SUSTAINABLE AGRICULTURE FARM BUSINESS PLAN

FARM NAME: ORGANIC GOLDEN GROWERS

FARM ADDRESS: NEAR GURU NANAK DEV THERMAL PLANT, BATHINDA

OWNER'S NAME:

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COMPANY PROFILE

BUSINESS OVERVIEW

Rice and wheat farm is combination of two crops as the name indicates; **WHEAT** (*Triticum aestivum*) and **RICE** (*Oryza sativa*). It is joint hand operation of two friends having same goals to grow organic and feed quality crops. We are completely aware that we have millions of competitors but just a few farmers grow organically. Thus, we can proudly say that it's a never-ending business as wheat and rice are the only one that most of population consume These two crops are the commonly grown seasonal commercial grown crops, but we choose organically grown wheat and rice. We have 20 acres of land for cultivation of our commercial crops.

Company History

This farm was founded in 2017 by Arashdeep and Gurpiar Gill. The Malwa region of Punjab, India, is facing an unprecedented crisis of environmental health linked to indiscriminate, excessive, and unsafe use of pesticides, fertilizers, and poor groundwater quality. The region has been described as India's "cancer capital" due to abnormally high number of cancer cases, which have increased 3fold in the last 10 years. Studies of this region have also highlighted a sharp increase in many other pesticide-related diseases, such as mental retardation and reproductive disorders. The most affected individuals are the agricultural workers who are directly exposed to pesticides. The Malwa region of Punjab, India, is less than 15% of the total area of Punjab (only 0.5% of the total geographical area of India), but it consumes nearly 75% of the total pesticides used in Punjab. The high use of pesticides, along with environmental and social factors, is responsible for the high concentration of pesticide residues in the food chain of this region. Moreover, many banned and restricted pesticides are still in use in this region, warranting strict periodical health check-ups and other interventions. The present review describes occupational, environmental, and social factors associated with pesticide use in the Malwa region of Punjab, India, and proposes some risk reduction interventions, so, we planned to have a farm business with organically grown crops which would be beneficial for consumers economically sound as well as https://www.researchgate.net/publication/259884112_Effects_of Environmental Pesticides on the e_Health_of_Rural_Communities_in_the_Malwa_Region_of_Punjab_India_A_Review

MANAGEMENT

Daily supervision of crops and management of agronomic practices running by both of us. Gurpiar is taking care of marketing and Arashdeep having good hand in accounting and finance.

For special advises we prefer faculty of Punjab agricultural university(Ludhiana)

LOCATION

Our farm is in Malwa region of Punjab which is in near Guru Nanak Dev thermal plant, Bathinda. This location is outskirt of the city as accordance to rules and regulation and the second major ease is it is near to all the amenities.

LEGAL STRUCTURE

The land is owned under the name of Arashdeep Arashdeep and Gurpiar Singh Gill. We both are like right hand of each other thus either profit and loss in every aspect would be 100% shared.

• <u>Professional Advisor</u>: we are agriculture graduates, so we have lot of theoretical knowledge about diseases and specific agronomic practices for crops if we talk about professional advise then we take advise from expertise of:

Punjab Agriculture University

Dr P.S. Rangi (Marketing)

• Vision and Mission Statements:

<u>Our vision</u> is to share my knowledge and passion for sustainable farming and fresh organic commercial with consumers and beginners. To create and sustain healthy community by providing organically grown crops without synthetic pesticides. Along with this, dreamt of getting number one rank in organic farming and production.

<u>Our mission</u> I have a set of values to achieve this mission. Using organic manures like vermicomposting, green manuring, kitchen garbage etcetera. Organizing weekend workshops to encourage the newly involving farmers towards sustainable farming and uplift the net income every year by growing quality crops. Such as; economics says that demand increases; price of commodities increases automatically which leads to the more gross income.

• Goals and Objectives:

<u>GOALS</u> – our short-term goal is sell our products at good price so that we can meet our daily expenses in long run business. Development and implementation of new marketing strategies and sales goals.

Our long-term goals are the mission statement

OBECTIVES-

our main objective is to produce organic and healthy food for consumers and developing relationships that enables the farm business to become the preferred supplier to market segment.

Continually learning to provide grain of superior quality and values that improve the well-being of costumer in the specific market.

Insuring the farm has the financial capacity to deal with year to year variability in prices and costs.

MARKET RESEARCH

Industry Profile and Outlook

As the population increases, the demand for cereal crops increases day by day. According to Indian climate and weather conditions; cultivation of cereals crops like; wheat and rice are much easier and common, but we have planned to grow or these crops organically. Organic farming is quite new specifically in Punjab and it pays a lot to start an organic farm business that's why only a few thinks to have organic farm. these days, folks prefer organically grown products because of sudden outbreaks of deadly disease like cancer. So, the price of organic products is too good thus, one can get high profit from this. The major reason, people prefer wheat and rice as food on the daily basis thus, it is the never-ending business.

When it comes to sales, Indian government providing too many local markets in every city and villages so, it became very easy for every farmer to sell their produce. Even, government has set very good price for wheat and rice.

Local Market

This farm is only organic farm in Bathinda region so there is no local market to sell organic produce that was why this region is best for doing our business.

Key competitors/SWOT Analysis

This farm is the only farm in that location, so we are only organic producer in our area that was why competition will be zero in the market.

Strength	Weaknesses
 Agriculture background 5 year doing agriculture study Cooperation between partners High demand of organic produce Zero competition between markets Good knowledge of animal husbandry Well educated owners Government support for organic farming Increasing of international support for organic farming Increase soil fertility High production Strong political support Safe products Nutrient food for community Long term storage of produce Rice and wheat basic food for our community 	 Low yields due to weather Low value addition and Food processing Post-Harvest losses Food wastage No access to modern technology Lack of certification
Opportunities	Threats

- Diversification
- Rainfed agriculture
- Organic farming
- Food Processing Sector
- Build up soil fertility
- Strengthening rural community
- Employment opportunities.
- Growing interests in organic farming
- Huge regional export market
- Huge global export market
- Sustainable use of resources
- Consistent yield
- Promoting healthy lifestyle
- Product development

- Land degradation
- Variability in Climate pattern
- Crops losses due to weeds, insects, diseases
- Declining Interest in Agriculture
- Global competition
- Dwindling supply of organic sources of manure
- Pest and disease incidence
- Fluctuations of market

Target Market

For our farm wholesale grain market is the target market to sell our produce and flour market to give grain to them for making flour.

Keys to Success

Hard work is the first thing to be a successful in business. There is no shortcut to be successful in short term. Everyone plays an important role in every part of business whatever we do in business. We both are very positive about our future goals and we do everything to make it possible. There are some key things in business to make it successful that are following on;

- Maintain our speciality like organic farming
- Follow rules and regulations of government
- > Establish a loyal customer base
- Health and safety regulations
- Manage operating risk
- Maintain set standards of farm
- Grow volume and sales
- Use time efficiently
- Use capital wisely
- Plan for future
- Produce high demand products
- Make decisions wisely
- Use of sustainable resources

SALES AND MARKETING

Pricing Strategy

"In India the price of an agricultural product can be either the Market Determined Price or the resultant price after government interventions such as the **Minimum Support Price** depending upon the product. To understand the prices which, follow government interventions, we need to understand these very government interventions in the form of **Minimum Support Price**.

Minimum Support Price (MSP) is a form of market intervention by the Government of India to insure agricultural producers against any sharp fall in farm prices. The minimum support prices are announced by the Government of India at the beginning of the sowing season for certain crops based on the recommendations of the Commission for Agricultural Costs and Prices (CACP). MSP is price fixed by Government of India to protect the producer - farmers-against excessive fall in price during bumper production years. The minimum support prices are a guarantee price for their produce from the Government that this will be the minimum price at which their product will fetch. If the market price is above, MSP, the farmer can obviously sell it at the market prices. In case the market price for the commodity falls below the announced minimum price due to bumper production and glut in the market, government agencies purchase the entire quantity offered by the farmers at the announced minimum price."

(RAJAN, 2015)

Market Strategy

We would harvest our crop when it would have appropriate moisture and would take our crop to the market directly after harvesting so this way, government officers will get attract and our product will get good profit.

- **Positioning statement** Positioning statement is very simple in our business plan. As in the case we are growing organically wheat and rice farm business plan in India, minimum support price is set by government and there is no role of farmer in setting prices. Thus, we never know what the price of product in the upcoming years would be.
- > <u>Sales Process</u> Our business plan, we need an agent to sell our product. So, it is crucial to have good relationship with middlemen or agent.
- <u>Strategic alliances</u> Our association is only with <u>PUNJAB AGRICULTURAL UNIVERSITY</u> for purchase of seeds, seed certification, organic certification. We take advise from the experts of university whenever our crop suffer from any disease or malfunction

OPERATIONS

Land management

Land management is the process of using land resources. Our responsibility is to use those resources into that way so that maximum output can be obtain from farm. We have own 20 acres land for doing our business. We need to consider some important factors like water management, soil quality, crop protection and crop rotation etc. we have an organic farm so these factors important to consider.

<u>Water management:</u> Water management is very important factor for land management. We have 20 acres of land for growing crops and need to maintain water management for each crop in proper way. We grow organic rice and wheat in rotation and maize and berseem. Rice and maize crops more water as compare to wheat and rice because rice and maize crops are grown in summer and others two are winter crops. We have two tube wells for watering the crops. We have proper water channels those are attached with tube wells to provide water to every corner of the field. We have two tube wells each in 10 acres and both are in the centre of field.

<u>Soil quality:</u> Soil is another important factor to consider in land management. Crops growth depend upon soil quality. In Bathinda region soil is clay loamy soil type in nature which are beneficial for grain crops because these soils are well drained, moderate and having moderate water holding capacity which is ideal for these crops. We need to first check the quality of soil. Make a sample of these soils and these in the soil lab every year for better production every year. We add manures every year which would have an appropriate amount of Nitrogen, Phosphorus and Potassium to increase the fertility of soil

<u>Crop protection:</u> Crop protection from weeds, insects, diseases, pests etc. We have an organic farm, so we need to more concentrate on this factor because in organic farm it can be difficult to control those crops damaging aspects. So, we need to identify those area where damage is start as soon as possible so it is easy to cure that because in organic farm we do not use chemical herbicides and insecticides that are easily control those things in quick time, but we use hand weeding and some biological control to prevent crop from damage. We also use some chemical that are certified by government that can be used in organic farm.

Legal issues

We decide to follow each rule to make farm business plan successful. There are some regulations, certifications, contracts, agreements etc.

Regulations

- **Follow proper instructions**: As we are running an organic farm, so we need to follow proper guidelines of government for selling our product in the market.
- <u>Water quality test</u>: We need to test water quality for better production of crop. We need to submit our water sample to certified government agency of water testing.
- **Proper wage of workers:** As per rules of government we need to maintain our standard for paying our workers to full amount of pay.
- <u>Safety:</u> Safety factor is very important when we run business. Safety is very essential for landlord and workers. We need to have a first aid station on the farm because in emergency we can use that in serious issues like accident.

Certifications

- Organic farming certification in India is governed by The National Programme for Organic Production(NPOP) under the Ministry of Commerce and Industry.
- Certifications of seeds first thing to consider because we take certified seeds from Punjab Agriculture University, Ludhiana
- Our workers have been proper licence of running vehicles on farm like tractors combine, vehicles etc.
- We have proper certifications of land where we run the business.
- Product should be certified under brand name which is Organic Golden Growers.

<u>Contracts:</u> Two workers will be contracted for all time availability throughout the year at a fixed rate under contract that will lead to prevention and settlement of any future misunderstandings between us and workers.

<u>Agreements:</u> As we are working in partnership, so we would get 50% of the profit both of us out of the total profit according to the agreement papers. We need workers for growing season, so we will get agreements for workers during only main season that will lead to prevention of excess use of money and make them aware not to use any sort of chemicals during working at fields.

Insurance issues

<u>Crop insurance:</u> There are two crop insurances going on i.e. Pradhan Mantri Fasal Bima Yojana and National Crop Insurance Programme (NCIP) / Rastriya Fasal Bima Karyakram (RFBK) but we choose Pradhan Mantri Fasal Bima Yojana for our crop insurance.

"Pradhan Mantri Fasal Bima Yojana:

- There will be a uniform premium of only 2% to be paid by farmers for all Kharif crops and 1.5% for all Rabi crops. In case of annual commercial and horticultural crops, the premium to be paid by farmers will be only 5%. The premium rates to be paid by farmers are very low and balance premium will be paid by the Government to provide full insured amount to the farmers against crop loss because of natural calamities.
- There is no upper limit on Government subsidy. Even if balance premium is 90%, it will be borne by the Government.
- Earlier, there was a provision of capping the premium rate which resulted in low claims being paid to farmers. This capping was done to limit Government outgo on the premium subsidy. This capping has now been removed and farmers will get claim against full sum insured without any reduction.
- The use of technology will be encouraged. Smart phones will be used to capture and upload data of crop cutting to reduce the delays in claim payment to farmers. Remote sensing will be used to reduce the number of crop cutting experiments.

Unified Package Insurance Scheme:

 The cover will be for one full year except for Crop Insurance (which will be bi-annual separately for Kharif and Rabi seasons) renewable from year to year. The Loaned farmers will be covered through Banks/Financial Institutions whereas non-loaned farmer shall be covered through banks and/or insurance intermediaries.

- This policy is designed to take care of the insurance needs of farmers associated with agriculture activities. This policy provides yield-based crop insurance to the farmer based on his ownership rights of land and sown crop.
- It covers both the personal assets of the farmer like the dwelling & its contents (Fire), the other assets which help him in earning his livelihood such as Agricultural Pump Sets, and Agriculture Tractor owned by farmer.
- The policy also provides protection to farmer and his/her family members in case of the Accidental Death / Disablement, accidental insurance protection of farmer's school/college going children and provisioning of education fee to the students in case of death of parent.
- Life insurance protection to the farmer and his/her family members.
- The policy will be issued for a period up to 1 year."

(Crop Insurance, 2018)

Human Resources

We need number of people to work in farm. We need people in growing season and harvesting season. In mid-season we only need irrigation that we can do ourselves. We need 10-12 people in growing season of rice when we transplanted the seedlings from the nursery after that we need people for weeding. We need people in harvesting season. We need 2-3 people in growing season of wheat and 2-3 people in harvesting season. They will be paid according to the Indian wage system as in India, there is Rs. 300 per day per worker. We would hire only trained worker. In India it is quite easy to find farm labour because we can get them personal relationship

Process/Production

Crop production:

1. <u>Rotation schedule:</u> We rotate our two crops simultaneously. We grow rice and wheat for commercial purpose. We grow wheat in winter and rice in summer. We fallow the land for one month after harvesting these crops and that we do some tillage practices and land preparation for next season growing season. We will add manures and some green manuring practices like adding leaves of plants to increase the fertility of the soil.

2. Pest management:

- ➤ <u>Pest management in rice:</u> We use resistant varieties. We will not raise the nursey near lampposts application of neem cake, maintain water level, setup light traps to monitor pest population to control, keep the field free from grasses and weeds, drain the excess water from the field.
- Pest management in wheat: Antagonistic insects, organic chemical and natural resources are used to control or destroy the pest population e.g. Lady bird beetles to control aphids, flooding to control nematodes and neem oils to control nematodes. Basic control methods such as certified healthy seeds could produce healthy crops that will have reduced infestations by pests; similarly using genetically resistant a tolerant species will also reduce the need of pest control.

Equipment resources/management

We need number of equipment for running our business. We have own some equipment and some we are renting from other agencies. The equipment's that we have:

- ➤ Hand tools like steel hoe, sprayer, rake, shovel, sickle etc
- Tractors and trolleys
- Disc harrow
- Cultivator
- Seed planter
- > Plank
- Furrow maker
- Seed drill

Equipment which is not having yet(rent)

- We are renting some other equipment's from others like combine, straw maker, roller, rotator etc for harvesting
- Management of equipment is very important because we need equipment every year, so its maintenance is very important, cleaning the equipment is very necessary after every growing season.

Risk Assessment

Risk Is the something involving to the danger. There are several types of risk in farm business are following on:

- 1. <u>Production Risks</u>: Includes whether, insets, disease, technology and other event that are directly affects production quality and quantity.
- 2. <u>Price Risk:</u> Uncertainty in the Market for commodities such as changes in the prices of inputs or outputs.
- **3.** <u>Financial Risk:</u> The method in which capital is required and financed and the firm's ability to pay financial obligation.
- 4. **Institutional Risk:** Changes in Governmental or legal policies which affects the agriculture.
- **5.** <u>Personal Risk:</u> Risk common to all Businesses, such as death, injury/ disease to the farmer / proprietor.

(Reddy, 2015)

There are three step approaches for risk management:

- Reduce risk: In this approach asses potential risk on the farm and create plan to mitigate risks. The farm will have all the risk avoiding factors such as worker training, safety for vehicles and farm workers etc. can reduce the chances of accidents a loss.
- Manage risk: This is the approach that manage if any sort of risk occurs means that we can take care if any accident with employee or worker happens, company can provide first aid and other facilities.
- <u>Transfer risk:</u> We can transfer risk by taking some crop insurance coverage for accidents and emergencies. For example: we take Pradhan Mantri Fasal Bima Yojana and Unified Package Insurance Scheme.

FINANCIAL MANAGEMENT

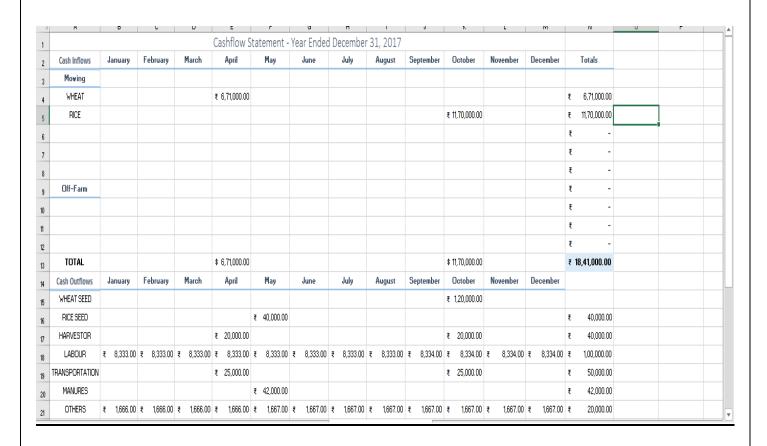
Start-up costs and Break even

Start-up cost are the expenses incurred during the starting of new business. Breakeven point comes when are income and expense are same.

Cashflow

In cash flow we receive money 2 times in a year first with selling of wheat is Rs. 6,71000 and from rice in receive money in month of October after selling is Rs. 11,70000.

In cash out flow all the expenses are included like seeds of both crops Rs.160000, harvester rent Rs.40000, labour cost Rs.100000, transportation cost Rs. 50000, manures Rs. 42000 and some other miscellaneous costs Rs. 20000 are included.



Income statement

Our income statement it shows our revenue, expenses and it calculate us a net income that is 14,29000 and our net margin is 0.78%.

		Income State	ment - Year E	inded Decem	ber 31, 201				
)	Re	venue	Expe	nses	To	otals			
		₹ -	WHEAT SEED	₹ 1,20,000.00	Net I	ncome			
	WHEAT	₹ 6,71,000.00	RICE SEED	₹ 40,000.00	Revenue	₹ 18,41,000.00			
	RICE	₹ 11,70,000.00	HARVESTOR	₹ 40,000.00	Expense	₹ 4,12,000.00			
j		₹ 18,41,000.00	LABOUR	₹ 1,00,000.00	Net	₹ 14,29,000.00			
,		₹ -	TRANSPORTATION	₹ 50,000.00					
3		₹ -	MANURES	₹ 42,000.00	Profit	Margin			
)		₹ -	OTHERS	₹ 20,000.00	Net	₹ 14,29,000.00			
0		₹ -			Revenue	₹ 18,41,000.00			
1					Margin (%)	₹ 0.78			
2	Total	₹ 18,41,000.00	Total	₹ 4,12,000.00					
3									

Balance sheets

There are two balance sheets one from starting from year and one from end of the year those describe our assets and equity. We are working in the partners so we both equally invest money in our farm business plan.

			Ва	llance Sheet -									
2	Assets			Liabilities			Ec	quity		Does it Balance?			
3	Short Term {			Short Term {			Equity {			Assets - Lial	bilities = Equity		
1	CASH	₹	1,00,000.00	Operating Line	\$	-	GURPIAR	₹	195,26,000.00	Assets	₹ 390,52,000.00)	
5	HAND TOOLS	₹	15,000.00	}	\$	-	ARASHDEEP	₹	195,26,000.00	Liabilities	₹ -		
5		₹		Long Term {				₹	390,52,000.00	Equity	₹ 390,52,000.00)	
7	}	₹	1,15,000.00	Mortgage	\$	-				IT BA	LANCES!		
8	Long Term {												
9	TRACTOR	₹	4,80,000.00	}	\$	-							
0	LAND	₹	380,00,000.00										
1	TROLLEY	₹	90,000.00	Total Liabilities	\$	-							
12	SEED DRILL	₹	32,000.00										
13	CULTIVATOR	₹	25,000.00										
14	IRRIGATION	₹	2,20,000.00										
15		₹	-										
16		₹	388,47,000.00										

1	Balance Sheet - DECEMBER 31 2017												
2	Assets			Liabilities			E	quity		Does i	t Balance?		
3	Short Term {			Short Term {			Equity {			Assets - Lia	bilities = Equity		
4	CASH	₹	15,29,000.00	Operating Line	\$	-	GURPIAR	₹	202,40,500.00	Assets	₹ 404,81,000.	00	
5	HAND TOOLS	₹	15,000.00	}	\$	-	ARASHDEEP	₹	202,40,500.00	Liabilities	₹ -		
6		₹	-	Long Term {				₹	404,81,000.00	Equity	₹ 404,81,000.	00	
7	}	₹	15,44,000.00	Mortgage	\$					IT BA	ALANCES!		
8	Long Term {												
9	TRACTOR	₹	4,80,000.00	}	\$	-							
10	LAND	₹	380,00,000.00										
11	TROLLEY	₹	90,000.00	Total Liabilities	\$	-							
12	SEED DRILL	₹	32,000.00										
13	CULTIVATOR	₹	25,000.00										
14	IRRIGATION	₹	2,20,000.00										
15		₹	-										
16		₹	388,47,000.00										

SUSTAINABILITY INDICATORS

Sustainable indicators/measures	Specific goals	What actions will you take to reach this specific goal?	How will you know when you have reached this goal?	When do you plan to have reached this goal?
Environmental Health	Organic farming	We will not apply any conventional farming operations.	Certification of organic farming	Since to start our business
Economic Prosperity	Net profit higher than inputs	Keep focusing on all the on farm and off farm operation.	When we will get income statement.	In the end of the year during financial projection.
Social, Cultural, Economic Equity	Generate the resources to meet people's needs	We will give our best	Consumer feedback	After 2-3 years.

(sustainability Goals and Measures, 2018)

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