

2025



MING XIN INDUSTRIAL PARK

Business Plan for Development of Ming Xin Industrial Park

June, 2025

Contents

1. Introduction	4
1.1 Summary of Ming Xin Industrial park	4
1.2 Rational for Development of Industrial Parks in Tanzania	4
1.3 Objectives of the Business Plan	5
1.3.1 Market Analysis	5
1.3.2 Land Supply Analysis	5
1.3.3 Marketing/ Promotions Action Plan	6
2. Socio-economic Development	6
2.1. Population and Social	7
2.2. Economic Growth	7
2.3. Industrial Development	7
2.4. Import and Export	7
2.5. Tanzania Commercial Forecast of Supply of Key Products	8
2.6. Market Demand Forecast	8
2.7. Market Competitiveness	9
3. Risk Analysis	10
3.1. Macroeconomic Risk Analysis	10
3.2. Financial Risk Analysis	11
3.3. Political Risks	11
4. Development Process	12
4.1. Development Planning	12
4.2. Site Development	13
4.3. Building Construction	13
4.3.1. Post Construction Services	14
4.4. Research	14
4.5. Surveying, Mapping, and Plat Preparation	15
4.6. Construction Document Preparation	15
4.7. Billing Period Services	15
4.8 Requirement from Ming Xing Co Limited	16
5. Ming Xin Industrial Park	16
5.1. Infrastructures	16
5.2. Residential and Commercial Facilities	17
5.3 Public Service Facilities	17
5.4. Administration Area	17
5.5. General Arrangement	18
5.6. Project Land Use Plan and Layout	21
6. Financial Model and Result of Analysis	22
6.1. Financial plan	23

7. Project Risk Management 24
7.1. Political Risk Issues 24
7.2. Project Risk Issues 25
7.3. Institutional Risk Issues 25
7.4. Physical Environment Impacts and Risk Issues 25
7.5. Social Environment Impacts and Risk Issues 26
7.6. Risk Management Analysis 26
8. Environmental Impact Assessment 26

1. Introduction

Ming Xin Company Limited is a limited company incorporated in Tanzania with registration No. 126080 and its head quarter in Dar es Salaam. After purchased 300 Acres land which was located at the Plot 6384, 6385, 6386, 6387, 6388, 6389 Minazi Mikinda village, Mlandizi area, Kibaha district, Pwani Region, the company planned to conduct modern industrial park construction with all infrastructures and facilities. Ming Xin Company Limited followed the procedure of government in order to quickly develop this property so that it would be ready for investment.

1.1 Summary of Ming Xin Industrial Park

This section summarizes the Ming Xin Industrial Park Project described in their concept note.

Table: 1. Project employment

No.	Section	Domestic employees	Foreign employees
1.	Water pipe and extinguisher	100	10
2.	Solar Panels	540	25
3.	Yarn Dyed Fabric Mill	1,700	90
4.	Sisal, Iron nails and Hardware	350	45
5.	Truck and Tipper assembly	4,700	100
6.	Motorcycle tire manufacture	600	30
7.	Other Invited Investment	4,600	100
Total		12,590	400

1.2 Rational for Development of Industrial Parks in Tanzania

The Government of the United Republic of Tanzania is currently promoting development of Industrial clusters to foster economic development by attracting both direct domestic and foreign investments. Develop of Ming Xin Industrial Park in Tanzania will be undertaken as one of the Industrial Clusters in Tanzania. Through Industrial clusters, the Government aims at the following:

- i. To Develop and Diversify Exports
- ii. To Support Local Industry and cluster
- iii. Create Jobs
- iv. Pilot new policies and approaches (for example, in financial, legal, labor and pricing aspects)
- v. Industrial Parks may allow for efficient Government regulation of enterprises, Provision of off-site infrastructure and environmental control

1.3 Objectives of the Business Plan

The goal of this Business Plan is to provide updated market intelligence and marketing advice to improve the Company business plan. Based upon consultant knowledge and the input gathered from primary and secondary sources, local business owners and others involved in local and regional industrial development the Business plan covers three main sections.

- i. Market Demand Analysis
- ii. Supply Analysis
- iii. Marketing/Promotions Action Plan

1.3.1 Market Analysis

A Product and Services, the project will be based on the development of Industrial Park with all infrastructures and facilities.

B Market Shares and Competition, the company expects to own more than 25% of market share for export oriented to China and making effort to increase yearly. The major competitors of company services are Government through EPZA and other industrial parks within the country in which by number is very few. The company does not fear the competition from the other competitors.

1.3.2 Land Supply Analysis

Land is a valuable resource that needs careful management. Ming Xin Industrial Park have established development plan with policies generally consistent with the local Government Planning Regulation to guide the use of land. The plan states that the designation of land should correspond to the changing land demands of investors and not be wasteful of land. A development plan should ensure a balance between the amount of land designated for residential use and commercial use and development of industrial park.

An adequate supply of appropriately located and designated residential land encourages orderly development in a strategic, planned manner including the development of Industrial Parks at three phases.

Phase I: 100 acres of land for export processing zone, 30 acres of land for commercial and residential and public utilities purpose

Phase II: 120 acres of land for general industrial processing purpose

Phase III: 80 acres of land for industrial clusters and high technology enterprises

Figure: 1 Location for Ming Xin Special Economic Zone



1.3.3 Marketing/ Promotions Action Plan

The use of advertisement and public notice will be highly emphasized, publication of a marketing package comprised of a promotional folder, brochures, and an electronic presentation on CD-ROM. Development of a web site promoting the unique opportunities provided by the industrial park. Aim to development of a marketing program for the High-Tech Industrial Park and signing of a preliminary contract with plenty of external investors.

2. Socio-economic Development

Tanzania, with an area of 945,203 square kilometers, is composed of mainland Tanzania and Zanzibar islands. It is located in eastern Africa, South of the equator and east of the Indian Ocean; to its south countries such as Zambia, Malawi and Mozambique; to its west there are Rwanda, Burundi and the Congo and to the north are Kenya and Uganda. The coastline of the Tanzania is 1424 Km. Most parts of mainland Tanzania is a savannah climate. The annual temperature different is small and the average temperature is between 15 to 32 degree centigrade. Every December to next March and April the weathers hot and from June to September is cooler. The precipitation is little around the country and 80% of the annual precipitation is less than 1000mm.

2.1. Population and Social

The population of Tanzania presented steady growth from 2000 to 2019. Tanzania's total population is 60.57 million in April of 2019. Urbanization population growth rate increased from 22.3% in 2000 to 34.32% in 2018; compound annual growth rate of urban population is 4.2% during 2000 to 2019. More than 98.5% of Tanzania is Africans and more than 200,000 people are of Indian, Pakistani and Arabic origin. Swahili is the national language and the official language is English. Tanzanians believe in traditional beliefs, Catholic and Islam.

2.2. Economic Growth

In the five countries of the East Africa Community, the economic development of Tanzania is in relatively good condition. From 2000 to 2018, Tanzania's GDP was growing steadily. The Tanzania GDP in 2000 was \$9.079 billion and grew to \$16.239 billion in 2009 and to \$57.445 billion in 2018. The GDP growth rate of has been maintained to about 5.5% from 2000 to 2009, and about 7.0% from 2010 to 2018. Tanzania's per capita GDP indicators are rising. In 2000 Tanzania's per capita GDP was \$306.72 and grew to \$658.76 in 2009 and to \$957.10 in 2018.

2.3. Industrial Development

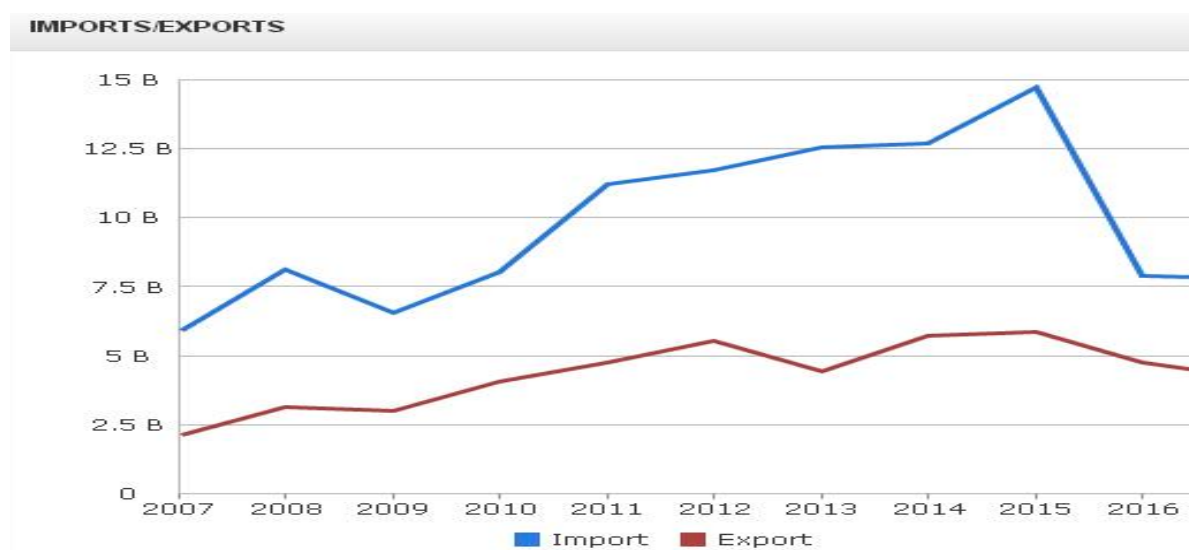
The Tanzania economy is dominated by agriculture, food is barely self-sufficient with low industrial production technology, and daily consumer goods have to be imported. The agriculture sector in Tanzania includes farming, forestry, fisheries and animal husbandry. Agriculture absorbs 2/3 of the arable land area of 3940 hectares and majority of the national workforce. The main crops are corns, wheat, rice, sorghum, millet, cassava. The main cash crops are coffee, cotton, sisal, cashew nuts, tea, tobacco, and so on. In the period 2000 to 2016, the retail sale of consumer goods in Tanzania was in upward trend, with the compound annual growth rate of 9.63%, in 2016 total retail sales of consumer goods rose to 11,091.21 billion Tanzania Shillings.

2.4. Import and Export

The 2000 to 2016 Tanzania total imports and exports increased from \$2.198 billion to \$9.820 billion. Among them, export increased from \$ 663 million to \$3.493 billion; import increased from \$ 1.534 billion to \$6.326 billion; Tanzania has maintained a trade deficit. Tanzania exports are mainly agriculture products. The main export commodities: coffee, cotton, sisal, tea, tobacco, cashew nuts and cloves. This year, exports of gems and gold and other minerals have come into play importantly as well. Tanzania's main export destinations are: India, South Africa, Vietnam, Kenya, Belgium, Dr Congo, China, and United Arab Emirates. In 2016 of Tanzania's major exports were precious stones & metals, Fruit and nuts, Tobacco, coffee and spices, seafood. Tanzania gold export earning of above products in 2016 was \$1.82 billion, an

increase as compared to \$932.4 million in 2008. Tanzania’s gold exports alone accounted for more than 89 per cent of all mineral exports in 2016. Oil & mineral fuels are the main imported goods in Tanzania. The proportion of goods with high technology is small. The main import commodities: oil & mineral fuels, industrial machinery, motor vehicle & parts, electrical machinery, pharmaceuticals etc. Most of imports are form China, India, United Arab Emirates, Saudi Arabic, Japan, South Africa, Germany, Switzerland, United States, Kenya, and other import partner countries; China accounted for 20.8%, India accounted for 18.4%, United Arab Emirates accounted for 7.52%, Saudi Arabic accounted for 6.00%, Japan accounted for 4.71%.

Table 2: Tanzania Export Data from the year 2007 to 2016



2.5. Tanzania Commercial Forecast of Supply of Key Products

Tanzania manufacturing imports centers mainly in agro-processing, light industry and import substitution, including textiles, food processing, leather, footwear, steel rolling, aluminum processing, cement, paper, ships, chemical fertilizer, oil refining, automobile assembly and agriculture implements manufacturing. In the period of 2005 to 2024, the production of biscuits, flour, beer, cigarettes, textile, rope, paint, iron, batteries and other products in Tanzania increased with different degree. In support of national policy, expected future consumption capability of Tanzania food, textiles, home building materials and consumer electronics products will increase, but the lower level of industrial manufacturing in Tanzania of such goods as building materials, consumer electronics products will still necessitate demand in imports to cater for the increasing demand.

2.6. Market Demand Forecast

Tanzania industrial structure is relatively simple. The foundation is weak and of relatively low level of development. However, finished products have great demand. These manufactured goods include food, clothing, electronic products, drugs, plastics products, and paper and

rubber products. There is a huge demand of consumer goods in Tanzania, particularly in line with increasing levels of per capita income, of such products as mobile phones and other electronics. Because of poor consumer demand and the impact of the level of industrial development, the current commercial market products in Tanzania are mainly middle and low product based. The high end product sales are relatively small and are concentrated in the cities. However from the price point of view, compare to the Chinese market commodity price are generally higher in Tanzania. From the development trend in recent years, Tanzania residents have the tendency to check the quality requirements of the commodity. The proportional of demand for commodities and imported goods are mainly daily necessities; video and apparel sales. Some of the above products are precisely our traditional advantages products, our investors, through the Tanzania market, can meet Tanzania's domestic and neighboring countries demand. After the visit to Tanzania and the discussions with Chinese people in Tanzania, and after collecting data, filling in the questionnaire and doing a proper research the view has emerged that there is a greater demand for imports of the following categories of goods in Tanzania and the East Africa Community.

- i. Machinery: factory machinery, agriculture machinery, Auto parts
- ii. Textile and clothing: clothing, bags, footwear, bedding, textiles
- iii. Home building materials: home paint, tile, hardware and building materials
- iv. Daily chemical: wigs, skin care products, laundry, candles, and consumer goods
- v. Electronics: cell phones, batteries, radio, air conditioners, refrigerators, fans
flashlight, light bulbs, sewing machines
- vi. Style supplies: office equipment, stationery, sports goods, toys
- vii. Craft jewelry, holiday items and trinkets

2.7. Market Competitiveness

Main competitors Tanzania commercial wholesale and retail cover store, chain store, shopping mall, online shopping, wholesale market, specialty shops, commercial buildings, etc is relatively rich. Meanwhile, hundreds of Chinese shops can be found in Tanzania. From the size of the market, Tanzania commerce market is mainly centered on traditional small retail stores. Fewer shopping malls and chains are relatively less developed, but more concentrated in the major cities such as Dar es Salaam, Arusha, and Mbeya.

The main rivals to cause competitive effect to the trade and logistics center are several supermarket chains and one large business market at the wholesale level. The Tanzania domestic large supermarket chains by multinational supermarket chains, South Africa, as well as all kinds of small and medium sized professional supermarket are of in general limited quantity as compared to the largest wholesale markets in china. For example Massmart is the second largest listed retailer in south Africa has 288 stores including 263 in south Africa the 25 others located in 12 African countries including Botswana, Zimbabwe, Nigeria and Ghana whereas only one is in Tanzania. Commercial market development in South Africa is relatively more mature. The supermarket chains have become saturated and competitive. With the saturation of domestic market in South Africa, it is expected that these large multinational companies will increase investment in other African countries. Meanwhile in 2010 the renowned global retail leader Wal-Mart announced that it has plans to spend more than 40

billion U. S dollars to acquire Massmart holdings.

The African market this year has showed a huge potential for growth, which impressed Wal-Mart. It is expected that Africa's development efforts will increase in the future and may promote the development of Tanzania commercial market and therefore becoming potential competitors of the trade and logistics center. The large commercial markets of Tanzania are Kariakoo commodity whole sale market. The Kariakoo is located in the capital of Tanzania, Dar es salaam and is Africa's largest trade market selling food, textiles and electronic and so on. Kariakoo is within a total gross floor area which is located 10,000 m² storey in which 1-4 layers for shops, with more than 100 shops. By poor consumer demand and the impact of the level of industrial development, the current commercial market products in Tanzania are mainly middle and low product based; high-end product sales are less and mainly concentrated in the large and medium-sized cities. However from the price point of view, compared to the Chinese market, Tanzania commodity prices are generally relatively higher. Almost all of the business in Tanzania is wholesale and retail which is completely isolated from the format and processes of manufacturing. Enterpriser design, production sales and services are relatively little, and sales mostly do not pay attention to differences of the product and brand.

3. Risk Analysis

Investment project risk analysis at market forecasting, technical solution, engineering solution, financing programs and social evaluation of the project have been conducted during the preliminary risk analysis on the basis of the further analysis to identify the potential risk factors for the proposed project in the construction and operation stages reveal the source of risk, to determine the degree of risk and to propose measure to avoid the risk as well as the countermeasures to reduce the risk of loss. Usually overseas investment project operate under complicated international situation and are seldom vulnerable to a variety of uncertainties. Thus careful scientific analysis of the project investment is very important.

3.1. Macroeconomic Risk Analysis

Since early 1986, the government of Tanzania has launched a comprehensive economic policy and stabilization plan with the aim to enhance the amount of infrastructure construction and improve the lives of the poor. During this time the main economic indicators significantly improved. However, uneven development of various regions in the country, lack of relevant infrastructure in transportation telecommunications, networking, health facilities, electricity and water supplies have proven to be investment barriers. Overall, Tanzania has a weak economic foundation but the project can achieve a greater impact in attaining social and economic goals for the country.

3.2. Financial Risk Analysis

Financial risk of the project includes construction investment risk, exchange rate risk and current risk. Funds availability whether the funds are available on time in full remain to be a determinant factor in the quality of the project and progress related to its smooth implementation. The supply of fund for the construction of the project is a potential risk factor. Therefore, there is a need to have preliminary preparations of fund before commencement of construction to ensure smooth of the progress of the project. Exchange rate risk refers to the life of a loan, direct or indirect result of the borrower's income subject to the risk of loss due to currency fluctuations. Currencies in circulation in the united republic of Tanzania are the Tanzania shilling and the dollar. In recent year the Tanzanian shilling against U. S dollar has tended to drop. In the past five years, an annual depreciation of about 5%, while in exchanging U.S dollar for Yuan the depreciated has dropped by about 3% annually in the past five years -implying that basically the exchange rate risk is at a controllable range. Currency and profit remittance Currency risk including utilities which project host country area convertible and that currency and profit remittance freedom, are the one of the risk.

Tanzania and east Africa countries exchange liberalized and foreign exchange are not controlled, thus making currency risk to be small. But Tanzania foreign currency exchange procedure are more cumbersome and less efficient, which the resulting effect has the relevant influence that the need to considered. Interest rate risk is the risk of a company's profitability or value due to change in interest rates. From 1993, the central bank of Tanzania has fully implemented the liberalization of interest rates, and took effective measure to control the overall interest rate. If Tanzania's overall economic situation does not change much, fluctuation in interest rate will not be barriers to capital flows during operations Profit remittances, exchange rate risk analysis from 1991, the Bank of Tanzania has taken a series of action to gradually relax the controls on foreign exchange transaction, and adopted a freer exchange rate policy. Foreign exchange or export faces very little foreign exchange restrictions but it involves a lot of paperwork. Inefficiencies will cause a certain degree of uncertainty project.

3.3. Political Risks

Recently, destabilizing factors have emerged in the international community, having an impact on China's development of international trade. Especially the political situation in Egypt, Sudan, Libya and other place is very tense posing uncertainty on Africa's future political situation. But there are no such conditions in Tanzania as a political coup. First in Tanzania now the government has high reputation; second Tanzania has stable economic development the people are having a normal work, social contradictions are not prominent. There is as well stable between Tanzania and neighboring countries, Europe and America with no obvious hostile countries. Therefore, we believe that Tanzania's political risk is relatively small and has limited impact on investment.

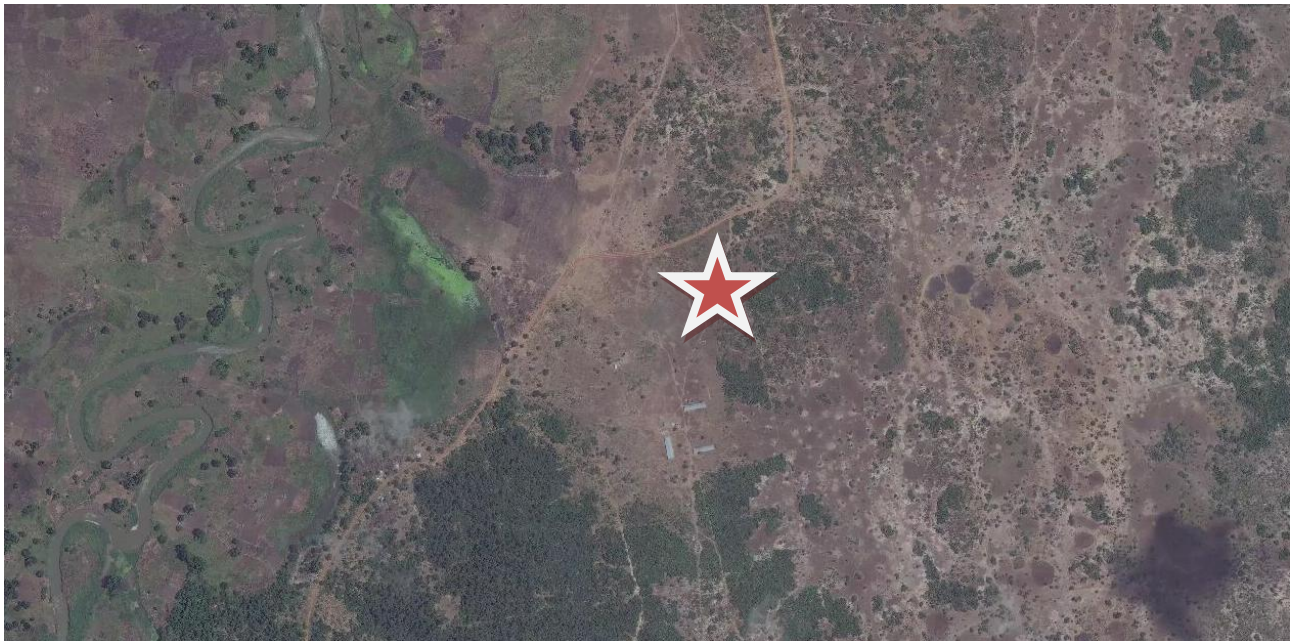
4. Development Process

Most of this topic already has been covered in the descriptions of the phased development options as well as the discussion of resolving the pre-development issues. Following is a generic model of the process to serve as a guide and to answer any additional questions. Three steps in the development process are outlined here:

- i. Development planning
- ii. Site Development
- iii. Building construction

The third item applies to the multi-tenant building but also applies to any build-to-suit Construction of buildings for specific tenants if the owner decides to offer turn-key facilities

Figure: Ming Xin Development site Minazi mikinda Mlandizi



4.1. Development Planning

The development planning for Ming Xin Industrial Park had been addressed by the creation of the Master Plan. Among the detailed investigations and documentations provided in the Master Plan are:

- i. Topographic survey of the site
- ii. Soils and foundation conditions
- iii. Plot layout plan
- iv. Street system plan
- v. Roads access
- vi. Rail access options, if any
- vii. Utility capacities, off-site and on-site requirements to serve the site

- viii. Drainage issues
- ix. Environmental and cultural issues

In most private industrial projects, this information is used to draft a subdivision plan and have it approved by the appropriate regulatory agency. This approval normally carries a set of "findings" or "Record of Decision" that imposes conditions on the project that will have to be met to obtain subsequent building permits.

The next step is to use the Master Plan as the base document for more detailed engineering work, including drafting the construction specifications. These normally are prepared by a qualified civil engineering firm.

4.2. Site Development

Ming Xin Industrial Park Plan for development of the site is normally managed by the construction contractor, with routine oversight by the owner either through a designated manager or by a board. A qualified contractor will hire the subcontractors, oversee their work, and file written documentation that the work has been performed to specifications. Invoices are normally submitted monthly and prompt payment is required to ensure that there are no breaks or slowdowns in the process. If the project is built on Tribal land, the Tribe should be aware that a general contractor may require payments in advance of work because Tribal sovereignty precludes the use of construction liens to ensure future payment. Another option is to continue the services of the civil engineering company through the construction phase. The company that bid the services described above also makes a proposal to provide the following services during and after construction.

4.3. Building Construction

Building construction Period Services will undergo some different procedures, which will include:

- a. Coordinate and attend a pre-construction conference
- b. Review bonds, insurance, and other requirement submittals
- c. Coordinate and document monthly construction conferences
- d. Provide construction staking and observe construction progress
- e. Offset stakes set at ROW line on 50-foot intervals
- f. Centerline subgrade hubs at 50-foot intervals
- g. Centerline top of rock hubs at 50-foot intervals
- h. Utility and drainage structures (MHS, FHS, vaults, etc.)
- i. Perform daily sewer construction observations and file reports
- j. Coordinate utility trench backfill compaction and materials testing
- k. Maintain records of the construction staking and test results
- l. Respond to clarification requests
- m. Review/initiate and process change order requests and proposals
- n. Maintain as-constructed drawing
- o. Review progress payment requests submitted by the contractor

- p. Complete BOLI Notice of Award form and review payroll certificates
- q. Prepare completion punch list and confirm compliance

4.3.1. Post Construction Services

Prepare record drawings on Mylar for archives (7 sheets) Using a civil engineering firm in this construction management capacity will relieve the City of having to manage this complex process. It will ensure that the work will be performed to specifications and that the final effect is in conformance with the Master Plan. The primary management requirements for the owner will be contracting with the engineering firm, contracting with the general contractor who will be responsible for doing the work, and paying the bills as the completed work is documented. Building Construction this essentially completes the requirements for managing the development process, unless the owner decides to intervene into the management of building construction. This would be done in order to offer build-to-suit construction capabilities and turn-key leases that combine both the land and the building space under a single lease. This would be attractive for companies that want to lease their space instead of having to construct owned buildings on leased land. It allows them to preserve their capital and invest it in their operations instead of in real estate.

The requirements for managing building construction are similar to those for land development. An architectural firm will provide all of the services described above similar to those of a civil engineering firm. Fees for the architect are normally wrapped into the construction financing so there may be no up-front capital cost. Most architects will oversee the actual construction, delivering the final product to the owner according to the tenant specifications. The costs of the building are generally amortized over the period of financing, while the specific tenant improvements (TIs) are amortized over the period of the lease. These terms are flexible according to the length of the lease period.

In summary, managing the development process will not impose a significant burden on the City or the Tribe if outside professional expertise is hired to do this job. If the job is done in-house, then the owner will need to hire a manager with all the technical experience to do the tasks described above. As cited earlier, there needs to be close interaction between the contractors and the owner's managers in order to build the experience and knowledge that will be needed for the on-going management of the industrial park of Special Economic Zone.

4.4. Research

- a. Meet with owner to review Master Plan and development objectives
- b. Obtain record survey data from County Surveyor
- c. Solicit as-built cable and utility data from providing companies
- d. Coordinate buried utility locates
- e. Review site in the field, inventory and photograph key features
- f. Review title report provided by owner

4.5. Surveying, Mapping, and Plat Preparation

- i. Review record survey data and compile project work map
- ii. Utilize GPS to tie monuments and establish a control point network
- iii. Perform field topographic design surveys on roadways
- iv. Reduce field survey data and compile project base map and DTM
- v. Prepare a subdivision plat
- vi. Monument the new and missing property corners
- vii. Secure the required plat signatures and facilitate recording
- viii. Prepare legal descriptions and exhibits for required easements

4.6. Construction Document Preparation

- a. Review research and survey findings with the owner
- b. Prepare the following bidding and construction drawings
- c. Cover sheet with vicinity map, acknowledgments, & notes
- d. Overall site plan and index map
- e. Road and utility plan and profiles
- f. Miscellaneous construction details (2 sheets)
- g. Review drawings @ the 75% and 100% complete points with:
 - i. Owner
 - ii. City road engineer (County/Highway District/ITD depending on location)
 - iii. City sewer engineer
 - iv. City water engineer
- h. Submit sewer plans for regulatory review
- i. Measure quantities and prepare a construction cost estimate
- j. Prepare bidding and contract forms
- k. Prepare general conditions and supplemental technical specifications
- l. Publish thirty (30) bid document sets

4.7. Billing Period Services

- a. Prepare an advertisement for bids and distribute to publishers
- b. Coordinate and attend an on-site pre-bid conference
- c. Prepare addenda as needed to clarify the construction scope
- d. Conduct a bid opening at a location to be arranged
- e. Assist in review of bids and prepare an award recommendation
- f. Prepare a Notice of Award and instructions to the apparent low bidder

Some of these steps may not be required for Ming Xin industrial park, while other steps may have to be added. There may also be some services that the City or the Tribe could perform in-house. In any case, the development planning stage performs all of the work necessary to actually issue a construction contract.

4.8 Requirement from Ming Xing Co Limited

For the construction Ming Xin Industrial Park Project to be successful the company has put forward the following requirements;

Tax /Fiscal Incentives requirements

The company requested the following as regard to Tax incentives for effective implementation of their project;

- i. 10-year corporate tax holiday and tax at a half of the prevailing rate thereafter
- ii. 10-year withholding tax holiday on remittances to non-resident
- iii. Exemption from payment of stamp Duty on execution of legal instruments
- iv. 100% investment deduction on capital investment.

5. Ming Xin Industrial Park

Ming Xin Industrial Park, a vast area in the Mlandizi, is proposed to be developed through phased implementation as appropriate. In each phase, the Zone selects some particular priority manufacturing sectors, which must be strategically in Proposal accordance with the performance of Tanzanian manufacturing industries. Ming Xin Industrial Park is divided into numerous blocks by arterial and feeder roads. Each block is designated to a certain factory for the initial setup of the workshop, warehouse and other facilities. All supplementary infrastructures shall be ready for immediate use before the factory entering the operation. The factories on the same industry chain are selectively arranged in the nearby blocks. As a result, these neighboring blocks comprise a base for the further industry clustering and agglomerating.

5.1. Infrastructures

Currently, the zone is merely a green field without any manufacturing industries and other necessary supplementary facilities. In order to capture the interests of global investors, the Industrial Parks shall provide Traffic system, including the arterial and feeder roads within the Industrial Parks, and highway and railway connecting to the hinterland. Power and water supply for both of the industrial and residential use in the Industrial Parks. Three plans available for consideration Power and water are offered by the external sources out of the Industrial Parks. The Government takes in charge of the related connection to national power net and water supply system. New power and water plants would be constructed in the Industrial Parks, and the investment would be cooperated with the Government. Private sectors invest in the new power and water plants, which are granted the rights and obligations identical to other private company in the Industrial Parks. The plants price the service rate, collect revenue and take all costs by themselves, while the Government levies the tax and other administration fee as per the related acts and laws. The power and water only cover the need of the Industrial Parks, so that it will not influence the current market rate in Tanzania. The

external power and water supply may be abundant to cover the short-run consumption at the early stage of the Industrial Parks. Nevertheless, it is still strongly suggested that the Industrial Parks shall retain the basis, such as land, for the independent power and water supply. Demands on power and water grow up with the rapid development of the Industrial Parks.

In a long term, Ming Xin Industrial Park will obtain the embryonic form of metropolis, which cannot be supported by the external supply of the power and water. Waste treatment would be the compulsory facility for the environmental protection. The business model can refer to the one for power and water supply. Proposal on zone is to ensure the firms entered the Industrial Parks can contact with their global business partners through telephone, mobile, internet access, etc. Bounded Warehouse and Inland Container Depot facility is indispensable for the Industrial Parks in at least two ways. The construction of Industrial Parks induces a huge import on construction materials, due to the limited production of steel structures in Tanzania. The Bounded Warehouse facility serves to receive and unload the imported construction materials, with the purpose to assure the smooth implementation of Ming Xin Industrial Park project.

5.2. Residential and Commercial Facilities

Residential area-conformable, hygienic and convenient residential facilities are most basic and most important prerequisites for either management staffs or workers. There consists of two types of housing facilities:

- High-density residential for workers; and
- Low-density residential for management staffs.
- Commercial area -shopping malls, office building, etc.

5.3 Public Service Facilities

Urban functions-including banks, commercial centers, markets, shops, hospital, religious area, library, etc. Education Primary school and secondary school providing the pre-college education for the children of staffs and workers; Technical school providing the professional training to the workers employed by the factories sited in the Industrial Parks; and Management academy providing the training for management staff of Industrial Parks, which would be helpful to form a group of specialists and experts in the administration of Industrial Parks to serve the development of Tanzania in future.

5.4. Administration Area

Administration area is scheduled to put all administrative departments together in the same building. At the mean time, custom and security departments can set several check points at the key positions of the Industrial Parks for the rapid response to the contingency, for example, the entrance of the Industrial Parks, the juncture of residential area, etc. The Ming Xin Industrial Park has to simplify the custom process to ensure the export products to be shipped to the destination through Dar es Salaam Port on time. At the same time, a thorough inspection

scheme shall be very effective in order to avoid the occurrence of smuggling. One-stop service simplified administration is adopted in the Industrial Park. It covers but not limits registry of company, inspection and approval, tax levy, immigration, infrastructure supports, disputation solution and arbitration, etc.

5.5. General Arrangement

General arrangement of the zone is an approximate layout of functional areas. As shown in chart below in Layout of Functional Areas of Ming Xin Industrial Park. On the west of Industrial Park, it is the residential and commercial area, which is proposed to be developed in the next phases, all of which are proposed to be developed in the next 2-3 phases.



a. Sisal Fiber Paper

Sisal fiber is well known by the public as a type of material with excellent performance in corrosion resistance. Sisal fiber is also qualified to produce the pulp for some high-quality paper production. The current price of sisal fiber pulp reaches USD 500 per ton, which implies

an outstanding payback on this business line. Under the present technique, 1.6 tons of sisal fiber can yield 1 ton of paper pulp. Albeit paper business generates very attractive profit, however, it generates considerable amount of sewage as well. Specialized sewage treatment plant must be arranged to ensure the relevant environmental laws and regulations requirements are met.

b. Garment

Cotton can be spun to and yarn, which can be used to produce cloth. One ton of cotton can yield 0.93 ton of yarn, if technically allowed. All parameters used in this section are the estimated values merely for reference, rather than a precise evaluation for a particular factory or business Proposal on Industrial Park of Ming Xin Industrial Park spindles, the annual capacity of yarn attains 15,000 tons. Generally, about 1 kg of yarn can produce 7.2 meter of cloth. Cloth is the main input for the garment enterprise.

c. Shoes Manufacturing

Yard of tannery carries out the pretreatment on the fur and pelt. Take sheep pelt as example. Let a piece of sheep pelt in 5 ft² be the standard piece. Then, if the total raw material was 12.4 million standard pieces, a middle-scale tan yard has the production capacity at 500,000 standard pieces per year. For a pair of man shoes, the leather input is around 1.2 ft². Thus, this middle-scale tan yard can support a shoe factory with the capacity near 1 million pairs. Tanzania has abundant leather resource to enlarge the production scale rapidly, if there is a good market feedback.

- i. Cotton /Sisal Cloth Textile mill Garment
- ii. Yarn/Apparel Sisal fiber
- iii. Supplier Accessories Fur /pelt Tan yard Shoe factory Leather Shoes
- iv. Supplier Accessories Proposal on Ming Xin Industrial Park

d. Furniture

Timber and leather resources have the absolute strength to support Tanzania to make a great success in the global furniture market. Dermal sofa and other solid wood furniture perfectly cater to the high-quality life requirement of the consumers in the developed countries. For a furniture factory with the capacity of 10,000 units per year, the timber consumption counts to about 12, 000 m³, where some board stuffs are not included. Current timber supply from Tanzania's plantations attains 1, 200, 000 m³, which can meet the demand of more than 100 furniture factories as large as the example. The timber supply is abundant at the present stage.

e. Cashew Processing

For Tanzania, cashew can be called as the gem growing on the tree. Cashew nut is the popular dry fruit, from which the high-grade edible oil can be extracted. Besides, cashew nut shell liquid is the main byproduct, which is proved to be the specialized friction material for space industry, machinery and equipment, precision instruments, etc. Another byproduct of cashew processing is cardanol, which is becoming the substitute of phynol in chemical industry. Some parameters are listed below for the reference. One ton of cashew yields 0.16 tons of nuts. One ton of nut can produce 0.3 tons of edible oil. One ton of cashew contains about 0.67 ton of

shell oil, of which about 50% may be obtained by some simple treatments. In sum one ton of cashew is expected to produce 0.383 tons of oil, in which there are about 0.048 tons of edible oil and 0.335 tons of shell oil.

f. Assemblies

Assembly of four types of manufacturing products can be introduced to diversify the industry structure. All of them rely on the input of spares and parts from the international suppliers out of Tanzania. Agro-machine and equipment which Tanzania imports 2,000 units every year to satisfy the agriculture. Proposal on Ming Xin Industrial Park, the Government should support the private sectors to import as much as possible however, this is constrained by limited fund. Thus, the actual demand on the machinery and equipment is expected to much higher than this figure. Small household appliances are portable or semi-portable machines, generally used on table-tops, counter-tops, or other platforms, to accomplish a household task, such as, cooking utilities, heater, light fixtures, beverage-making, MP3 player, computers, etc.

- i. Small Household Appliance
- ii. Bag and package Bag and package
- iii. Modules Prefab House
- iv. Container

Container maker contemporary seaborne transports rely on the containerization to improve the service quality. Africa is going to be the next major enabler of the global economy, which results in absolutely a huge local demand on the containers.

g. General Arrangement of Industrial Park

STATEMENT: The enterprise design, floor area, number of employees, annual output value, electricity and water consumption in this plan are estimated based on Chinese data. Therefore, due to the difference with the actual situation in Tanzania, this plan only provides Ming xin Industrial Park as a reference. This section will follow the introduction of the six core industrial chains in the previous article to make an overall layout of virtual labor-intensive manufacturing enterprises in Ming xin Industrial Park.

Industry Chains	Enterprise Production	Plot (square meters)	Employee (persons)	Planned Investment Amount (USD million)
tire	Motorcycle tire	40,000	300	30
Sisal	Sisal Fiber Paper	80,000	600	30
Garment	Cotton Textile Mill Yarns	50,000	1800	35
Garment	Work Clothes	50,000	3300	50
Timber	Furniture	80,000	360	20
Solar	Solar panels	330,000	150	80
Leather	Tan yard	80,000	380	15
	Shoes	40,000	200	12
Cashew	Cashew Biotech	50,000	820	20
Assembly	Agro-machine & truck & tipper Equipment	100,000	190	10

	Small house appliance	70,000	890	30
	Box and package	70,000	380	10
	Modular house	70,000	260	10
	Container maker	70,000	150	10
	Total	1,180,000	9780	362

h. Public Service Facilities

It is expected there will be 14,330 manufacturing workers serving in Ming Xin Industrial Park, including management staffs. Suppose each person has 1.5 family members to Proposal on Ming Xin Industrial Park live together in the zone. Then, the public service facilities shall be able to sustain a population of 21,500.

Public service facility is a general concept which mainly involves:

- Administrative service as an Integrated Service Building is constructed to accommodate all administrative offices such as custom, public security, company registry, tax, immigration inspection, and public service providers like electricity, water, telecommunication, etc. The administrative building is sited close to the entrance of zone for convenience.
- Commercial service: Supportive facilities for the residents living in the zone, such as bank, shops, markets, restaurant and so on.
- Urban functional service: For example, hospital, primary and high schools for the kids of residents

i. Power Plant, Waterworks and Sewage Treatment

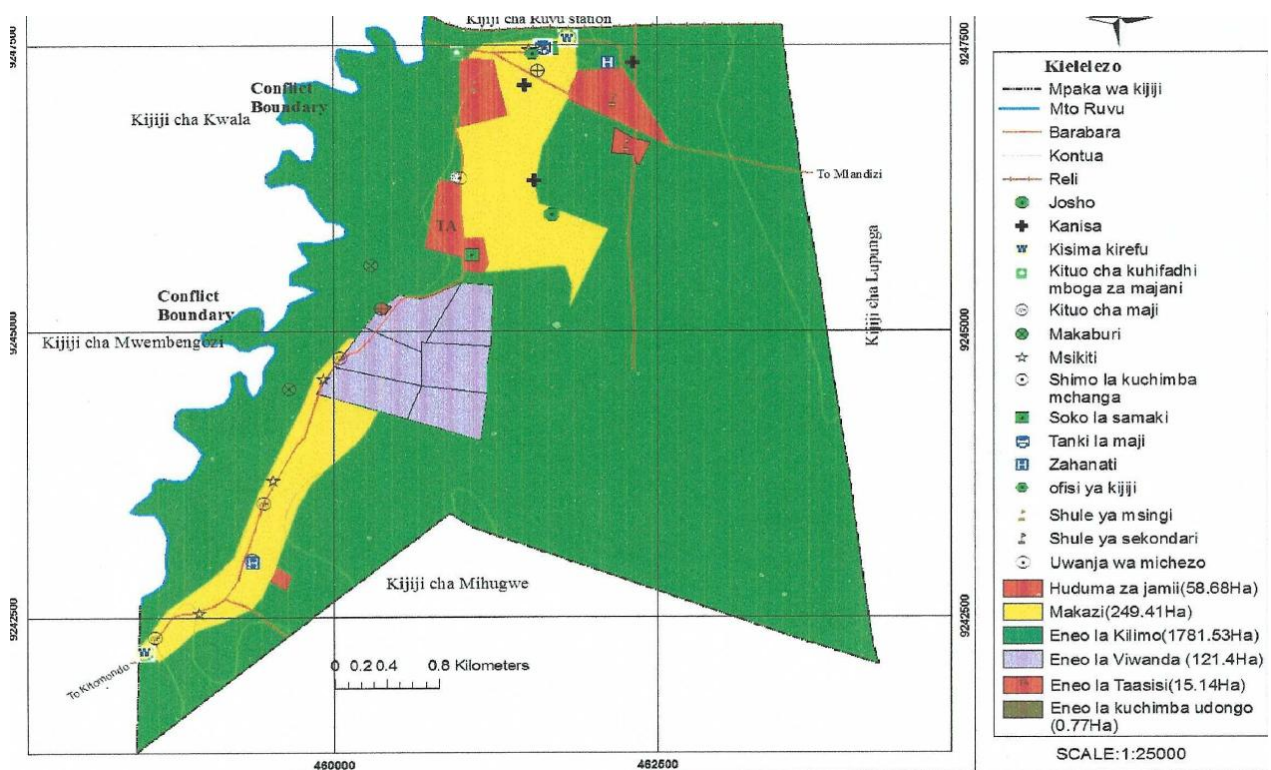
Based on the proposed scale of fetch-in manufacturing factories in none, it is expected that electricity demand is 2.2 billion kwh per year and water demand Proposal on zone is 120,000 m3 per day. Thus, the independent power plant (around 280 MW as suggested) and waterworks (120,000 ton per day) is strongly recommended in the layout of zone. Proposed Power Plant, Waterworks and Sewage Treatment Plant, Sewage treatment plant is compulsory for the environment impact assessment. Minimal capacity is 360,000 ton per day. Technical standard of the discharged water refers to the regulation of Tanzania.

5.6. Project Land Use Plan and Layout

Ming Xin Industrial Park contains area designations, created to direct development toward areas of the Park with respect to compatibility, development needs, and aesthetic quality. The properties along the Industrial Park, one area should concentrate on providing high aesthetic building quality, a broad range of industrial and service oriented uses, and should provide an environment that acts as a gateway to the Industrial Park and the rest of the Industrial Park. The other one area is envisioned to contain general industrial and manufacturing uses that are not expected to generate nuisance conditions. Additionally, the certified site should be developed with an eye toward quality of design and high value of use from an economic development standpoint. Another area is envisioned as the location where more intensive industrial users

would be most compatible, recognizing that some intensive industrial uses may be appropriate in the southern center portion. This area expected to contain access to the railroad tracks on the west side of park, and those properties should be retained for users that would benefit from rail access. This area is the location where certain uses that may be characterized as generating some nuisance conditions would be most appropriate. In all cases, the Area Designations and associated uses are meant as guidelines, except where certain uses are prohibited. Discretion should be used when considering uses and Area Designations to ensure consistency and compatibility with surrounding uses. As shown in figure below of Ming Xin Industrial Park, the Purple block is located on the center of the drawing.

Figure 3: Proposed Land Use Proposed



6. Financial Model and Result of Analysis

The following are key assumptions used by the consultant in the financial analysis of Ming Xin Industrial Park model:

- Site development period-3 year;
- Site development will be undertaken in step with demand for plots;
- Deprecation period-25 years;
- Period of analysis-22 years 30;
- Loan repayment period 25 years, assuming that each loan will be refinanced to match the full analysis period;

- Loan grace period 1 and 2 years for the two first loan. The model assumed two separate loans (1) for compensation and resettlement development (2) for industrial area infrastructure development including roads;
- Loan capital cost: Libor(6months)+country margin + risk premium;
- Discount factor 6%;
- Annual cost of operation and maintenance assumed to be 4% of phase investments;
- Phase land acquisition and compensation costs escalating for development phase 2 and 3, compared to the prevailing current level of compensation;
- Mandated Administrator of Ming Xin Industrial Park will use surplus earned for reinvestment in further development of the said Industrial Parks. Using the assumption supra in the financial analysis for the base case demand of industrial plots in phased development, the financial indicators in Table 2 below show main results of the analysis.

Table 2 MAIN RESULT OF THE FINANCIAL ANALYSIS

FIRR		18.5%
NPV		593,448
DSCR	minimum	0.73
DSCR	minimum from year 4 of operation	1.08

6.1. Financial plan

a. Financial projection

Ming Xin Industrial Park ,Total estimated investment amount is 100,000,000 USD.

Organization: Project command team led by the GM, with dedicated units for environment and investment.

- Funding: 30% self-raised capital + 50% bank loans (25% Tanzania bank loan and 25% China bank loan) + 20% government grants and private sector participation.

Allocation will be made according to the following details,

Category	Estimated(USD)	Cost Notes
Land&Infrastructure	\$60,000,000	factory,road,fence
Raw materials	\$20,000,000	steel,aluminum alloy,doors and windows
Machinery&Equipment	\$3,000,000	Excavators, bulldozers, road rollers
Utilities&Installation	\$6,000,000	Electric power grid, washrooms, waterway
Labor Setup	\$3,000,000	operators,supervisors,admin
License,Legal,Insurance	\$200,000	local regulatory&compliance
Working Capital Reserve	\$8,000,000	Initial operations, logistics, customs clearance
Contingency	\$5,000,000	~5% reserve
Total	\$105,200,000	Fully allocated

b. Commercial Bank Loans

Ming Xin Industrial Park seeks to enter the commercial loan entry with mandate to source project funding in zone development. It is another window of opportunity for Commercial Banks to grow their business through the lending portfolio to public investment in the

development of economic services infrastructure. The participation of Commercial Banks in lending to fund industrial parks development will be determined first by the appetite of the Banks, and further subject to terms that will be negotiate with Ming Xin Company Limited.

c. Government grants and Private Sector Participation

Nature of Private Sector involvement in all aspect of zone development is one of the key aspects of Government Policy to promote private sector participation in all sectors of the economy. The Special Economic Zone Act 2006 and corresponding regulations provide fiscal and non-fiscal incentives to create the enabling legal and regulatory environment that will build business confidence which is necessary for private finance initiatives to invest in zone.

Private sector participation in Ming Xin Industrial Park is expecting to be the form of private sector business enterprises; in various forms of joint venture structures provided for in the policy and legislation which governs Public-private-partnerships in infrastructure concessions, management contracts and EPC contracts; in the provision of financial services in transport and logistics; in the provision of utility services and all other forms of business that are allowed in terms of the Special Economic Act 2006.

7. Project Risk Management

Project Risk Management is dynamic undertaking which is necessary for project execution to be complete on time, within budget ("cost") and in accordance with client specifications ("value for money"). Therefore, success of Ming Xin Industrial Park development hinges of proper risk identification, allocation and management by the party that is best suited and has capacity for eliminating, mitigating or effectively managing the particular risk allotted to that particular party. From the foregoing, it should be obvious that successful project development and sustainable commercial undertaking is contingent on comprehensive risk identification, followed by proper risk allocation or management by the best suited and competent to deal with the risk allocated. In that regard, given its familiar with and knowledge of the socio-economic environment in Tanzania Ming Xin Industrial Park has undertaken the initiative to identify number of key issues which comprise the comprehensive risk profile for the development of Ming Xin Industrial Park.

7.1. Political Risk Issues

Legal and regulatory environment pertaining to Industrial Parks development investments, commercial operations, transport logistic, support services and management

- International trade agreements, protocols, regional integration and common market development;
- Resettlement in new areas and integration in the new dispensation;
- Local communities dislocation (physical, economic and social), compensation, Management of Community Expectations;
- Corporate Social Community Investment and Social Services Delivery Impact;

- Local Government interests and interface.

7.2. Project Risk Issues

- Neighborhood land trespass and encroachment;
- Technical feasibility of project concept confirmation-conduct techno economic Studies;
- Economic and Financial viability of project confirmation Commercial sustainability confirmation (robustness of the project in relation to technology, operational, maintenance and market related risk issues);
- Investment and Risk Appetite Confirmation - Confirm the availability and cost of capital as Equity and Debt Finance, as well as development support in the form of Sovereign Grants;
- Efficient Economic Services infrastructure supply-for transportation (roads, railways, maritime ports and airports);
- Utility services (water, electric power, gas and telecommunications);
- Bio-physical Environment Impact Management (regulatory compliant environment management plan and implementation program);
- Health, physical security and human safety Supply of project physical inputs (materials, labor, machinery Project EPC risk (Performance risk, Quality risk, Completion risk and Cost overrun risk).

7.3. Institutional Risk Issues

- Institutional framework to provide central project oversight and coordination;
- Institutional rivalry and turf protection;
- Institutional competencies to manage project development processes;
- Institutional capacities to provide administrative, operational, logistics and support services to project development;
- Human capacity building and succession plans to ensure long term project sustainability;
- Retention and sustainability of Project Manpower Turnover;
- Financial and Material resources constraints;
- Branding, image and public relations management.

7.4. Physical Environment Impacts and Risk Issues

- Land degradation resulting from urban based industrial and commercial activities;
- Industrial and domestic refuse disposal management;
- Deforestation resulting from urban demand of forest products, especially biomass fuel;
- Air pollution from industrial and motorized vehicles emissions;
- Water pollution and contamination;

- Wildlife and marine habitat infringement;
- Uncontrolled urban growth and slum development.

7.5. Social Environment Impacts and Risk Issues

- Accelerated rural-to-urban migration and urban population densification;
- Cultural invasion, infringement and violation of social traditions;
- Unplanned urban sprawl with increased social disorder and violent crimes;
- Politically induced, organized labor activism and industrial unrest.

7.6. Risk Management Analysis

The risk factors and issues listed above provide the basic framework for conducting risk analysis and actively managing the entire project life cycle from the conceptual stage. Political risk factors pertaining to the existing legal and regulatory environment, as well as the institutional risk factors in the current early stages of establishing the commercial, operational and legal framework for the strategic development of Ming Xin Industrial Park.

8. Environmental Impact Assessment

The overall project construction of the main business and trade cooperation will produce simple pollutant generated by the project itself but will rather generate and a very small number of industrial waste. Construction group living in the compound can make use of solar, wind, geothermal, sewage treatment technology, which to some extent help to solve the problem of power for heating, lighting, sewage treatment and waste disposal. The impact of construction project on the surrounding environment can be controlled within the scope of the relevant provisions of standard, and has little effect on the environment.