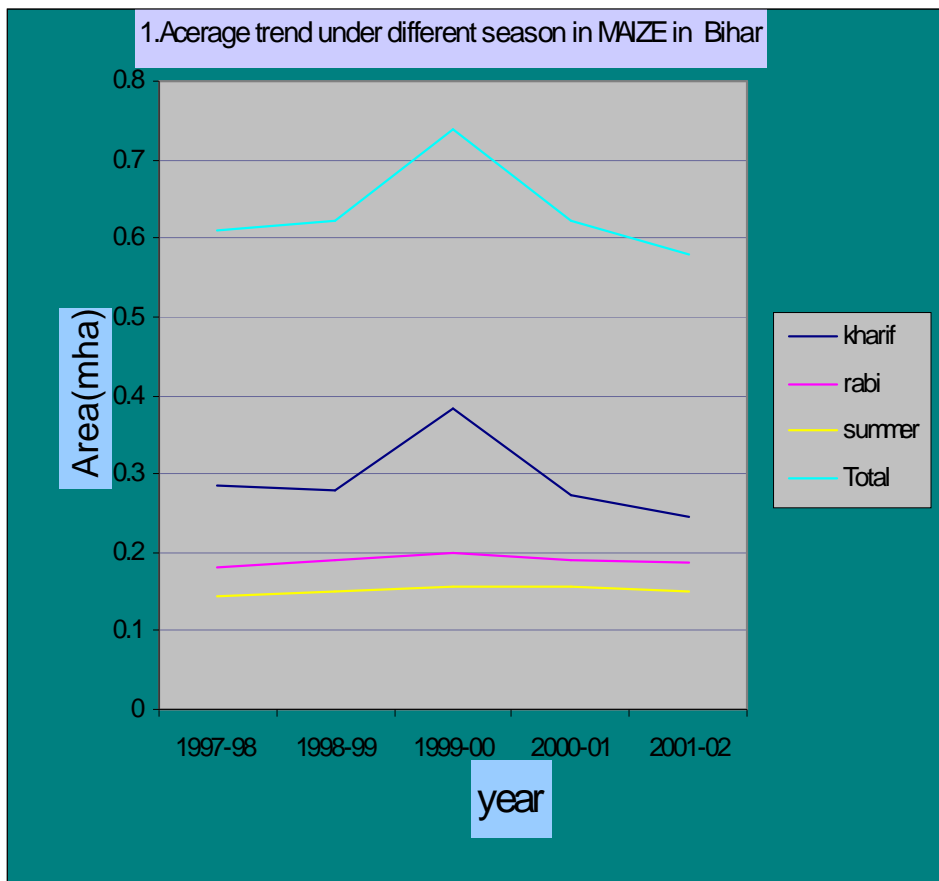


ANALYSIS:

To estimate the market size for the year (2002-03), it would be better to look the past five year trends and % change in area of last two years.

AREA UNDER MAIZE (mha)

Year	1.(a) crop			TOTAL
	Kharif/bhad ai	Rabi	Summer	
1997-98	0.286	0.182	0.143	0.611
1998-99	0.279	0.191	0.151	0.621
1999-00	0.383	0.199	0.157	0.739
2000-01	0.274	0.191	0.156	0.621
2001-02	0.244	0.186	0.149	0.579
2002-03	NA	NA	NA	NA



Season wise % change in Area of Maize during last two years -;

Season wise area (mha)				
Year	Kharif	Rabi	Summer	Total
2000-01	0.274	0.191	0.156	0.621
2002-02	0.244	0.186	0.149	0.579
%change	10.09% (-)	2.61% (-)	4.48% (-)	6.77% (-)

From the above table it is quite clear, the area under maize has been decreasing and in present year (2002-03) too we can't deny from the same facts due the flood

during kharif and untimely rain before rabi season .

MARKET SIZE OF MAIZE IN BIHAR FOR THE YEAR (2002-03)

SEASON	Area (mha)	Seed rate@ 20kg/ ha	Market size(mt)
KHARIF	0.219		4380
RABI	0.181		3620
SUMMER	0.142		2840
TOTAL	0.541		10840

Total market size of Maize in BIHAR =10,840 mt. From secondary sources it was estimated that 80 –85% area (0.432 mha) will be under Hybrid maize. **(It is also cleared that these 12 district surveyed covers 73% area of total area under Maize). Therefore, existing market size for Hybrid maize in BIHAR= 8640 mt. (9000 mt.)**

UNDER SURVEYED District MAIZE Mandi in BIHAR for 2002-03

DISTRICT	TOTAL area under maize (mha)	Area under hybrid MAIZE (mha)	Market size under HYBRID (mt)
1.CHAPRA	0.032	.025	500
2.SIWAN	0.021	.016	320
3.GOPALGANJ	0.016	.013	260
4.MOTIHARI	0.018	.015	300
5.BETTIAH	0.013	.010	200
6.MUZAFFARPUR	0.033	.026	520
7.SAMASTIPUR	0.047	.037	740
8.BEGUSARAI	0.073	.058	1168
9.KHAGARIA	0.044	.035	700
10.PURNEA	0.041	.033	660
11.MADHEPURA	0.041	.033	660
12.BHAGALPUR	0.045	.036	720

TOTAL 6748 mt.

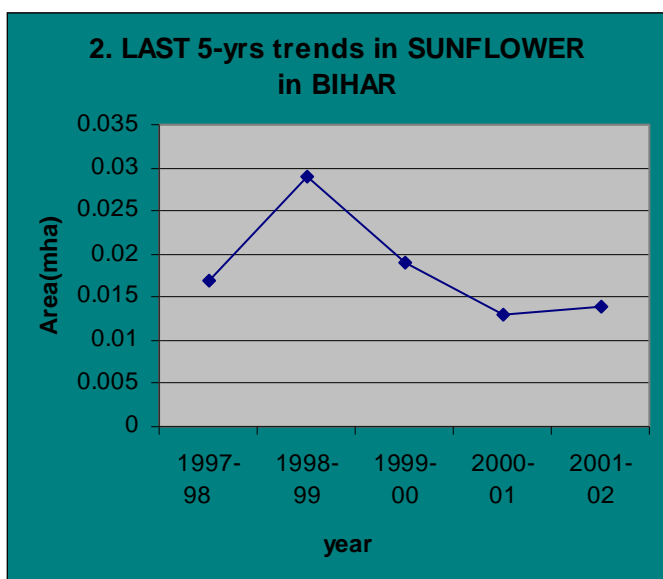
Total market size of Maize under surveyed dist. in BIHAR = 6748 mt.

(b) SUNFLOWER-

SUNFLOWER is an evergreen crop in Bihar ,generally there is no any specific time of cultivation It is grown throughout year in our country due to its photo-insensitive nature.

Last 5-years trends in BIHAR under sunflower area

crop	1997-98	1998-99	1999-00	2000-01	2001-02
SUNFLOWER	0.017	0.029	0.019	0.013	0.014

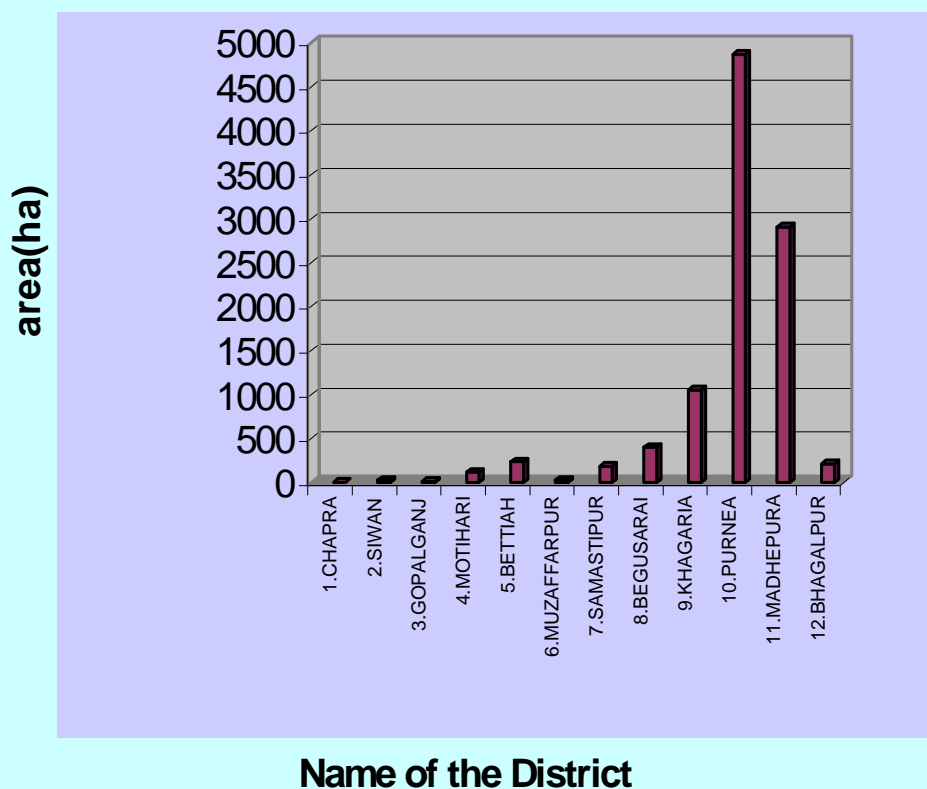


From above graph it is clear, after a boom period of year 1998-99, the acerage of sunflower was decreasing but since yr. 2001-02 it has started to regain the lost area due to more economical crop than others at less labour and low level of management.

(Year 2001-02)

1.(b)CROP - DISTRICT	SUNFLOWER AREA (Hactare) ***
1.CHAPRA	3
2.SIWAN	26
3.GOPALGANJ	14
4.MOTIHARI	115
5.BETTIAH	235
6.MUZAFFARPUR	25
7.SAMASTIPUR	186
8.BEGUSARAI	399
9.KHAGARIA	1,055
10.PURNEA	4,869
11.MADHEPURA	2,908
12.BHAGALPUR	212
	18,274

1.(b)Acerage under sunflower in surveyed district
of BIHAR



Estimation of market size for sunflower in year (2002-03)

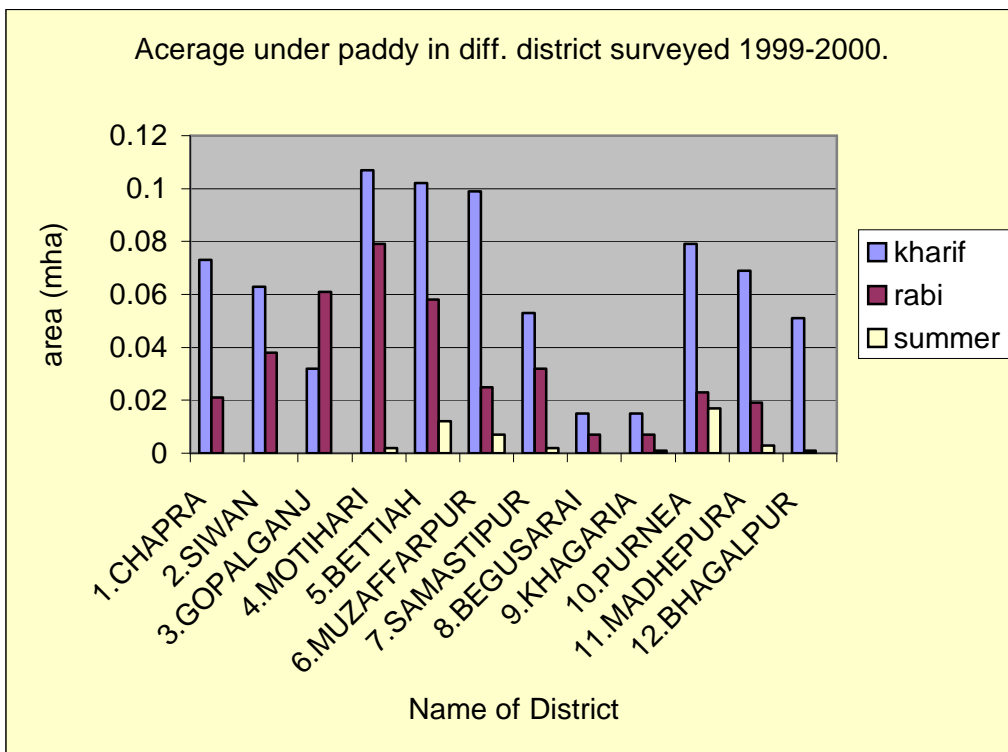
Year	Area(mha)
2000-01	0.011
2001-02	0.012

There is 9% increase in area under sunflower during last year. So assuming the same % of increase of area for the year 2002-03, the area will be .013 mha and existing market size @ 10 kg/ha, would be of 130 mt.

(c) PADDY

1. (c) CROP - PADDY , YEAR -(1999-2000) AREA (mHa)

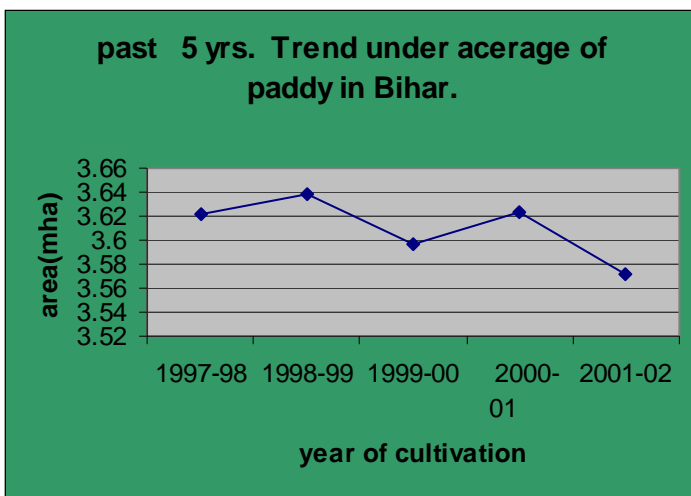
DISTRICT	Kharif	Rabi	Summer	TOTAL
1.CHAPRA	0.073	0.021	NA	0.094
2.SIWAN	0.063	0.038	NA	0.101
3.GOPALGANJ	0.032	0.061	NA	0.093
4.MOTIHARI	0.107	0.079	0.002	0.188
5.BETTIAH	0.102	0.058	0.012	0.172
6.MUZAFFARPUR	0.099	0.025	0.007	0.131
7.SAMASTIPUR	0.053	0.032	0.002	0.087
8.BEGUSARAI	0.015	0.007	NA	0.022
9.KHAGARIA	0.015	0.007	0.001	0.023
10.PURNEA	0.079	0.023	0.017	0.119
11.MADHEPURA	0.069	0.019	0.003	0.091
12.BHAGALPUR	0.051	0.001		0.052
TOTAL	0.758	0.371	0.044	1.173
TOTAL (BIHAR)	2.931	0.541	0.124	3.596



As from the above graph it is clear that the most potent area for area paddy cultivation is MOTIHARI, BETTIAH AND MUZAFFARPUR.

PAST 5-YRS. TRENDS IN PADDY

YEAR	1997-98	1998-99	1999-00	2000-01	2001-02
AREA(mha)	3.621	3.639	3.596	3.623	3.571



ESTIMATION OF MARKET SIZE OF PADDY IN BIHAR FOR 2002-03.

Due to lack of availability of last two years separate season wise data, it would be better to predict the market size for year 2002-03 by taking the % shift of last five yr. in consideration. Here, It has been observed that A wave like crest and trough trends in paddy crop and the yr. 2002-03 is also assumed with a (+ve) growth rate of 1.5 % due to on time monsoon and it will compensate the loss occurred during last year.

Thus, In BIHAR the cultivated area under paddy during 2002-03 will be 3.624mha.

Paddy is regarded as Grain of Gold. But in Bihar the rate of adoption of proprietary research hybrid released by private companies, particularly in this crop is very very low due to the lack of awareness among farmers and topographical condition of land which is undulating with confused patterns of upland and low land.

As per concern to Assistant joint Director of Agriculture BIHAR, Mr. R. R. Mandal responded the rate of adoption of proprietary research hybrid in Paddy may be around 0.5- 1% of total cultivated area during (Year 2002-03) and not more than that. But it is in growing trend and in future it will grow more than what ever is expecting now. So, The present market size for proprietary research Hybrid paddy will be

= Area under proprietary research hybrid X seed rate

= 0.5% of cultivated area X 15 kg.

= 18,120 x 15

= 272 mt.

Present market size for proprietary research Hybrid in PADDY in Bihar=272mt.

(NOTE- During my field survey ,farmers were considering only two crops in paddy.

Paddy sown during Early -may to Mid -june, and Mid june to First - july is the same as kharif and others as summer paddy sown during Nov.-Dec. in negligible area of eastern Bihar like Purnea. It's also true until or unless there is no monsoon most of the Farmers in BIHAR does not sow paddy.)

STATE - JHARKHAND

After reorganisation of BIHAR, on 15th Nov.2000 a new state JHARKHAND came into existence which is very rich in mineral resources but very backward in agricultural resources. In Kharif only 12% and in Rabi only 6% of total cultivated area is under irrigation.

During last year 2002-03, 74% of targeted area in Paddy , 81% of targeted area in Maize under cultivation was achieved .Under crop diversification scheme, from next yr. onwards they have decided to enter in sunflower also. In my view it is a good estimation because during project survey I found as the region is largely unirrigated and the single crop usually rice is followed by FALLOW. However, the residual moisture in the soil is high and it may possible to go for a second crop in Rabi like SUNFLOWER .

OBJECTIVE I.

I got the opportunity to have a glance of this newly formed state to look inside their Market size in three different crops namely MAIZE, SUNFLOWER & PADDY in its 6-District Deoghar, Bokaro, Ranchi, Hazaribagh , Palamu and Gumla .

Here to calculate the market size for year (2003-04) in respective crop again I have taken the help of targeted area for the year and calculated the market size for same.

2. (a) Crop – Maize , Year (2003-04)

Year (2003-04)	SEASON- WISE Targetted AREA (' 000 ha)				
DISTRICT	Kharif	Rabi	Summer	Market size	
1.DEOGHAR	4	0.5	nil	72 mt	
2.BOKARO	2	0.1	nil	34mt	
3.HAZARIBAGH	6	1	nil	112mt	
4.RANCHI	3	1	nil	64mt	
5.PALAMU	7	0.1	nil	113mt	
6.GUMLA	1	0.1	nil	17.6mt	
Total	23	2.8	nil		
JHARKHAND (Total)	71	11.5	nil		

The district wise market size has been calculated by considering the shifting pattern @20% into the other crops.

Season wise MAIZE market in JHARKHAND.

KHARIF	1420 mt
RABI	230 mt
SUMMER	NIL
TOTAL	1650 mt

By keeping all the pros and cons in consideration like last year, @ 20% shiftment to other crops, the Total market size for hybrid MAIZE in JHARKHAND =1320 mt.

2 (b).CROP – SUNFLOWER

SEASON- WISE Targetted AREA (' 000 ha)

YEAR (2003-04)	SEASON- WISE Targetted AREA (' 000 ha)				
DISTRICT	Kharif	Rabi	Summer	TOTAL	MARKET SIZE @ 10 Kg/ha
1.DEOGHAR	0.05	0.1	nil	0.15	1.5mt
2.BOKARO	0.05	0.1	nil	0.15	1.5mt
3.HAZARIBAGH	0.1	0.1	nil	0.2	2.0mt
4.RANCHI	0.05	0.25	nil	0.3	3.0mt
5.PALAMU	0.05	0.25	nil	0.3	3.0mt
6.GUMLA	0.1	0.1	nil	0.2	
Total	0.4	0.9	nil	1.3	
JHARKHAND	1.2	2.2		3.4	

NOTE: During past year 2002-03, in oilseed crops, 68% of targeted area was achieved. By keeping the same target of achievement in year 2003-04 ,the total market for sunflower would be 23.12 mt. If it is adopted under crop diversification scheme.

In JHARKHAND,

The market size for sun flower in kharif = 8.16 mt.

Rabi = 14.96 mt.

Summer = nil

2. (C) PADDY

In this newly formed Jharkhand the total cultivated area is less than BIHAR. But to achieve the self sufficiency in food by their own ,the adoption rate in proprietary research hybrid paddy is more than the bihar.. Since last three years to now there is miraculous shift from low yielding disease sensitive variety to high yielding disease resistant hybrids. According to Mr. Anand kumar Tiwari, Block Agriculture officer, Deoghar, In Jharkhand 3-5 % of total paddy cultivated area will be under proprietary research HYBRID PADDY.

On the basis of this percentage, the total area under proprietary research hybrid paddy in JHARKHAND will be **.078 mha..**

Year (2003-04)

DISTRICT	AREA (mha)			TOTAL Area	Area (ha) under P.RESEARCH Hybrid paddy	MARKET SIZE (mt) @15 kg/ha.
	Kharif	Rabi	Summer			
1.DEOGHAR	0.023	NA	nil	0.023	1150	17.25 mt
2.BOKARO	0.008	NA	nil	0.008	400	6.00mt
3.HAZARIBAGH	0.033	NA	nil	0.033	1650	24.75mt
4.RANCHI	0.023	NA	nil	0.023	1150	17.25mt
5.PALAMU	0.083	NA	nil	0.083	4150	62.25mt
6.GUMLA	0.033	NA	nil	0.033	1650	24.25mt
JHARKHAND	0.621	0.151		0.772	38600 hactare.	579 mt

The existing market in paddy under HYBRID seed in JHARKHAND =1158 mt.

OBJECTIVE II

To study the preference for different hybrids. (Requirements for an ideal fit in different market segments with respects to duration, yield, quality of produce, disease pest reaction, etc.)

For objective II, To study the preference of our Hybrid over different varieties and competitor's hybrid, I have divided the existing district market surveyed into 4 -group on the basis of geographical segmentation which is as follows

GROUP	NAME OF DISTRICT
Group -I	CHAPRA, SIWAN, GOPALGANJ, MOTIHARI AND BETTIAH
Group -II	MUZAFFARPUR ,SAMASTI PUR AND BEGUSARAI
Group -III	KHAGARIA, PURNEA, MADHEPURA & BHAGALPUR.
Group -IV	DEOGHAR, BOKARO, RANCHI,HAZARIBAGH, PALAMU & GUMLA .

Symbol; K –Kharif.

R - Rabi

S - Summer.

Group - I	CHAPRA, SIWAN, GOPALGANJ, MOTIHARI AND BETTIAH
------------------	---

(a) CROP –MAIZE

Name of V/H	Duration (Days)	Av. Yield (kg/ha)	Plant features and Quality of produce	Disease pest reaction
1.SUPER 900 M	160-180 (R) 100-110 (S)	38- 40	Uniform plant, Dwarf height, germination % very high. Water insensitive. good market value.	Sensitve to winter.
2.SEED-TECH 740, 940	155 – 160 (R) 100 – 110 (S)	30-35	Bold and shiny grain , plant looks good.	Resistant to winter
3.PHI- 3056	140 – 160 (R)	32-36	Tall plants, uniform cobbing ,bold grain ,high yield.	Sensitive to stem borer.
4. PROAGRO 4640	150 – 160 (R)	30-35	Dwarf plant, cob siz is long.	Sensitive to stem borer.
5.MAHYCO 3824	150 -160 (R)	32-35	Double cob, dwarf plant, Shelling % is high.	Sensitive to stem borer.

Others hybrids in Maize are Kanchan ,Ganga safed –2, Ganga –5 , Makka hybrid –1 and In variety LAXMI maize is more poular and widely grown during kharif in this region. ZANERA is also grown for fodder purpose.

Preferred hybrid –

PAC-9735 (Y) Av.yield =28-30 q/acre.duration (155-170days)

PAC –9714 (Y) yield= 22-24 q/acre.

PAC -784 (W) yield =18-20 q/acre.duration (100-110days)

(b) SUNFLOWER - Not grown.

(c) PADDY - PADDY dominated region but most of the area under low land cultivation. So, water logging during kharif and also flood affected.

Hybrids grown	Duration (Days)	Yield (q /acre)	Features & quality of produce	Disease pest reaction
1.PHB-71	125-130	25-30	Tall plant animal feed, height suitable for low land water stagnant area to upland both Good in taste.	Leaves becomes straw yellow colour.
2.MAHYCO (Suruchi,5319)	125-130	20-25	Tolerant to water logging,plant height suitable for low land.	Disease resistant. Sucking pest problem.
3.PROAGRO (4001,6201,6444)	130-145	28-30	Very old,suitable for all variable climate.	Severe pest attack.sucking pest problem.

Preferred hybrid – PAC –801.

Besides these other popular varieties grown with regional name are Botua, Pallisri ,Panpran (due to shiny grain and good market value). Others varieties like TDC-7029,parmali (150-160 days),S-52,Pant-12,Narendra –2,Saket-4, Pant-10, Mala, sonamansoori, Arjun etc. are grown on large scale.

Group -II	MUZAFFARPUR ,SAMASTI PUR AND BEGUSARAI
------------------	---

Extensive market of WHITE & YELLOW maize in Rabi & Kharif both.

(A) CROP -MAIZE

In group II region, same hybrids are grown for YELLOW MAIZE as in group I. but difference is that ,Samastipur , Begusarai and Muzaffarpur are exclusively WHITE MAIZE growing area. **In samastipur, during rabi white maize is grown with potato for self consumption purpose and in summer white maize is grown as a sole crop for marketing purpose.**

The main player in white maize are

Name of hybrid	Duration (days)	Yield (Q/acre)	Quality of produce
1. DURGA	110-120 (K) 140-160 (R)	12-15	Not so good.
2. Ganga safed-2	100-110 (K)	10-15	Okay, small grain, sweet in taste.
3.Ganga -5	110-115 (K)	25-27	okay
4.Triveni	110-120 (K)	20-22	Good.

Preferred hybrid 1. PAC - 784

(performance is excellent in SAMASTIPUR but failed in BEGUSARAI)

(B) CROP - SUNFLOWER.

It is not growing since 3 yrs. Due to a rumour of parrot snake and they feel sunflower decreases the fertilising power of soil. But now trend might be shifting again because they knew the rumour spread was wrong and it is more beneficial than other crops.so in future trend may change.

(C).CROP -PADDY

Same hybrids are playing like group I.Particularly in BEGUSARAI ,Paddy is not growing due the heavy flood .It is grown as BAUG paddy and janera for animal feed only. This area is also occupied by kharif Maize being a DIARA region more suitable for Rabi MAIZE ,and hence It is also known as **seat of MAIZE**.

Some popular varieties are growing in paddy with regional name like

Name of variety	Duration (days)	Yield (q /ha)
1.KARMA	150-170	12-15
2.LALSAR	150-170	12-15
3.KANCHI MUSLIM	140-150	18-20
4.PUNJABI DHAN	150-180	16-18
5.BAKAUL	150-170	8-10
6.CHANAO	160-180	8-10
7.HATHIYAJHOOLAN	150-160	5-7

CHANAO, BAKAUL AND HATHITA JHOOLAN are grown on the concept of something better than nothing . it is very good in taste. As water level increases height of paddy also increases, well adopted in flood effected region.

Conclusion – it may nothing but JALMAGAN variety.

Group -III	KHAGARIA, PURNEA, MADHEPURA & BHAGALPUR.
-------------------	---

(EXCLUSIVELY FOR SUNFLOWER as well as MAIZE and PAADY)

(A) CROP MAIZE -- Same player as in group I. Pioneer 3056 is main in rabi maize.

White maize of KANCHAN and KAVERI is preferred in kharif for fodder purpose.

Kanchan- k-55, k-101 etc. are of 60-70 days duration.

Kaveri is popular in white maize for fodder purpose in kharif.

Mungeria desla – sown in kharif only. Very popular. 60-70 days duration.

Jaunpuri and tilbulia - also popular in kharif maize.

Preferred hybrid :1.PAC- 9735

2.PAC -9714

3.PAC -701 & PAC- 784.

(B) CROP – PADDY .

Name of hybrid	Duration (Days)	Yield (Q/acre)	Features
1.Loknath –555	135-140	20-21	Resistance to paddy blight.
2.6201 (PROAGRO)	130-135	22-24	Suitable for upland soil.
3.SURUCHI (MAHYCO)	125-135	24-25	Can't say.

varieties;

1.Barabar (ghiyodha) yield= 8-10q/a. ,duration=120 days.

2.hathiya

3.katak

4.Bajrangwali -8-10 q/a.

5.bakaul yield=8-10 q/a.,plant height 5-6". For low land suitability.

6.Lal sita

7.China-pusa -160-180 days. 12-15 q/a.

8.chandanchur

9.penchali -(yield=(10-14 q/a)

10.pankaj - 150-160 days, yield =25 q/a.

11.pansera – (yield =8-10 q/a)

12.sukla- (yield =8-10 q/a)

13.Dootkalma (yield=5-6 q/acre)

14.1001

15.safed sita

16.katarni. - smelling rice, 160-180 days duration.

17.IR-36. (yield =22-25q/a)

18.1R-64

19.S-52 (yield = 14-16 q/a)

20.BAUNA MANSOORI. Yield =10-12 q/a.

These varieties are most suitable in land area of group IV. It is of 135-180 days duration with an average yield of 10-12 Q/acre. Some of them is more suspicious to bacterial leaf blight. Other varieties like Bajrang wali Pansera are just like Jalmagan.

(C) CROP - SUNFLOWER.

In Khagaria , Naugachiya (Bhagalpur), Purnea and Madhepura , sunflower is sown as a cash crop ,money crop and it also helps to destroy the karmi grass.The main hybrid is preferred by farmers are

Name of hybrid	Duration (Days)	Yield (q/ha)	Quality of produce	Disease pest reaction
1.(MSHF-17) Mahyco	120-130	7-8	Good oil %	2-3 cm. Long yellow pest.
2. (275) Syngenta	110-120	6-8	Full of seed, big head size.	
3.(Jwalamukhi) Proagro	110-130	7-8	Excellent ,good market price.	Pest problem.
4. (3322) Monsanto	110-120	NA	-----	Seed falling problem.

Besides these , 25-30 others player like vijay brand, Paras, Nirmal,Nath, Shakti etc. are in the field.

Preferred hybrids –

1. PAC- 8699 **EXCELLENT, MARKET KING FOR RABI.**

Yield =9-10 q/acre. Duration 110-120 days.

2. PAC –36 suitable for summer. Yield 6-7 q/ha. Duration (90-100days).

Group -IV	DEOGHAR, BOKARO, RANCHI, HAZARIBAGH, PALAMU & GUMLA
------------------	--

In group IV, I have kept all the different district surveyed in JHARKHAND. As per my concern, there is very little market for MAIZE and

SUNFLOWER. Only KHARIF season is favourable to grow the MAIZE and PADDY both.

Name of hybrid/variety.	Duration (Days)	Yield (q/acre)	Quality of produce
1. k-25 , k-55, k-99, k101, nutan, (kanchan)	60-80	10 –12	Small grain, Good in taste.
2.ganga safed-2	80-90	8-10	White grain,
3.ganga-5		xxx	Xxx
4.swan-1.	xxx	xxx	xxx

In JHARKHAND, For summer maize PAC-701 & PAC-784 could be preferred.

And in case of sunflower Meridivik (90-100 days), EC-68413, EC-68414 etc . ,

PAC-36 could be preferred for this duration.

PADDY IN JHARKHAND

The district surveyed under this project are major area of paddy growing. There are many hybrids growing in this region are as follows ;

Name of hybrids.	Duration (days)	Av.Yield (Q /acre)	Quality of produce	Disease pest reaction
1.6201,6244 (PROAGRO)	120-130	30-35	Good in taste	Sucking pest.
2.5319,suruchi (MAHYCO)	120-135	26-30	Grain size bold	Resistent to disease.
3.PHB-71 (PIONEER)	130-140	30-32	Tasty, no stale quickly, cooking quality is excellent.	No disease.
beside these, varieties are				
1.Kalamdhan	150-160	18-20	Long grain,tasty	No panicle opening. Drying of paddy.chaff y
2.Lalat	140-160	12-14	-do-	
3.1001	140-160	15-16	-do-	
4.Narendra	130-135	10-15	-	Some where Sucking pest and regional disease like gundhi, buggi etc.
5.PD-12	140-145	-do-	-	
6.IR-36	120-130	-do-	-	
7.PANKAJ	150-160	22-25	long grain	
8.RATGOLI	140-160	8-10	very tall plant,tasty.	
9.JHILI	160-180			
10.GORA	160-180	--	Fine rice	
11.BADSHAH	150-170	10-12	-do-	

These are the varieties grown in rice.

Based on land situations in JHARKHAND , different varieties are grown during june – july.

Situation of land	Name of the varieties.
1.Upland conditions	Birsa gora-102,105,106 &107
2.Medium land	IR-36 ,IR-64 ,Rajendra – 202 ,Birsa-201,202.
3.Lowland	MTU-7029, Pankaj ,IET –5656.

OBJECTIVE III

Competitive scenario ,market shares of different players , Brand image of different players and rating of products.

III (a) Competitive scenario in BIHAR and JHARKHAND

The present seed market of BIHAR and JHARKHAND is highly competitive, dynamic and unstable. Those who are major player today may not be tomorrow. It would be wise to keep a keen vision on this changing market condition. Why because ,if one is at top in one segment other is leading in another segment. Here I have studied GROUP wise market scenario and putting as it is in the segment.

Group -I	CHAPRA, SIWAN, GOPALGANJ, MOTIHARI AND BETTIAH		
CROP	NO.1	NO.2	NO.3
MAIZE	MONSANTO	BISCO	PIONEER
SUNFLOWER	X X X	XXX	XXX
PADDY	PROAGRO	PIONEER	MAHYCO

Group -II	MUZAFFARPUR ,SAMASTI PUR AND BEGUSARAI		
CROP	NO.1	NO.2	NO.3
MAIZE	MONSANTO	BISCO	ADVANTA INDIA
SUNFLOWER	xxx	XXX	XXX
PADDY	PROAGRO	NATH	MAHYCO

Group -III	KHAGARIA, PURNEA, MADHEPURA & BHAGALPUR.		
CROP	NO.1	NO.2	NO.3
MAIZE	MONSANTO	PROAGRO	ADVANTA INDIA
SUNFLOWER	ADVANTA INDIA	SYNGENTA	PROAGRO
PADDY	NATH	MAHYCO	PROAGRO

Group -IV	DEOGHAR, BOKARO, RANCHI,HAZARIBAGH, PALAMU & GUMLA .		
CROP	NO.1	NO.2	NO.3
MAIZE	KANCHAN	LAXMI	GANGASAFED-2
SUNFLOWER	XXX	XXX	XXX
PADDY	ADVANTA INDIA	PIONEER	PROAGRO

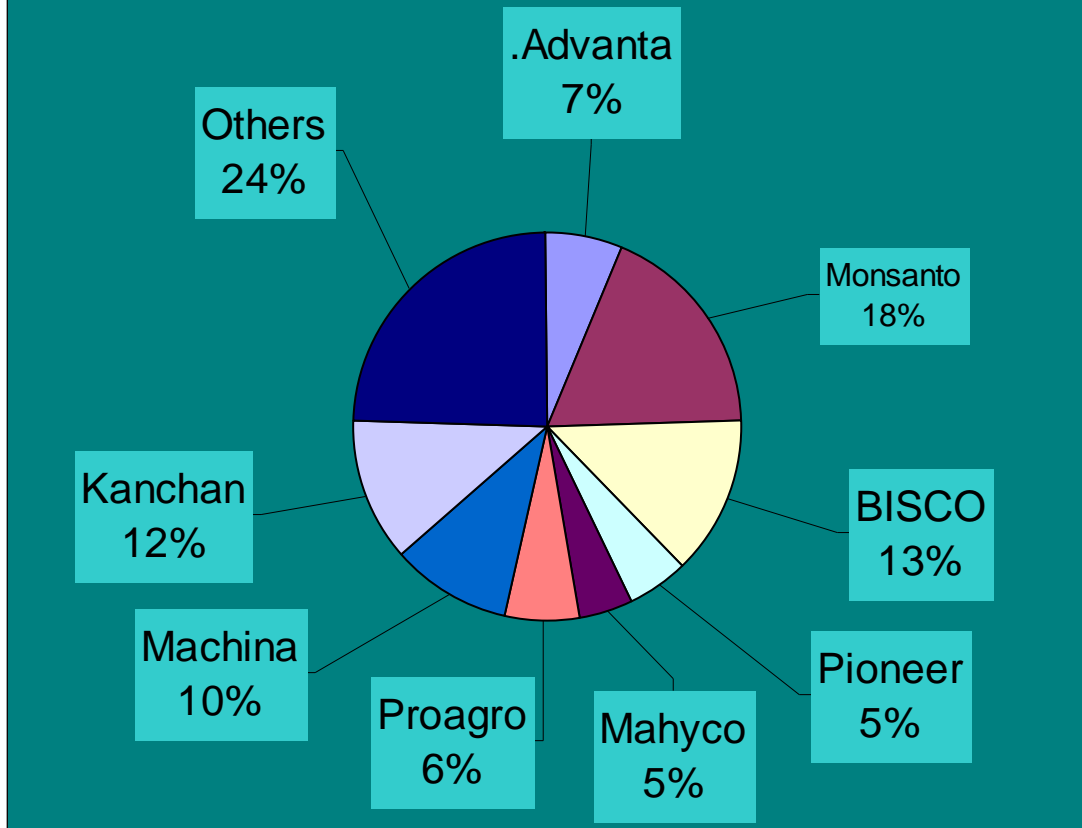
III (b). TOTAL MARKET SIZE OF DIFFERENT PLAYERS IN BIHAR (2002-03) & JHARKHAND (2003-04)

CROPS	BIHAR	JHARKHAND	TOTAL (mt)
MAIZ	8640	1320	9960
SUNFLOWER	130	003	133
PADDY	275	579	854

1.CROP – MAIZE

Name of the company	sales (in mt)	% Shares
1.Advanta India	650	7
2.Monsanto	1800	18
3.BISCO	1300	13
4.Pioneer	500	5
5.Mahyco	450	5
6.Proagro	600	6
7.Machina	1000	10
8.Kanchan	1200	12
Others	2460	24
TOTAL	9960	100

1.MARKET SHARES OF DIFF. COMPETITORS IN MAIZE

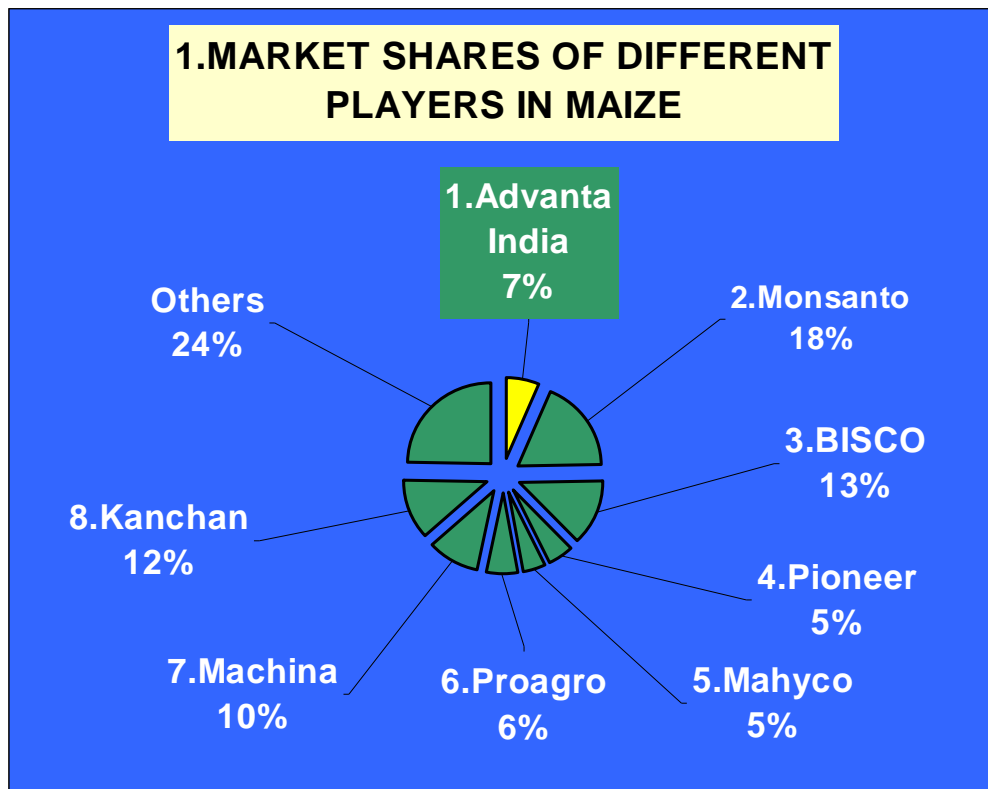


From this pie chart it is clear that Monsanto and Bisco is leading in Maize AND enjoying a share of more than 30%.While Kanchan and Machina is leading due to of heavy sell in short duration Kharif MAIZE.

Among MNC'S only Monsanto is leading ahead of ADVANTA INDIA while BISCO is a regional company having comparative advantage of the place of that particular region .

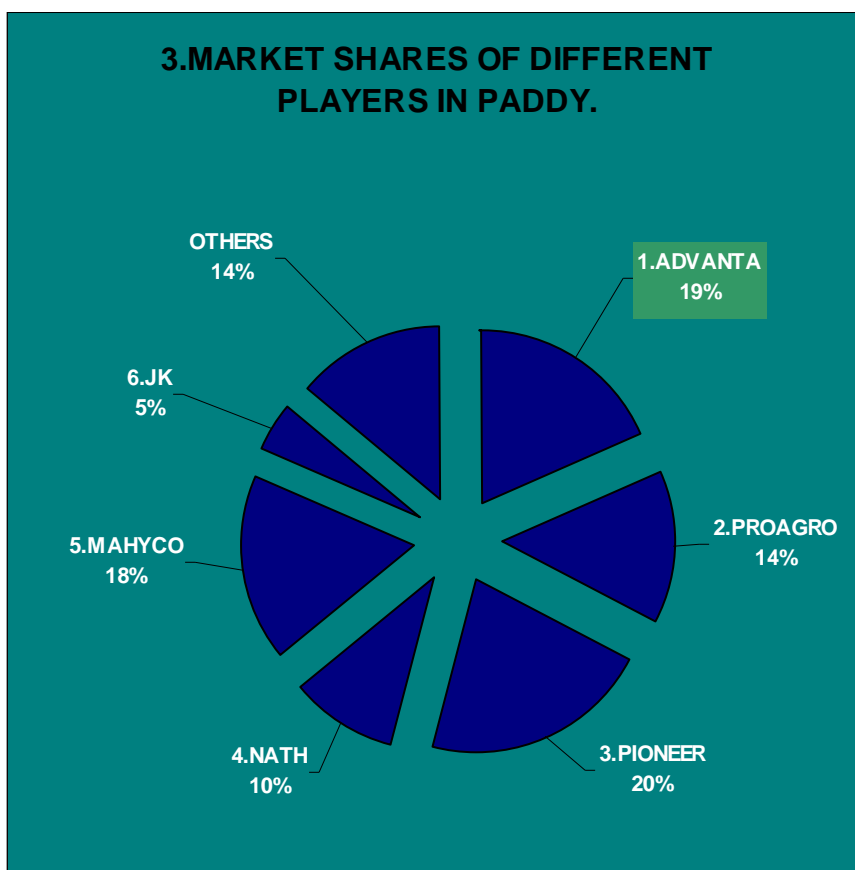
2. CROP - SUNFLOWER.

Name of the company	sales (in mt)	%SHARES
1.Advanta India	35	26
2.Syngenta	15	11
3.Mahyco	12	9
4.Proagro	13	10
5.Pioneer	10	8
6.Paras	5	4
7.Nirmal seeds	2	2
8.Nath	3	2
Others	38	28
TOTAL	133	100



(3) CROP – PADDY.

NAME OF PLAYERS	SALES (mt)	%SHARES
1.ADVANTA	160	19
2.PROAGRO	120	14
3.PIONEER	180	20
4.NATH	85	10
5.MAHYCO	145	18
6.JK	40	5
7.OTHERS	100	14
TOTAL	854	100



ADVANTA INDIA is enjoying with 19 % share of total market in hybrid paddy.

III.(c).BRAND IMAGE OF DIFFERENT PLAYERS.

As we know brand image is nothing but perceived value about a product in consumer black box. It is a qualitative things which is very difficult to measure absolutely. Why because within a fraction of second it comes down from top to bottom. Here I have tried to know it on the basis of DEALERS RESPONSES .

(a) CROP-MAIZE

NAME OF COMPANY	GRADE %			
	EXCELLENT	GOOD	OKAY	POOR
1.MONSANTO	66	23	11	XXX
2.ADVANTA INDIA	21	59	11	9
3.PIONEER	29	52	15	4
4.PROAGRO	8	69	16	7
5.MAHYCO	13	83	4	XXX

(b) CROP - SUN FLOWER

There is no substitute of ADVANTA INDIA (with the name of ITC SUNFLOWER).

(C)CROP - PADDY

NAME OF COMPANY	GRADE %			
	EXCELLENT	GOOD	OKAY	POOR
1.ADVANTA	51(JHARKHAND)	23	20	6
2.PIONEER	59	27	11	3
3.PROAGRO	38	32	25	5
4.MAHYCO	47	33	16	4
5. NATH	46 (BIHAR)	42	4	8

3.(d). Rating of products –ON THE BASIS OF DEALERS PERCEPTION.

CROP – MAIZE

NAME OF products	GRADE %			
	EXCELLENT	GOOD	OKAY	POOR
1.900 M	61 (BIHAR)	23	16	XXX
2.PAC-9735	11	59	30	XXX
3. PHI-3056	13	68	15	4
4.3824 (MAHYCO)	9	69	16	6
5. 4622 (PROAGRO)	23	73	4	XXX
6.K-25,101	79 (JHARKHAND)	21	XXX	XXX

CROP SUNFLOWER

PAC-8699 ONLY. EXCELLENT

MSHF-17 –NO.2 (MAHYCO)

JWALAMUKHI (PROAGRO)

SYNGENTA -275

CROP –PADDY - on the basis of suitability of Hybrid according to dealers.

NAME OF PRODUCTS	BIHAR (% OF EXCELLENCY)	JHARKHAND (% OF EXCELLENCY)
1.PAC-801,832	7	38
2.4001,6201,SURUCHI	29	17
3.PHB-71	21	24
4.LOK-555	31	XXX
5.OTHERS	12	21
TOTAL	100	100

(OBJECTIVE –IV)

Scope of current Advanta India Limited and requirements of new products.

Although there are many worst products in the market and it is being sold. Problem is universal and solutions comes only after problem. An organisation should concentrate more on their strength as well as weaknesses both. In BIHAR and JHARKHAND large area is still being sown with farm saved seeds and varieties popular in that area. So ADVANTA INDIA has a better tomorrow to sell their hybrids in PADDY and other crops like can MAIZE ,SUNFLOWER, MUSTARD , SUDAN GRASS etc.

The existing products in MAIZE has already been saturated ,In sunflower the same conditions with PAC-36 having a necessity to modify but in PADDY there is unlimited scope for the growth of Hybrid only need to focus on time.

MAIZE:

1. Requirements of new products in both yellow and white maize.
2. Requirement of new product for White Maize in Kharif (60-70days) in JHARKHAND and BIHAR both , & in Rabi (150-160 days) in BIHAR only with high shelling %.

PADDY

1. There is tremendous scope of growth for existing hybrids ,need to place it with proper marketing strategy.
2. Scope for fine quality , shorter duration (120-130 days),disease resistant paddy in upland area with good cooking quality.
3. Scope for EXPORT of paddy to neighbour country like NEPAL by making proper business contact.

SUNFLOWER

Requirements of short duration sunflower in terms of yield, resistant to pest attack and highest oil %.

Scope for others product:

- (a) scope for sudan grass in flood affected region of Bihar for fodder.
- (b) Ample opportunity for sunflower in JHARKHAND during Rabi.

Thus, there is requirement of all about all the product in market.

CHAPTER VI

RECOMMENDATIONS, SUGGESTIONS AND SUGGESTED STRATEGIES

This chapter has covered the last and final assigned objective of project .

RECOMMENDATIONS

Based on study conducted and observation done in the field , a company must consider these things ,

1. Effective channel management

The ability to increase the market share is critically dependent on how well manage the channel is & with proper coordination among dealers and company staff. It should not allow to change the dealers every year.

2. Brand building awareness

Except Sunflower (that too ITC sunflower),need to create more awareness about Hybrid seeds in Paddy as well as in Maize both with the name of ADVANTA INDIA LTD.

3. Blind support to the “Principle of Force”

In assigned market segment the sales of seed is mainly depend on skilled army of the field staff of a company. If there is more no. of field staff , selling will be more.

4. Separate sales force during Kharif for BIHAR and JHARKHAND.

By keeping the budgetary strength in consideration, A Company must appoint a separate sales team well before starting the season in BIHAR and JHARKHAND

so that they could make aggressive promotional work which is only the option to lead hybrid market in that particular segment.

5 Be Proactive than Postactive

Assumption (2004-06). There might be a big change in HYBRID MAIZE (CORN). For corn there may be a rapid growth and **Introduction of single cross.**

So we should release single cross earlier than others in market.

6. Due to shorter life cycle of new hybrids it gets saturated after 2-3 years so must introduce a new hybrid after this gap. **This is what is happening with the existing product.**

7. There should be keen vision during failure of competitors product and at any cost it should not allowed to sale our seed with the name of competitors brand because credit goes to the competitors.

8. Must position a “Hybrid suitable for rainfed and irrigated condition in paddy”

Mainly in Bihar there is no problem of irrigation at all .It is flooded either there is rain or not .so a high yielding Hybrid, (150-155 days duration) of medium height will be more suitable because PAC-801 (130-135 days) matures earlier than others and it faces a problem of harvesting due to more moisture in the field. If possible bring a dwarf variety because it is easy to harvest.

9. Now farmers are shifting towards the use of new hybrid so must bring a new hybrid on par with recently introduced hybrid.

SUGGESTIONS

The rural farmers may be illeterate but not unintelligent. There are following suggestions are made by keeping the farmers attitude in minds.

(A) Product oriented suggestions:

- i) Quality of product :- no compromise with quality.
- ii) Grain size and colour :- it should be uniform ,homogenous and shiny.
- iii) Cob size :- longer and filled with bold and healthy grain in maize.
- iv) Pack size:- 1kg. Pack of White maize is more preferred in Jharkhand because they use it mainly for consumption purpose and same pack in the paddy too to penetrate the new segment first time
- v) Seed must be treated with a chemical other than powder to avoid a dusty and old appearance .
- vi) Poly packing :- An attractive packing is essential to attract the farmer. It should be poly packed and transparent so that a framer could see the quality of seed from outside.
- vii) A germination % must be improved in sunflower as well as in maize both.
- viii) Timely supply of seed in sufficient amount and must avoid the shortage to check up the black marketing.
- ix) **Plant morphology-** The plant height should be uniform and of medium height which is essential for proper photosynthesis and to provide a good yield.

- x) **Dose of fertilizer** should be mentioned in term of Urea, Potash and MOP and must be expressed in kg/acre for better understanding to the farmers.

B) promotion and brand awareness oriented suggestion:

- i) There should be sufficient Man power and promotional activities carried in the field aggressively to promote the product
- ii) There should be provision of weekly village meeting just before starting a season. Beside these retailers meeting, dealers meeting, kisan meeting should be carried out at definite interval.
- iii) Field supervision: - field must be supervised at critical stages of the crop to get the mutual benefit in terms of yield for farmers and brand loyalty to the company.
- iv) There should be special literature for BIHAR and JHARKHAND.
- v) Posters and Hoarding on the wall and public places in village area.

MAIZE:

- i) For yellow maize, A hybrid of medium plant height (150-160 days duration).
- ii) For summer maize, A hybrid of 70-80 days duration ,so that because of rain or flood farmers could get a quick return.
- iii) There is a demand of **full maturity Hybrid (150 –160days) in white maize** in segment II with higher yield
- iv) In Jharkhand,1 kg. Pack of white maize of 60-70days, @ 30 Rs. Per kg. will be more preferred

PADDY:

- i) It is mainly grown for consumption purpose so cooking quality and taste should be improved.
- ii) In Bihar in low land area during rainy season there is a problem of waterlogging, up to height of 2 meter so it is advisable to introduce a hybrid of long duration of height >2m.
- iii) For upland and rainfed area where crop depend on rain, a short duration (100-110 days) high yielding hybrid like IET-2232, SAKET-4, PUSA-21 etc. will be more preferred
- iv) In kharif for upland A full maturity, dwarf, long duration with high yield should release in Bihar, so that it could mature with other varieties and protects them from severe pest attack .
- v) A paddy hybrid should be resistant to the bacterial leaf blight and sheath blast disease of rice like S-52 Overall, The farmer is nothing but related with yield and they want only good return .

GENERAL SUGGESTION:

- I. There should some measure against rate cutting in Maize and Black marketing in sunflower seed by giving a favorable advise to the dealer during peak and shortage period. (Because it is not healthy for the organization in building the good rapport in black box of farmers).
- II. It should try to check up the duplicacy and mixing of seeds at dealers and at retailers level.
- III. If possible try to fulfill the demand of sunflower market in Bihar

STRATEGY SUGGESTED (for seed market in Bihar and Jharkhand)

A SEED market strategy includes The rural market scenario of particularly BIHAR and JHARKHAND is different from others due to more illiteracy they don't want to come out with real problems and the same situation is with dealers too. They also don't want to open the lips about real situation ,so to penetrate in this kind of segment where dealers and farmers both are the two sides of one coin , one should must follow **A 3-PRONGED PENETRATION STRATEGY .**

Because it is not a seed market only, In other words it is a combination of **FRM** (Farmers relationship management) + **DRM** (Dealers relationship management) which includes -

(I) Product level strategy –

1. A product should be quality oriented and value added. i.e. In rice and sunflower if possible try to add the value in terms of cooking quality and oil %.
2. In a particular market segment for (paddy and sunflower) multi-product strategy should be adopted.
3. **New Product launching strategy –** A new product should launch with a name like (**G HAR-B HAR in MAIZE**) rather than with a number for the product.
4. Advance discounts for New and Ist introducing product in the market.
5. Cash discounts for established products of hybrid paddy and MAIZE.
6. Foreign tour for sales officers on achievement of target.
7. A gift pack or commission for farmers on buying of seed according to volume of seed purchased.
8. A clear cut dealers, retailers margin and hidden incentive like gold chain /coin on achieving the target.

II . Promotional strategies to build awareness about products

1. This is the best done through the face to face 'below the line'touch, feel and talk mode at hats, melas and mandis.
2. By arranging a field programs like Demo, fairs, festival, field days etc.
3. By convincing opinion leader groups in villages like progressive farmers, Agri-extension worker and village leaders.

EX-

A) Tie up with KVK, program organized by BAO at block level and at Village level etc may be cost effective and profitable for the organisation..

B) Tie up with institution like **SCHOOL FOR FARMERS at RANCHI** earlier than others company .They educate about the hybrids ,their cultivation pattern just before starting the season and they are also seeking a help from MNC'S.

C) Tie up with Farm Manager for promoting the product.

4.By arranging AV-vans and crop seminar on particular product.

5.Throught year field work rather than seasonal to create a demand against heavy potential in paddy and maize.

6.**Use of Dress masket** at the time of village festivals with a special message to the farmers.

7.**OTS (Opportunity to see)** for the farmers by advertising on Tractors.

8.WOMC (Word of mouth communication) by trapping the LADIES segment at ANGANWADI in different places

9.**By Prompt handling of complaints-** One satisfied farmer helps to make the loyal to ten farmer but One dissatisfied farmer can through thousand potential farmers.

III). People's support strategy – to penetrate the village segment

1. with the help of local army of mobile sales force.
2. A T-shirt with separate logo about the product or with the company name should make essential to wear the field staff just before going into the field
3. To reach rural area, outdoor media (hoardings, wall paintings) and unconventional media like NAUTANKI, magic show, video vans etc can be helpful to trap the farmers psychology. Such kind of traditional media offers an excellent opportunities to tailor the message and the language of communication.
4. WOMC (word of mouth communication) to suit the local farmers and can be delivered at doorsteps.
5. Due to frequent power cut and unavailability of electricity in rural villages TV is not so much effective.
6. **Help from Women** - WOMEN is also playing a significant role in Agriculture in BIHAR and JHARKHAND, so we should try to catch their mentality by targeting the organisation like ANGANWADI and Mahila GRAMEEN mandal.
7. New market penetration strategy in VILLAGE AREA –It will be more effective but we would have to deal with retailers shop.

Competitor's beating strategy – WIN- WIN STRATEGY.

By providing market access facility to the farmers in BIHAR to sell their produce on his doorstep. for this there is need of collaboration or tie up with a produce based procurement or institutional buyer like food processors, commodity traders. By making this buy-back arrangement we can beat competitors very easily.

e.g. suppose if we make collaboration with Venkataeshwara's hatcheries or any other calcutta based feed industry and provide a market facility to farmers ,they will buy my seed only and we will sell to them only.. And it is also well known last year in our country INDIA, there was a huge shortage in poultry feed industry & it was planning to import the Maize .so scope is very wide in this sense too.

CHAPTER VII

CONCLUSION

Any company's strength lies in their product. A core competent product will only survive in the market and maintain the sales return with good profit. Apart from that there is no substitute for

- (a) good quality of product
- (b) better pre and post sales services and
- (c) good farmers & dealers relationship .

For all these the support of top management is absolutely essential so that it should must articulate a strong commitment for rural marketing, only then market team will give focussed attention and sustained support to raise the market shares in growing segment of BIHAR and JHARKHAND.

-----XXX-----XXX-----XXXX-----

THE AUTHOR (Santosh kumar singh) OF THIS REPORT HAS PUT HIS OWN EFFORT TO MAKE THINGS RELEVANT, USEFUL AND FINALLY WORTHFUL TO THE DREAM ORGANISATION "ADVANTA INDIA LTD".

SOURCE:

- Industry sources , rabobank International
- Seed association of India
- The department of Agriculture & Cooperation.
- Agriculture gateway of India

District Agricultural Offices.

CMIE Agriculture , December 2002.

Websites:

www.cmie.com

www.kisanwatch.org/eng/statistics

www.cgicar.org

www.webdirectory.com

www.indiaseeds.com

www.agricoop.nic.in/agcensus02.htm

www.agricoop.nic.in/seeds2002.htm

www.agricoop.nic.in/stats.htm