

Pre-Feasibility Study

PEDIGREE DOG BREEDING FARM



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Ministry of Industries and Production
Government of Pakistan

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1. DISCLAIMER

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2. EXECUTIVE SUMMARY

The Pedigree Dog Breeding Farm provides information about the keeping, reproduction and selling of Pedigree puppies. Pedigree means the record of descent of an animal, showing it to be pure-bred. It tells about the breed, temperament bloodline, etc. of the dog; whereas non pedigreed dogs have no such records about them.

Keeping dogs as pets, show-dogs, hunting dogs and watchdogs for hobby and sport are decades-old trends. This need is ever-increasing and is catered for by local pedigreed and non-pedigreed dog breeders and importers, both veterans who have long experience in this field and rookies who have newly joined this field. Well-managed Dog breeding farms are needed to obtain enhancing breed bloodlines and producing stronger and better-looking dogs. During the past decades, the pedigreed dog market witnessed a significant growth in Pakistan due to increased awareness about pure breeds, dog nutrition, trainings, grooming, and breeding. The awareness of dog nutrition involves the kind, types, quality and quantity of food provided to the dogs at different ages of its life. Most of the awareness spread through exhibitions, shows and festivals organized by kennel clubs and dog associations. Exposure to media, education and modern lifestyle also play their parts in increasing awareness.

The choice of a pet dog depends on its looks as well as on the particular purpose for which the dog is kept. Rottweiler, Labrador, Pug, Spaniel and German Shepherd are some of the more popular dog breeds, famous as much for their looks as for their alertness, obedience, loyalty and temperament.

This pre-feasibility document provides details for setting up a small sized Pedigree Dog Breeding Farm, proposed to be located ideally in Lahore, Karachi, Islamabad or any other large city. The Farm will be dealing in Rottweiler and German Shepherd breeds as a base case; however, farm owners may also include other breeds as per the customer demand and latest trends.

A small size "Pedigree Dog Breeding Farm" will be set up in an estimated farm area to be rented approximately 1.6 kanal (7,240 square feet). The proposed project has a total investment of PKR.10.88 million. This includes capital investment of PKR. 10.15 million and working capital of PKR. 0.72 million. The project will be financed through 100% equity. The Net Present Value (NPV) of project is PKR 7.00 million with an Internal Rate of Return (IRR) of 33% and a Payback period of 3.51 years. Further, this project is expected to generate Gross Annual Revenues of PKR 5.42 million during 1st year, Gross Profit (GP) ratio ranging from of 55% to 67% and Net Profit (NP) ratio ranging from 12% to 32% during the projection period of ten years. The proposed project will achieve its estimated breakeven point at a capacity of 84% with annual revenues of PKR 4.97 million.

The proposed project will provide employment opportunities to 4 to 5 people. High return on investment and steady growth of business is expected with the

entrepreneur having some prior experience or education in the related field of business. The legal business status of this project is proposed as sole proprietorship.

3. INTRODUCTION TO SMEDA

The Small and Medium Enterprises Development Authority (SMEDA) was established in October 1998 with an objective to provide fresh impetus to the economy through development of Small and Medium Enterprises (SMEs).

With a mission "to assist in employment generation and value addition to the national income, through development of the SME sector, by helping increase the number, scale and competitiveness of SMEs", SMEDA has carried out 'sectorial research' to identify policy, access to finance, business development services, strategic initiatives and institutional collaboration and networking initiatives.

Preparation and dissemination of prefeasibility studies in key areas of investment has been a successful hallmark of SME facilitation by SMEDA.

Concurrent to the prefeasibility studies, a broad spectrum of business development services is also offered to the SMEs by SMEDA. These services include identification of experts and consultants and delivery of need-based capacity building programs of different types in addition to business guidance through help desk services.

National Business Development Program for SMEs (NBDP) is a project of SMEDA, funded through Public Sector Development Program of Government of Pakistan.

The NBDP envisages provision of handholding support / business development services to SMEs to promote business startup, improvement of efficiencies in existing SME value chains to make them globally competitive and provide conducive business environment through evidence-based policy-assistance to the Government of Pakistan. The Project is objectively designed to support SMEDA's capacity of providing an effective handholding to SMEs. The proposed program aimed at facilitating around 314,000 SME beneficiaries over a period of five years.

4. PURPOSE OF THE DOCUMENT

The objective of the pre-feasibility study is primarily to facilitate potential entrepreneurs in project identification for investment. The project pre-feasibility may form the basis of an important investment decision and in order to serve this objective, the document/study covers various aspects of project concept development, start-up, and production, marketing, finance and business management.

The purpose of this document is to provide information to the potential investors about "Pedigree Dog Breeding Farm" The document provides a general

understanding of the business to facilitate potential investors in crucial and effective investment decisions.

The need to come up with pre-feasibility reports for undocumented or minimally documented sectors attain greater imminence as the research that precedes such reports reveal certain thumb rules; best practices developed by existing enterprises by trial and error, and certain industrial norms that become a guiding source regarding various aspects of business setup and its successful management.

Apart from carefully studying the whole document one must consider critical aspects provided later on, which form the basis of any investment decision.

5. BRIEF DESCRIPTION OF PROJECT & PRODUCTS

This project mainly focuses on the potential investment opportunity in the Pedigree Dog breeding Farm. The proposed business has two main functions, reproduction, and sale of puppies.

This project involves keeping and breeding, pedigrees of male and female Rottweiler and German Shepherd dogs for reproduction and sale of puppies. These are the two most demanded breeds in Pakistan according to primary and secondary research. Keeping the dogs in general as pets, show-dogs, hunting dogs and watchdogs for hobby and sport is a tradition that is followed by elite and upper middle class in Pakistan. Established and new breeders cater to the ever-increasing market demand. Exhibitions, dog shows and festivals arranged by the Kennel Clubs, along with support of media and education, is increasing awareness related to pet dogs. Rottweiler and German Shepherd breeds best suit to the conditions and climate of Pakistan, have high rate of reproduction, are not very expensive to keep and breed. They are famous for their looks as well as for their alertness, obedience, loyalty and temperament. They are kept as status symbol and also for security purposes The business is proposed to be set up in Lahore, Karachi or Islamabad.

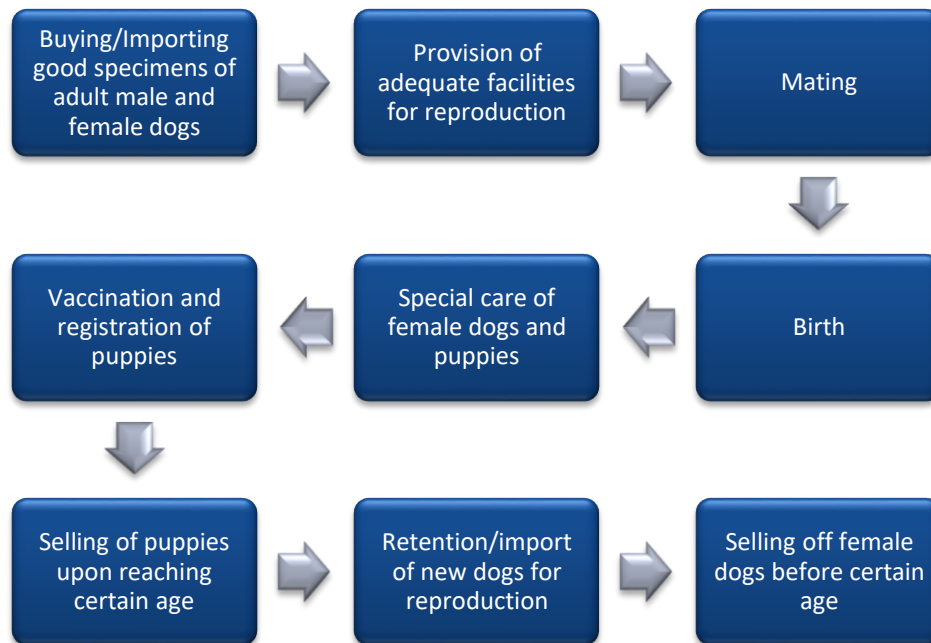
The proposed ratio of male to female dogs is 1:3 for each breed. The standard gestation period is 58 to 68 days, which means that a female dog takes 58-68 days to give birth after conception. The Kennel Clubs recommend that each female should give birth only once a year to maintain good physical health of the female dog.

The proposed project requires covered and uncovered areas, management building, puppies' room, cages (both indoor and outdoor), grounds, dog treadmill, brooder see saw, kitchen, pavement/driveway, and a water pump. Estimated farm area to be rented would be approximately 1.6 kanal (7,240 square feet) and manpower required would be 5 persons.

5.1. Process Flow

The reproduction process of Pedigree Dog Breeding Farm is given in Figure 1.

Figure 1 Process Flow Diagram



Brief description of process flow of “Pedigree Dog Breeding Farm” is provided hereunder.

Selection and buying of Adult Male and Female Dogs

As a first step, the breed which best suits to the conditions and climate of Pakistan, has high rate of reproduction, is high in demand in the area of business and is not very expensive to keep and breed, is selected. The feasibility study has been based on Rottweiler and German Shepherd breeds. They are famous for their looks as well as for their alertness, obedience, loyalty and temperament. They are kept as status symbol as well as for security purposes. Good quality pedigreed dogs will be carefully selected and purchased locally. For the proposed study one male, three female German Shepherds and one male, three female Rottweilers will be selected.

Figure 2: German Shepherd (left) and Rottweiler (right)**Provision of adequate facilities for reproduction**

Covered cages, grounds and exercising areas are provided to the dogs for their good growth, reproduction, and exercise. Dogs are regularly de-wormed by giving them anthelmintic drugs, and keeping their surroundings regularly dusted to keep them safe from internal and external parasites.

Mating

Two types of breeds are kept in the separate cages. Males and females are not kept together. They are brought together in the same cage only for the purpose of mating. For the sake of quality breed and health of female dog mating is done only once a year.

Birth

After conception it takes 63 days on average for female dogs to give birth. This is called the gestation period. On average, 4 to 6 puppies are expected per delivery. The mortality rate of new born puppies is expected to be 10% according to the primary research.

Special Care of Female Dogs and Puppies

42-day pregnant females are dealt with extra care and given specialized diets that comprises of the food that should have 1600 kcal digestible energy per pound of food and at least 22 percent protein.

The new born puppies are kept in the puppies' room with the mother, where it feeds them and takes care of them.

Vaccination and Registration of Puppies

Puppies are registered with the kennel club with which the Breeding Farm is affiliated. All dogs and puppies are regularly vaccinated.

Following are the benefits and importance of registration of dogs with the kennel club:

- The dogs will display the characteristics of the breed, in both looks and temperament.
- Puppies produced from the breeding of the dogs will also be registered with The Kennel Club.
- The dog will be able to take part in shows and activities licensed by The Kennel Club.
- The pedigree certificate for the dogs can be obtained which is a unique record detailing the dog's family tree.

All dogs are always kept vaccinated against diseases for parvovirus, distemper, canine hepatitis and rabies. Special preparations for whelping (birth of puppies) are made which includes dry, clean and paper towels to clean the puppies, thermometer to check dog's temperature before whelping, and clean and sterilized scissors to cut the umbilical cords. After 3 to 4 weeks of the birth, weaning of the puppies starts which is shifting the puppies from mother's milk to regular diet.

Figure 3: Puppy of German Shepherd



Selling Puppies Upon Reaching Certain Age

The market demand is for the puppies with an age of 2 to 10 months. Most of the newly born puppies are sold within this age range.

Retention of Few Dogs for Reproduction

If the farm's own breed is to be developed, one male and four female puppies are retained in each breed for the purpose of reproduction. New dogs can also be purchased as per need.

Selling of Female Dogs Before Certain Age

Reproductive age of female dogs varies with breeds; however, seven years is generally considered as a cutoff age after which they usually stop reproducing. Female dogs are therefore sold after seven years and new female dogs have to be added to continue the business.

5.2. Registrations & Certifications

5.2.1. The ISO Standard

Businesses voluntarily register for these standards and are issued certificates. The ISO standard (Quality Management and Quality Assurance Standard) is a deliberately generic standard series of quality system management. The ISO series relevant to this business is ISO 65.020.30 – Animal Husbandry and Breeding including sanitary inspection.

Benefits of ISO 9000 Certification:

- Higher perceived quality of customer service
- Improved customer satisfaction
- Competitive edge over non-certified competitors
- Increased market share
- Greater quality awareness and;
- Better documentation.

5.2.2. Other Certifications and Registrations

- A dog breeding farm will have to be named and registered with a national club such as KCP (Kennel Club of Pakistan) as the first step.
- There is a requirement for a periodic (annual or once every two years) renewal of this registration in the form of membership fee.
- All the puppies will also have to be registered with the club and awarded a pedigree and microchip each before they could be sold.

5.3. Installed Capacity

The proposed farm will have 15 cages of varying sizes to house maximum 200 dogs of different ages at any given time. These cages will range from 100 to 150 Sq. feet each, having a total caged area of 1,810 Sq. feet. The size of cages depends upon the breed and age of dog kept. Male dog is usually kept in separate cages due to its aggression. Description of the caged areas is shown in Table 1.

Table 1: Installed Capacity

Category	Number of Cages	Area/cage (Sq.feet)	Total Area (Sq.feet)	Capacity/Cage		Total Installed Capacity
				Adults	Puppies (6–18-month-old)	
150 Sq.feet	2	150	300	4		8
150 Sq. feet	8	150	1,200		12	96
130 Sq. feet	4	130	520		10	40
100 Sq. feet	12	100	1,200	2		24
100 Sq. feet	4	100	400		8	32
Total	30		3,620	6	30	200

6. CRITICAL FACTORS

The decision to invest in Pedigree Dog Breeding Farm business requires a thorough analysis of the associated risk factors. Following factors are to be considered:

- Awareness / knowledge of market dynamics
- Availability of skilled dog trainers and husbandry professionals
- Awareness about requisite facilities necessary for the comfort, safety, hygiene, housing, food, healthcare and general wellbeing
- Selection of breed and parent stock
- Establishing the brand and breeds by participation in dog shows and;
- Registration with the national/international clubs

7. GEOGRAPHICAL POTENTIAL FOR INVESTMENT

The metropolitan cities of Lahore, Karachi and Islamabad have great potential for investment in pedigree dog breeding farm. Other cities with sizeable shares of affluent population, such as Faisalabad, Gujranwala, Hyderabad, Peshawar, Quetta, Multan and sub-urban communities of all major cities of Pakistan also has potential for this investment. The elite and upper middle-class families in these cities prefer to

keep pedigreed dogs of good breeds. People from other cities who keep dogs also prefer these big cities to buy the desired breed.

Other supportive reasons for this business to be more suitable in metropolitan cities are the availability of veterinary doctors, dog foods, dog trainers and other required services.

8. POTENTIAL TARGET MARKETS

Over the years, pet animals have become a status symbol and the willingness to spend more money for purebred animals and their upkeep is increasing. Potential target market for the proposed business of the Pedigree Dog Breeding Farm is the upper and upper-middle income classes of the society. Keeping dogs/puppies is an expensive activity, which makes it unaffordable for the middle and lower-middle income classes of the society. Moreover, pet-keeping requires large open spaces which are only available in large houses of the upper and upper-middle income classes. Dogs are kept as pets for security and as a hobby, show-dogs and hunting dogs are kept for sports, and watchdogs for security purposes.

According to the statistics of Pakistan Kennel Club:

- Puppies registered with the studbook and the appendix in 2019 are 16,562 and in 2020 are 19,763.
- Approximate total number of dogs (pure bred) in 2019 are 220,000 and in 2020 is 232,000.
- Approximate total number of dog owners (pure-bred) in 2019 are 135,000 and in 2020 are 145,400.

9. PROJECT COST SUMMARY

A detailed financial model has been developed to analyze the commercial viability of the Pedigree Dog Breeding Farm. Various cost and revenue related assumptions along with the results of the analysis are outlined in this section.

The projected Income Statement, Balance Sheet, and Cash Flow Statement are attached as annexures.

9.1. Project Economics

All the figures in this financial model have been calculated after carefully taking into account the relevant assumptions and target market. Table 2 shows the Internal Rate of Return (IRR), Net Present Value (NPV) and Payback period of the proposed venture.

Table 2: Financial Feasibility Analysis

Description	Project
IRR	33%
NPV (PKR.)	7,003,555
Payback Period (Years.)	3.51
Projection Years	10
Discount Rate used for NPV	20%

9.1. Financial Feasibility Debt Financing

Table 3 shows the Internal Rate of Return (IRR), Net Present Value (NPV) and Payback period of the proposed venture.

Table 3: Financial Feasibility Analysis-Debt Financing

Description	Project
IRR	33%
NPV (PKR)	10,996,750
Payback Period (Years.)	3.52
Projection Years	10
Discount Rate used for NPV	16%

9.2. Project Cost

Table 4: Project Cost

Cost Item	Cost (PKR)
Land	-
Infrastructure / Building	7,667,160
Biological Assets (Breeder Dogs)	1,270,000
Machinery & Equipment	310,000
Furniture & Fixtures	185,000
Office equipment	503,500
Office Vehicle	80,800
Pre-Operating Costs	136,701
Total Capital Cost (A)	10,153,161
Raw Material Inventory (Feed)	131,250
Upfront land lease rental	96,533

Cash	500,000
Total Working Capital (B)	727,783
Total Project Cost (A+B)	10,880,944

9.2.1. Land

The proposed Pedigree Dog Breeding Farm will be set up on rented land. In this regard, a plot measuring 1.6 kanal (7,240 square feet) including covered and open spaces will be rented. This space requirement has been calculated on the basis of proposed manpower, required cages, open spaces, kitchen, management building etc. Table 5 provides the details of space requirement.

Table 5: Space Requirement Breakup

Area Description	Area (sq. ft.)
Covered Area	
Management building	724
Puppies' rooms	1,086
Covered Area For (Cages)	3,620
Kitchen	290
Total Covered Area	5,720
Uncovered Area	
Pavement/driveway	506
Grounds	1,014
Total Uncovered Area	1,520
Total Area	7,240

9.2.2. Building / Infrastructure

It is recommended that the following facilities be built on the rented land. Total cost for constructing is estimated at PKR 7,667,160. Details of cost of building and infrastructure are given in Table 6.

Table 6: Building and Infrastructure

Cost Item	Break up	Area (Sq. feet)	Cost (PKR) / Sq. feet	Total Cost (PKR)
Management building	10%	724	2,100	1,520,400
Puppies room	15%	1,086	1,500	1,629,000
Covered Area (Cages)	71%	3,620	800	2,896,000

Kitchen	4%	290	2,100	608,160
Pavement/driveway	7%	506.8	1,000	506,800
Grounds	14%	1013.6	500	506,800
Total		7,240.4		7,667,160

9.2.3. Biological Assets

Adult dogs are required as the breeder stock for establishing the Pedigree Dog Breeding Farm. For the proposed study, one male, four female German Shepherds and one male, three female Rottweilers will be selected. According to Pakistan Kennel club a female dog can breed for seven years Therefore useful life of our biological assets is seven years. Table provides details for Biological Assets.

Table 7: Biological Assets

Cost Item	No.	Unit Cost (PKR)	Total Cost (PKR)
Male			
German Shepherd	1	100,000	100,000
Rottweiler	1	120,000	120,000
Female			
German Shepherd	4	150,000	600,000
Rottweiler	3	150,000	450,000
Total			1,050,000

9.2.4. Machinery and Equipment

Table 8 provides detail of equipment is required for breeder dogs and puppies.

Table 8: Machinery and Equipment

Cost Item	No.	Unit Cost (PKR)	Total Cost (PKR)
Dog Treadmill	1	90,000	90,000
Incubator/Brooder	5	30,000	150,000
Indoor Cages for Puppies	10	5,000	50,000
Seesaw	1	10,000	10,000
Water Pump 1.5HP	1	15,000	10,000
Total			310,000

9.2.5. Furniture and Fixture Requirements

Details of the furniture and fixture required for the project along with their cost are given in Table 9.

Table 9: Furniture and Fixtures

Cost Item	No.	Unit Cost (PKR)	Cost (PKR)
Executive Table	1	30,000	30,000
Executive Chair	1	20,000	20,000
Staff Table	1	25,000	25,000
Staff Chair	4	10,000	40,000
Guest Chairs	2	10,000	20,000
Sofa set	1	35,000	35,000
Table for Guests	1	15,000	15,000
Total			185,000

9.2.6. Office Equipment Requirement

The office equipment required for the proposed project is shown in Table 10.

Table 10: Office Equipment

Cost Item	No.	Unit Cost (PKR)	Total Cost (PKR)
Air Conditioners	1	90,000	90,000
Air Coolers	8	15,000	120,000
Deep Freezer	1	60,000	60,000
Ceiling Fan 56"	3	4,500	13,500
Exhaust Fan	2	2,000	4,000
Water Dispenser	1	20,000	20,000
Laptop / Computer	1	80,000	80,000
Printer	1	40,000	40,000
Security System (12 Cams, 2MP)	12	2,000	24,000
DVR	1	12,000	12,000
LED/LCD	1	40,000	40,000
Total			503,500

9.2.7. Vehicle Required

Vehicles are required to carry out different operational activities, such as purchase of food, medicines, etc. Details of the proposed vehicles, along with their cost, are provided in Table 11.

Table 11: Vehicles Cost

Cost Item	No.	Unit Cost (PKR)	Cost (PKR)
Motorcycle	1	80,000	80,000
Registration Charges		1%	800
Total Cost (PKR)			80,800

9.2.8. Pre-Operating Expense

An essential cost to be borne by the project is the cost of staff salaries estimated to be PKR 60,000 and utility expenses estimated to be PKR 76,701.

Table 12: Pre-Operating Expenses

Cost Item	Number of Months	Uni Cost (PKR)	Total Cost (PKR)
Admin Expenses	1	60,000	60,000
Utilities Expenses	1	76,701	76,701
Total Cost (PKR)			136,701

9.3. Break Even Analysis

Calculation of Product wise break-even analysis is provided in Table 13.

Table 13: Break Even Analysis-First Year

Particulars	Amount First Year (PKR)	Ratios
Sales	5,420,000	100%
Variable Cost	2,705,508	50%
Contribution	2,714,492	50%
Fixed Cost	2,492,751	46%
Breakeven		
Breakeven Units		46
Breakeven Revenue		4,977,252
Breakeven Capacity		84%

9.4. Revenue Generation

Table 14 and Table 15 provides assumption details used for revenue calculation Table 16 provides details for expected revenue generation from the sale of Pedigree puppies during the first year of operations.

Table 14: Revenue Generation Assumption

Particulars	Rate	Number (Dogs)
Expected Puppies/Female		9
Mortality	10%	
Male Ratio	70%	
Female Ratio	30%	
Maximum Capacity	100%	200
Initial Year Capacity utilization	28%	56

Table 15: Revenue Generation Assumption

Breed	Number of Breeder Dog (Female)	Expected Puppies / Female	Total (Units)	Mortality @ 10%	Retention	Sale (Units)
Rottweiler	3	9	27	3	3	21
German Shepherd	4	9	36	4	3	29

Table 16: Revenue Generation

Product	Unit of Measurement	Sales	Sales Price (PKR)	Initial Year Revenue (PKR)
Rottweiler	No. of Puppies	21	120,000	2,520,000
German Shepherd	No. of Puppies	29	100,000	2,900,000
Total				5,420,000

9.4.1. Variable Cost Estimate

Variable costs of the project have been provided in detail in Table 17.

Table 17: Variable Cost Estimate

Description of Costs	Total Cost (PKR)
Labour	480,000
Cost of goods sold 1 (Adult dog feed cost)	567,000
Cost of goods sold 2 (Puppy feed cost)	1,008,000
Utilities	193,208
Vaccination cost- Puppies	212,800
Vaccination cost- Adults	22,500
Communications expense (phone, fax, mail, internet, etc.)	36,000
Office vehicles running expense	114,000
Office expenses (stationery, entertainment, janitorial services, etc.)	72,000
Total	2,705,508

9.4.2. Basis and Assumption for Variable Cost

Table 18: Feed Cost Estimate-Adult Dogs

Consumption per day (Kgs)	Cost/Kg (PKR)	Cost per Month / Dog	Annual Cost/Dog	Number of Dog	Total Cost (PKR)
1	175	5,250 (175*30)	63,000 (12*5,250)	9	567,000 (63,000*9)

Table 19: Feed Cost Estimate-Puppies

Consumption per day (Kgs)	Cost/Kg (PKR)	Cost per Month / Dog	Annual Cost/Dog	Number of Dog	Total Cost (PKR)
1	133	4,000 (133*30)	18,000 (4.5*4,000)	56	1,008,000 (18,000*56)

Table 20: Vaccination Cost Estimate-Puppies

Age	Number Of Dogs	Unit Cost (PKR)	Total Cost (PKR)
6-8 Weeks	56	800	44800
10-12 Weeks	56	1,500	84,000
14-16 Weeks	56	1,500	84,000
Total			212,800

Table 21: Vaccination Cost Estimate-Adults

Age	Number Of Dogs	Unit Cost (PKR)	Total Cost (PKR)
Annual Cost	9	2,500	22,500

9.4.3. Fixed Cost Estimate

Variable costs of the project have been provided in detail in Table 22.

Table 22: Fixed Cost Estimate

Description of Costs	Total Cost (PKR)
Administration expense	720,000
Land lease rental expense	720,000
Promotional expense	81,300
Licenses, Membership, Subscription	15,500
Depreciation expense	928,611
Amortization of pre-operating costs	27,340
Total	2,492,751

9.4.4. Basis and Assumption for Fixed Cost**Table 23: Land Leased Rental Cost Estimate**

Description of Costs	Monthly Cost (PKR)	Number of Months	Total Cost (PKR)
Rent	60,000	12	720,000

Table 24: Licenses, Membership, Subscription

Membership	Membership Fee (PKR)	Annual Subscription (PKR)	Total Cost (PKR)
Pakistan Kennel Club	10,000	2,000	12,000
Rottweiler club	2,700	800	3,500
Total			15,500

Table 25: Other Fixed cost Assumptions

Cost Item	Rate	Rationale
Promotional expense	1.5%	% Of Revenue
Depreciation Rate	2,700	
Machinery & equipment	15%	% of Cost
Office equipment	15%	% of Cost
Furniture & fixtures	15%	% of Cost
Office vehicles	15%	% of Cost
Fair Value Loss of Biological Assets	15%	Based on breeding Period

9.4.5. Fair Value Loss of Biological Assets

Table 26: Fair Value Loss of Biological Assets

Cost Item	Cost (PKR)	Annual Rate	Fair value Loss per year (PKR)
Biological Assets	1,270,000	15%	190,500

9.5. Human Resource Requirement

Staff is required for managing health, food, hygiene and reproduction of dogs, and security & maintenance of the facility. In order to run the operations smoothly, details of human resources required along with the number of employees and monthly salary are recommended provided in Table 27.

Table 27: Human Resource Requirements

Description	Number of Employees	Salary Per Month Per Resource (PKR)	Annual Salaries (PKR)
Direct Labour			
Labour	2	20,000	480,000
Total			480,000
Administration expense			
Office Boy	1	20,000	240,000
Security	2	20,000	480,000
Total	5	54,000	720,000

10. CONTACT DETAILS

In order to facilitate the potential investors, contact details of some relevant vendors to the proposed project is given in Table 28.

Table 28: Contact Details

Name of supplier	Type of supplies	Email/ Website/Address	Contact Number
Abid Shafi	Dog Food	abid_shafi143@hotmail.com	03214425833
Rehan Haidry	Dog Food	marketwizpk@gmail.com	03214230001
Mian M. Ali	Dog Food	Pets Care, Shop#87, Bank Square Market, C-Block, Model Town, Lahore.	03219405435
DVM Pharma	Dog Medicine	Plot # 263/1 B Block Punjab Cooperative Housing Society Defence, Ghazi Rd, Block B Punjab CHS, Lahore	(042)35460039
Pet Set	Clinic and Accessories	https://www.petset.com.pk/ Islamabad and Rawalpindi	051-8482333 0518356148
Pet Shop	Accessories	www.petshop.pk	
Pets Cuisine	Dog Food	Street 14, F-10/2 F 10/2 Tariq Market, Islamabad	0335 5444244
Paws & Claws	Dog Food	op Number 1 Plot, 23-C Badar Commercial Street 2, opp. Mahmood Sweet Karachi.	(021) 35843436
PETPAL	Dog food and accessories	Shop No. 1, Plot C2C/1, Street, 10 Nishat Lane 1, D.H.A Phase 6 Nishat Commercial Area Karachi	(021) 35240090

11. USEFUL LINKS

Table 29: Useful Links

Name of Organization	E-mail address
Small and Medium Enterprises Development Authority (SMEDA)	www.smeda.org.pk
National Business Development Program (NBDP)	www.nbdp.org.pk
Government of Pakistan	www.pakistan.gov.pk
University of Veterinary and Animal Sciences Lahore	www.uvas.edu.pk/index.php
Government of Punjab	www.punjab.gov.pk
Government of Sindh	www.sindh.gov.pk
Government of Balochistan	www.balochistan.gov.pk
Government of Khyber Pakhtunkhwa	www.kp.gov.pk
RPK Critter Care & Animal Hospital	www.rpkccs.business.site
Security and Exchange Commission of Pakistan	www.secp.gov.pk
State Bank of Pakistan	www.sbp.gov.pk
Pakistan Kennel Club	pakistankennelclub.com.pk
Kennel Club of Pakistan	www.kcp.com.pk

12. ANNEXURES

12.1. Income Statement

Calculations										
Income Statement										
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Revenue	5,420,000	6,584,640	11,400,481	12,346,721	13,371,499	14,481,333	15,683,284	16,984,996	18,394,751	19,921,516
<i>Cost of sales</i>										
Cost of goods sold 1 (Adult dog Feed Cost)	567,000	750,519	812,812	880,275	953,338	1,032,465	1,118,160	1,210,967	1,311,478	1,420,330
Cost of goods sold 2 (Puppy Feed Cost)	1,008,000	1,091,664	1,878,968	2,034,923	2,203,821	2,386,738	2,584,838	2,799,379	3,031,728	3,283,361
Operation costs 1 (Direct Labor)	480,000	515,040	552,638	592,980	636,268	682,716	732,554	786,030	843,411	904,979
Utilities	123,120	133,955	145,743	158,568	172,522	187,704	204,222	222,193	241,746	263,020
Vaccination cost- Puppies	212,800	230,462	396,671	429,595	465,251	503,867	545,688	590,980	640,031	693,154
Vaccination cost- Adults	22,500	29,783	32,254	34,932	37,831	40,971	44,371	48,054	52,043	56,362
Total cost of sales	2,413,420	2,751,422	3,819,086	4,131,273	4,469,031	4,834,461	5,229,833	5,657,604	6,120,436	6,621,207
Gross Profit	3,006,580	3,833,218	7,581,395	8,215,448	8,902,467	9,646,872	10,453,451	11,327,392	12,274,315	13,300,309
<i>General administration & selling expenses</i>										
Administration expense	720,000	772,560	828,957	889,471	954,402	1,024,073	1,098,831	1,179,045	1,265,116	1,357,469
Land lease rental expense	720,000	792,000	871,200	958,320	1,054,152	1,159,567	1,275,524	1,403,076	1,543,384	1,697,722
Utilities	70,088	76,255	82,966	90,267	98,210	106,853	116,256	126,486	137,617	149,728
Communications expense (phone, fax, mail, internet, etc.)	36,000	38,628	41,448	44,474	47,720	51,204	54,942	58,952	63,256	67,873
Office vehicles running expense	114,000	123,462	133,709	144,807	156,826	169,843	183,940	199,207	215,741	233,647
Office expenses (stationery, entertainment, janitorial services, etc)	72,000	77,256	82,896	88,947	95,440	102,407	109,883	117,905	126,512	135,747
Promotional expense	81,300	98,770	171,007	185,201	200,572	217,220	235,249	254,775	275,921	298,823
Licenses, Membership, Subscription	15,500	3,032	3,284	3,557	3,852	4,172	4,518	4,893	5,299	5,739
Depreciation expense	928,611	928,611	928,611	928,611	928,611	928,611	874,646	1,000,536	1,000,536	1,000,536
Amortization of pre-operating costs	27,340	27,340	27,340	27,340	27,340	-	-	-	-	-
Subtotal	2,784,839	2,937,915	3,171,418	3,360,994	3,567,126	3,763,950	3,953,788	4,344,876	4,633,382	4,947,285
Operating Income	221,741	895,303	4,409,977	4,854,454	5,335,341	5,882,922	6,499,663	6,982,516	7,640,933	8,353,024
Gain in fair value of biological assets - inventory	660,000	54,780	59,327	64,251	69,584	75,359	81,614	88,388	95,724	103,669
Loss in fair value of biological assets - breeders	(190,500)	(190,500)	(190,500)	(190,500)	(190,500)	(190,500)	(127,000)	(326,484)	(326,484)	(326,484)
Earnings Before Interest & Taxes	691,241	759,583	4,278,804	4,728,205	5,214,425	5,767,782	6,677,852	6,744,421	7,410,174	8,130,210
Earnings Before Tax	691,241	759,583	4,278,804	4,728,205	5,214,425	5,767,782	6,677,852	6,744,421	7,410,174	8,130,210
Tax	34,562	37,979	703,641	838,461	984,327	1,150,334	1,457,248	1,480,547	1,713,560	1,965,573
NET PROFIT/(LOSS) AFTER TAX	656,679	721,604	3,575,163	3,889,744	4,230,098	4,617,447	5,220,605	5,263,874	5,696,614	6,164,637

12.2. Balance Sheet

Statement Summaries											SMEDA
Balance Sheet											
	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Rs. in actuals Year 10
Assets											
<i>Current assets</i>											
Cash & Bank	500,000	1,294,301	2,451,409	5,603,800	8,244,198	10,714,114	13,171,704	16,762,240	17,146,602	18,955,473	22,520,625
Livestock inventory	-	660,000	714,780	774,107	838,358	907,941	983,300	1,064,914	1,153,302	1,249,026	1,352,695
Raw material inventory (Feed)	131,250	166,257	263,097	308,583	361,934	424,508	497,901	583,983	684,947	803,366	-
Pre-paid annual land lease	96,533	96,533	96,533	96,533	96,533	96,533	96,533	96,533	96,533	96,533	96,533
Total Current Assets	727,783	2,217,092	3,525,819	6,783,024	9,541,023	12,143,097	14,749,438	18,507,671	19,081,384	21,104,399	23,969,854
<i>Fixed assets</i>											
Land	-	-	-	-	-	-	-	-	-	-	-
Building/Infrastructure	7,667,160	6,900,444	6,133,728	5,367,012	4,600,296	3,833,580	3,066,864	2,300,148	1,533,432	766,716	-
Biological Assets (Breeder Dog)	1,270,000	1,079,500	889,000	698,500	508,000	317,500	127,000	2,176,557	1,850,073	1,523,590	1,197,106
Machinery & equipment	310,000	263,500	217,000	170,500	124,000	77,500	31,000	531,286	451,593	371,900	292,207
Furniture & fixtures	185,000	157,250	129,500	101,750	74,000	46,250	18,500	-	-	-	-
Office vehicles	80,800	68,680	56,560	44,440	32,320	20,200	8,080	164,606	139,915	115,224	90,533
Office equipment	503,500	427,975	352,450	276,925	201,400	125,875	50,350	862,911	733,474	604,037	474,601
Total Fixed Assets	10,016,460	8,897,349	7,778,238	6,659,127	5,540,016	4,420,905	3,301,794	6,035,507	4,708,487	3,381,467	2,054,447
<i>Intangible assets</i>											
Pre-operation costs	136,701	109,361	82,020	54,680	27,340	-	-	-	-	-	-
Total Intangible Assets	136,701	109,361	82,020	54,680	27,340	-	-	-	-	-	-
TOTAL ASSETS	10,880,944	11,223,801	11,386,078	13,496,831	15,108,379	16,564,002	18,051,232	24,543,177	23,789,870	24,485,866	26,024,301
Liabilities & Shareholders' Equity											
<i>Current liabilities</i>											
Accounts payable	-	47,706	57,679	82,202	89,784	98,128	107,318	117,452	128,638	141,002	128,868
Total Current Liabilities	-	47,706	57,679	82,202	89,784	98,128	107,318	117,452	128,638	141,002	128,868
<i>Other liabilities</i>											
Deferred tax	-	(33,188)	(77,517)	483,618	1,167,745	1,984,929	2,954,246	4,215,453	5,483,687	6,967,313	8,683,866
Long term debt	-	-	-	-	-	-	-	-	-	-	-
Total Long Term Liabilities	-	(33,188)	(77,517)	483,618	1,167,745	1,984,929	2,954,246	4,215,453	5,483,687	6,967,313	8,683,866
<i>Shareholders' equity</i>											
Paid-up capital	10,880,944	10,880,944	10,880,944	10,880,944	10,880,944	10,880,944	10,880,944	10,880,944	10,880,944	10,880,944	10,880,944
Retained earnings	-	328,340	524,972	2,050,067	2,969,906	3,600,002	4,108,724	9,329,329	7,296,602	6,496,608	6,330,622
Total Equity	10,880,944	11,209,284	11,405,916	12,931,011	13,850,850	14,480,946	14,989,668	20,210,273	18,177,546	17,377,552	17,211,566
TOTAL CAPITAL AND LIABILITIES	10,880,944	11,223,801	11,386,078	13,496,831	15,108,379	16,564,002	18,051,232	24,543,177	23,789,870	24,485,866	26,024,301

12.3. Cash Flow Statement

Statement Summaries											SMEDA
Cash Flow Statement											
	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
	Rs. in actuals										
<i>Operating activities</i>											
Net profit	-	656,679	721,604	3,575,163	3,889,744	4,230,098	4,617,447	5,220,605	5,263,874	5,696,614	6,164,637
Add: depreciation expense	-	928,611	928,611	928,611	928,611	928,611	928,611	874,646	1,000,536	1,000,536	1,000,536
amortization expense	-	27,340	27,340	27,340	27,340	27,340	-	-	-	-	-
Gain/(loss) in fair value of biologic	-	(469,500)	135,720	131,173	126,249	120,916	115,141	45,386	238,096	230,759	222,814
Deferred income tax	-	(33,188)	(44,329)	561,135	684,127	817,183	969,317	1,261,207	1,268,234	1,483,626	1,716,554
Raw material inventory	(131,250)	(35,007)	(96,840)	(45,487)	(53,351)	(62,574)	(73,393)	(86,082)	(100,964)	(118,420)	803,366
Accounts payable	-	47,706	9,973	24,523	7,583	8,343	9,190	10,134	11,187	12,364	(12,134)
Cash provided by operations	(131,250)	1,122,641	1,682,080	5,202,458	5,610,303	6,069,917	6,566,314	7,325,895	7,680,963	8,305,479	9,895,774
<i>Financing activities</i>											
Add: land lease expense	-	720,000	792,000	871,200	958,320	1,054,152	1,159,567	1,275,524	1,403,076	1,543,384	1,697,722
Land lease payment	(96,533)	(720,000)	(792,000)	(871,200)	(958,320)	(1,054,152)	(1,159,567)	(1,275,524)	(1,403,076)	(1,543,384)	(1,697,722)
Issuance of shares	10,880,944	-	-	-	-	-	-	-	-	-	-
Cash provided by / (used for) financ	10,784,411	-	-	-	-	-	-	-	-	-	-
<i>Investing activities</i>											
Capital expenditure	(10,153,161)	-	-	-	-	-	-	(3,735,359)	-	-	-
Acquisitions	-	-	-	-	-	-	-	-	-	-	-
Cash (used for) / provided by invest	(10,153,161)	-	-	-	-	-	-	(3,735,359)	-	-	-
NET CASH	500,000	1,122,641	1,682,080	5,202,458	5,610,303	6,069,917	6,566,314	3,590,537	7,680,963	8,305,479	9,895,774
Cash balance brought forward		500,000	1,294,301	2,451,409	5,603,800	8,244,198	10,714,114	13,171,704	16,762,240	17,146,602	18,955,473
Cash available for appropriation	500,000	1,622,641	2,976,381	7,653,868	11,214,104	14,314,116	17,280,428	16,762,240	24,443,203	25,452,081	28,851,247
Dividend	-	328,340	524,972	2,050,067	2,969,906	3,600,002	4,108,724	-	7,296,602	6,496,608	6,330,622
Cash carried forward	500,000	1,294,301	2,451,409	5,603,800	8,244,198	10,714,114	13,171,704	16,762,240	17,146,602	18,955,473	22,520,625

13. KEY ASSUMPTIONS

13.1. Operating Cost Assumptions

Table 30: Operating Cost Assumptions

Description	Details
Operating costs growth rate	8.3% of general inflation rate
Utilities-Indirect	1.33% of revenue
Communication expenses	5% of administration expenses
Office Vehicle running expenses	9,500per month
Promotional expense	1.50% of revenue
Office expenses (stationery, janitor, etc.)	10% of administration expenses

13.2. Production Cost Assumptions

Table 31: Production Cost Assumptions

Description	Details
Cost of goods sold growth rate	8.3%
Feed Cost Adults	Rs. 175/KG
Feed Cost Puppies	Rs. 133/KG
Vaccination Cost Adults	Rs. 2,500/year
Vaccination Cost Puppies	Rs. 3,800/year

13.3. Revenue Assumptions

Table 32: Revenue Assumptions

Description	Details
Sale price growth rate	8.3%
Maximum Capacity (Units)	200
Initial Year Capacity (Units)	56

13.4. Financial Assumptions

Table 33: Financial Assumptions

Description	Details
Project life (Years)	10
Debt: Equity	0:100
Discount Rate used for NPV	20%

13.5. Cash Flow Assumptions

Table 34: Cash Flow Assumptions

Description	Details
Accounts receivable cycle (in days)	-
Accounts payable cycle (in days)	10