Chapter 4
Business Strategy

To maintain and develop the company, PT. Binex needs a business strategy that has a high competitiveness. The growth strategies are divided into two parts, namely internal growth strategies and external growth strategies. Therefore, PT.Binex will try to apply some of this business strategy which accordance for rubber plantation.

4.1. External Growth Strategies

External growth strategies rely on establishing relationship with third party, such as mergers, acquisitions, strategic alliances, joint ventures, licensing and franchising. Thus, joint ventures, licensing, and franchising are strategic options entrepreneurial firms used to both enter foreign market and accomplish external growth. There are distinct advantage and disadvantage to emphasizing external growth strategies. The advantages are reducing competition, getting access to propriety products or services, gaining access to new products and markets, obtaining access to technical expertise, gaining access to an established brand name, economies of scale, and diversification of business risks. The disadvantages are incompatibility of top management, clash of corporate culture, operational problem, increase business complexity, loss of organizational flexibility, anti trust implication. Business strategy in utilizing external factors:

a. Working together with the plant research centre, especially rubber plants, so the PT. Binex can gain access of knowledge and information. One of the cooperation forms is by send our R & D workers to research training centre, they have opportunity do research with another expert at plant research centre. As a consequence, PT. Binex can become as one of the donor funds for that research centre.
b. Cooperate with the local government of Bangka, such as utilizing unproductive land, which is owned by local governments. Farmers in the plantation companies will be recruited from families that are considered

poor by local governments of Bangka. The company also will provide all facilities and infrastructure for the plantation, such as building houses, providing fertilizer and training farmers how to cultivate the rubber plant. Then each natural rubber sold by the company will be distributed to all parties, namely the government, poor families and companies. Thus, all parties will benefit.

1. From the government side:
    - Provide cash income for the region
    - Assist the government reduce poverty and create employment
    - Assist the government to maximize land that has not been productive
2. From the side of the family workers:
    - Getting the opportunity to increase income
    - The farmers get a decent place to live
    - The farmers get the knowledge, so soon they are expected to be financially independent
3. From the company side:
    - Obtaining income from sales of plantation products
    - Will help PT. Binex expand plantation land, without the cost of land acquisition
    - Being one of the Corporate Social Responsibilities (CSR) form from the company to Bangka's society.

c. Establish or register to the association of rubber companies, so PT.Binex will be able to have access to extensive information on each of the rubber industry in the national and the international prospects, such as how rubber demand in the future and price movements rubber itself.

d. Acquisition a local farmer's rubber plantation that already not productive anymore, so we can rejuvenate the plantation with a new variety of rubber plant that could give a higher productivity. A part of cost rejuvenation is taken from selling the old rubber tree. The company will train the farmer and supply them with fertilizer.

4.2. Internal growth strategies

Internal growth strategies involve efforts taken within the firm itself, such as new product development, other product-related strategies, and international expansion with the purpose of increasing sales, revenue and profitability. The distinctive attribute of internally generated growth is that business relies on its own competencies, expertise, business practice, and employees. Internally generated growth is often called organic growth because it does not rely on outside intervention. Business strategy in utilizing internal factors:

a. Maximize the areas of plantation by utilizing the land between the rubber trees. PT. Binex will try to plant other crops that have high economic value and that do not disrupt the development of the rubber tree itself. In this case, PT. Binex will choose the corn plant. It is expected that when the decline in rubber prices, this additional commodity can still provide income for the company and farmers. And also, at the beginning period of planting rubber, we can afford a part of operational cost from selling this additional commodity (corn).
b. Rejuvenate the old rubber plant periodically, so that productivity can remain intact. Cost to rejuvenate can be taken from the sales of old rubber wood, especially when there is a significant price increase for commodity wood. So the companies can save expenditure, and even get additional profit margin from the sales of that old rubber wood.
c. PT. Binex will recruit some experienced researchers to be placed at Department of Research & Development (R&D), which is expected to bring superior development new varieties of rubber plant and do a routine inspection to maintain quality and quantity of natural rubber production. Routinely sends the researchers to follow the training that conducted by the research centre, both in Indonesia and other countries. The researchers at the R & D department are also given the authority and responsibility for each process and the maintenance of rubber tapping sap.
d. Provide intensive and periodically training for farmers, so the productivity and quality of natural rubber latex produced remains high and intact. And

also provides broadest access of information from Research & Development department, so the farmers will not only receive instructions from PT.Binex, but also can take the right decision quickly when necessary without waiting suggestion from researchers in the R & D department.

e. The company will try to improve facilities and infrastructure around the plantation, such as expanding access of existing roads, establish incredulous, establish clinics, and others. In addition to supporting the activities of company, such activity also can increasing motivation and loyalty of farmers to ompany, because it felt treated well by the company.

f. Developing PT. Binex becomes a rubber-processing company, so it can add value for the rubber company's product. The company will also have competitive advantages because they will not depend on raw materials from suppliers. This new development will be done when the rubber plants can start generate rubber latex. PT. Binex can reduce dependence to the companies that buy the results of rubber latex produced by PT. Binex.

Chapter 5
Functional Plan

Production Plan

5.1.1. The Rubber Tree

Many plant species produce natural rubber. Considerations of quality and economics, however, limit the source of natural rubber to one species, namely Hevea brasiliensis. It is a native of the Amazon basin and introduced from there to countries in the tropical belts of Asia and Africa during late 19th century. It can be termed as the most far reaching and successful of introductions in plant history resulting in plantations over 9.3 million hectares, 95 per cent of it across the globe in Asia.

Hevea brasiliensis, also known as the Para rubber tree after the Brazilian port of Para, is a quick growing, fairly sturdy, perennial tree of a height of 25 to 30 meters. It has a straight trunk and thick, somewhat soft, light brownish gray bark. The young plant shows characteristic growth pattern of alternating period of rapid elongation and consolidated development. The leaves are trifoliate with long stalks. The tree is deciduous in habit and winters from December to February in India. Refoliation is quick and copious flowering follows. Flowers are small but appearing in large clusters. Fruits are three lobed, each holding three seeds, quite like castor seeds in appearance but much larger in size. The seeds are oil bearing.

The rubber tree may live for a hundred years or even more. But its economic life period in plantations, on general considerations is, only around 32 years – 7 years of immature phase and 25 years of productive phase.

5.1.2.Propagation of Rubber

Hevea seeds normally ripen during July-September when the seeds are collected and seedlings raised. All earlier plantations were raised from unselected seeds. The yield potential of these having been low, the production of those plantations was poor. Selection work on Hevea with a view to improving the planting materials and the introduction of vegetative propagation by budding led, in course of time, to the establishment of numerous valuable clones.

5.1.3.Clones

The planting materials approved by the Rubber Board are classified in to three categories I, II and III. Category I comprises of materials approved for large scale planting. However, it is strongly recommended that these may be used to cover only 50% of the total area of any estate or small holding.

Category II comprises clones, which have shown their merit in performance in India over long term or medium term periods. It is recommended that three or more of these clones be used to plant up to 50 per cent of the total area of any estate or small holding.

Category III planting materials are divided into (a), (b), (c) and (d). Materials under division (a) are those which have held out promise of good performance in small-scale trials, and over short term in some large scale trials in India or abroad. Hence these are approved only for experimental planting. Those under division (b) are old selections having promising localized performance or having desirable secondary attributes. In regions where these clones are showing very good performance, no restriction in planting is insisted. Modern clones with moderate scale performance are included in division (c). Other experimental clones of promising yield and/or desirable secondary characters with limited data are included in division (d). Selections from

any of these are recommended for very small scale planting not exceeding 15 percent of the total area.

Category I	RRII 105, PB 260, RRII 414 and RRII 430 (RRIM 600 and GT 1 in non traditional areas)
Category II	RRIM 600, GT 1, RRII 5, RRII 203, PB 28/59, PB 217, RRII 417 and RRII 422
Category III	RRII 50, RRII 51, RRII 52, RRII 118, RRII 176, RRII 208, RRII 300, RRII 429, PR 107, PR 255, PR 261, PB 86, PB 5/51, PB 235, PB 255, PB 280, PB 311, PB 312, PB 314, PB 330, RRIM 605, RRIM 701, RRIM 703, RRIM 712, RRIC 100, RRIC 102, RRIC 130, KRS 163, IRCA 111, IRCA 130, SCATC 88-13, SCATC 93-114, Haiken 1, BPM 24 and Polyclonal seeds

Table 4-1 Type of Rubber Clones

5.1.4. Agro-climatic Requirements

Rainfall of 2000 to 3000 mm evenly distributed without any marked dry season and with 125 to 150 rainy days per annum. Maximum temperature of about 29C to 34C and minimum of about 20C or more with a monthly mean of 25C to 28C. High atmospheric humidity of the order of 80%. Bright sunshine amounting to about 2000 h per annum at the rate of 6 h per day through all the months. Absence of strong winds

5.1.5.Rubber Growing Soils

Soil in the rubber tract is generally highly weathered and consists mostly of laterite, lateritic types. Sedimentary types and nonlateritic red and alluvial soils are also seen in some non-traditional areas. The laterite and lateritic soils are mostly very porous, well drained, moderately to highly acidic, deficient in available phosphorus and varying in potassium and magnesium content. Red soil found in some

areas is characterized by reddish to brown color and fine loamy texture. This soil is generally acidic and highly deficient in available phosphorus.

Soil for rubber cultivation should have a minimum depth of one meter without any intervening hardpan or impenetrable layer. Water table should also be well below one meter so that at least one meter of soil with good aeration, essential for root penetration is available.

Well-drained soil is essential for optimum growth and yield of rubber plants. In marshy areas, owing to poor physical properties and waterlogged conditions growth of rubber is always found to be very poor.

5.1.6. Nursery Establishment

Nurseries are established and maintained for raising various propagation materials for planting. These include seedling stumps, budded stumps and advanced planting materials like polybag plants, stumped budding and soil core plants. Mother plants or source bushes for the multiplication of bud wood are also grown in nurseries. Rising of plants is easier and cheaper in nurseries than in the main field. Moreover, nurseries offer an opportunity for selection of vigorous and uniform plants.

5.1.7. Land Preparation

In Indonesia, rubber plantations are established in forest clearings, rubber replanting or by crop replacement. Most of the areas available for rubber cultivation are highly undulating and the extent of flat lands suitable for planting rubber is limited. These situations necessitate clearing of the land and adoption of proper soil conservation measures before planting rubber.

a. Clearing

The land to be brought under rubber cultivation should be cleared of all vegetation. Large trees of economic value should be removed first followed by felling and removing of smaller trees and slashing of the under growth. A light burn after felling and drying facilitates planting operations and slows down the regeneration of weeds. Nevertheless, excessive cleaning and burning may cause the destruction of soil and expose the soil to erosion.

Replanting the old areas has to be thought of when the yield falls and the cultivation becomes uneconomic. The old trees may be slaughter tapped with yield stimulant application before felling. Lining and digging of pits can be started before felling of trees to save time. But there are chances of damaging the terraces at the time of felling.

b. Roads, Fences and Buildings

A well-planned network of roads and footpath is necessary for the easy transportation of inputs to the various fields, latex to the factory and for the efficient supervision of field operations. The roads should be preferably traced before the commencement of lining so that sufficient strip of land could be reserved.

Sufficient provision should be made for estate office, stores, processing factories and residential accommodations. The plantation should be protected all around by erecting fences or walls to keep away grazing cattle and to prevent pilferage.

c. Lining

Lining should be based on plant spacing and planting density to be adopted. Rubber can be planted by adopting square or rectangular planting system. Square planting is suitable for level and near level lands. Rectangular system can be adopted in flat lands and slopes. In rectangular planting the lines should be oriented in the East West direction to intercept maximum sunlight. Contour lining is

done in undulating and hilly areas where the slope exceeds 8 per cent. Here the planting points are marked as lines passing through points of the same elevation. The planting density recommended is 420 to 500 plants per ha in the case of budding or plants proposed to be field budded and 445 to 520 plants per ha in the case of seedlings. Higher initial stand is recommended for allowing proper thinning out.

d. Terracing

On hilly and undulating terrain, cutting of terraces along the contour is a recommended practice to conserve moisture and prevent erosion. The soil on the hill side is cut from a distance of 60-75 cm in front of the planting row and thrown back in such a way that the terraces so formed will have a width of 1.25 to 1.5 meter and an inward drop of 20-30 cm. Steps of uncut earth are left out at intervals along the terraces to check lateral flow of water. For economy, planting on hillside may be done on square platform of size 1.25 x 1.25 meter (honey comb terrace) during the year of planting and later on joined together to form a complete terrace.

e. Drainage

Proper drainage enhances aeration, microbial activity, ground cover establishment and helps in the development of an extensive root system. Natural waterways available in the area may be cleared, dressed or deepened to form a good drainage system. If not, drains are dug at an interval of 100-200 meters depending on the slope and drainage problem.

f. Construction of silt pits and contour bunds

Silt pits are trenches of about 120 cm length, 45 cm width and 60 cm depth taken along the contour at suitable intervals to check erosion and to conserve water. Pits can be taken at the rate of 150-250 per ha depending on the degree of slope. They are aligned in such a way that the pits in the adjacent inter-rows are in a staggered

manner. Construction of stone pitched contour bunds is another method to check erosion in steep slopes.

g. Pitting and refilling

Pitting is necessary to provide an ideal medium for the proper growth of the young rubber root system. The standard size of the pit is 75cm x 75cm x 75cm. The size of the pits varies depending upon the planting material to be used. Stumped budding need comparatively deeper and larger pits. Smaller pits are sufficient for small and medium sized polybag plants. On economic consideration in deep, loose and friable soils, pits are sometimes dug wider at the top and tapering towards the bottom or the depth is reduced to 60 cm with a central crow bar (alavango) hole of 15 cm or more depth for taproot. But in hard, stony and compact soils, the pits should be widened.

Pitting should be started sufficiently early and filling should be completed well in advance of planting so that the filled soil will get sufficient time to settle. While digging, the topsoil is kept on one side and the subsoil on another side. Filling should be done with the top fertile soil as far as possible. The organic manure and phosphatic fertilizers applied to the pits should be mixed with the top 20 cm soil in the pit. The pits should be filled to about 5 cm above ground level. A peg is placed in the centre of the pit to locate the planting point.

5.1.8. Field Planting

The success of planting depends on the prevailing weather conditions, quality of the planting materials used and the care with which the planting operation is done. Continuous wet weather can be expected during June-July in the major rubber growing areas in Indonesia and hence this period is considered to be ideal for planting rubber. The actual method of planting will depend on the materials used for planting. Different types of planting materials used are seeds,

seedling stumps, budded stumps and polybag plants. Of these, the last two are the most common ones.

5.1.9. Intercropping

During the initial years of a rubber plantation, the land area is not fully occupied by the rubber plants and inter spaces are available in the plantation which receive plenty of sunlight. These interspaces can be utilized for growing intercrops, which will help the farmer to generate additional revenue. Intercrops should be planted at least 1.5 M away from plant bases. Intercrops should be separately and adequately manure.

The topography of the rubber plantations vary from level lands to gentle, moderate and steep slopes. The high rainfall in the rubber growing regions and the undulating topography in many situations make the soil vulnerable to erosion hazards. Growing of inter crops necessitates soil disturbing tillage operations of various kinds. This will predispose the top soil to erosion losses in steep and undulating lands. The growing of intercrops therefore has to be restricted to level lands and gentle slopes. Even in such lands it should be ensured that leguminous cover crops are established side by side with intercrops or immediately after the intercropping is stopped. The general practice of growing leguminous ground covers has to be strictly followed in plantations of moderate and steep slopes.

5.1.10. Mulching, Shading and Whitewashing

Mulching or covering the plant basin with dry leaves, cover crop cuttings, grass cuttings, paddy straw etc is a recommended practice in rubber plantations to protect soil in the immediate vicinity of the plants from direct impact of heavy rains and sunlight causing soil degradation. Dried African Payal (Salvinia sp.) also can be effectively used as mulch

at the rate of 5 kg per square meter (sun dried material). Benefits of mulching

a. Improvement of water and plant nutrient holding capacity of the soil
b. Multiplication of microbial population of the soil, ensuring better nutrient availability
c. Protection of the soil from beating effect of heavy rainfall resulting in soil erosion
d. Control of weeds around the plant bases

Mulching should be undertaken in nurseries and young plantations after fertilizer application and before the onset of regular summer. Usually, November is the ideal time for mulching to protect the plant from adverse effect of drought.

During the year of planting young plants may be protected by shading before the beginning of summer. Plaited coconut leaves or used gunny bags can be used for this purpose. The brown bark of the young plants can be protected from the scorching action of the sun by whitewashing the main stem of the plant from the second year of planting. This may be continued till canopy of the plants develops and partially shades the plantation. However, plants on the roadsides may need whitewashing for a longer period as they are more exposed to sunlight. Whitewashing can be done using lime or china clay.

5.1.11. Induction of Branches

It has been observed that to achieve a high rate of girth increase the rubber plant should produce branches at a height of about 2.5 to 3.0 m from the ground. In high branching trees girth increment has been found to be poor compared to low branching trees. Some plants show a tendency for high branching, particularly clones like RRIM 600 and GT 1. In such cases branching has to be induced by encouraging a few lateral buds to develop. The branches thus induced should develop in different directions in an equally spaced manner to ensure a well-

balanced canopy. Techniques like the double blade ring cut device and the leaf cap method can be utilized for this.

The double-blade ring-cut device has two V-shaped blades fixed 20 cm apart on a rod. By pressing the V-shaped blades and rotating them around the trunk complete ringing of the bark is done down to the surface of the wood. The cuts are made above a cluster of leaf scars so that a number of trunk shoots is produced around this region. This method can be applied only on greenish brown or brown tissues and is not suitable for young green tissues. In young green tissues, the leaf folding or leaf cap method can be used. In the leaf folding method, the leaves of the top whorl are folded down at the point of contact of the petiole with the lamina using only the upper few leaves to enclose the apical bud. The leaves are then tied with a rubber band. After three to four weeks they are released. In plants where the terminal whorl of leaves is in the leaflet or bud break stage, the leaf cap method is recommended. Here, three mature leaflets are taken to form a cap to enclose the terminal bud and tied with a rubber band. The cap is then removed three to four weeks later.

5.1.12. Tapping and Stimulation

Latex is obtained from the bark of the rubber tree by tapping. Tapping is a process of controlled wounding during which thin shavings of bark are removed. The aim of tapping is to cut open the latex vessels in the case of trees tapped for the first time or to remove the coagulum which blocks the cut ends of the latex vessels in the case of trees under regular tapping.

5.1.13. Diseases and pests

Crops losses resulting from ravages of disease causing agencies in rubber plantations are substantial. Timely plant protection operations

ensure healthy growth and economic production. The major diseases and pests of rubber are given below.

a. Abnormal Leaf Fall
b. Shoot Rot
c. Powdery Mildew
d. Colletotrichum Leaf Disease
e. Leaf Spot
f. Pink Disease
g. Patch Canker or Bark Canker
h. Black Stripe, Black Thread or Black Rot
i. Dry Rot, Stump Rot Collar Rot or Charcoal Rot
j. Brown Root Disease
k. Scale Insect
l. Mealy Bug
m. Termite (White Ant)
n. Cockchafer Grub
o. Bark Feeding Caterpillar
p. Mites
q. Slug and Snail
r. Rat
s. Porcupines and Wild Pigs
t. Cover Crop Pests
u. Parasitic and Non-Parasitic Maladies
v. Sprayers and Dusters

5.1.14. Crop Collection

The main crop from a rubber plantation is latex, a milky white dispersion of rubber in water, which is harvested by the tapping process. Two to three hours after tapping, the latex collected in the cup is transferred to a clean bucket. About 70-80 percent of the crop from a rubber plantation is in the form of latex. The latex which gets solidified in the tapping panel (tree lace) and the collection cups (cup lump) also

form part of the crop and are collected by the taper in a basket just prior to tapping. The latex spilt and/or overflowed to the ground (earth scrap) when gets dried up is also collected as scrap once in a month. These are collectively called field coagulum. Latex and field coagulum is highly susceptible to bacterial action and therefore it is essential to process these into forms that will allow safe storage and marketing.

5.2.Financial Plan

The author has received funding of Rp. 1 billion, which is injection from shareholders. These funds will be saved in the bank with a 10% interest that can be withdrawn at any time to be used by the company. Assumptions to be used by the authors are as follows:

a. Starting area of planting is 10 ha and it will be enlarging about 2 ha per year. The result are:
   - For year 2009, total area is 10 ha
   - For year 2010, total area is 12 ha (increase 2 ha)
   - For year 2011, total area is 14 ha (increase 2 ha)
   - For year 2012, total area is 16 ha (increase 2 ha)
b. Each area of 1 ha, contain 475 tree that each tree can produce 0.1kg/day
c. The increase of price and cost are assumed 10% per year
d. Profit sharing is as follows:
   - Profits are total sales minus total cost of seeds, fertilizers, pesticides and salary, but exclude transportation. Transportation cost is on purchasers responsible.
   - 30% of sales are for the benefits of farmers
   - 70% rest are for the benefits of PT.Binex
e. Salaries of employee:
   - Salary of Director is Rp. 3,000,000 per month
   - Salary of Operation Manager is Rp. 1,500,000 per month
   - Salary of Marketing Manager is Rp. 1,500,000 per month
   - Salary of R&D Manager is Rp. 1,500,000 per months
   - Annually, each person has 13 months of salary

- Increasing in salaries are 10% per year

f. Net profit will always be injected to add capital through post of retained earning.

g. Latex production per unit area in a certain period of time is influenced by several factors, such as rubber clones type, the suitability of land and agroclimatetology, maintain the plant, and sap management system, etc. With the assumption that the management of plantation can meet all the criteria above, the estimation of production can be done by referring to the standard production issued by the local Central Plantation Crops Research concerned. Because the production of rubber plant is latex, the estimation of production per hectare per year converted to the unit in the sap of latex.

Age (year)	Tapping (year)	Production Lateks (kg/ha)
5	1	2000
6	2	4600
7	3	5600
8	4	6400
9	5	7000
10	6	7400

Table 5-1 Latex Productivity Estimation

5.2.1. 10-year Income Statement

An Income Statement, also called a Profit and Loss Statement (P&L), is a financial statement for companies that indicates how revenue (money received from the sale of products and services before expenses are taken out, also known as the "top line") is transformed into net income (the result after all revenues and expenses have been accounted for, also known as the "bottom line"). The purpose of the income statement is to show managers and investors whether the company made or lost money during the period being reported.

Net profit (loss) range from loss Rp. 110,100,000 at year 1 to profit over Rp. 797 million by the year 2018. The three biggest expenses are cost of good sold, farmer's position, salaries and wages. From the

income, PT.Binex pays operation cost. Net income is reinvested as retained earning in order to strength own capital. At the moment, PT.Binex will not pay any dividend to shareholders.

Year	2009	2010	2011
Selling Rubber			
Selling Corn	120,000,000	158,400,000	203,280,000
Total Revenue	**120,000,000**	**158,400,000**	**203,280,000**
Cost Of Goods Sold	36,000,000	47,520,000	60,984,000
Gross Profit	**84,000,000**	**110,880,000**	**142,296,000**
Operating Expense			
Farmer portion	25,200,000	33,264,000	42,688,800
Salaries and Wages	146,400,000	161,040,000	177,144,000
Equipment	10,000,000	11,000,000	12,100,000
Utilities	1,500,000	1,650,000	1,815,000
Depreciation	5,000,000	5,000,000	5,000,000
Transportation	6,000,000	6,600,000	7,260,000
Total Expense	**194,100,000**	**218,554,000**	**246,007,800**
Earning Before Tax	(110,100,000)	(107,674,000)	(103,711,800)
Tax			
Earning After Tax	**(110,100,000)**	**(107,674,000)**	**(103,711,800)**

Table 5-2 3-year Income Statement

5.2.2. 10-year Balance Sheet

In financial accounting, a balance sheet or statement of financial position is a summary of a person's or organization's balances. Assets,

liabilities and ownership equity are listed as of a specific date, such as the end of its financial year.

At the end of year, PT.Binex has not any debt from bank or other sources. Neither PT.Binex has any liabilities. It means assets are equal to capital. But during each one year operation, PT.Binex will have liabilities to supplier and will have account receivables to purchaser, but those are only for few weeks. Asset PT.Binex will be decline for the first four years, but at year 5 till year 10, the asset will increase significantly.

Year	**2009**	**2010**	**2011**
ASSETS CURRENT ASSETS			
Cash	594,900,000	448,226,000	301,114,200
FIXED ASSETS			
Building	95,000,000	90,000,000	85,000,000
Land	200,000,000	244,000,000	292,400,000
TOTAL ASSETS	**889,900,000**	**782,226,000**	**678,514,200**
LIABILITIES			
Current Liabilities	-	-	-
Long Term Liabilities	-	-	-
SHAREHOLDERS EQUITY			
Capital Stock	1,000,000,000	1,000,000,000	1,000,000,000
Retained earning	(110,100,000)	(217,774,000)	(321,485,800)
TOTAL SHAREHOLDERS EQUITY	889,900,000	782,226,000	678,514,200
TOTAL LIABILITIES & SHAREHOLDER	**889,900,000**	**782,226,000**	**678,514,200**

Table 5-3 3-year Balance Sheet

According to the projected balance sheet, PT.Binex has a lot of cash or very liquid. In asset management, it is very good opportunity to invest the cash in the short term investment with tenor of one until three months. But PT.Binex does not intend to enter short term investment market, and prefers to maintain its liquidity in saving account with low interest rate but have unlimited access.

5.2.3. 10-year Cash Budget

An estimation of the cash inflows and outflows for a business or individual for a specific period of time. Cash budgets are often used to assess whether the entity has sufficient cash to fulfil regular operations and/or whether too much cash is being left in unproductive capacities.

Year	**2009**	**2010**	**2011**
Beginning cash balance	-	594,900,000	448,226,000
Cash from operations	120,000,000	158,400,000	203,280,000
Total available cash	**120,000,000**	**753,300,000**	**651,506,000**
Less:			
Capital expenditures	300,000,000	44,000,000	48,400,000
COGS	36,000,000	47,520,000	60,984,000
Operating Expenses	189,100,000	213,554,000	241,007,800
Income Tax			
Total disbursements	**525,100,000**	**305,074,000**	**350,391,800**
Cash surplus (deficit)	**(405,100,000)**	**448,226,000**	**301,114,200**
Add			
Capital stock issues	1,000,000,000	-	-
Total addition	1,000,000,000	-	-
Ending cash balance			

	594,900,000	**448,226,000**	**301,114,200**

Table 5-4 3-years Cash Budget

5.2.3. Financial Feasibility Analysis

In this analysis will be conducted in the financial feasibility of using the financial parameters such as NPV, Payback Period, and the IRR. Use of this parameter is to prove the feasibility of this project, or the appearance of impropriety.

a. Analysis of Net Present Value

Net present value (NPV) is defined as the total present value (PV) of a time series of cash flows. It is a standard method for using the time value of money to appraise long-term projects. Used for capital budgeting, and widely throughout economics, it measures the excess or shortfall of cash flows, in present value terms, once financing charges are met. NPV in this rubber plantation project is Rp. 664,012,964.85

b. Analysis of Internal Rate of Return

The internal rate of return (IRR) is a capital budgeting metric used by firms to decide whether they should make investments. Internal rate of return in this rubber plantation project is 31%, greater than the rate of return that could be earned by putting in bank deposit (assumption rate 10%)

c. Analysis of Payback Period

Payback period in business and economics refers to the period of time required for the return on an investment to "repay" the sum of the original investment. Payback period in this rubber plantation project is 7 years 1 month.

Financial Feasibility	Value	Feasible if
NPV	Rp664,012,964.85	NPV > 0
IRR	31%	IRR > 10%
Payback Period	7 years 1 month	

Table 5-5 Financial Feasibility Analysis

5.3. Marketing Plan

PT. Binex will sell natural rubber latex to rubber processing companies in the areas of Bangka, but there is a possibility PT.Binex will sell it to rubber processing companies outside if the price offered is higher, then the PT. Binex will sell to the highest bidder.

PT.Binex also plans to create an exclusive agreement with the rubber processing company, which has the highest bidding price, so it will provide benefits for both parties. Agreement exclusive agreement consists of the selling price and the quantity of rubber latex production, which must be fulfilled by the rubber plantation company, during a certain period. The advantage for rubber plantation companies, such as PT.Binex, is the company will have the certainty of buyers and selling price. And for rubber processing companies, their advantage is the certainty of raw material (rubber latex) supply to fulfil orders from manufacture companies that buy raw material from them.

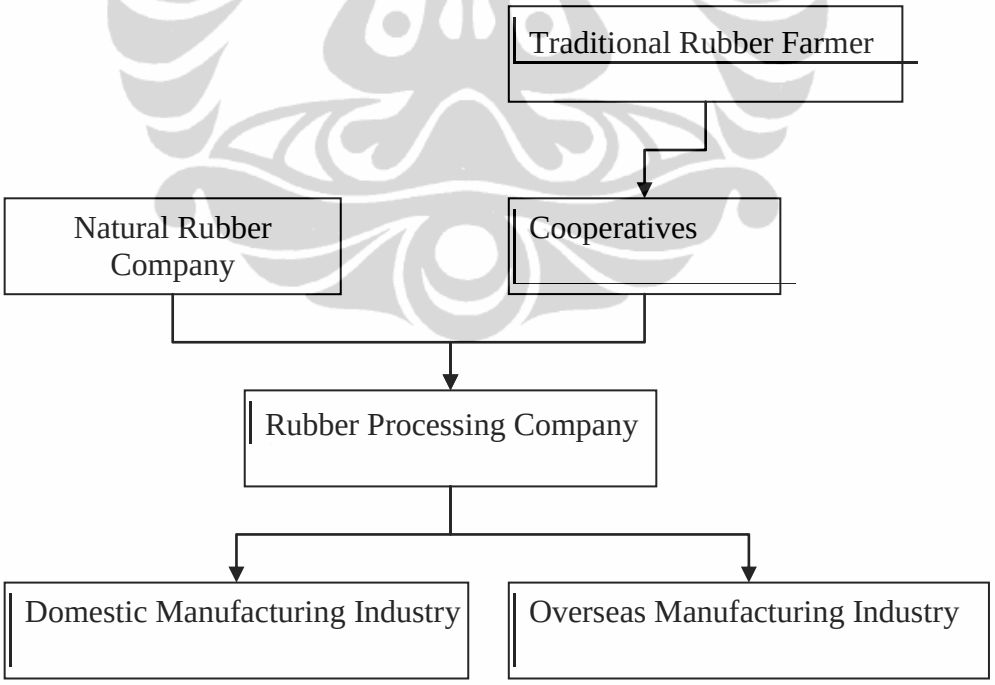

Figure 5-1 Natural Rubber Selling Path

Processing and selling plan of natural rubber are the rubber plantation company sell the latex to rubber processing companies, and then natural

rubber processing companies will process natural rubber latex become half finished or finished rubber material. After that, the rubber processing company will sell it to manufacturers companies, which use that half finished or finished rubber material as one of their raw materials, both in the country and exported to overseas companies, to further processed into a product which is sold to the public.

Usually, rubber processing company will go to the rubber plantation areas to collect the natural rubber latex, so the plantation companies do not need to pay transport costs anymore. Payment is usually made in cash, after natural rubbers weighed, then buy and sell transactions directly. Buying and selling price is the price agreed upon by both parties.

PT. Binex will also try to maximize the value of additional commodities that planted by PT. Binex, like corn plant. PT.Binex will sell this commodity to companies that need corn as their raw material. One of the examples of companies that use many corn as their raw materials is livestock feed companies and snack producer companies. PT.Binex hoping in the future can develop corn commodities into final product that can be sold directly to the end consumers. It is expected that it can provide additional income for the company and farmers.