

Idea- Seed Drill

Balasore Agro Private Limited

**AT-RENUPADA, BASTA, BALASORE
ODISHA-756022**

Stage of Development- Commercial



Team

- **Mr. Manoranjan Das Adhikari, Director**
Bsc , having 15 years of exeperience in the manufacturing business of agriculture implements and machines, sale and marketing
- **Mr. Rabindra Behera, Director**
Diploma engineer , having 30 years of experience in the field of research and manufacturing of agriculture implements and machines.
- **Mrs. Madhuri Das Adhikari, Director**
Bsc, graduate, having 10 years of experience of operation.
- **Mr Subhrajit Biswal (Director)**
Bcom, Graduate , having 3 Years of experience In Accounting
- **Mr Satya Ranjan Das Adhikari**
Bcom, Graduate , having 3 Years of experience In Sales and marketing and dealership management and govt tender work.

Problems of the farmer during the cultivation process.

- Sowing pulse seed (Groundnut, Black gram, Bengal gram, white gram other Dal related crop) ,Maize are very pathetic for the small marginal farmer presently.
- At present they sow the seed by hand scattering the seeds as a result no line and space is maintained between the tree to tree and line to line leading to low yield and huge financial loss.
- Presently the small marginal farmers are sowing groundnut by bullock drawn plough and 6 children / person required to sow the groundnut at a time cultivation work and the expense is more for the farmer.

Solution

SINGLE ROW SEED DRILL (GROUNDNUT ,MAIZE,BLACK GRAM SEED PLANTER)

INNOVATION FOR THE SMALL MARGINAL FARMER

- A new innovation and specially designed for Groundnut , maize and black gram
- Widely used in the two district (Balasore, and Mayurbhanj).
- It has a highest potential in entire Odisha and other part of country where small farmer doing cultivation of groundnut.
- The cost of the machine is only 5500 which can be afford by a small farmer.
- With the help of our machine two person can sow one acre of land by 4 -5 hrs.
- There is not other substitute of this product.
- Creation of job opportunity for the village youth.



Specification of the machine

- **No of row** : 1 row with spacing of 7inch (standard) and (adjustable).
- **Space and Depth** : Seed to seed space & depth is adjustable, as per the requirement of farmer.
- **Size of groundnut** : The inclined plate is designed for different size of groundnut, two type of inclined plate will be provided for small and big size groundnut along with hand operated grader.
- **Hopper capacity** : 2kg seed at a time,
- **Weight** : 9 kg approx.
- **Seed for sowing** : Specialized for Groundnut, but Maize, Green gram, Soybean can be sown.
- **Operation** : It can be utilized by both manual (hand) and bullock.

COMPARISION BETWEEN OLD METHOD AND SINGLE ROW SEEDRILL	
OLD AND MANUAL METHOD/ACRE COST	SINGLE ROW SEEDDRILL/ACRE COST
6 Labour X250=1500.00	2 labour=300.00X2=600.00
2 Pair of Bullock =1000X2=2000.00	MEAL=50X2=100.00
Meal=6x50=300.00	
Total cost to farmer=3800.00	Total cost to farmer =700.00
	The longevity of the machine will last for 10 year.
With this method the line sowing will not be maintained. So the production will be less.	With this method line sowing happens so the tree get adequate amount of oxygen and give highest yield.





Competition and scalability

- At present there is not any direct competition . Only big Seed drill is utilize for the sowing of pulses where the people not satisfied by the tractor drawn Seed drill.

And the cost of seeding is more .

MARKET SIZE FOR SINGLE ROW SEED DRILL

- There are almost 50000 small farmer who cultivate pulse specially groundnut in Odisha.
- This is a seasonable business.
- The target for the next 18-36 month to sell 10,000 pcs across odisha.
- Major targeted district are **BALASORE, MAYURBHANJ, JAJPUR, KENDRAPADA** Etc.

6 ROWS MULTICROP SEEDRILL

Technical specification:-

Name : 6 ROW MULTICROP SEEDRILL (POWERTILLER)

- **No of row** : 6 rows with spacing of 7inch (standard) and (adjustable).
- **Space and Depth** : Seed to seed space & depth is adjustable, as per the requirement of farmer.
- **Size of groundnut** : The inclined plate is designed for different size of groundnut, two type of inclined plate will be provided for small and big size groundnut along with
- **Hopper capacity** : 12kg seed at a time,
- **Weight** : 60kg approx.
- **Seed for sowing** : Specialized for Groundnut, but Maize, Greengram, Soyabean can be sown.
- **Which Power tiller for fitting** : It can be fitted/attached to all company Powertiller very easily within 15 minutes. Without removing tilling blade and other parts.



- **Advantage:-**

- Easy to do the weeding for the proper space between the line of groundnut tree .
- Breakage and (Pilling of the skin of the groundnut) is very very less upto 0.5%.
- Missing or gap of seed to seed during planting of groundnut is very very less .
- Due to the proper space and depth between tree to tree causes high yealding.
- It takes only 2.5 hours to cover 1 acre of field.





COMPARISION WITH OLD METHOD AND 6ROW MULTICROP SEEDRILL



OLD AND MANUAL METHOD/ACRE COST	6 ROW MULTI CROP SEEDDRILL /ACRE COST
6 Labour X250=1500.00	1 labour=300.00/2.5 hrs (Power tiller driver)
2 Pair of Bullock =1000X2=2000.00	2 liter of diesel =140.00
Meal=6x50=300.00	Maintenance of Powertiller=100.00
Total cost to farmer=3800.00	Total cost to farmer =540.00
It takes 4 hrs to sow the seed for 1 acre of land With the help of two pair of bullock and 6 labour	It takes 2.5 hr to sow the seed for 1 acre of land
With this method the line sowing will not be maintained. So the production will be less.	With this method line sowing happens so the tree get adequate amount of oxygen and give highest yield.

Projected Revenue


	Actual	Actual	Actual	Estimated	Projected	Projected	Projected
YEAR	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
SALES	6183603	13008762	20017524	44049885	128163262.5	136707480	145251697.5
Cost of Production	5285173	9078750.667	18157500	38542738.09	46008905.29	49109205.96	52136328.86
Add: Opening Stock of F.G.	1254145	1221458	2442916	2226097.08	9493575	10171687.5	10849800
Less:Closing Stock of F.G.	1221458	2226097.08	4452194	5876975	10171687.5	10849800	11527912.5
Cost of Sales	5317860	8074111.587	16148222	34891860.17	45330792.79	48431093.46	51458216.36
Gross Profit	865743	6534650.501	13069300	39158024.83	82832469.71	88276386.54	93793481.14
Selling, General Admn.Exp.	295561	470568.3404	941136	912131.2793	1380762.475	1561577.23	1702142.79
EBITDA	639871	6954797.1	13909594	39136608.5	82322738.32	87585840.39	92962369.43
Depreciation	69689	890714.9401	1781428	890714.9401	871031.085	871031.085	871031.085
EBIT	570182	6064082.16	12128164	38245893.56	81451707.24	86714809.31	92091338.35
Interest on C.C. Loan	0	0	390000	390000	390000	390000	390000
Interest on Term Loan	0	308298.196	616596	884760.8503	599737.2207	457225.4059	314713.5911
Provision for Taxation - Current	0	1487102.853	2974204	10386386.3	22789458.28	24355708.39	25948929.14
Provision for Taxation - Deferred	0	-25540.69823		130202.9906	34884.01104	1268.285041	-30649.82026
Net Profit/Profit after Tax(PAT)	570182	4294221.81	8588442	26454543.41	57637627.73	61510607.22	65468345.44
Retained Profit	570182	4294221.81	8588442	26454543.41	57637627.73	61510607.22	65468345.44
Gross Profit Margin	0.140006239	0.447310351	0.498806018	0.528806018	0.646304316	0.645731942	0.645730706
Net Profit Margin	0.092208701	0.29394837	0.307252998	0.357252998	0.449720354	0.449943245	0.450723445

Awards and Recognition



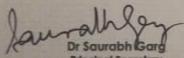
 Government of Odisha

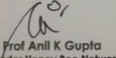


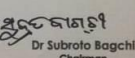
 ମୁଖ୍ୟମନ୍ତ୍ରୀ
 ଅଭିନବ କୃଷି ଯତ୍ନପାତି ସମ୍ମାନ

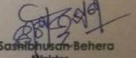
Certificate of Award

କୃଷି ଯତ୍ନପାତିରେ ନବ ପ୍ରବର୍ଦ୍ଧନ ପାଇଁ କୃଷି ଓ କୃଷକ ସଶକ୍ତିକରଣ ବିଭାଗ, ଓଡ଼ିଶା ସରକାର ଆପଣଙ୍କୁ ସମ୍ମାନିତ କରି ନିଜକୁ ଭୌତପାତ୍ରିତ ମନେ କରୁଅଛନ୍ତି ।
 Department of Agriculture and Farmers' Empowerment, Govt. of Odisha have great pleasure in honouring
 Shri / Smt./ Miss. Mandranjan Das Adhikari With and Prize
 for the innovation... Single row multicrop seed drill


 Dr Saurabh Gara
 Principal Secretary
 Department of Agriculture and
 Farmers' Empowerment,
 Govt. of Odisha


 Prof Anil K Gupta
 Founder Honey Bee Network
 CSR-Bhatnagar Fellow,
 Visiting Faculty IIT Mumbai &
 IIM Ahmedabad


 ଉପକାରଣୀ
 Dr Subroto Bagchi
 Chairman
 Odisha Skill Development Authority,
 Govt. of Odisha


 S J Sasibhusan-Behera
 Minister
 Finance & Excise,
 Agriculture and Farmers' Empowerment,
 Fisheries & ARD, Govt of Odisha

24th February, 2019

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