

Concrete Batching Plant Project Plan

1. Executive Summary

This project proposes the establishment of a Large-scale concrete batching plant to supply high-quality ready-mix concrete to the fast-growing construction market in Tanzania (Dodoma).

The plant will produce standardized concrete grades for:

- Residential construction
- Commercial buildings
- Infrastructure projects (roads, bridges, industrial parks)

The facility will adopt modern automated batching technology, ensuring:

- Consistent quality
- Efficient production
- Cost control
- Environmental compliance

The objective is to become a reliable supplier of ready-mix concrete to contractors, developers, and government infrastructure projects.

2. Business Objectives

Short-term (2 month - 6 month)

- Establish plant infrastructure and operations
- Secure supply contracts with 3–5 construction companies
- Reach 70–80% capacity utilization

Medium-term (6 month - 2 year)

- Expand production capacity
- Introduce specialized concrete products (high-strength, waterproof, fast-setting)
- Build regional distribution network

Long-term

- Become a leading regional concrete supplier
- Expand into cement products and precast components

3. Market Analysis

Industry Overview

Tanzania is experiencing strong growth in:

- Urban housing demand
- Government infrastructure projects
- Industrial construction

This creates high demand for ready-mix concrete.

Target Customers

- Real estate developers
- Construction companies
- Government contractors
- Industrial project owners

Competitive Advantage

- Consistent quality control
 - Fast delivery logistics
 - Competitive pricing
 - Strategic plant location near construction zones
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4. Project Location

The plant will be located in WIA, Dodoma or nearby logistics corridor, ensuring:

- Easy access to raw materials (cement, aggregates, sand)
 - Efficient transport routes
 - Close proximity to major construction sites
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5.1 General Overview

There is a wide market for spare parts in Tanzania. Likewise, there is external market and the demand is increasing. Hence, it can be expected that the sponsors would not face marketing and operational problems in managing the proposed project.

The existing market is supplied by importation of the products from overseas. Based on the nature of the products and its users; the company's product has a good market in Tanzania.

The ports of Dar es Salaam have undergone major rehabilitation, modernization and expansion so as not only to be able to compete with South Africa ports in handling of the cargo and this will substantially enhance cargo handling in all phases of the project. The port would also provide the proposed freight haulage project necessary condition for its soft establishment and expansion of its future operations.

CARMARGE TANZANIA LIMITED will endeavor to achieve the projected sales for both domestic and transits business in the neighboring eastern Africa countries and Asia.

5.2 Key Success Factors

Following are Key Success Factors of the manufacturing industry:

- Financial Resources
- Working Capital
- Use of Technology
- Proper logistics to meet demand

The importance of having huge funds to finance the use of latest technology which will yield a quality product which is important in project success operation. Further with a quality product there must be proper delivery of the product to the customers to meet their demand. All this depends on financial resources which the owner has to achieve desired result.

5.3 **Long Term Relationships**

Established transport firms enjoy the advantage of long- term relationships with corporate clients. Such corporate firms include among others, armies, huge mining companies using thermal power, etc, clearing and forwarding companies, just to mention a few. Again the proposed project would use its Synergy of its relation with parent companies in securing huge cargo.

However, it should be clearly understood that as time changes some industry forces have tended to re- modify these key success factors, Hence, generally it is the ability of a transport company to design and implement its business strategies that may suit building of a company's success in this sector.

1.0 **MANAGEMENT AND ORGANIZATION STRUCTURE**

6.1 **Management**

The Company policy is to have adequate manpower to manage its operations efficiently. **CARMARGE TANZANIA LIMITED** believes in keeping on board only the very essential manpower strength, to develop them into highly motivated and sincere company team for the best and efficient operations of the company.

The company will have a team of qualified and experienced functional managers in the areas of Operations/Marketing, Workshop Operations and Finance & Administration. Other senior and middle level staff will be available for the startup and subsequent operations of the company. The personnel will be qualified, well-seasoned and most possessing considerable industrial experience.

6.2 **Management Policy**

The day to day operations will be managed by the General Manager, to be assisted by the Operations Manager who will be the overall in charge of the fleet, a Sales & Marketing Manager whose major responsibility will be marketing and a Finance & Administrative Manager who will manage finance and administrative issues. The Company's fleet pool will therefore be professionally managed.

6.3 **Organization Structure**

Once the company has well established the market its organizational structure will have to change sp as to give it a corporate structure of freight Haulage Company. Therefore, the shareholders will have to embark on a meticulous manpower planning and recruitment, which will be preceded by a manpower consultant's report.

It is proposed that the company's operations then be headed by the General Manager under whom there will be functional managers, that is : Personnel & Administration Manager, Sales & Marketing Manager, Finance & Administration manager, and Production manager.

The Marketing Manager will be responsible for both the countrywide and regional wide sales and marketing for the service .The job responsibilities will include market planning and development, sales promotion and sales co- ordination.

5. Production Plan

Plant Capacity

- Initial capacity: 100-120 m³/hour
- Daily output: 1000-1200 m³/day (For 10 hours use)

Main Equipment

- Concrete batching plant system
- Aggregate bins and conveyor systems
- Water and admixture dosing systems
- Control system (automated PLC)
- Weighbridge
- Concrete mixer truck
- Loader truck
- Pump

Raw Materials

- Cement
 - Sand
 - Aggregate
 - Water
 - Concrete admixtures
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6. Technology and Process Flow

Process Flow

1. Raw materials delivered and stored
2. Materials weighed by batching system
3. Mixed in automated mixer
4. Quality inspection
5. Loaded into concrete mixer trucks
6. Delivered to customer sites

Quality Control

- Laboratory testing (compressive strength, slump)
- Batch monitoring system

- Standardized mix design
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7. Environmental and Safety Compliance

The project will comply with Tanzania environmental and industrial regulations, including:

- Dust collection systems
- Wastewater recycling
- Noise control measures
- Safe chemical storage

Worker safety measures:

- PPE equipment
- Safety training
- Equipment operation protocols

8. Organization and Management

Management Structure

- General Manager
- Production Manager
- Quality Control Engineer
- Procurement Officer
- Logistics Manager
- Finance & Administration

Staffing Plan

Estimated 50–80 employees depending on plant scale.

9. Logistics and Distribution

- Fleet of concrete mixer trucks
- Optional pump trucks for high-rise projects
- Delivery radius: 0–50 km

Efficient dispatch system will ensure:

- On-time delivery
 - Reduced waiting time
 - Customer satisfaction
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10. Financial Plan

Estimated Initial Investment

Detail is shown in the table

PARTICULAR	AMOUNTS USD
Land and Buildings	1,200
Vehicles	625,000
Plant and Machinery	504,000
Furniture & Fittings	6,450
Others	2,550
Working Capital	100,000
TOTAL	1,239,200

Revenue Projections

- Average selling price: tzs 250,000 – tzs 305,000 per m³
(Exact price depends on the distance)
- Monthly production (target): 10,000 – 20,000 m³ (Assume 25 days operation)
- Estimated Revenue: tzs 25,000-tzs 38,500 per m³ (Exact price depends on selling price)

- Monthly revenue: tzs 250,000,000- tzs 770,000,000

Profitability

- Payback period: Depends on actual production (Estimated: 6-12 month)
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11. Risk Analysis

Key Risks

- Fluctuation in cement prices
- Fuel and logistics costs
- Competition from local suppliers
- Construction market cycles

Mitigation Strategies

- Long-term supplier contracts
 - Fuel cost optimization
 - Diversified customer base
 - Flexible pricing strategy
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12. Implementation Timeline

Phase	Duration
Feasibility & Licensing	1 months
Land Acquisition & Site Prep	1–2 months
Equipment Transportation	1–2 months
Installation & Testing	Within 1 months
Trial Production	1 month
Total Timeline	2-4 months

13. Conclusion

The establishment of a concrete batching plant in Tanzania is a highly viable investment due to:

- Strong construction demand
- Infrastructure expansion
- Limited supply of high-quality ready-mix providers

With efficient management, modern equipment, and strong logistics capability, the project is expected to deliver stable cash flow and long-term profitability.

PROJECTED FINANCIAL PROJECTIONS

INVESTMENT BREAKDOWN

PARTICULAR	AMOUNTS USD
Land and Buildings	1,200
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Plant and Machinery	504,000
Furniture & Fittings	6,450
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Working Capital	100,000
TOTAL	1,239,200

FIXED ASSETS SCHEDULE

NAME OF ASSETS	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
Land and Buildings	1,200	1,140	1,080	1,020	960
Plant & Machines	625,000	500,000	375,000	250,000	125,000
Motor Vehicle	504,000	498,840	493,840	488,840	483,840
Furniture & Fixtures	6,450	5,644	40,000	35,000	30,000
Total	1,136,650	1,005,624	909,920	774,860	639,800
Depreciation	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
Land and Buildings	60	60	60	60	60
Plant & Machines	125,000	125,000	125,000	125,000	125,000
Motor Vehicles	5,160	5,000	5,000	5,000	5,000
Furniture & Fixtures	806	806	806	806	806
ANNUAL DEPRECIATION	131,026	130,866	130,866	130,866	130,866
CLOSING FIXED ASSETS	1,005,624	874,758	779,054	643,994	508,934

PROJECTED INCOME STATEMENT

	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
Sales Revenue	1,796,840	2,156,208	2,587,450	3,104,940	3,725,927
Cost of Sales	35,937	35,937	35,937	35,937	35,937
Gross Profit	1,760,903	2,120,271	2,551,513	3,069,003	3,689,991
Operating Expenses					
Administrative Overhead					
Costs	18,000	18,180	18,362	18,545	18,731
Motor Vehicle running	6,000	6,060	6,121	6,182	6,244
Salaries and Wages	2,000	2,020	2,040	2,061	2,081
Depreciation	131,026	132,337	133,660	134,996	136,346
Utility Costs	64,000	64,640	65,286	65,939	66,599
Insurance	30,980	31,290	31,603	31,919	32,238
Interest on Loan	4,000	4,040	4,080	4,121	4,162
Total Expenses	232,006	234,326	236,670	239,036	241,427
Profit before Tax	1,528,897	1,885,945	2,314,843	2,829,966	3,448,564
Tax (30%)	458,669	565,783	694,453	848,990	1,034,569
Profit After Tax	1,070,228	1,320,161	1,620,390	1,980,977	2,413,995

PROJECTED BALANCE SHEET

	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
Fixed Assets	1,136,650	2,616,248	4,091,051	5,535,158	6,964,221
Long term Assets					
Depreciation	131,026	130,866	130,866	130,866	130,866
Total long term assets	1,005,624	2,485,381	3,960,185	5,404,291	6,833,354
Current Assets					
Cash	505,000	580,750	667,863	768,042	883,248
Account Receivable	100,000	115,000	132,250	152,088	174,901
Inventory	0	0	0	0	0
Total Current Assets	605,000	695,750	800,113	920,129	1,058,149
Total Assets	1,610,624	3,181,131	4,760,298	6,324,421	7,891,503
Current Liabilities					
Accounts Payable	25,000	28,750	33,063	38,022	43,725
Other Current Liablit	16,000	18,400	21,160	24,334	27,984
Subtotal Current Liabi	41,000	47,150	54,223	62,356	71,709
Long term Liabilities					
Long term Liabilitie	0	0	0	0	0
Total Liabilities	41,000	47,150	54,223	62,356	71,709
Captil and Reserves					
Owners Contribution	1,239,200	3,589,628	9,616,795	22,228,364	48,120,451
Retained Earning	1,070,228	2,390,389	2,940,552	3,601,367	4,394,971
Total Capital	2,350,428	6,027,167	12,611,569	25,892,087	52,587,132