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**Feasibility Study
on
Bamboo Furniture and GTH Making**

Submitted to the

**Upland Development Programme
in Southern Mindanao (UDP)**

EXECUTIVE SUMMARY

'Bamboo, n., any of the various mostly tropical grasses of the genus Bambusa, Arundinaria, and Dendrocalamus, having hard-walled stems with ringed joints.'

Comparable to coconut, bamboo indeed, is so versatile because of its various uses. From the lowly toothpick to building and housing materials as planks, panels, parquet, fences, stairs, etc. And who has not heard of bamboo as food, pulp and paper, musical instruments, chopsticks, hats, bags, baskets, fans and interior decors? Not just one of the most useful plants, bamboo is also one of the most beautiful plants with its various colors, sizes and naturally artistic culms' formations.

The project, recognizing the economic potentials of bamboo, will embark on a scale-up production of bamboo furniture and gifts, toys and housewares (GTH).

The project will be called FERDUAN BAMBOO CRAFTS and CREATIONS (FBCC), and shall be located at Tantangan, South Cotabato.

MARKET STUDY

Sans the required data, the study proved that there is in fact a sizeable market for bamboo furniture and GTH. The project proposes to target 3 market clusters, focusing on the Class A-D income earners and institutional buyers.

Current trends, new product designs, the re-opening of the BIMP-EAGA and stricter government regulations imposed on the utilization of woods and rattan, gave bamboo-based furniture a better edge ever than before. There are plenty of existing bamboo furniture makers but product quality, variety and durability is still very much wanting. These are among the production areas that the Association may be able to build on, and develop their own niche. A check on several suppliers proved the group's selling price as very competitive.

Market opportunities may be best exploit by the Association through linkage building with existing market players, both local and international. In Region XI and XII, some of the export market players, which the group could tap for possible partnerships, are the following companies, (DIPC):

1. Bell Wood Products, Inc. – Davao City
2. J and F Bro. Hwa United Ind. – Davao City

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3. Pan Oceanic Furniture – Davao City
 4. Davao ESP Resources – Davao City
 5. South Sea Ind. – Davao City
 6. ECS Bamboo Expression – Malungon

Promotional activities must be done in an aggressive pace. Selling may also be briskly boosted through a commissioning system and the putting up of a showroom at the center of Tantangan. The group may also arrange with big department of furniture stores for a display agreement.

TECHNICAL STUDY

The project will use two types of bamboo, i.e., 'bayog' and 'kawayang tinik'. These are the best if not the better types of bamboo used for furniture making. 'Bayog' is better known for its beautifully formed culms, while kawayang tinik has the bigger culms. All these are grown abundantly in the area, hence, supply is assured. All other supplies and materials needed for the production are locally available and relatively cheap.

Designs and structures of bamboo furniture produced by the group are far more elegant and durable compared to those being offered in the market. Skills required is available as 17 out of the 20 existing bamboo furniture makers of the Association have been trained by TESDA and the Product Design Center of the Philippines.

The production proposed under this study is of collective type. However, if the group chooses to continue their current practice of producing furniture at their individual houses, this still could be done. Should the group opt for the establishment of the showroom, the amount appropriated for the building and facilities investments may be used. This way, the financial requirement of the project will still be maintained.

FINANCIAL STUDY

Financial and Market assumptions made under this study were believed to have been more than conservative. This was purposely done due to the lack of actual data coming from the area. However, even with this constraint, the financial statements and financial analysis of the project proved a very promising future for the project.

The project has an ROI of 34.4% and a cash payback period of 2 years and 10 months.

SOCIO-ECONOMIC STUDY

The proposed project, being located in the countryside, is expected to perk-up economic activities in the area. A total of 20 people will be directly employed by the project. It is likewise expected to generate indirect employment for 100 more people within and/or outside the area.

The direct labor cost of the project is estimated at 25% of the production cost. For year 1 alone, an estimated income of PhP 291,577.50 is expected to be derived from the project and will go to the 20 people employed by it.

Although not much during the first 3 years, should the project become more economically viable, its contribution to the local government through its taxes, will likewise increase.

ORGANIZATION AND MANAGEMENT STUDY

The Ferduan Upland Community Association, which is still on the process of registering the group to SEC, will manage the project. It would have been better if the group will be registered as a cooperative for it to be able to avail of the advantages of being a cooperative.

People needed for the project are readily available within the Association. From the 20 members, 17 are all skilled bamboo furniture makers, while 3 are semi-skilled.

Capability building support to strengthen the management skills of the Association should be a concern to reckon with.

1.0 MARKETING ASPECT

1.1 Product Description

The project, complimenting the existing production of the Association, will scale up the production of its bamboo-based furniture, gifts, toys and house wares (GTH). Except for the leaves, bamboo culms and rhizomes will be among the major materials to be used. Rattan splits and poles, as ties and sliders respectively, will lend accent to the products. Specifically, the products that the project will produce are as follows:

1.1 Sala sets, which are of three (3) types:

- **Majestic**, consisting of a 7-piece ensemble of (1) couch, (1) sofa, (2) single chairs, (1) center table and (2) foot comforters.
- **Imperial**, consisting of a 4-unit ensemble of (1) sofa, (2) single chairs and (1) center table
- **Classic**, a low-cost 6-piece ensemble of (1) sofa, (4) single chairs and (1) center table

1.2 Dining sets, which are of three (3) types:

- **Armada**, a 10-seater ensemble of (10) "Oriental" high-back chairs and (1) oval-shaped table
- **Flotilla**, a 6-seater ensemble of (6) "Oriental" high-back chairs and (1) oval-shaped table
- **Company**, a 4-seater ensemble of (4) "Oriental" high-back chairs and (1) square-shaped table

1.3 Bedroom sets, which are of three (3) types:

- **Presidential**, consisting of (1) bed with (2) side tables
- **Executive Double**
- **Executive Single**

All beds are designed with artistic headboards, having frames made of solid bamboo and mattress platforms made of bamboo splits.

1.4 Other **Gifts, Toys and Housewares**, to include dividers, corner stands, lampshades, door lamps, and trays.

All of the above products may be finished with natural colors or other bright or dark colors depending on the choice or preference of the prospective buyers.

1.2 Comparison of Product with its Competitors

There are about fifteen (15) individual bamboo furniture producers operating within the Municipality of Tantaran. These producers however, limit their production to beds and sala sets only, designed for the class D-E income earners. (For the purposes of this study, Class D income-earners are defined as those earning a regular monthly income of less than PhP 5,000.00, while Class E earners are those earning an average monthly income of less than PhP 5,000.00 but has no permanent sources of income, i.e., seasonal laborers, contractuels, carpenters, etc.).

In the nearby Cities of Koronadal (South Cotabato) and Tacurong (Sultan Kudarat), among the possible target market outlets of the project, there are other producers of furniture that are steel, wood, rattan and bamboo-based too. Added to these is the proliferation of plastic-based furniture sold in big department stores and in every nook of the local markets.

Of the locally available furniture, those of rattan, wood and plastic-based provide the most competition to bamboo-based. However, the wood and rattan-based furniture are becoming more and more expensive brought about by the stricter laws imposed by the Government in their utilization. The plastic-based on the other hand, are relatively cheap but has problems in durability and presentation. When broken, these can hardly be repaired. They also look so clinical and wanting with elegance.

As to product pricing, the project can also offer very competitive figures as shown on the table under 4.3 Product Price.

Even with the existing competition, the project envisions to offer a product that combines elegance, comfort, variety, durability and affordability. The project shall endeavor to offer products which are far more durable, presentable and have better export quality features than those of the competitors' products. With this in mind, the project hopes to create its own niche in the furniture making industry in this part of the country.

1.3 Price Study

According to first hand information, the selling price of bamboo furniture in the area barely increased to a minimum of 20% during the last five (5) years. Among the reasons presented was the poor quality of produce, which the local producers have been offering its market. Added to this was the lack of product design development assistance making the local products inferior when compared to those that are brought in from other producers based in the other regions.

The table below shows the comparisons of the project's retail price schemes for its products with that of its immediate competitors:

Item	Project's Selling Price (PhP)	Competitors' Price (Bamboo-based)	Competitors' Price (Wood and Rattan-based)
Sala Sets:			
▪ Majestic	18,500.00	-	25,000.00
▪ Imperial	6,500.00	-	23,000.00
▪ Classic	4,500.00	4,000.00	18,500.00
Dining Sets:			
▪ Armada	15,000.00	-	23,500.00
▪ Flotilla	11,500.00	10,500.00	20,000.00
▪ Company	6,000.00	5,800.00	18,000.00
Bedroom Sets:			
▪ Presidential	7,000.00	7,000.00	14,950.00
▪ Executive Double	4,500.00	4,200.00	10,500.00
▪ Executive Single	3,500.00	3,500.00	8,750.00
Other Products			
▪ Dividers	4,500.00	3,800.00	7,450.00
▪ Corner Stand	1,500.00	1,500.00	1,970.00
▪ Lamp Shades	1,500.00	1,900.00	2,600.00
▪ Door Lamps	650.00	680.00	1,200.00
▪ Trays (set of 3)	350.00	480.00	760.00

The project assumes a conservative price increase of at least 5% per annum only starting the 4th year of operations.

1.4 Market Area

The project shall serve three (3) market clusters. It is targeting to serve initially the local market of Tantangan Municipality, the adjoining market areas of Koronadal City, Tacurong City and the capital town of Isulan, Sultan Kudarat. The second market cluster target shall be the cities of Gen. Santos, which is down South of Tantangan and Digos City on the far Eastern direction. Other markets considered later for expansion shall include the third cluster of Davao City and other areas. All these target market areas are connected to the Municipality of Tantangan through major thoroughfares and national highways.

Foreign market, although with big potentials, will only be considered when the capability of the association to supply in regular volume and quality has already been met. Initially though, the Association may consider linking up with established furniture companies who are already players in the foreign market.

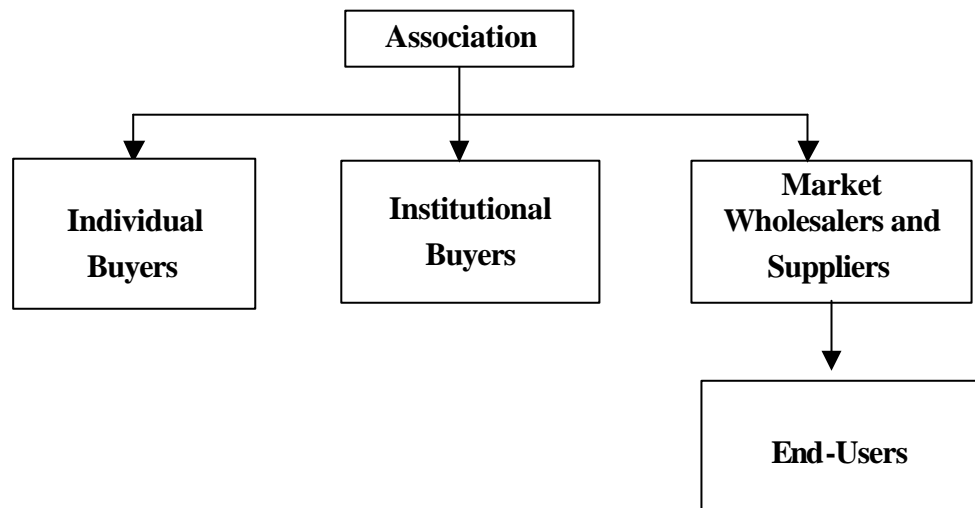
The project targets to serve the 1st market cluster during the 1st two (2) years of its operation, the 2nd cluster on the 3rd to 4th, and the 3rd cluster towards the 5th year of operation. However, the project is not discounting the possibility of serving the other market clusters earlier if and when market opportunities demand so. But for purposes of this study, only the first market cluster will be use in the estimation and calculations.

1.5 Main Customers and Distribution Channel

The target clientele of the project are the households in the target cluster markets belonging to Class A to D income earners. However, efforts will be made focus to serve those acquiring new housing units and institutional buyers such as, but not limited to, hotels, resorts, restaurants, schools and offices.

The project is likewise, best advised to explore linking with established bamboo craft producers who are already into the export market and those who are supplying the market needs of big department stores and appliance centers.

The products of the project will be distributed to its target market through the following distribution channels:



1.6 Demand-Supply Analysis

In the absence of the required data, this study used the total number of households in the target market clusters as basis for its demand-supply projections and analysis. An assumption of the number of possible institutional and wholesale buyers is likewise drawn to at least make an estimation of the

possible demand-supply gaps. With these limitations and constraints in mind, projections herein are made very conservative. Only the 1st market cluster is being considered here as the major market. The other market clusters will be treated as the potential market for expansion of the project.

Estimated total Demand, Supply and Demand-Supply Gap

Market	Estimated Total Demand (Tot. No. of HH)	Estimated Total Supply (75%)	Estimated Demand-Supply Gap
Tantangan	6,583	4,937	1,646
Koronadal City	27,623	20,717	6,906
Isulan	14,333	10,750	3,583
Sultan Kudarat	14,950	11,213	3,737
Total	63,489	47,617	15,872

1.7 Market Share

From the estimated demand-supply gap (DSG), the project assumed that the target Class A-D income earners comprised at least 60% of the sample DSG population. Of this, the collective market share of steel, wood, rattan and plastic-based furniture is estimated at 80%. Only 20% therefore, is the assumed total market, which the bamboo-based furniture industry can play around in the 1st market cluster.

D-S Gap	Class A-D Income Earners	Market Share of Other Furniture	Market Share of Bamboo Furniture	Target Market Share of the Project
15,872	9,523	7,618	1,905	7%

The project proposes to reach 50% of its target market share on the first year of operations, 75% during the second year and 100% on the third year and shall maintain it until the fifth year of operations.

1.8 Promotional Measures

The project, to make sure it will get or even surpass its target market share, should embark on an aggressive marketing promotion. Promotional activities may be done in many creative ways where limited costs could produce substantial outputs in terms of increase in sales.

As part of the promotional strategy of the project, the following schemes will be adopted:

- 1.0 The Association will provide support and incentives for product improvement, innovations and creation of new designs. Samples of these new designs will be sent out periodically to market wholesalers, suppliers and institutional buyers who are already categorized as regular customers of the project.
- 1.1 Price incentives will be provided to bulk and/or wholesale buyers through discounts. Product sale and discounted sale promotions will be offered during selected holidays.

Schedule 2-1 SALES FORECAST

Product	No. of Units			Selling Price per Unit	Sales Forecast				
	Yr. 1	Yr. 2	Yr. 3-5		Yr. 1	Yr. 2	Yr. 3	Yr. 4	Yr. 5
Sala Sets									
Majestic	6	9	12	18,500.00	111,000.00	166,500.00	222,000.00	233,100.00	244,755.00
Imperial	8	12	16	6,500.00	52,000.00	78,000.00	104,000.00	109,200.00	114,660.00
Classic	10	15	20	4,500.00	45,000.00	67,500.00	90,000.00	94,500.00	99,225.00
Dining Sets									
Armada	6	9	12	15,000.00	90,000.00	135,000.00	180,000.00	189,000.00	198,450.00
Flotilla	8	12	16	11,500.00	92,000.00	138,000.00	184,000.00	193,200.00	202,860.00
Company	10	15	20	6,000.00	60,000.00	90,000.00	120,000.00	126,000.00	132,300.00
Bedroom Sets									
Presidential	6	8	10	7,000.00	42,000.00	56,000.00	70,000.00	73,500.00	77,175.00
Executive Double	6	8	10	4,500.00	27,000.00	36,000.00	45,000.00	47,250.00	49,612.50
Executive Single	7	12	17	3,500.00	24,500.00	42,000.00	59,500.00	62,475.00	65,598.75
GTH									
Dividers	12	18	24	4,500.00	54,000.00	81,000.00	108,000.00	113,400.00	119,070.00
Corner Stand	12	18	24	1,500.00	18,000.00	27,000.00	36,000.00	37,800.00	39,690.00
Lampshades	12	18	24	1,500.00	18,000.00	27,000.00	36,000.00	37,800.00	39,690.00
Door Lamps	12	18	24	650.00	7,800.00	11,700.00	15,600.00	16,380.00	17,199.00
Trays	19	28	37	350.00	6,650.00	9,800.00	12,950.00	13,597.50	14,277.19
					647,950.00	965,500.00	1,283,050.00	1,347,202.50	1,414,562.44

Note: Increase in Unit price at 5% for years 4 and 5 is assumed

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- 1.2 Installment schemes will be designed and/or devised so that the Association may be able to offer lighter acquisition options to clients proven to be good payers.
 - 1.3 After sales service may also be offered with discounts on repair services. A product warranty scheme of 3-6 months against defects will be guaranteed.
 - 1.4 The Association will make every effort to participate in major Trade Fairs in selected Regional centers and/or cities, i.e., Mindanao Trade Expo in Davao City, Baraklan in Koronadal City, Kalilangan Festival in Gen. Santos City, etc.
 - 1.5 Linkage building and networking with friendly and supportive organizations, government and non-government agencies, foreign assisted projects, business oriented groups, international groups, etc.
 - 1.6 Judicious use of tri-media facilities, preferably only when sponsorship is available. Promotional materials and collaterals will be kept to a minimum of maintaining a photo album of samples and designs, printing of calling cards and flyers, recyclable streamers, etc.
 - 1.7 Conduct of sales presentation in offices or organizations where housing programs are offered.
 - 1.8 Regularly seek support and assistance in marketing, technical, management and financial from perceived supportive entities.
 - 1.9 Seek support and assistance to tap potentials of Internet in marketing the project's products and in finding potential buyers and/or partners.

1.9 Marketing Cost

The project will appropriate the amount of PhP 10,000.00 annually for its marketing and promotions cost. This amount is expected to cover the project's expenses in participating in trade fairs, transportation and food during sales pitching and/or presentation, promo materials and collaterals and networking activities.

2.0 TECHNICAL AND PRODUCTION STUDY

2.1 The Product

Bamboo is a tall grass of over 200 different kinds belonging to the Bambuseae of the grass family. Its stems, technically referred to as culms,

are woody, very long, thin, and hollow inside. One of the fastest growing plants, bamboo culms may grow as high as 36-50 meters.

Bamboo plant is so versatile that it can be weaved into mats and baskets, made into fences, thatched roof, furniture, water pipes, or planks of buildings. Its young shoots are used as food and in some far-eastern countries, it is used in preparing certain kinds of medicines.

The project will produce furniture and selective house wares made chiefly from bamboo, which will be complimented with rattan splits and rattan poles. The bamboo varieties, which the project will utilize, are of two (2) kinds, i.e., 'bayog', and 'kawayang tinik.' Bayog, with its naturally beautiful culms' formation, will be used for main lines and parts. 'Kawayang tinik' or the spiny bamboo on the other hand will be used mainly for the floorings or matting.

2.2 Production Process

The production process is divided into three (3) major phases, i.e., pre-assembling, assembling, and finishing.

Upon delivery of freshly cut bamboo, a protective surface treatment is done by spraying the culms with a chemical called 'cislin'. 'Cislin' is a chemical used against termite and 'bok-bok'. The culms are then left to dry for a month under a partially shaded place.

A month after the first surface treatment, the culms are skinned by scraping and sanding them with sandpaper. This activity signals the next chemical treatment, where the culms are dipped in water mixed with 'cislin'. Another air drying activity is in the offing. The culms are air dried again for a period of three to four (3-4) months. After this, the culms are now ready for cutting according to the desired sizes needed for the production of specific type of furniture. Sizing and cutting depends largely on the design for each type of furniture to be produced. Hence, sizing and cutting will only commence after the design has been drawn up.

After the cutting process, the various parts are now assembled. Depending on the designs of the furniture, the cut culms are assembled with the use of rattan splits serving as ties and rattan poles as sliders. Where joints need to be strengthened, carriage bolts are used instead of nails. This technique makes the furniture last longer with no creaking sounds and loosened joints, which are the usual results when nails are used to fix joints. The cutting and assembling usually takes a maximum of one week for a set of furniture to be finished.

As part of the finishing stage, the assembled furniture is now subjected to sanding to make the culms surfaces smooth and ready for the application of primer. Finally, the furniture pieces are varnished and are now ready to be displayed and sold.

In a diagram, the process flow described is as simple as:



Quality control is very essential, hence, it is made part in every step of the process. It starts immediately when bamboo culms are delivered. The culms are segregated according to age and type. Only 'Bayog' and 'Kawayang tinik' are preferred. Quality control is specially observed during the treatment activities, in sizing and cutting and during the finishing stage.

2.3 Production Schedule

Based on the target market share the project will produce 67 sets of bamboo furniture and 67 pieces of GTH. This comprised 50% of the target market share. Years 2 and 3-5, target 75% and 100% of the market share respectively. Year 1 target production is broken down as follows:

Product	No. of Units
Sala Sets (36%)	24
Majestic	6
Imperial	8
Classic	10
Dining Sets (36%)	24
Armada	6
Flotilla	8
Company	10
Bedroom Sets (28%)	42
Presidential	6
Executive Double	6
Executive Single	7
GTH	140

Dividers	12
Corner Stands	12
Lampshades	12
Door Lamps	12
Trays	19

The number of days needed to finish a set of furniture would sometimes depend on the intricacy of the designs for each furniture set. The available number of workers that will work for each item is the major factor though. However, based on current practice, if a maximum of 3 workers are available, the assembling and finishing time for each set will only take a maximum of 5 days for the sala set, 7 days for the dining set, and 5 days for a bedroom set. Most GTH can be finished within 2-3 days. This is provided that the culms have already been pre-treated and ready for sizing and cutting.

2.4 Plant Location and Lay-out

The project production area is located at Barangay Perduan, approximately 3 kilometers away from the center of Tantaran. Momentarily, it will be accommodated at the land of the Association's Chairman. A showroom is being proposed to be set-up at the Poblacion of Tantaran and shall be located very near the highway. This location will then be very strategic, as it will provide easy access to the project's target markets.

2.5 Building and Facilities

The project will need a simple building to house its activity area. Initially, the building will just be semi-concrete, with only the floorings at the assembling and finishing areas, and the treatment tank cemented. Needed facilities include water and energy. Working tables will be provided to ensure a comfortable working area for the workers. The working area should be well ventilated, lighted, and provided with the necessary waste disposal bins.

The investment cost of the building and the facilities is estimated at PhP 30,000.00 with a projected life span of 5 years.

2.6 Machinery and Equipment

With or without electricity, the project can operate and produce furniture because it needs only very simple tools for its production activities. For ease, speedy and quality output however, electricity is needed.

Electric power drill, sander, disc sander, blowtorch, saw, hammer, carving tools, vices, backpack sprayer, etc., are among the machinery, equipment, and tools needed by the project.

The collective cost of the required machinery, equipment, and tools is estimated at PhP 50,000.00. All these are projected to have a life span of 5 years.

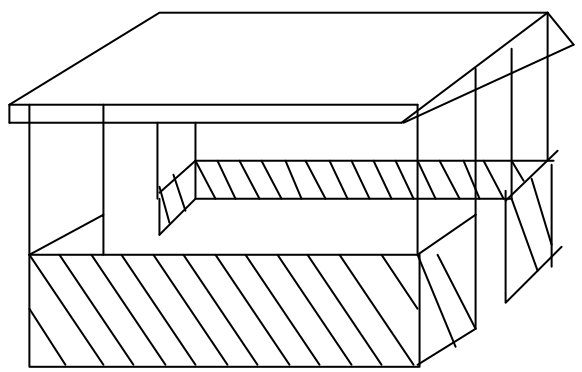
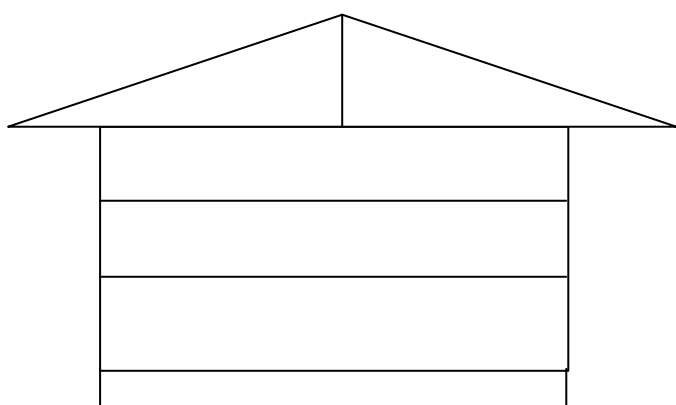
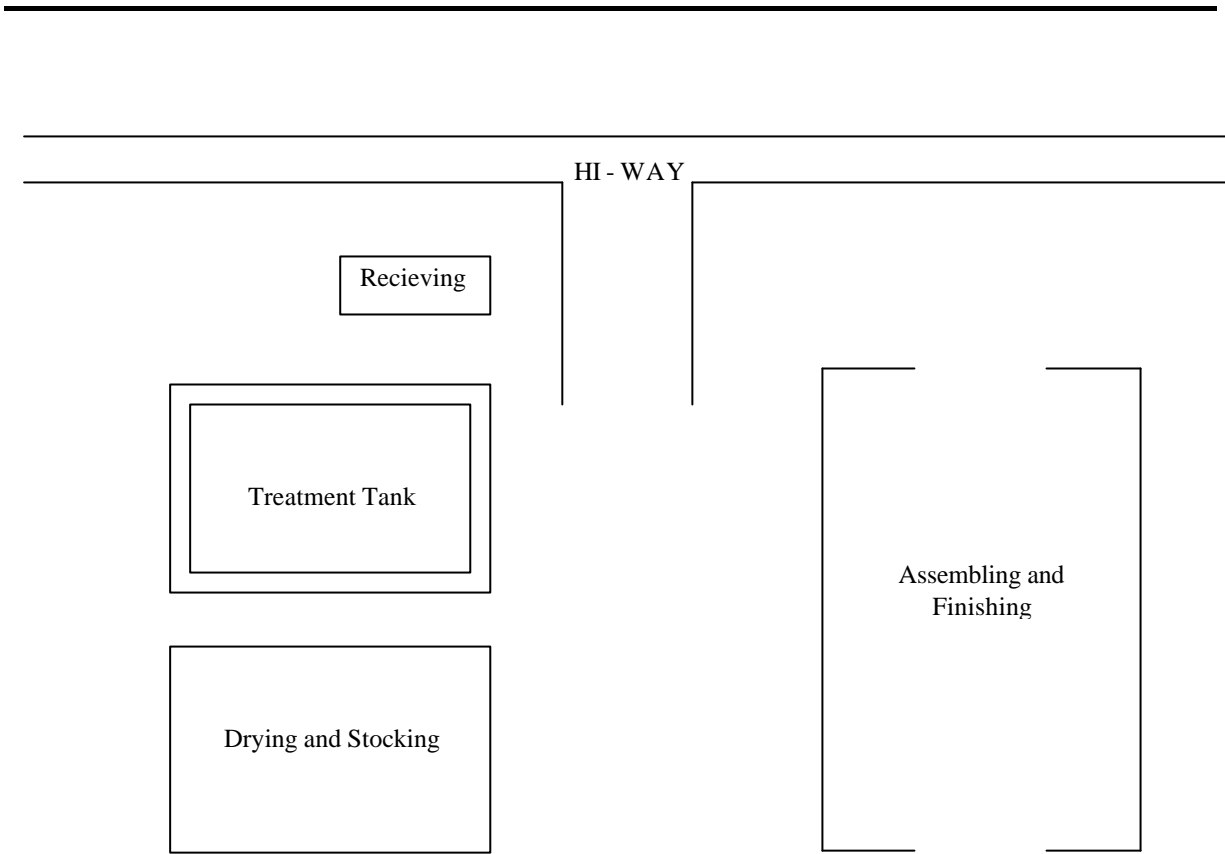
2.7 Raw Materials and Supply

'Bayog' and Kawayang tinik' grows abundantly in the area of Barangay Perduan and in its adjoining barangays. In fact, it has been observed that these types of bamboo thrive so well not only in the Municipality of Tantaran but in most areas of South Cotabato as well. Moreover, most of the members of the Association have bamboo in their farms and backyards.

Other raw materials needed for the production include rattan splits and poles, which can be source out at the local market of Tantaran. Carriage bolts, primer, varnish, Cislin, and other supplies needed are also available in the locality.

The estimated costs of major raw materials and supplies are as follows:

Item(s)	Unit	Unit Cost (PhP)
Bayog	Pole of 15 ft	20.00 - 28.00
Kawayang Tinik	Pole of 40 feet	50.00 – 65.00
Rattan Splits	Bundle of 100 splits	65.00
Rattan Poles	Pole of 10 feet	15.00
Carriage Bolts	Piece	3.00
Cislin	Liter	3,500.00
Primer	Gallon	300.00
Varnish	Gallon	180.00
Sand paper	Sheet	8.00



2.8 Utilities

The operation of the project will need an estimated cost of PhP 1,000.00 per month for light, PhP 500.00 for water and at least 10 liters of fuel amounting to PhP 150.00.

2.9 Waste Disposal

Bamboo scrapings and rejects are the major wastes that the project will produce. Minor wastes will come from the empty cans, bottles, supply containers, papers, etc.

Proper disposal of these wastes will be observed. As much as possible, the project will discourage the burning of these wastes in the working area. Waste materials, which can be recycled, should be recycled. A compost area will be designated where scrapings, rejects, and other biodegradable wastes may be left to rot, become compost and can now be use as organic fertilizer in the farmer-members' farms. Bamboo scrapings and rejects may still be use as fuel for home use but users should be cautioned as these were treated with Cislin.

2.10 Labor Requirements

The Association has 17 available skilled workers and 3 who are semi-skilled. Although all are capable to make the various types of furniture and GTH, which the project proposes to produce, for ease of operations, group teams will be organized. Each team will be assigned its own specific task. One team will take charge with the production of sala sets (SST), another for dining sets (DST), bedroom sets (BST), and GTH (GTHT). In actual operations, though, members from other teams may be tapped to help other teams, as the need will arise. This will hold true specially if orders from other sets are required more than those from the other sets. The teams for sala sets and dining sets will have 6 members each. The bedroom set team will have 5 members and the remaining members of 3 will handle the production of GTH.

Abiding with the existing practice of the Association, labor requirements will be based on a 'pakyaw' system or on a per output basis. This arrangement translates to 45% labor compensation based on the selling price per item or set produced.

2.11 Total Production Cost

The Association estimated that the production cost per item or set of furniture and GTH, which they produce, are as follows:

Cost of Labor	64%
Cost of materials	36%

This, according to the Chairman and Consultant, comprises 70% of the selling price. Therefore, the cost of labor and materials if based on the selling price is estimated at 45% and 25% respectively. Procurement expense is already included in the cost of materials.

Schedule 3– 1 – Production Forecast

Product	No. of Units	Selling Price per Unit	Estimated Cost of Production per Unit		Estimated Total Cost of Production
			Labor	Material	
Sala Set					
Majestic	6	18,500.00	8,325.00	4,625.00	77,700.00
Imperial	8	6,500.00	2,925.00	1,625.00	36,400.00
Classic	10	4,500.00	2,025.00	1,125.00	31,500.00
Dining Set					
Armada	6	15,000.00	6,750.00	3,750.00	63,000.00
Flotilla	8	11,500.00	5,175.00	2,875.00	64,400.00
Company	10	6,000.00	2,700.00	1,500.00	42,000.00
Bedroom Sets					
Presidential	6	7,000.00	3,150.00	1,750.00	29,400.00
Executive Double	6	4,500.00	2,025.00	1,125.00	18,900.00
Executive Single	7	3,500.00	1,575.00	875.00	17,150.00
GTH					
Dividers	12	4,500.00	2,025.00	1,125.00	37,800.00
Corner Stand	12	1,500.00	675.00	375.00	12,600.00
Lampshades	12	1,500.00	675.00	375.00	12,600.00
Door Lamps	12	650.00	292.50	162.50	5,460.00
Trays	19	350.00	157.50	87.50	4,655.00
			38,475.00	21,375.00	453,565.00

Note: 50% only of Target Market Share. For Year 2 production target will be 75% of the TMS, and on 3rd until the 5th year 100% of TMS. Hence forecast will be 67 units for year 1, 100 units for year 2 and 133 for year 3 – 5

3.0 ORGANIZATION AND MANAGEMENT ASPECT

3.1 Business Name

The business will be named PUCA Bamboo Crafts and Creations. The acronym PUCA stands for the name of the group's association, which is PERDUAN UPLAND COMMUNITY ASSOCIATION. The phrase 'Bamboo Crafts' is made to give emphasis on the kind or type of products that the entity offers to its potential clientele. The word 'Creation' was chosen as it alludes to something that has been intrinsically well thought of, well planned and coming from an artistic mind specifically made just for you.

3.2 Form of Ownership

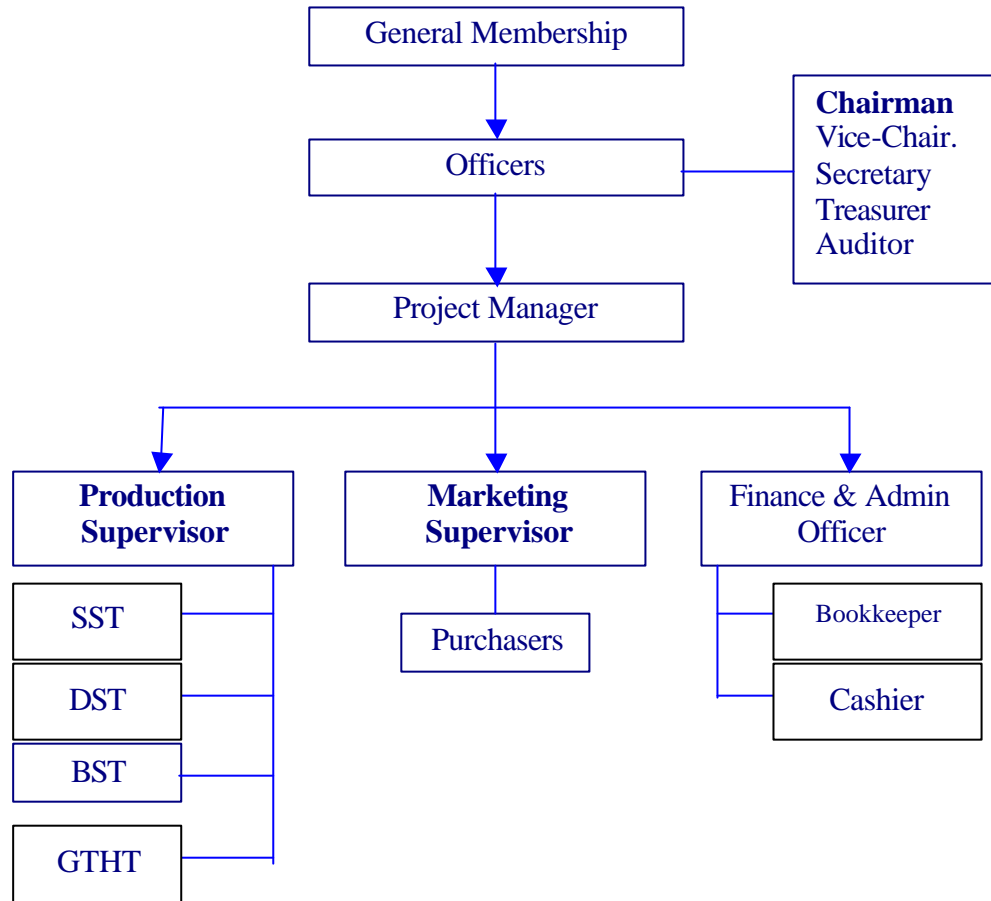
The business is run by a yet to be registered Association. The proposal is for the Association to be registered first with the Bureau of Rural Workers under the Department of Labor and Employment (DOLE). Later the Association will be registered as a Producer's Cooperative with the Cooperative Development Authority (CDA).

Initially, the Association will seek local recognition by getting a Barangay Clearance. After which the Association must apply for a Mayor's Permit and License for it to be able to legally operate in the area. Its registration with the Bureau of Internal Revenue (BIR) and the Department of Trade and Industry (DTI), the Social Security System and PhilHealth should also be process.

3.3 Organizational Structure

The project will have an organizational structure based on a group owned business establishment. The structure is presented as:

ORGANIZATIONAL CHART



3.4 Duties, Responsibilities and Qualifications of Key Personnel

The group shall adopt the usual duties and responsibilities of officers within an Association. In this particular project however, due to limited number of members and officers, the Association's Officers will assume some of the key positions under the management operations. This way, management and administrative costs will be managed judiciously. Since all of the members of the Association are participants or play active roles in the operations of the project, the limited compensation package will be supplemented from the cost of labor budgeted from each of the finished products.

The below listed personnel require certain abilities and capabilities to effectively undertake their roles. These may be present or absent within the members of the group. It is therefore,

very important that the members who will be chosen to occupy specific positions, should be open and willing to be trained. If and when this is not possible, the group's option will be left at hiring from outside the personnel needed to manage the project.

3.4.1 Project Manager

Responsibilities and Duties:

- Manages the over-all operations and implementation of the project
- Supervises, directs and sets the development phase and direction of the project
- Together with the Chairman represents the Association in investment and market matching exercises.
- Do an aggressive linking up with potential buyers, partners, donors, and other supportive organizations.
- Makes sure that orders keep coming in to the project
- Makes sure that all units work as a team harmoniously
- Reports regularly to the GA and the Board

Qualifications:

- Preferably a full-pledged member and a Member in Good Standing (MIGS) of the Association
- The Project Manager should be somebody who is well-versed and/or familiar with the management of a furniture making business, preferably those related to wood, rattan and bamboo-based.
- Business and marketing experience of not less than 2 years with artistic skills
- Familiar with the resource-based of the area
- Good working relationship with positive disposition in life
- Aggressive, dependable and can work with minimal supervision

3.4.2 Finance and Administrative Officer (FAO)

Responsibilities and Duties

- Supervises the judicious use of the project's fund by seeing to it that funds are expended according to need and regulations.
- Sees to it that the Accounting, Reporting and Monitoring Systems are installed
- Sees to it that funds are available in the right time when these are needed, i.e., purchasing, salaries, payments for accountabilities, etc.

-
- Makes sure that administrative matters are imposed, taken care and actions are in consonance with the approved policies and guidelines of the Association.
 - Maintains records of meetings and decisions
 - Makes sure that official receipts and vouchers are available at all times.
 - Prepares and reports monthly the financial position of the project to the GA and the Board

Qualifications

- Full-pledged member and a Member in Good Standing (MIGS) of the Association
- Experience in project planning and budgeting
- Has knowledge in accounting and administrative matters

3.4.3 Marketing Supervisor

Responsibilities and Duties

- In-charge with the over-all marketing concerns of the project, i.e., finding orders and clientele, and purchasing of the needed materials for the production requirements.
- Sees to it that the Marketing program of the project is implemented
- Receives orders and make sure that these are included in the production schedule of the Production group.
- Aggressively promotes the products of the project
- Responsible in coming up with innovative marketing program for the project
- Maintains records of customers and suppliers

Qualifications

- Full-pledged member and a Member in Good Standing (MIGS) of the Association
- Articulate and persuasive
- With experience in sales presentation
- With experience in material procurement

3.4.4 Production Supervisor

Responsibilities and Duties

- In-charge with the Production Unit of the project
- Sees to it that all orders are met and served on time
- Sees to it that all items produced are of good quality

-
- Has the main responsibility for the after sales service
 - Maintains records and inventory of equipment, tools and supplies
 - Regularly reports to the Manager the status of operations for the production
 - Reports to the GA and Board the total production output of the project

Qualifications

- Full-pledged member and a Member in Good Standing (MIGS) of the Association
- At least 2 years experience in the production of bamboo-based furniture
- Creative and has an artistic ability

3.4.5 Bookkeeper

Responsibilities and Duties

- Record business transactions of the project
- Prepares financial reports for submission to the Finance and Admin Officer
- Sees to it that the accounting books are installed and keep in order and ready for inspection anytime
- Assists the FAO in monitoring inventories of materials procured and stocks sold and shall prepare its report.

Qualifications

- Full-pledged member and a Member in Good Standing (MIGS) of the Association
- With experience in bookkeeping, inventory of stocks and in the preparation of needed reports.

3.4.6 Cashier

Responsibilities and Duties

- In-charge in the disbursements and collection of funds and cash receipts
- Maintains a cash book
- Prepares daily cash report, which report shall be submitted in triplicate, i.e., one copy for the Manager, FAO, and for his/her record

Qualifications

- Full-pledged member and a Member in Good Standing (MIGS) of the Association
- Honest and trustworthy

3.4.7 Purchaser

Responsibilities and Duties

- Responsible in the actual purchasing and procurement of materials and supplies as approved by the Marketing Supervisor.
- Do other tasks as delegated by the Manager and direct supervisor.

Qualifications

- Full-pledged member and a Member in Good Standing (MIGS) of the Association
- Dependable, honest and trustworthy needing minimal supervision

3.5 Compensation Plan

The project will offer the following remuneration package to its personnel:

Personnel	Monthly Remuneration (PhP)
Project Manager	3,600.00
Finance and Administrative Officer/Auditor	1,500.00
Marketing Supervisor/Vice-Chairman	1,500.00
Production Supervisor/Chairman	1,500.00
Bookkeeper/Secretary	800.00
Cashier/Treasurer	800.00
Purchaser	800.00

In addition to the above, each of the personnel and worker of the project will be given SSS, PhilHealth and other insurance coverage computed at 10% of the salaries and wages.

3.6 Pre-Operating Activities and Pre-Operating Expenses

The project has been ongoing for several years now. In fact, the group has been existing informally since 1991. Hence, for purposes of this study, the pre-operating activities of the project is limited only in the process of acquiring barangay clearance, which is a requisite in securing a Mayor's Permit and License; registration; printing of receipts; etc.

Production is currently being done in the houses of the members. As such, other supposedly pre-operating activities, i.e., materials procurement, financial assistance arrangements, etc. have now become part and parcel of their operating activities.

An estimated amount of PhP 3,000.00 is assumed to cover the pre-operating activities' expenses of the project.

3.7 Total Administrative and Pre-Operating Expenses

The 1st year total administrative and pre-operating expenses of the project is assumed at PhP 144,150.00 broken-down as follows:

Particular	Amount (PhP)
Salaries and Wages	126,000.00
13 th month pay	10,500.00
SSS, PhilHealth	1,050.00
Office Supplies and Materials	3,600.00
Pre-Operating Activities	3,000.00
Total	144,150.00

4.0 FINANCIAL ASPECT

4.1 Total Financial Requirement

Based on the projections, estimations and assumptions made in each of the feasibility study aspects, the total financial requirement of the Project for the first year of its operations is estimated at PhP 707,515.00 broken down as follows:

Budget Items	Budget Requirement (PhP)
Marketing	10,000.00
Production	553,365.00
Building and Facilities	30,000.00
Machinery & Equipment	50,000.00
Materials	161,987.50
Light	12,000.00
Water	6,000.00
Fuel	1,800.00
Labor	291,577.50
Management	144,150.00
	Total 707,515.00

4.2 Financing Plan

The Association plans to avail of financial assistance from UDP's UDF amounting to PhP 150,000.00. The group will likewise put up their equity. Should the plan be approved, the policies and guidelines of UDP pertaining to its loan assistance will apply.

4.3 Major Assumptions

- Loan interest is pegged at 18% per annum at a discounted rate.
- Loan is payable in 3 years time with a 1 year grace period
- Loan amortization is computed in three equal payments
- Depreciation cost is computed straight for 5 years
- Production forecast is based on the target market share of the project, which is 7% of the total demand-supply gap. Production however, is programmed at 50%, 75% and 100% of the target market share spread during the initial year, 2nd and 3rd to 5th years respectively.
- Increase in selling price is projected at 5% during the 4th year and another 5% during the 5th year.
- Increase in marketing cost is estimated at 20% per annum
- Increase in production and management costs are estimated at 10% per annum.
- Tax is computed at 10% of the income

Ferduan Bamboo Crafts and Creations
Projected 5-Year Cash Flow Statement

	Yr. 1	Yr. 2	Yr. 3	Yr. 4	Yr. 5
Cash Inflows:					
Cash Receipts	647,950.00	965,500.00	1,283,050.00	1,347,202.50	1,414,562.44
Loan Proceeds	150,000.00				
Equity	35,000.00				
Total Cash Inflows	832,950.00	965,500.00	1,283,050.00	1,347,202.50	1,414,562.44
Cash Outflows					
Pre-Operating Expense	3,000.00				
Salaries and Wages	126,000.00	138,600.00	152,460.00	167,706.00	184,476.60
Fringe and Insurance	11,550.00	12,705.00	13,975.50	15,373.05	16,910.36
Office Supplies	3,600.00	3,960.00	4,356.00	4,791.60	5,270.76
Marketing Costs	10,000.00	12,000.00	14,400.00	17,280.00	20,736.00
Light	12,000.00	13,200.00	14,520.00	15,972.00	17,569.20
Water	6,000.00	6,600.00	7,260.00	7,986.00	8,784.60
Fuel	1,800.00	1,980.00	2,178.00	2,395.80	2,635.38
Bldg. & Facilities	30,000.00				
Machinery & Eqpt.	50,000.00				
Materials & Supplies	161,987.50	241,375.00	320,762.50	336,800.63	353,640.61
Direct Labor	291,577.50	434,475.00	577,372.50	606,241.13	636,553.10
Loan Amortization		50,000.00	50,000.00	50,000.00	
Interest		27,000.00	18,000.00	9,000.00	
10% Tax	443.50	760.50	9,176.55	9,765.63	15,198.58
Total Cash Outflows	707,958.50	942,655.50	1,184,461.05	1,243,311.83	1,261,775.18
Net Cashflow	124,991.50	22,844.50	98,588.95	103,890.67	152,787.26
Add: Beg. Balance		124,991.50	147,836.00	246,424.95	350,315.62
Cash Balance End	124,991.50	147,836.00	246,424.95	350,315.62	503,102.88

Ferduan Bamboo Crafts and Creations														
Projected 12-Month Cash Flow Statement														
	Mo. 0	Mo. 1	Mo. 2	Mo. 3	Mo. 4	Mo. 5	Mo. 6	Mo. 7	Mo. 8	Mo. 9	Mo. 10	Mo. 11	Mo. 12	
Cash Inflows:														
Cash Receipts				64,795.00	64,795.00	64,795.00	64,795.00	64,795.00	64,795.00	64,795.00	64,795.00	64,795.00	64,795.00	647,950.00
Loan Proceeds	150,000.00													150,000.00
Equity	35,000.00													35,000.00
Total Cash Inflows	185,000.00			64,795.00	64,795.00	64,795.00	64,795.00	64,795.00	64,795.00	64,795.00	64,795.00	64,795.00	64,795.00	832,950.00
														-
Cash Outflows														-
Pre-Op. Exp.		3,000.00												3,000.00
Sal. and Wages		10,500.00	10,500.00	10,500.00	10,500.00	10,500.00	10,500.00	10,500.00	10,500.00	10,500.00	10,500.00	10,500.00	10,500.00	126,000.00
Fringe and Ins.				262.50			262.50			262.50			10,762.50	11,550.00
Office Supplies		900.00			900.00			900.00			900.00			3,600.00
Marketing Costs		1,000.00	1,000.00	1,000.00	1,000.00	1,000.00	1,000.00	1,000.00	1,000.00	500.00	500.00	500.00	500.00	10,000.00
Light		1,000.00	1,000.00	1,000.00	1,000.00	1,000.00	1,000.00	1,000.00	1,000.00	1,000.00	1,000.00	1,000.00	1,000.00	12,000.00
Water		500.00	500.00	500.00	500.00	500.00	500.00	500.00	500.00	500.00	500.00	500.00	500.00	6,000.00
Fuel		150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	1,800.00
Bldg. & Facilities	30,000.00													30,000.00
Machinery & Eqpt.	50,000.00													50,000.00
Matls. & Supplies		16,198.75	16,198.75	16,198.75	16,198.75	16,198.75	16,198.75	16,198.75	16,198.75	16,198.75	16,198.75			161,987.50
Direct Labor			29,157.75	29,157.75	29,157.75	29,157.75	29,157.75	29,157.75	29,157.75	29,157.75	29,157.75	29,157.75		291,577.50
Loan Amortization														-
Interest														-
10% Tax													443.50	443.50
Total Cash Outflows	80,000.00	33,248.75	58,506.50	58,769.00	59,406.50	58,506.50	58,769.00	59,406.50	58,506.50	58,269.00	58,906.50	41,807.75	23,856.00	707,958.50
														-
Net Cashflow	105,000.00	(33,248.75)	(58,506.50)	6,026.00	5,388.50	6,288.50	6,026.00	5,388.50	6,288.50	6,526.00	5,888.50	22,987.25	40,939.00	124,991.50
Add: Beg. Balance		105,000.00	71,751.25	13,244.75	19,270.75	24,659.25	30,947.75	36,973.75	42,362.25	48,650.75	55,176.75	61,065.25	84,052.50	593,155.00
Cash Balance End	105,000.00	71,751.25	13,244.75	19,270.75	24,659.25	30,947.75	36,973.75	42,362.25	48,650.75	55,176.75	61,065.25	84,052.50	124,991.50	718,146.50

Ferduan Bamboo Crafts and Creations
Projected 5-Year Income Statement

	Yr. 1	Yr. 2	Yr. 3	Yr. 4	Yr. 5
Income from Sales	647,950.00	965,500.00	1,283,050.00	1,347,202.50	1,414,562.44
Less: Cost of Goods	453,565.00	675,850.00	898,135.00	943,041.75	990,193.71
Gross Income	194,385.00	289,650.00	384,915.00	404,160.75	424,368.73
Less: Pre-Operating Expense	3,000.00				
Salaries and Wages	126,000.00	138,600.00	152,460.00	167,706.00	184,476.60
Fringe and Insurance	11,550.00	12,705.00	13,975.50	15,373.05	16,910.36
Office Supplies	3,600.00	3,960.00	4,356.00	4,791.60	5,270.76
Marketing Costs	10,000.00	12,000.00	14,400.00	17,280.00	20,736.00
Light	12,000.00	13,200.00	14,520.00	15,972.00	17,569.20
Water	6,000.00	6,600.00	7,260.00	7,986.00	8,784.60
Fuel	1,800.00	1,980.00	2,178.00	2,395.80	2,635.38
Bldg. & Facilities Dep.	6,000.00	6,000.00	6,000.00	6,000.00	6,000.00
Machinery & Eqpt. Dep.	10,000.00	10,000.00	10,000.00	10,000.00	10,000.00
Loan Amortization		50,000.00	50,000.00	50,000.00	
Interest		27,000.00	18,000.00	9,000.00	
Total Expenses	189,950.00	282,045.00	293,149.50	306,504.45	272,382.90
Net Income Before Tax	4,435.00	7,605.00	91,765.50	97,656.30	151,985.84
Less: 10% Tax	443.50	760.50	9,176.55	9,765.63	15,198.58
Net Income/Loss	3,991.50	6,844.50	82,588.95	87,890.67	136,787.25
Cummulative Net Income/Loss	3,991.50	10,836.00	93,424.95	181,315.62	318,102.87

Ferduan Bamboo Crafts and Creations
Projected 5-Year Balance Sheet

	Yr. 1	Yr. 2	Yr. 3	Yr. 4	Yr. 5
ASSETS:					
Current Assets					
Cash	124,991.50	147,836.00	246,424.95	350,315.62	503,102.88
Total Current Asset	124,991.50	147,836.00	246,424.95	350,315.62	503,102.88
Fixed Assets					
Bldg. & Facilities	30,000.00	30,000.00	30,000.00	30,000.00	30,000.00
Machinery & Eqpt.	50,000.00	50,000.00	50,000.00	50,000.00	50,000.00
Less: Acc. Dep.	16,000.00	32,000.00	48,000.00	64,000.00	80,000.00
Net Book Value	64,000.00	48,000.00	32,000.00	16,000.00	-
Total Fixed Assets	64,000.00	48,000.00	32,000.00	16,000.00	-
TOTAL ASSETS	188,991.50	195,836.00	278,424.95	366,315.62	503,102.88
LIABILITIES AND CAPITAL					
Liabilities					
Loans Payable	150,000.00	150,000.00	100,000.00	50,000.00	
Total Liabilities	150,000.00	150,000.00	100,000.00	50,000.00	-
Capital					
Equity	35,000.00	38,991.50	95,836.00	228,424.95	366,315.62
Add: Net Profit	3,991.50	6,844.50	82,588.95	87,890.67	136,787.25
Total Capital	38,991.50	45,836.00	178,424.95	316,315.62	503,102.87
TOTAL LIAB & CAP.	188,991.50	195,836.00	278,424.95	366,315.62	503,102.87

4.4. Financial Analysis

Current Ratio =	Current Assets ----- Current Liabilities		
Year 1	0.83:1.00		
Year 2	0.99:1.00		
Year 3	2.46:1.00		
Year 4	7:00:1:00		
Gross Profit Margin =	Sales – Cost of Goods ----- Sales	=	30%
Return on Investment =	Ave. Net Income ----- Initial Investment	=	34.4%
	63,630.57 ----- 185,000.00	=	0.3439
Cash Payback Period =	Initial Investment ----- Ave. Net Income	=	2 years and 10 months
	185,000.00 ----- 63,620.57	=	2.9079