

# Financing Opportunities Inland-Pond Fish Farming South Punjab



**Small and Medium Enterprises Development Authority (SMEDA)**

**&**

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## **Acknowledgment**

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## 1. Executive Summary

Fish farming has emerged in recent decades as a growing business in South Punjab region. The inland-pond fish farming has witnessed an overall growth of around 25% during the last 15 years. Average fish production since last five years remained more than 150,000 thousand metric tons annually. Fish farms in South Punjab are mostly located in districts of Multan, Muzaffargarh, Khanewal and Jhang etc. Fish farming is growing in other districts of South Punjab as well. Based on the production capacity of fish farms, the industry is categorized into small, medium and large-scale farms. Climate uniformity, water-table and soil chemical composition in the region is suitable for fish farming. Despite substantial presence of fish farms in the region, there is no central representing body or representation in the relevant Chambers of Commerce and Industries. If necessary, support is provided to the sector, it can further expand and add economic value in the region.

This study, primarily, is conducted to evaluate the financing requirements of fish farming industry in the South Punjab. Furthermore, different obstacles in access to finance are analyzed in the industry. The data is composed through primary market survey, field visits and meetings with financial institutions, Punjab Fisheries Department, academic institutions and secondary sources. Fish Farming is a raw material intensive industry. Feed ingredients are seasonal and locally produced, the prices vary substantially due to seasonality component. Considering the price distortions, the major portion of the business is carried on market credit terms. Although the market credit terms are not much favorable but this practice is prevalent in the industry due to unavailability of suitable financial products for the industry. Primary data collected from the industry shows need of financial products to meet working capital requirements and upgrade the farms to renewable energy sources.

Based on the primary data, a comprehensive financial model has been developed to evaluate the viability of financial needs of the industry. The findings of the study revealed that the industry should avail working capital loan from financial institutions for sustainable and increased profitability as compared to existing business practices. The small-scale fish farms can get the most benefit if their working capital need is fulfilled through bank financing. Increase in profitability for small, medium and large-scale farms is calculated to be 44%, 39% and 23% respectively on average of ten years projections. Due to energy price hikes and raw material price distortions, fish farm needs to be upgraded to renewable energy sources. It will cutdown 6 to 8% energy costs and improve production upto 5%. Furthermore, it will add value in environmental conditions and overall better production due to uninterrupted availability of water supply to fish farms.

Fish farming in the region is carried out by traditional farming methods at large. The industry may be provided awareness for better financial management and bookkeeping. Furthermore, the research and development on advance methods of fish farming is at a pre-mature stage in the region. There is need to develop the industry on indigenous research-based foundations to get advantage of advanced fish farming methods and techniques.

## **2. Introduction to SMEDA AND SMEBFC, Multan**

The Small and Medium Enterprises Development Authority (SMEDA) was established in October 1998 with an objective to provide 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'. Business Development Services are offered to the SMEs by SMEDA including guidance for business development & Pre-Feasibility studies, Cluster Studies and District Economic Profiling for investment opportunities.

SME Business Facilitation Center (SMEBFC) Multan is a PSDP Project of SMEDA, MoI&P, Government of Pakistan. The Facilitation Center, managed by SMEDA, is one-stop facility for the development requirements of SMEs of South Punjab region. The Center facilitates on information services related to marketing, technology upgradation, support in access to finance, regulatory compliance, business registration, corporatization, taxation and capacity building support and services to the SMEs and potential entrepreneurs. Identification of region-specific investment opportunities, Business Cluster Studies and Over the Counter (OTC) products development is one of the important components of service delivery of SMEBFC Multan.

### 3. Study Objectives

The major objective of this document is to assess the financing requirements of inland fish farming in South Punjab. Furthermore, it also identifies as how presently the financing needs of fish farming are being met in South Punjab. Major objectives of the study are as following:

- To understand different financing requirements of the inland fish farming.
- To explore the perceptions of the fish farming industry about existing financing facilities of FIs and its effectiveness.
- Identify issues faced by the industry in access to formal credit.
- Suggest optimal lending solutions to Banks/FIs for fish farming sector of South Punjab.

### 4. Methodology of the Study and Data Collection

Survey was conducted through field visits, in-depth interviews, group discussion, and focus group meetings with industry stakeholders in South Punjab to collect primary data. Multiple meetings were conducted with Punjab Fisheries Department of South Punjab to discuss details of the project and financial needs of the fisheries sector were recorded. We've also worked closely with Muhammad Nawaz Sharif University of Agriculture Multan (MNSUAM) during this study. MNSUAM has developed a research-based culture to support the fisheries sector in the region. A number of progressive farmers are working with the university and benefiting from improved seed quality, feed quality and provision of updated knowledge about the technology and best farming practices.

An open-ended questionnaire was designed to collect data from farmers on fish farming and assess different opportunities and threats associated with the business. Participating farmers were asked about different obstacles regarding business growth, sustainability and financial needs of fish farmers.

Financial model was developed based on data collected using field surveys, in-depth interviews, group discussions and focus group meetings with industry stakeholders including farmers, fish markets, feed suppliers, hatcheries owners, Punjab Fisheries Department, Punjab Food Authority, SBP and financial institutions. The results of the data have been analyzed on the basis of three profitability assumptions which are as under:

- If raw material purchased on cash and working capital requirement met through bank financing.
- If raw material purchased on credit from market
- If fish farms are upgraded to renewable energy sources.

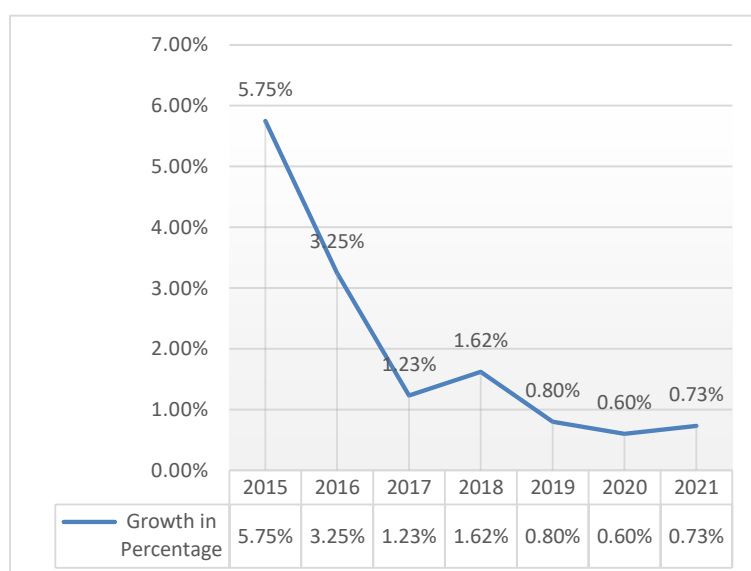
The reason for adopting multilevel approach including open ended questions, in-depth interviews and focus group discussion was to minimize the biasness of respondents for collection of data about farming process, costs and operational life cycle of the fish farming business.

## 5. Brief Introduction of the Industry

The fishing sector has a share of 2.01 percent in agriculture value addition and 0.39 percent in GDP. In Pakistan Fisheries sector is being managed at provincial levels. Punjab Fisheries Department is working on implementation of Punjab Fisheries Ordinance and Rules for further improvement in fisheries sector of Punjab. At federal level, Ministry of Food Agriculture and Livestock (MINFAL) is responsible for policy design, planning and coordination with provincial fisheries departments, national and international agencies.

From 2015 onward marine fishing has declined due to overfishing and inadequate measures for fisheries culture and production. Aquaculture has played vital role in growth of fish production during last five years. However, disproportional increase in input prices has impacted the quality and growth in last three years.

Fish production recorded an increase from 2005 to 2015 due to introduction of aquaculture practices. Fish farming started on a large scale and support from international institutions for development of the sector. During this period no such policy was introduced for conservation, growth and sustainability of fisheries sector. A decline in 2018 onward was recorded in growth of industry which resulted due to lack of policy initiatives to sustain the growth and conservation of fish culture<sup>2</sup>. Another factor which added to the decline was increase in input prices in proceeding years. During the last year in 2020-21 the fisheries growth rate was recorded below 1% as shown in Figure 1<sup>1</sup>. During FY2021, fish production remained at 690,900 metric tons of which 465,200 metric tons was from marine and the 225,700 metric tons produced by inland fishery sector.<sup>2</sup> Fish production in FY2020 (July-March) was 701,726 metric tons in which 474,025 metric tons was from marine and the remaining from the inland fishery sector.<sup>3</sup> The production of fish & fishery products has witnessed a decrease of 1.5 percent compared to last year<sup>4</sup>.



**Figure 1: Annual Production Growth Rate of Fisheries in Pakistan (in Percentage)<sup>1</sup>**

<sup>1</sup> Pakistan Economic Survey 2015-21

<sup>2</sup> FAO: Report on Pakistan Fisheries 2019

<sup>3</sup> Fisheries Production Indicative Report 2020

<sup>4</sup> Pakistan Economic Survey 2020-21



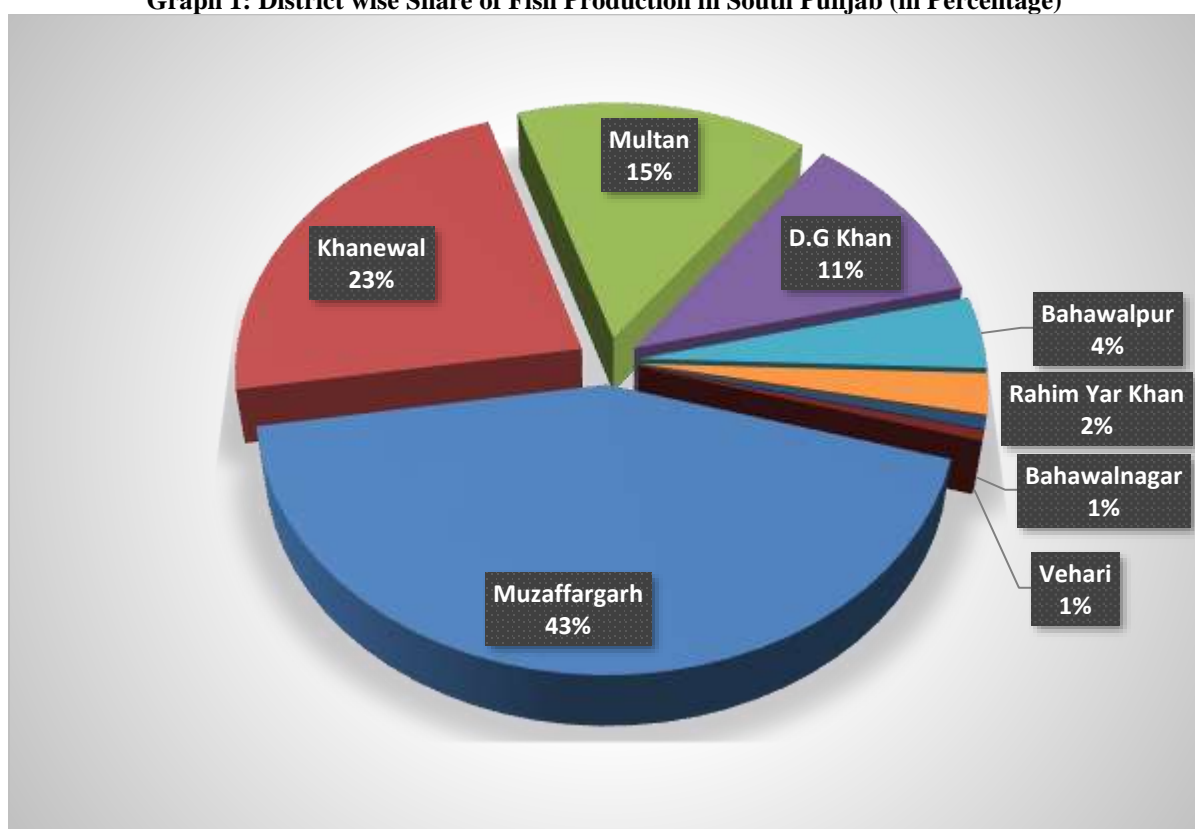
In South Punjab, the fisheries sector is under performing than its actual potential. The major obstacles are traditional approaches of fish farming and risk averse behavior of fish farmers and investors. Farmers generally are not well versed with new technologies and advanced business management practices.

Fish farming sector has shown a growth of 0.73% in year 2020-21<sup>5</sup>. There are about 13,000 fish farmers with 60,230 ha, fish ponds and lakes covering 127,109 hectares. Those are producing about 179.9 mt per ha per year. Mostly these farmers belong to Punjab and Sindh province<sup>6</sup>. While, 50,000 fish farmers are engaged in marine and coastal fisheries for their livelihood<sup>5</sup>.

## 6. Inland-Pond Fish Farming in South Punjab

In South Punjab region mainly Rohu and Thaila, Mori, Grass Carp, Silver Carp, Big Head, Gulfam, and Tilapia fish is being cultured in farms. Most common types being produced by fish farms are Rahu, Thaila and Tilapia. The fish is supplied to local fish markets of Multan, Bahawalpur, Dera Ghazi Khan, Head Islam, Head Panjnad, Head Taunsa, Head Sidhnai.

**Graph 1: District wise Share of Fish Production in South Punjab (in Percentage)<sup>7</sup>**



<sup>5</sup> FAO: Pakistan National Aquaculture Sector Overview

<sup>6</sup> Economic Survey of Pakistan 2018-19

<sup>7</sup> Directorate of Fisheries & Wildlife South Punjab

Climatic situation and soil composition is quite favorable for fish farming in South Punjab. District Muzaffargarh is the largest fish producing district in South Punjab with total share of 43% within South Punjab region. Likewise, Khanewal has 22%, Multan 15% and D.G Khan 11% share in total fish production of the region<sup>8</sup>. In other districts like Bahawalpur, Rahim Yar Khan, Bahawalnagar, Vehari, Lodhrn, Ranajpur and Layyah fish farming is also being carried out and the number is increasing with the time.

**Table 1: Categorization of Fish Farming in South Punjab**

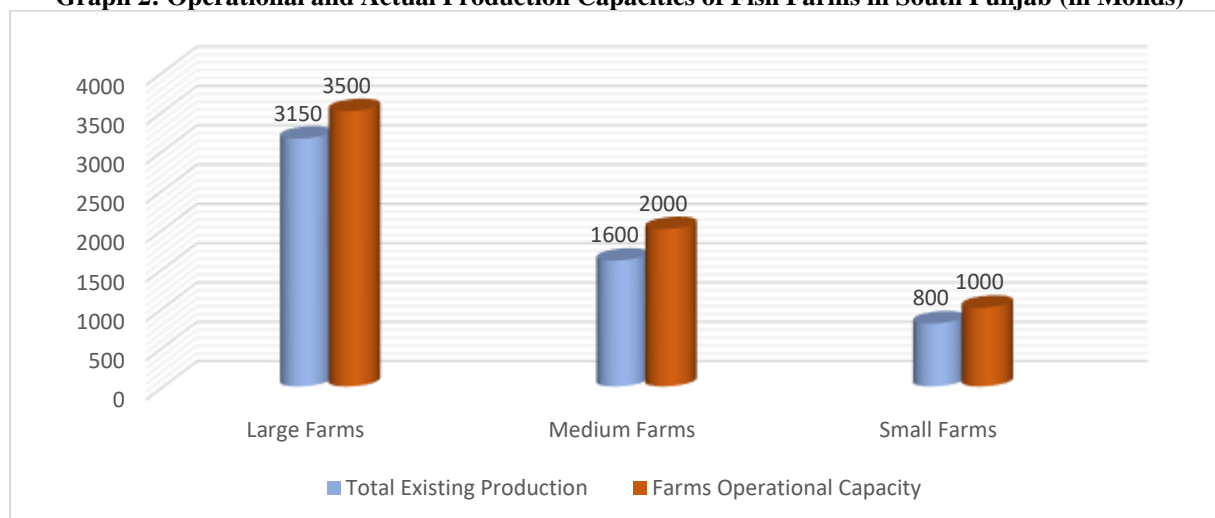
<b>Description</b>	<b>Small Farms</b>	<b>Medium Farms</b>	<b>Large Farms</b>
Fish Farm Area (Acres)	15	40	70
Annual Production (Tons)	24	64	126
Type of Books of Accounts	No Formal Accounts	No Formal Accounts	Formal/Semi Formal Accounts
Bank Account Operates with Business Name	No	No	Yes
Average No. of Employees	2-5	5-7	10-15

For the purpose of business categorization of fish farming in South Punjab, businesses are categorized into small medium and large farms. As per the industry practice the farms of size upto 15 Acres are categorized as small fish farms, 40 Acre farms are categorized as medium size farms whereas upto 70 Acres and above farms are categorized as large farms with annual production of 24 tons, 64 tons and 126 tons respectively.

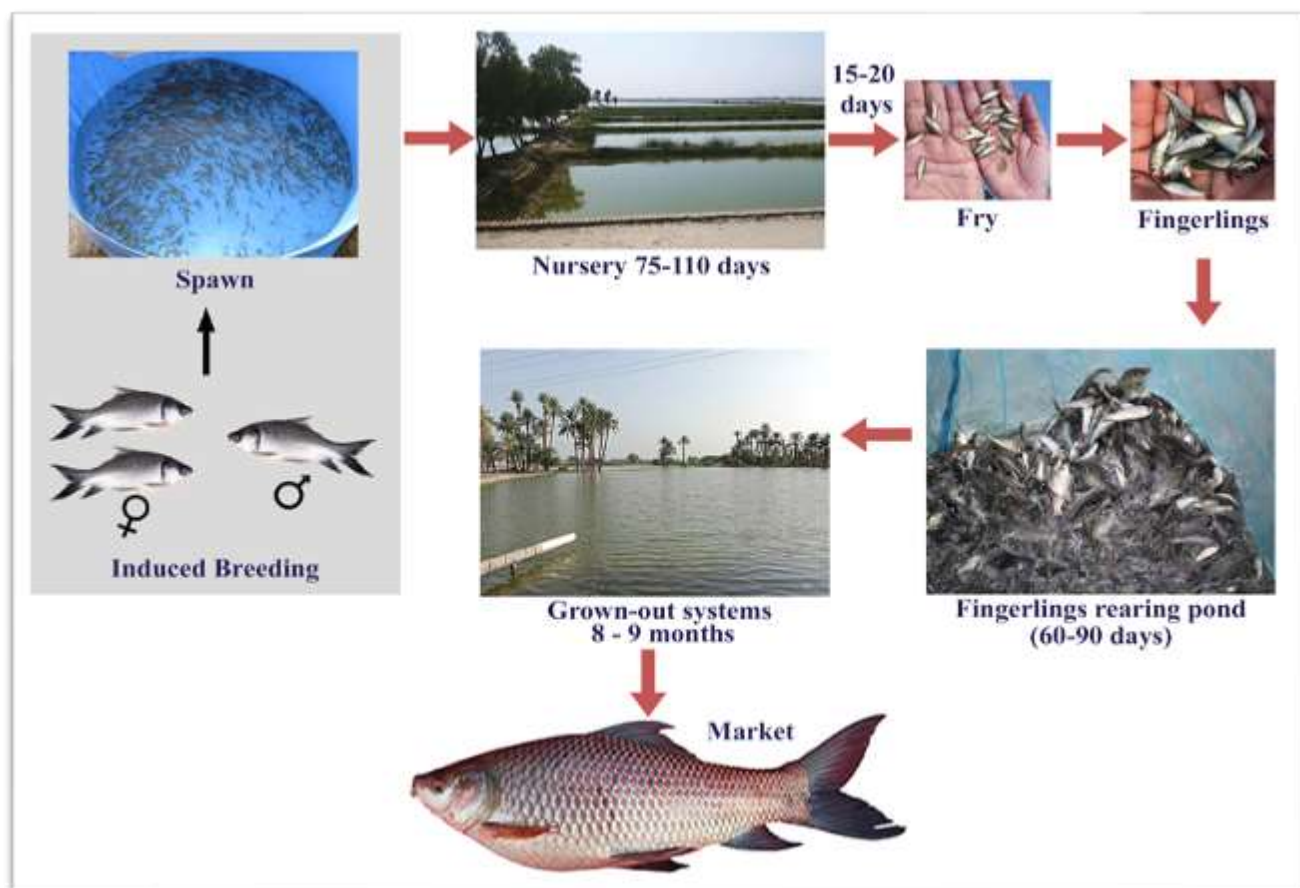
## 6.1 Installed and Operational Capacities

Survey was conducted through field visits, in-depth interviews, group discussion, and focus group meetings with industry stakeholders in South Punjab to collect primary data. Based on information collected operational capacities over the series of last three years are given in the Graph 2 below.

<sup>8</sup> Punjab Fisheries Department - South Punjab

**Graph 2: Operational and Actual Production Capacities of Fish Farms in South Punjab (in Monds)**

## 6.2 Process Flow

**Figure 2: Pond Fish Farming Process Flow**

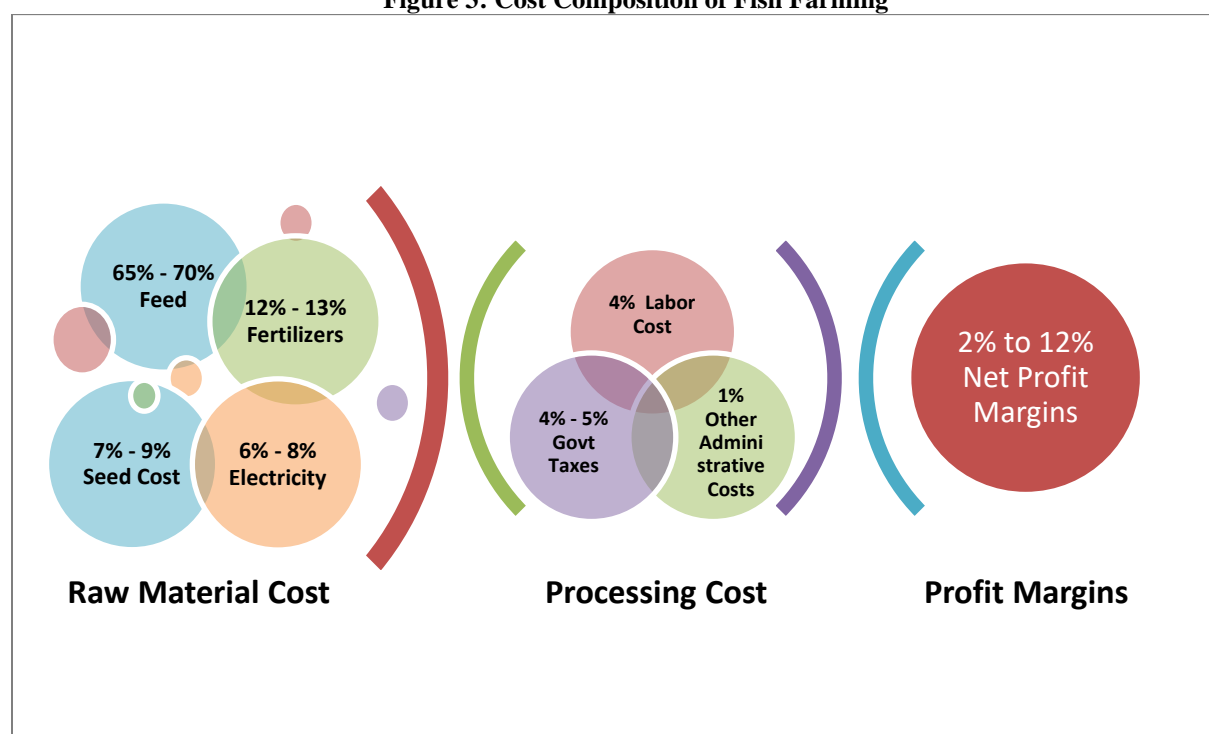
Inland fish farming is a raw material intensive business. Production process of the business is explained in the Figure 2. Most of the businesses procure seed (Spawn) from the fish hatcheries

and put them in primary Nursery for 15-20 day old (called Fry). The Fry is grown to the size of 70-80 grams (called fingerling) and transferred to fingerling rearing pond for next 60-90days where weight of the seed is gained upto 200-250 grams. Average weight of the grown fish ranges from 1.5Kg to 2.5Kg in industry.

### 6.3 Fish Farm Costs Composition

Pond fish farming is not a labor intensive business. Major cost element includes the raw material (i.e. maize, barley, husk, wheat bran and seed cake) costs that accumulate almost 75% - 85% of feed and fertilizers of total costs. Seed cost remains 7% - 9% whereas electricity cost forms 6% - 8% of the total cost incurred during the whole life cycle of the fish farming. Profit margins range from 2% to 12% based on financial assumptions and different sizes of business.

Figure 3: Cost Composition of Fish Farming



## 7. Financing Need of Inland Fish Farmers of South Punjab

In fish farming business, an informal credit system prevails in the region that is based on unrealistic costs of raw materials and also varies over the period. No peculiar financing schemes for fish growers have been introduced by formal financial sector except the non-farm agriculture finance schemes which do not address the needs of fish farming. Non-Farm Agriculture limits approved by SBP do not fulfil the needs of the fish farming in South Punjab due to disproportional increase in input prices in the market. Although SBP is keenly working to address the financing needs of SMEs in the sector as per varying needs but a lot of work is to be done to match the on-ground financing requirements of fish farming businesses in South Punjab.

Another obstacle in fulfillment of financing needs of the Fish Farming is inadequacy of improved business practices and financial management of these businesses. Most of the business owners fail to fulfil the documentary and compliance requirements of financial institutions.

Financing needs of the fish farming industry in South Punjab can be summed up into the following two categories

- Working Capital Requirements
- Financial Requirement for Renewable Energy

All the figures are based on primary data collected from industry and certain key assumptions as per industry practices. Afterwards, the financial model is developed to analyze the possible financing possibilities along with the financial assumptions.

### Industry Categorization and Costing

**Table 2: Characteristics of Fish Farming Industry in Sout Punjab**

Description	Small Farms	Medium Farms	Large Farms
Fish Farm Area (Acres)	15	40	70
Annual Production (Tons)	24	64	126
Type of Books of Accounts	No Formal Accounts	No Formal Accounts	Formal / Semi Formal Accounts
Bank Account Operates with Business Name	No	No	Yes
Average No. of Employees	2-5	5-7	10-15
Raw Material Cost (On Credit) Rs.	6,346	5,994	5,654
Raw Material Cost (On Cash) Rs.	4,866	4,732	4,540
Labor Cost Per Mond (Rs.)	240	240	213
Sale Price Per Unit (Rs.)	8,800	8,800	8,800

*\* Profitability of each option is calculated with certain assumptions and attached in annexures.*

### Per Year Fish Production of Different Scales of Fish Farms (in Monds)

**Table 3: Per Year Fish Production of Different Scales of Fish Farms (in Monds)**

Description	Total Farm Area (in Acres)	Rohu (Monds)	Thela (Monds)	Tilapia (Monds)	Total (Monds)
Small Farms	15	570	30		600
Medium Farms	40	1,520	80		1,600
Large Farms	70	2,993	95	63	3,150

*\*Based on primary data and industry practices*

## 7.1 Financing Needs for Working Capital Loan

Fisheries is the sub sector of agricultural. The agriculture produces like maize, barley, husk, wheat bran and seed cakes mixtures are used as a feed for fisheries. Whereas, fertilizers are used to maintain the oxygen levels and water culture. Availability of raw material and fertilizers is often uncertain and scarce due to price fluctuations and market hedge and control mechanisms. Majority of the fish growers purchase raw material on credit basis due to seasonal price hikes. During the surveys and in-depth discussions, it has been noted that there is a dire need of finances for farmers to purchase raw material on cash that can culminate the additional price hikes when purchasing on market credit terms. As per market practice, farmers are purchasing raw materials on 20-30 percent higher rates on credit terms. In order to extrapolate the cost comparison between traditional market credit terms and working capital from formal financial market, detailed profitability calculations are made using financial model.

As per the information collected from different sector stakeholders, small scale fish farms comprise of 50% (i.e. 1,387 farms) of total fish farms in south Punjab region. The medium and large fish farms' composition is 30% and 20% (i.e. 833 and 554 farms) respectively<sup>9</sup>. Thus, small fish farms capture the highest portion of the fish farm industry in South Punjab and have greater need for financing products that can fulfill their needs. Total financial requirements for working capital of the sector is 16,691 Million Rupees as shown in Table 4. Offering of short-term working capital loans by the commercial banks can facilitate the cluster and enhance its performance.

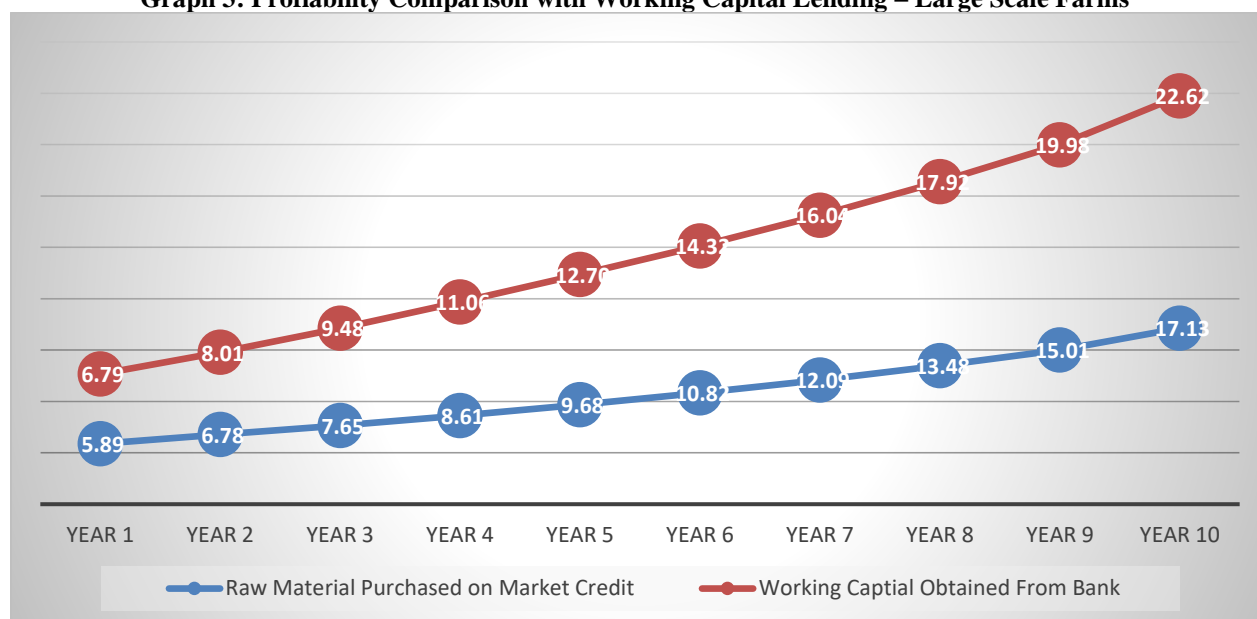
**Table 4: Total Financing Requirements of the Sector for Working Capital Loan (Rs. Million)**

Sector Category	No. of Fish Farms	Financing Requirements per Farm	Total Financing Requirement of Sector
Large Scale Farms (20%)	555	12.21	6,774.33
Medium Scale Farms (30%)	832	7.32	6,093.41
Small Scale Farms (50%)	1,387	2.76	3,823.96
<b>Total</b>	<b>2,774</b>		<b>16,691.70</b>

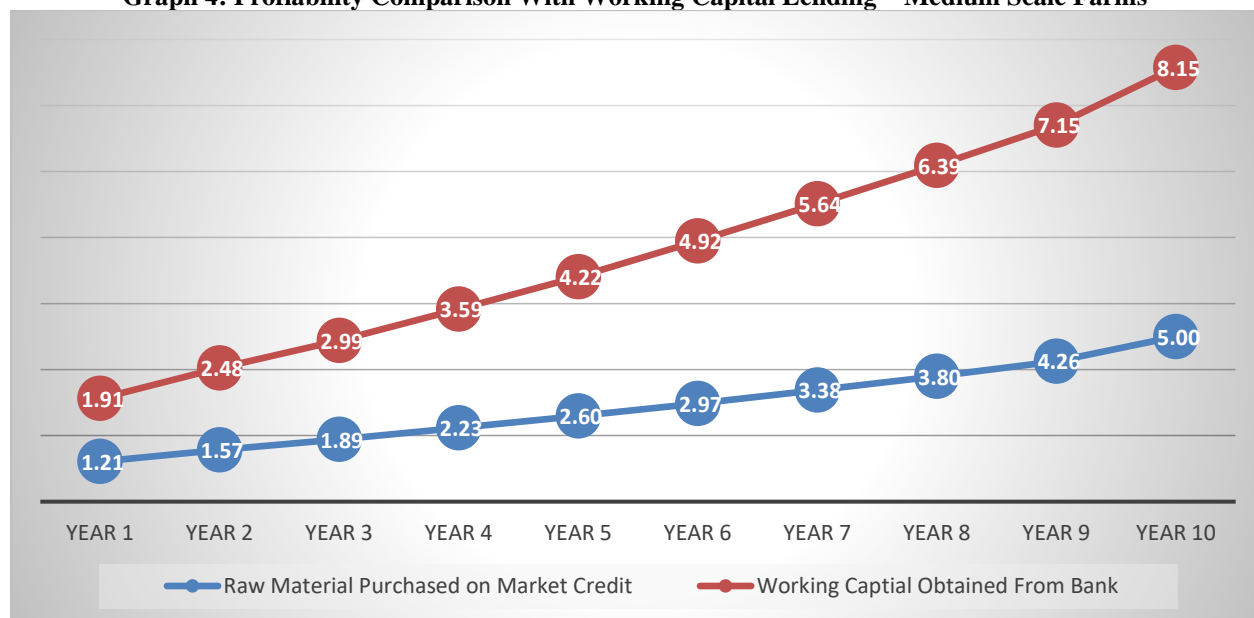
Profitability calculations show that the profit of large-scale farms can increase upto 23%<sup>10</sup> if working capital loan is provided to the large-scale farmers as shown in Graph 3 below.

<sup>9</sup> Information based on sector stakeholder from South Punjab

<sup>10</sup> Take average of the 10 years profit and calculate the profit for both options

**Graph 3: Profitability Comparison with Working Capital Lending – Large Scale Farms**

Return on Investment of Project is calculated at 4 years if working capital loan is provided to the medium size farms. While the project Return on Investment is 9 years if farmers continue to work on existing market credit terms. Profitability of medium size farms can be improved upto 39%<sup>7</sup> if working capital is provided by bank financing. Detailed chart is shown in Graph 4 below.

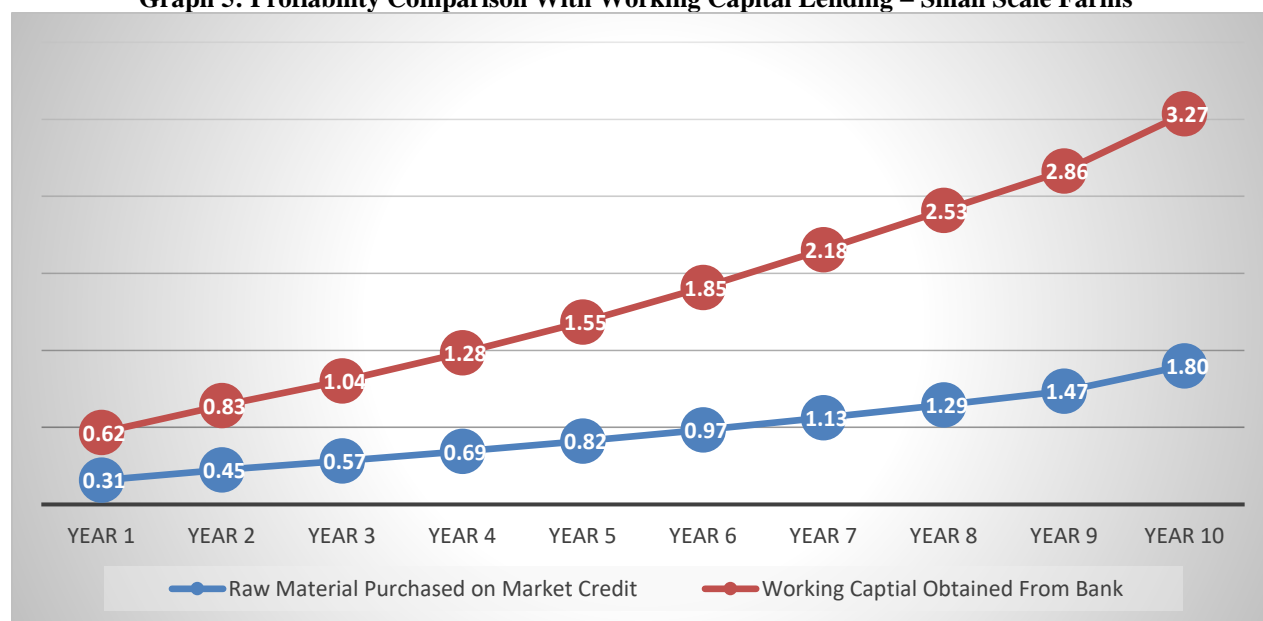
**Graph 4: Profitability Comparison With Working Capital Lending – Medium Scale Farms**

Profitability of small-scale farms can be increased upto 44%<sup>7</sup> if working capital financing is provided to farmers as shown in below Graph 5. Return on Investment of Project is calculated at



3 years if working capital loan provided to the medium size farms. While the project Return on Investment is 9.5 years if farmers continue to work on existing market credit terms.

**Graph 5: Profitability Comparison With Working Capital Lending – Small Scale Farms**



## 7.2 Financing Needs for Upgradation of Fish Farms to Renewable Energy

During the market survey, group discussions and interviews with sector stakeholders identified the need for conversion of fish farms to renewable energy resources and inclusion of aerator tubes for cost reduction and improved profits. Due to energy price hikes the profitability of fish farms is affected that results in inconsistent production levels. If renewable energy investments can be secured through different financial products the profitability of the farms can be improved. According to the data collected 5% further increase in profit margins can be gained if converted to renewable energy sources. Total financial requirements for renewable energy upgradation of the sector is 13,515 million rupees as shown in Table 5. Offering renewable energy upgradation financing by the commercial banks can facilitate the cluster and enhance its performance and improve environmental quality index of the region.

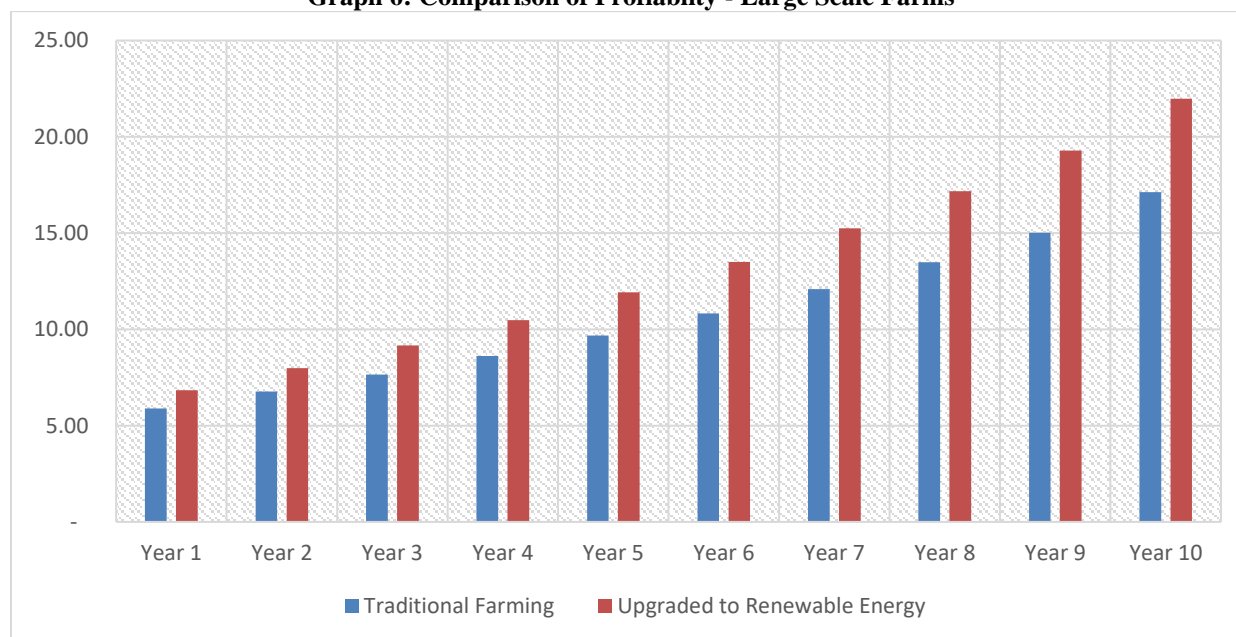
**Table 5: Total Financing Requirements of the Sector for Renewable Energy Upgradation (Rs. Million)**

Sector Category	No. of Fish Farms	Financing Need for Renewable Energy Upgradation per Farm	Total Financing Need for Renewable Energy Upgradation of Sector
Large Scale Farms (20%)	555	8.27	4,587.08
Medium Scale Farms (30%)	832	5.29	4,403.36
Small Scale Farms (50%)	1,387	3.26	4,525.40
<b>Total</b>	<b>2,774</b>		<b>13,515.83</b>



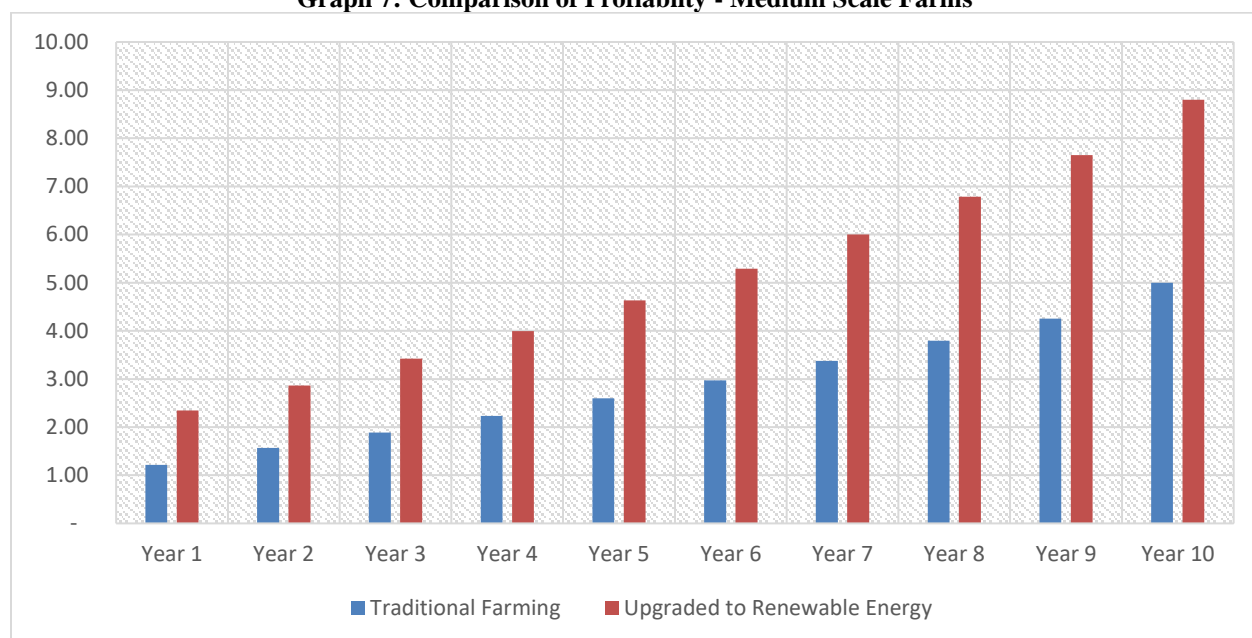
Calculations showed if large scale fish farms are converted to renewable energy sources, then profitability will increase upto 20% as compared to traditional profitability trend based on market credit as shown in the below Graph 6.

**Graph 6: Comparison of Profitability - Large Scale Farms**



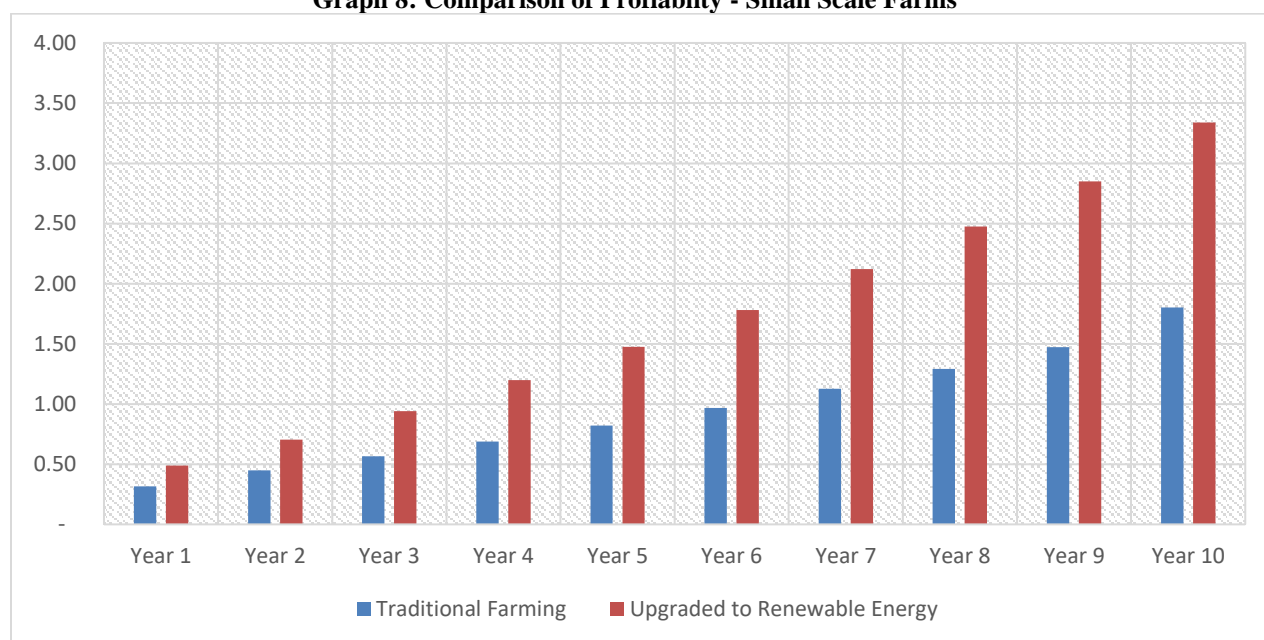
Medium scale fish farm profitability is shown in Graph 7 below which shows profit increase upto 44% if fish farms are converted into renewable energy means. The reason for increased profit is the greater margin of electricity costs in medium scale farms as compared to large scale fish farms.

**Graph 7: Comparison of Profitability - Medium Scale Farms**



Small fish farm has the most increased profitability on long term basis which is calculated to be 47% if renewable energy schemes are provided to them shown in Graph 8. The profitability is calculated taking the average of ten years net profits of the small fish farms. The greater profitability of small fish farms is due to the highest margin of electricity costs being incurred in traditional fish farming.

**Graph 8: Comparison of Profitability - Small Scale Farms**



## 8. Major Issues

Based on industry information some of the key problems faced are given below.

### 8.1 Access to Finance

Access to finance is key element for sustainable growth and development of the fish farming industry. According to SBP Prudential Regulations for Agriculture Financing, fish farming is included in non-farm credit financing. Financial regulator along with collaborative partners from research institutes relevant departments, agricultural associations and relevant stakeholders outlines the requisite limits for agriculture financing including non-farm credit facilities limits.

Fish farming in South Punjab region is being carried out on land with higher salinity tables and barren areas where other agriculture activities are not suitable. Most of the fish farms are constructed by acquiring the land on lease agreements ranging from 10 to 20 years on average. Due to this fish farming approach in the region the collateral requirements cannot be met through leased land agreements. Additionally, the value of barren land is very low as compared to collateral requirements for obtaining finances from financial markets

Fish farming in the region is carried out by traditional farming methods at large. There is no formal documentation and record keeping of the businesses with few exceptions. Due to traditional business approaches most of the fish farmers are not aware of the documentary requirements of the financial institutions. Undocumented business activities have limited their access to formal financing opportunities available through different banks.

### 8.2 Increase in Raw Material Prices and Free Market Forces

The study found disproportional price hikes in raw material. It has posed a greater threat to the fish farming sector in South Punjab. Especially, during the last three years the hegemonic prices hikes are very unrealistic and unparallel to selling prices of the fish products. Despite the increased prices the availability of raw material is uncertain. Due to inconsistent availability of raw material the production of fish is impacted at lower levels.

The price control mechanism in fish farming is not being managed by any central authority unlike chicken and beef markets. Due to decentralized sale pricing, due share is not transferred to the fish farmers. Local fish markets set the fish sale prices that do not reflect the proportional input costs burdens.

Generally, raw material of fish farming is procured on local-markets credit terms in fish farming sector of South Punjab. As per market prices the feed cost is charged upto 30-40% higher than the cash prices of raw materials. Agriculture produce like maize, barley, husk, wheat bran and seed cakes mixtures are used as a feed along with fertilizers to maintain the oxygen levels and water culture. Due to seasonality of raw material the credit terms are charged at very high rate. Due to higher costs of market credit the Return on Investment (ROI) is increased upto 9 years that is far more than industry ROI benchmark which is 3 to 4 years at average.

### 8.3 Gaps in Industry & Academia Linkages

Fish farming in the region is mainly being carried out on traditional farming methods. The technological advancements in the sector in all over the world has given boost to new technologies and approaches of fish farming. The farmer in the South Punjab region is reluctant to adopt new technologies and advanced methods of fish farming. Production levels of fish farming with improved technology and methods increase two to three times as compared to traditional fish farming. Few exceptional examples of technological advancement and value chain addition exist in south Punjab including Punjab IPRS Farms, and Tawakkal Fish Hatcheries and Farms. They have adopted new technologies and advance methods of fish farming like In Pond Race Way System (IPRS) and Bio-Flock Fish Farming.

Despite success stories in implementation of advanced methods of fish farming, over all culture of fish farming is not adaptive towards advanced methods. Therefore, lack of financial resources, risk averse behaviors of farmers and lack of knowledge of new technologies and advanced methods are main constraint to development of fish farming industry in the South Punjab.

In recent developments, academia has come a step further to join hands with fish farming industry. Most notably, Muhammad Nawaz Sharif University of Agriculture Multan (MNSUAM) is working on advance researched approaches of fish farming and bringing them into the region. Successful projects of Bio-Flock Technology and IPRS system are already launched by MNSUAM and they are providing technical assistance on development Bio-flock fish farming on commercial levels. A number of memorandums of understanding and memorandum of cooperation have been signed for further linkages with the industry.

## 9. Recommendations

Finances are the backbone of the industry. Based on the findings from the study the financial needs of the fish farming industry may be matched by introducing dedicated financial products and different programs to educate farmers to develop financial records consistently for better financial assessment by banks / FIs. Following are the recommendations based on findings of financial needs of industry

- Special financial schemes and products may be introduced by the Government through financial institutions to allow the fish growers to obtain finance at subsidized interest rates with simplified document requirement.
- Industries may be provided guidance on Islamic mode of financing and grant of financing facilities with easier collateral requirement. Moreover, financing programs may be introduced to facilitate upgrading farms to renewable energy sources with easy terms of payback and collateral requirements.
- The gap between fish farmers and financial institutions can be decreased by providing guidance and encouraging fish farmers to adopt the best business management practices that will result in better understanding of business and availing financial products from formal financial markets.

Price distortions is the foremost reason for inadequate performance in fish farming in terms of productivity and growth. The Price Control and Anti-Profiteering Act 2020 is promulgated across Punjab. It should be implemented across the board and especially in remote areas where

grain markets are not centralized. Below are few suggestions that can be considered for controlling the prices of raw material in the region.

- Government may develop centralized mechanism to open and close the market prices of different raw materials.
- Production costs of fertilizers and seed of raw material to be monitored strictly to control rapid price changes
- Different price control mechanisms are put in place by the Government. However, price policy reforms alone would be insufficient for the development of this sector without improving the quality of locally available seed and feed.

Despite large scale production of fish in the region, the fish products value chain is not developed on commercial levels in the region. The fish is directly supplied to local fish markets from where it is distributed to ultimate consumers. Due to shorter shelf life of fish, it is need of the hour to process the fish and fish by products to enhance the shelf life of the fish products. It will increase levels of fish consumption and demand leading to sustainable growth of industry in the region. Following recommendations can further improve the situation in this regard:

- Provision and establishment of customized storage facility in the region to store fish and fish products to increase their shelf life.
- Proper research and development on fish by-products may be initiated and disseminated to investors and farmers for value addition and increased profitability.
- Different inter-firm linkages and networking platform may be established for better coordination and improved forward and backward linkages for enhanced business activities in the sector.

## 10. Annexures\*

### 10.1 Profitability if Working Capital is Provided Through Bank - Large Farms

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
	Rs. in actuals									
Revenue	31,182,401	34,303,500	37,733,850	41,507,235	45,657,959	50,223,754	55,246,130	60,770,743	66,847,817	73,532,599
Cost of goods sold	16,477,759	18,126,955	19,939,651	21,933,616	24,126,977	26,539,675	29,193,642	32,113,007	35,324,307	38,856,738
Gross Profit	14,704,642	16,176,545	17,794,200	19,573,619	21,530,981	23,684,080	26,052,487	28,657,736	31,523,510	34,675,861
<i>General administration &amp; selling expenses</i>										
Rental expense	3,500,000	3,500,000	3,500,000	3,500,000	3,500,000	3,500,000	3,500,000	3,500,000	3,500,000	3,500,000
Promotional expense	15,591	14,032	12,629	11,366	10,229	9,206	8,286	7,457	6,712	6,040
Professional fees (legal, audit, etc.)	77,956	85,759	94,335	103,768	114,145	125,559	138,115	151,927	167,120	183,831
Depreciation expense	100,500	100,500	100,500	100,500	100,500	102,434	102,434	102,434	102,434	102,434
Miscellaneous expense	31,182	34,304	37,734	41,507	45,658	50,224	55,246	60,771	66,848	73,533
Subtotal	3,725,230	3,734,594	3,745,197	3,757,141	3,770,532	3,787,424	3,804,081	3,822,589	3,843,113	3,865,838
Operating Income	10,979,413	12,441,951	14,049,002	15,816,478	17,760,449	19,896,656	22,248,406	24,835,147	27,680,397	30,810,022
Other income	65,028	156,211	260,162	379,753	556,434	786,901	1,067,730	1,372,946	1,702,725	2,632,589
Earnings Before Interest & Taxes	11,044,440	12,598,162	14,309,164	16,196,231	18,330,883	20,683,557	23,316,137	26,208,093	29,383,122	33,442,611
Interest expense	1,956,296	1,636,400	1,085,539	528,001	153,517	-	-	-	-	-
Earnings Before Tax	9,088,144	10,961,762	13,223,625	15,668,230	18,177,365	20,683,557	23,316,137	26,208,093	29,383,122	33,442,611
Tax	2,300,850	2,956,616	3,748,269	4,603,880	5,482,078	6,359,245	7,280,647	8,292,832	9,404,092	10,824,914
<b>NET PROFIT/(LOSS) AFTER TAX</b>	<b>6,787,294</b>	<b>8,005,146</b>	<b>9,475,357</b>	<b>11,064,350</b>	<b>12,695,288</b>	<b>14,324,312</b>	<b>16,035,489</b>	<b>17,915,261</b>	<b>19,979,030</b>	<b>22,617,698</b>

- The Assumptions are as follows;
- Growth in Sale for Large, Medium and Small Agriculture Implements are assumed at 10%.
- Sale Price, Raw Material Purchase Price, Labor Wages and Electricity Cost Growth rate is assumed at 10%.
- Depreciation is calculated on Straight Line Method at the rate of 10%.
- Tax is calculated as per FBR's AoP Slabs.

**10.2 Profitability if Raw Material is Purchased On Credit - Large Farms**

	Rs. in actuals									
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Revenue	31,182,401	34,303,500	37,733,850	41,507,235	45,657,959	50,223,754	55,246,130	60,770,743	66,847,817	73,532,599
Cost of goods sold	19,987,967	21,988,505	24,187,356	26,606,091	29,266,700	32,193,370	35,412,707	38,953,978	42,849,376	47,134,313
Gross Profit	11,194,435	12,314,995	13,546,495	14,901,144	16,391,258	18,030,384	19,833,423	21,816,765	23,998,441	26,398,285
<i>General administration &amp; selling expenses</i>										
Rental expense	3,500,000	3,500,000	3,500,000	3,500,000	3,500,000	3,500,000	3,500,000	3,500,000	3,500,000	3,500,000
Promotional expense	15,591	14,032	12,629	11,366	10,229	9,206	8,286	7,457	6,712	6,040
Professional fees (legal, audit, etc.)	77,956	85,759	94,335	103,768	114,145	125,559	138,115	151,927	167,120	183,831
Depreciation expense	100,500	100,500	100,500	100,500	100,500	102,434	102,434	102,434	102,434	102,434
Miscellaneous expense	31,182	34,304	37,734	41,507	45,658	50,224	55,246	60,771	66,848	73,533
Subtotal	3,725,230	3,734,594	3,745,197	3,757,141	3,770,532	3,787,424	3,804,081	3,822,589	3,843,113	3,865,838
Operating Income	7,469,205	8,580,401	9,801,297	11,144,003	12,620,726	14,242,961	16,029,341	17,994,176	20,155,329	22,532,447
Other income	234,559	491,986	618,676	754,274	900,304	1,056,710	1,223,035	1,397,409	1,577,757	2,467,467
Earnings Before Interest & Taxes	7,703,764	9,072,386	10,419,973	11,898,277	13,535,030	15,299,671	17,252,376	19,391,585	21,733,086	24,999,914
Interest expense	-	-	-	-	-	-	-	-	-	-
Earnings Before Tax	7,703,764	9,072,386	10,419,973	11,898,277	13,535,030	15,299,671	17,252,376	19,391,585	21,733,086	24,999,914
Tax	1,816,317	2,295,335	2,766,990	3,284,396	3,857,260	4,474,884	5,158,331	5,907,054	6,726,580	7,869,970
<b>NET PROFIT/(LOSS) AFTER TAX</b>	<b>5,887,447</b>	<b>6,777,052</b>	<b>7,652,983</b>	<b>8,613,880</b>	<b>9,677,770</b>	<b>10,824,786</b>	<b>12,094,045</b>	<b>13,484,530</b>	<b>15,006,506</b>	<b>17,129,945</b>

### 10.3 Profitability if Upgraded to Renewable Energy - Large Farms

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
	Rs. in actuals									
Revenue	31,182,401	34,303,500	37,733,850	41,507,235	45,657,959	50,223,754	55,246,130	60,770,743	66,847,817	73,532,599
Cost of goods sold	16,696,609	18,367,690	20,204,459	22,224,905	24,447,395	26,892,135	29,581,348	32,539,483	35,793,432	39,372,775
Gross Profit	14,485,792	15,935,810	17,529,391	19,282,330	21,210,563	23,331,619	25,664,781	28,231,259	31,054,385	34,159,824
<i>General administration &amp; selling expenses</i>										
Rental expense	3,500,000	3,500,000	3,500,000	3,500,000	3,500,000	3,500,000	3,500,000	3,500,000	3,500,000	3,500,000
Promotional expense	15,591	14,032	12,629	11,366	10,229	9,206	8,286	7,457	6,712	6,040
Professional fees (legal, audit, etc.)	77,956	85,759	94,335	103,768	114,145	125,559	138,115	151,927	167,120	183,831
Miscellaneous expense	31,182	34,304	37,734	41,507	45,658	50,224	55,246	60,771	66,848	73,533
Subtotal	4,454,730	4,464,094	4,474,697	4,486,641	4,500,032	4,516,924	4,533,581	4,552,089	4,572,613	4,595,338
Operating Income	10,031,063	11,471,716	13,054,694	14,795,689	16,710,531	18,814,696	21,131,200	23,679,171	26,481,773	29,564,486
Other income	227,274	489,722	665,091	857,908	1,070,835	1,305,122	1,561,816	1,840,777	2,141,933	3,042,223
Earnings Before Interest & Taxes	10,258,336	11,961,437	13,719,785	15,653,597	17,795,366	20,119,818	22,693,016	25,519,948	28,623,706	32,606,709
Interest expense	1,100,967	1,041,204	973,108	895,516	807,104	706,362	591,572	460,775	311,738	141,918
Earnings Before Tax	9,157,369	10,920,233	12,746,677	14,758,081	16,988,262	19,413,456	22,101,444	25,059,173	28,311,968	32,464,791
Tax	2,325,079	2,942,081	3,581,336	4,285,328	5,065,892	5,914,709	6,855,505	7,890,710	9,029,188	10,482,676
<b>NET PROFIT/(LOSS) AFTER TAX</b>	<b>6,832,290</b>	<b>7,978,152</b>	<b>9,165,340</b>	<b>10,472,753</b>	<b>11,922,371</b>	<b>13,498,747</b>	<b>15,245,939</b>	<b>17,168,463</b>	<b>19,282,779</b>	<b>21,982,114</b>



**10.4 Profitability if Working Capital is Provided Through Bank – Medium Farms**

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
	Rs. in actuals									
Revenue	14,078,827	15,488,000	17,036,800	18,740,480	20,614,528	22,675,981	24,943,579	27,437,937	30,181,730	33,199,903
Cost of goods sold	8,749,772	9,625,506	10,588,057	11,646,862	12,811,548	14,092,703	15,501,974	17,052,171	18,757,388	20,633,127
Gross Profit	5,329,054	5,862,494	6,448,743	7,093,618	7,802,980	8,583,277	9,441,605	10,385,766	11,424,342	12,566,777
<i>General administration &amp; selling expenses</i>										
Rental expense	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000
Promotional expense	7,039	6,335	5,702	5,132	4,619	4,157	3,741	3,367	3,030	2,727
Professional fees (legal, audit, etc.)	35,197	38,720	42,592	46,851	51,536	56,690	62,359	68,595	75,454	83,000
Depreciation expense	64,700	64,700	64,700	64,700	64,700	64,838	64,838	64,838	64,838	64,838
Miscellaneous expense	14,079	15,488	17,037	18,740	20,615	22,676	24,944	27,438	30,182	33,200
Subtotal	2,121,015	2,125,243	2,130,031	2,135,423	2,141,469	2,148,361	2,155,882	2,164,238	2,173,504	2,183,765
Operating Income	3,208,039	3,737,251	4,318,713	4,958,194	5,661,510	6,434,917	7,285,724	8,221,528	9,250,838	10,383,012
Other income	37,941	43,837	74,072	109,656	150,333	196,466	247,519	317,123	401,386	806,696
Earnings Before Interest & Taxes	3,245,980	3,781,087	4,392,785	5,067,850	5,812,843	6,631,383	7,533,243	8,538,651	9,652,224	11,189,708
Interest expense	1,129,004	969,330	912,708	762,567	615,370	408,344	204,163	63,857	-	-
Earnings Before Tax	2,116,976	2,811,757	3,480,077	4,305,283	5,197,473	6,223,039	7,329,080	8,474,794	9,652,224	11,189,708
Tax	207,546	332,351	490,019	711,585	979,242	1,298,063	1,685,178	2,086,178	2,498,278	3,036,397
<b>NET PROFIT/(LOSS) AFTER TAX</b>	<b>1,909,430</b>	<b>2,479,406</b>	<b>2,990,058</b>	<b>3,593,698</b>	<b>4,218,231</b>	<b>4,924,976</b>	<b>5,643,902</b>	<b>6,388,617</b>	<b>7,153,946</b>	<b>8,153,310</b>

**10.5 Profitability if Raw Material is Purchased On Credit – Medium Farms**

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Rs. in actuals Year 10
Revenue	14,078,827	15,488,000	17,036,800	18,740,480	20,614,528	22,675,981	24,943,579	27,437,937	30,181,730	33,199,903
Cost of goods sold	10,768,404	11,846,186	13,030,805	14,333,885	15,767,274	17,344,001	19,078,401	20,986,241	23,084,865	25,393,352
Gross Profit	3,310,423	3,641,814	4,005,995	4,406,595	4,847,254	5,331,980	5,865,178	6,451,696	7,096,865	7,806,552
<i>General administration &amp; selling expenses</i>										
Rental expense	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000
Promotional expense	7,039	6,335	5,702	5,132	4,619	4,157	3,741	3,367	3,030	2,727
Professional fees (legal, audit, etc.)	35,197	38,720	42,592	46,851	51,536	56,690	62,359	68,595	75,454	83,000
Depreciation expense	64,700	64,700	64,700	64,700	64,700	64,838	64,838	64,838	64,838	64,838
Miscellaneous expense	14,079	15,488	17,037	18,740	20,615	22,676	24,944	27,438	30,182	33,200
Subtotal	2,121,015	2,125,243	2,130,031	2,135,423	2,141,469	2,148,361	2,155,882	2,164,238	2,173,504	2,183,765
Operating Income	1,189,407	1,516,571	1,875,965	2,271,172	2,705,785	3,183,619	3,709,296	4,287,458	4,923,361	5,622,787
Other income	110,051	202,190	217,857	234,107	251,776	270,178	289,099	308,285	327,521	716,708
Earnings Before Interest & Taxes	1,299,459	1,718,761	2,093,822	2,505,278	2,958,561	3,453,797	3,998,395	4,595,742	5,250,882	6,339,494
Interest expense	-	-	-	-	-	-	-	-	-	-
Earnings Before Tax	1,299,459	1,718,761	2,093,822	2,505,278	2,958,561	3,453,797	3,998,395	4,595,742	5,250,882	6,339,494
Tax	84,919	147,814	204,073	271,056	361,712	483,449	619,599	798,723	995,264	1,338,823
<b>NET PROFIT/(LOSS) AFTER TAX</b>	<b>1,214,540</b>	<b>1,570,947</b>	<b>1,889,749</b>	<b>2,234,223</b>	<b>2,596,849</b>	<b>2,970,348</b>	<b>3,378,797</b>	<b>3,797,020</b>	<b>4,255,617</b>	<b>5,000,672</b>

## 10.6 Profitability if Upgraded to Renewable Energy – Medium Farms

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
	Rs. in actuals									
Revenue	14,078,827	15,488,000	17,036,800	18,740,480	20,614,528	22,675,981	24,943,579	27,437,937	30,181,730	33,199,903
Cost of goods sold	8,209,269	9,030,890	9,933,979	10,927,377	12,020,115	13,222,126	14,544,339	15,998,773	17,598,650	19,358,515
Gross Profit	5,869,558	6,457,110	7,102,821	7,813,103	8,594,413	9,453,855	10,399,240	11,439,164	12,583,081	13,841,389
<i>General administration &amp; selling expenses</i>										
Rental expense	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000
Promotional expense	7,039	6,335	5,702	5,132	4,619	4,157	3,741	3,367	3,030	2,727
Professional fees (legal, audit, etc.)	35,197	38,720	42,592	46,851	51,536	56,690	62,359	68,595	75,454	83,000
Depreciation expense	529,500	529,500	529,500	529,500	529,500	529,638	529,638	529,638	529,638	529,638
Miscellaneous expense	14,079	15,488	17,037	18,740	20,615	22,676	24,944	27,438	30,182	33,200
Subtotal	2,585,815	2,590,043	2,594,831	2,600,223	2,606,269	2,613,161	2,620,682	2,629,038	2,638,304	2,648,565
Operating Income	3,283,742	3,867,067	4,507,990	5,212,880	5,988,144	6,840,694	7,778,559	8,810,126	9,944,776	11,192,824
Other income	65,338	114,019	173,358	239,585	313,433	394,548	482,226	575,925	675,008	1,086,332
Earnings Before Interest & Taxes	3,349,080	3,981,086	4,681,348	5,452,464	6,302,577	7,235,242	8,260,784	9,386,051	10,619,785	12,279,155
Interest expense	705,005	666,736	623,131	573,444	516,829	452,320	378,814	295,058	199,622	90,877
Earnings Before Tax	2,644,075	3,314,350	4,058,218	4,879,020	5,785,748	6,782,922	7,881,971	9,090,993	10,420,163	12,188,278
Tax	298,815	448,587	637,465	883,706	1,155,724	1,494,023	1,878,689	2,301,847	2,767,057	3,385,897
<b>NET PROFIT/(LOSS) AFTER TAX</b>	<b>2,345,260</b>	<b>2,865,762</b>	<b>3,420,752</b>	<b>3,995,314</b>	<b>4,630,023</b>	<b>5,288,900</b>	<b>6,003,281</b>	<b>6,789,146</b>	<b>7,653,106</b>	<b>8,802,381</b>

**10.7 Profitability if Working Capital is Provided Through Bank – Small Farms**

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
	Rs. in actuals									
Revenue	5,279,560	5,808,000	6,388,800	7,027,680	7,730,448	8,503,493	9,353,842	10,289,226	11,318,149	12,449,964
Cost of goods sold	3,423,935	3,766,620	4,143,282	4,557,610	5,013,371	5,514,708	6,066,179	6,672,797	7,340,077	8,074,084
Gross Profit	1,855,625	2,041,380	2,245,518	2,470,070	2,717,077	2,988,784	3,287,663	3,616,429	3,978,072	4,375,879
<i>General administration &amp; selling expenses</i>										
Rental expense	750,000	750,000	750,000	750,000	750,000	750,000	750,000	750,000	750,000	750,000
Promotional expense	2,640	2,376	2,138	1,924	1,732	1,559	1,403	1,263	1,136	1,023
Professional fees (legal, audit, etc.)	13,199	14,520	15,972	17,569	19,326	21,259	23,385	25,723	28,295	31,125
Depreciation expense	31,750	31,750	31,750	31,750	31,750	31,819	31,819	31,819	31,819	31,819
Miscellaneous expense	5,280	5,808	6,389	7,028	7,730	8,503	9,354	10,289	11,318	12,450
Subtotal	802,868	804,454	806,249	808,271	810,539	813,140	815,960	819,094	822,569	826,417
Operating Income	1,052,756	1,236,926	1,439,269	1,661,799	1,906,538	2,175,644	2,471,702	2,797,335	3,155,503	3,549,463
Other income	13,041	14,417	24,746	37,302	52,095	69,400	89,282	114,277	146,125	305,355
Earnings Before Interest & Taxes	1,065,798	1,251,343	1,464,015	1,699,100	1,959,134	2,245,044	2,560,984	2,911,613	3,301,628	3,854,818
Interest expense	430,908	379,690	366,688	318,707	269,927	196,718	120,834	42,379	-	-
Earnings Before Tax	634,889	871,653	1,097,327	1,380,394	1,689,206	2,048,326	2,440,151	2,869,234	3,301,628	3,854,818
Tax	13,489	37,165	59,733	97,059	143,381	197,249	258,030	343,847	445,407	583,705
<b>NET PROFIT/(LOSS) AFTER TAX</b>	<b>621,400</b>	<b>834,488</b>	<b>1,037,594</b>	<b>1,283,335</b>	<b>1,545,825</b>	<b>1,851,077</b>	<b>2,182,121</b>	<b>2,525,387</b>	<b>2,856,221</b>	<b>3,271,114</b>

**10.8 Profitability if Raw Material is Purchased on Credit – Small Farms**

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
	Rs. in actuals									
Revenue	5,279,560	5,808,000	6,388,800	7,027,680	7,730,448	8,503,493	9,353,842	10,289,226	11,318,149	12,449,964
Cost of goods sold	4,203,121	4,623,795	5,086,175	5,594,792	6,154,271	6,769,698	7,446,668	8,191,335	9,010,468	9,911,515
Gross Profit	1,076,440	1,184,205	1,302,626	1,432,888	1,576,177	1,733,795	1,907,174	2,097,891	2,307,681	2,538,449
<i>General administration &amp; selling expenses</i>										
Rental expense	750,000	750,000	750,000	750,000	750,000	750,000	750,000	750,000	750,000	750,000
Promotional expense	2,640	2,376	2,138	1,924	1,732	1,559	1,403	1,263	1,136	1,023
Professional fees (legal, audit, etc.)	13,199	14,520	15,972	17,569	19,326	21,259	23,385	25,723	28,295	31,125
Depreciation expense	31,750	31,750	31,750	31,750	31,750	31,819	31,819	31,819	31,819	31,819
Miscellaneous expense	5,280	5,808	6,389	7,028	7,730	8,503	9,354	10,289	11,318	12,450
Subtotal	802,868	804,454	806,249	808,271	810,539	813,140	815,960	819,094	822,569	826,417
Operating Income	273,571	379,751	496,376	624,617	765,638	920,654	1,091,214	1,278,797	1,485,112	1,712,032
Other income	41,206	72,536	78,535	84,642	91,118	97,863	104,845	111,890	118,886	277,879
Earnings Before Interest & Taxes	314,777	452,288	574,911	709,259	857,257	1,018,517	1,196,059	1,390,688	1,603,998	1,989,911
Interest expense	-	-	-	-	-	-	-	-	-	-
Earnings Before Tax	314,777	452,288	574,911	709,259	857,257	1,018,517	1,196,059	1,390,688	1,603,998	1,989,911
Tax	-	2,614	8,746	20,926	35,726	51,852	69,606	98,603	130,600	188,487
<b>NET PROFIT/(LOSS) AFTER TAX</b>	314,777	449,673	566,166	688,333	821,531	966,666	1,126,453	1,292,085	1,473,398	1,801,424

**10.9 Profitability if Upgraded to Renewable Energy – Small Farms**

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
	Rs. in actuals									
Revenue	5,279,560	5,808,000	6,388,800	7,027,680	7,730,448	8,503,493	9,353,842	10,289,226	11,318,149	12,449,964
Cost of goods sold	3,257,232	3,583,223	3,941,545	4,335,699	4,769,269	5,246,196	5,770,816	6,347,897	6,982,687	7,680,956
Gross Profit	2,022,328	2,224,778	2,447,255	2,691,981	2,961,179	3,257,297	3,583,026	3,941,329	4,335,462	4,769,008
<i>General administration &amp; selling expenses</i>										
Rental expense	750,000	750,000	750,000	750,000	750,000	750,000	750,000	750,000	750,000	750,000
Promotional expense	2,640	2,376	2,138	1,924	1,732	1,559	1,403	1,263	1,136	1,023
Professional fees (legal, audit, etc.)	13,199	14,520	15,972	17,569	19,326	21,259	23,385	25,723	28,295	31,125
Depreciation expense	326,000	326,000	326,000	326,000	326,000	326,069	326,069	326,069	326,069	326,069
Amortization expense	795	795	795	795	795	-	-	-	-	-
Miscellaneous expense	5,280	5,808	6,389	7,028	7,730	8,503	9,354	10,289	11,318	12,450
Subtotal	1,097,913	1,099,499	1,101,294	1,103,316	1,105,583	1,107,390	1,110,210	1,113,344	1,116,819	1,120,667
Operating Income	924,415	1,125,279	1,345,961	1,588,665	1,855,595	2,149,907	2,472,816	2,827,985	3,218,643	3,648,342
Other income	22,927	35,219	49,258	66,408	87,002	111,031	138,567	169,334	202,741	357,017
Earnings Before Interest & Taxes	947,342	1,160,498	1,395,219	1,655,072	1,943,098	2,260,938	2,611,383	2,997,319	3,421,384	4,005,358
Interest expense	454,985	433,508	405,156	372,851	336,040	294,096	246,303	191,845	129,793	59,088
Earnings Before Tax	492,357	726,990	990,063	1,282,222	1,607,058	1,966,842	2,365,080	2,805,475	3,291,591	3,946,270
Tax	4,618	22,699	49,006	82,333	131,059	185,026	244,762	331,095	442,898	606,568
<b>NET PROFIT/(LOSS) AFTER TAX</b>	<b>487,739</b>	<b>704,291</b>	<b>941,056</b>	<b>1,199,888</b>	<b>1,475,999</b>	<b>1,781,816</b>	<b>2,120,318</b>	<b>2,474,380</b>	<b>2,848,694</b>	<b>3,339,703</b>