

# PROJECT REPORT

Of

## READY MIX CONCRETE

### PURPOSE OF THE DOCUMENT

This particular pre-feasibility is regarding **Ready mix concrete**.

The objective of the pre-feasibility report is primarily to facilitate potential entrepreneurs in project identification for investment and in order to serve his objective; the document covers various aspects of the project concept development, start-up, marketing, finance and management.

[We can modify the project capacity and project cost as per your requirement. We can also prepare project report on any subject as per your requirement.]



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**PROJECT AT A GLANCE**

- 1 Name of the Entrepreneur : xxxxxxxx
- 2 Constitution (legal Status) : xxxxxxxx
- 3 Father / Spouse Name : xxxxxxxxxxxx
- 4 Unit Address : xxxxxxxxxxxxxxxxxxxxxxxx
- District : xxxxxx
- Pin: xxxxxxx State: xxxxxxxx
- Mobile xxxxxxx
- 5 Product and By Product : **READY MIX CONCRETE**
- 6 Name of the project / business activity proposed : **READY MIX CONCRETE MAKING UNIT**
- 7 Cost of Project : Rs.21.56 Lakhs
- 8 Means of Finance
- Term Loan Rs.14.4 Lakhs
- Own Capital Rs.2.16 Lakhs
- Working capital Rs.5 Lakhs
- 9 Debt Service Coverage Ratio : 2.52
- 10 Pay Back Period : 5 Years
- 11 Project Implementation Period : 5-6 Months
- 12 Break Even Point : 39%
- 13 Employment : 11 Persons
- 14 Power Requirement : 30.00 HP
- 15 Major Raw materials : Aggregates, cement, sand, Fly ash
- 16 Estimated Annual Sales Turnover (Max Capacity) : 79.11 Lakhs
- 17 Detailed Cost of Project & Means of Finance

**COST OF PROJECT**

(Rs. In Lakhs)

Particulars	Amount
	Own/Rented
Land	
Building /Shed 1000 Sq ft	5.00
Plant & Machinery	9.50
Furniture & Fixtures	1.50
Working Capital	5.56
<b>Total</b>	<b>21.56</b>

**MEANS OF FINANCE**

Particulars	Amount
Own Contribution	2.16
Working Capital(Finance)	5.00
Term Loan	14.40
<b>Total</b>	<b>21.56</b>

## **READY MIX CONCRETE**

**Introduction:** Ready-mix concrete (RMC) is a ready-to-use material, with predetermined mixture of cement, sand, aggregates and water. RMC is a type of concrete manufactured in a factory according to a set recipe or as per specifications of the customer, at a centrally located batching plant. It is delivered to a worksite, often in truck mixers capable of mixing the ingredients of the concrete or just before delivery of the batch. This results in a precise mixture, allowing specialty concrete mixtures to be developed and implemented on construction sites. The second option available is to mix the concrete at the batching plant and deliver the mixed concrete to the site in an agitator truck, which keeps the mixed concrete in correct form.



**Uses & Market Potential:** RMC is preferred to on-site concrete mixing because of the precision of the mixture and reduced worksite confusion. It facilitates speedy construction through programmed delivery at site and mechanized operation with consequent economy. It also decreases labour, site supervising cost and project time, resulting in savings. Proper control and economy in use of raw material results in saving of natural resources. It assures consistent quality through accurate computerized control of

aggregates and water as per mix designs. It minimizes cement wastage due to bulk handling and there is no dust problem and therefore, pollution-free.

The growth of RMC is predominantly driven by demand from the metro cities. In cities like Mumbai, the mandatory use of RMC is in construction of flyovers provided the requisite impetus to growth, according to an ICRA analysis. RMC is particularly useful when the building activity is located in congested sites where little space is available for siting the mixer and for stock piling of aggregates.

Following are the places where Ready to mix concrete (RMC) can be used:

- Major concreting projects like dams, roads, bridges, tunnels, canals etc.
- For concreting in congested areas where storage of materials is not possible.
- Sites where intensity of traffic makes problems.
- When supervisor and labour staff is less.
- To reduce the time required for construction etc.
- Huge industrial and residential projects.

**Raw material:** Major materials used are as follows:

1. Aggregate
2. Cement
3. Fly ash
4. Sand
5. Packing material (20kg, 50kg bags, etc.)

**Manufacturing Process:** The raw materials are procured and are thoroughly tested for their quality and physical properties. The required raw materials are stored in Silos in required quantity. Lime stone is put into the crusher where the material is crushed. Aggregates are transferred to crusher where crushing activity takes place and are crushed in required size. The

material is then transferred to Compressed Air mixer in which the required material is mixed. The final product or mixture is then transferred to Silo for storing purpose. Finally the mixture that is ready for sale is packed in 25kg or 50 kg bags as per market and consumer preference.

**Machinery & equipments:** Basic machines & equipments are:

<b>Name</b>	<b>Unit</b>	<b>Price</b>
Crusher	2	190000
Compressed Air mixer	1	140000
Silos	5	500000
Other equipments ( Bins, compressor, pumps, etc.)	LS	120000

**Area:**

The industrial setup requires space for Inventory, workshop or manufacturing area, space for power supply utilities and auxiliary like Generator setup. Also some of the area of building is required for office staff facilities, documentation, office furniture, etc. Thus, the approximate total area required for complete industrial setup is 1000 to 1500Sqft. Civil work cost will be around 5 Lac Rs.(Approx.)

**Power Requirement** –The power consumption required to run all the machinery could be approximated as 30hp.

**Manpower Requirement**- There are requirement of skilled machine operators to run the machine set. Experience quality engineers are required for desired quality control. Some helpers are also required to transfer the material from one work station to other. Office staffs are required to maintain

the documentation. The approximate manpower required is 11 including 1 Supervisor, 3 Plant operator and 2 unskilled worker , 1 Helper, 1 Security guard. 3 Skilled worker including Accountant, Manager and Sales person.

**Bank Term Loan:** Rate of Interest is assumed to be at 11%

**Depreciation:** Depreciation has been calculated as per the Provisions of Income Tax Act, 1961

### **Approvals & Registration Requirement:**

Basic registration required in this project:

- GST Registration
- Udyog Aadhar Registration (Optional)
- Choice of a Brand Name of the product and secure the name with Trademark if require

### **Implementation Schedule:**

S No.	Activity	Time required
1.	Acquisition of premises	1-2 Months
2.	Procurement & installation of Plant & Machinery	1-2 Months
3.	Arrangement of Finance	1.5-2 Months
4.	Requirement of required Manpower	1 Month
5.	Commercial Trial Runs	1 Month
	Total time Required (some activities shall run concurrently)	5-6 Months

## **FINANCIALS**

<b>PROJECTED CASH FLOW STATEMENT</b>					
<b>PARTICULARS</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>
<b><u>SOURCES OF FUND</u></b>					
Own Contribution	2.16	-			
Reserve & Surplus	4.92	6.97	9.11	11.65	14.48
Depriciation & Exp. W/off	2.08	1.80	1.56	1.35	1.17
Increase In Cash Credit	5.00				
Increase In Term Loan	14.40	-	-	-	-
Increase in Creditors	0.30	0.04	0.03	0.03	0.03
<b>TOTAL :</b>	<b>28.86</b>	<b>8.81</b>	<b>10.69</b>	<b>13.03</b>	<b>15.67</b>
<b><u>APPLICATION OF FUND</u></b>					
Increase in Fixed Assets	16.00	-	-	-	-
Increase in Stock	0.96	0.12	0.11	0.12	0.12
Increase in Debtors	5.19	0.70	0.65	0.67	0.70
Repayment of Term Loan	1.60	3.20	3.20	3.20	3.20
Taxation	-	1.74	2.28	3.50	4.34
Drawings	2.50	3.00	4.00	5.00	6.00
<b>TOTAL :</b>	<b>26.26</b>	<b>8.77</b>	<b>10.24</b>	<b>12.48</b>	<b>14.36</b>
Opening Cash & Bank Balance	-	2.60	2.64	3.10	3.64
Add : Surplus	2.60	0.04	0.46	0.55	1.32
Closing Cash & Bank Balance	<b>2.60</b>	<b>2.64</b>	<b>3.10</b>	<b>3.64</b>	<b>4.96</b>

<b>PROJECTED BALANCE SHEET</b>					
<b>PARTICULARS</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>
<b>SOURCES OF FUND</b>					
<b>Capital Account</b>					
Opening Balance	-	4.58	6.80	9.64	12.79
Add: Additions	2.16	-	-	-	-
Add: Net Profit	4.92	5.23	6.83	8.16	10.13
Less: Drawings	2.50	3.00	4.00	5.00	6.00
<b>Closing Balance</b>	<b>4.58</b>	<b>6.80</b>	<b>9.64</b>	<b>12.79</b>	<b>16.92</b>
CC Limit	5.00	5.00	5.00	5.00	5.00
Term Loan	12.80	9.60	6.40	3.20	-
Sundry Creditors	0.30	0.35	0.38	0.40	0.43
<b>TOTAL :</b>	<b>22.68</b>	<b>21.75</b>	<b>21.41</b>	<b>21.40</b>	<b>22.36</b>
<b>APPLICATION OF FUND</b>					
<b>Fixed Assets ( Gross)</b>	16.00	16.00	16.00	16.00	16.00
Gross Dep.	2.08	3.87	5.43	6.78	7.95
Net Fixed Assets	13.93	12.13	10.57	9.22	8.05
<b>Current Assets</b>					
Sundry Debtors	5.19	5.90	6.54	7.22	7.91
Stock in Hand	0.96	1.08	1.20	1.31	1.43
Cash and Bank	2.60	2.64	3.10	3.64	4.96
<b>TOTAL :</b>	<b>22.68</b>	<b>21.75</b>	<b>21.41</b>	<b>21.40</b>	<b>22.36</b>

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<b>PROJECTED PROFITABILITY STATEMENT</b>					
<b>PARTICULARS</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>
<b>A) SALES</b>					
Gross Sale	51.92	58.96	65.44	72.15	79.11
<b>Total (A)</b>	<b>51.92</b>	<b>58.96</b>	<b>65.44</b>	<b>72.15</b>	<b>79.11</b>
<b>B) COST OF SALES</b>					
Raw Material Consumed	12.99	14.88	16.12	17.36	18.60
Electricity Expenses	2.51	2.74	2.97	3.20	3.42
Repair & Maintenance	5.19	5.90	6.54	7.22	7.91
Labour & Wages	15.12	16.63	18.30	19.94	21.34
Depreciation	2.08	1.80	1.56	1.35	1.17
<b>Cost of Production</b>	<b>37.89</b>	<b>41.94</b>	<b>45.48</b>	<b>49.06</b>	<b>52.44</b>
<b>Add: Opening Stock /WIP</b>	<b>-</b>	<b>0.75</b>	<b>0.84</b>	<b>0.93</b>	<b>1.02</b>
<b>Less: Closing Stock /WIP</b>	<b>0.75</b>	<b>0.84</b>	<b>0.93</b>	<b>1.02</b>	<b>1.12</b>
Cost of Sales (B)	37.14	41.85	45.39	48.96	52.34
<b>C) GROSS PROFIT (A-B)</b>	<b>14.78</b>	<b>17.10</b>	<b>20.05</b>	<b>23.19</b>	<b>26.77</b>
	<b>28.47%</b>	<b>29.01%</b>	<b>30.64%</b>	<b>32.14%</b>	<b>33.84%</b>
D) Bank Interest (Term Loan )	1.56	1.28	0.92	0.57	0.22
ii) Interest On Working Capital	0.55	0.55	0.55	0.55	0.55
E) Salary to Staff	5.67	5.95	6.85	7.53	8.36
F) Selling & Adm Expenses Exp.	2.08	2.36	2.62	2.89	3.16
<b>TOTAL (D+E)</b>	<b>9.86</b>	<b>10.14</b>	<b>10.94</b>	<b>11.54</b>	<b>12.29</b>
<b>H) NET PROFIT</b>	<b>4.92</b>	<b>6.97</b>	<b>9.11</b>	<b>11.65</b>	<b>14.48</b>
	<b>9.5%</b>	<b>11.8%</b>	<b>13.9%</b>	<b>16.1%</b>	<b>18.3%</b>
I) Taxation	-	1.74	2.28	3.50	4.34
<b>J) PROFIT (After Tax)</b>	<b>4.92</b>	<b>5.23</b>	<b>6.83</b>	<b>8.16</b>	<b>10.13</b>
<b>Raw Material Consumed</b>	<b>Capacity</b>		<b>Amount (Rs.)</b>		
	<b>Utilisation</b>				
I	55%		12.99		
II	60%		14.88	5% Increase in Cost	
III	65%		16.12	5% Increase in Cost	
IV	70%		17.36	5% Increase in Cost	
V	75%		18.60	5% Increase in Cost	

**COMPUTATION OF SALE**

Particulars	I	II	III	IV	V
Op Stock	-	220.00	240.00	260.00	280.00
Production	13,200.00	14,400.00	15,600.00	16,800.00	18,000.00
	13,200.00	14,620.00	15,840.00	17,060.00	18,280.00
Less : Closing Stock(5 Days)	220.00	240.00	260.00	280.00	300.00
Net Sale	12,980.00	14,380.00	15,580.00	16,780.00	17,980.00
Sale Price per bag of 25 kg	400.00	410.00	420.00	430.00	440.00
<b>Sale (in Lacs)</b>	<b>51.92</b>	<b>58.96</b>	<b>65.44</b>	<b>72.15</b>	<b>79.11</b>

<b>COMPUTATION OF MAKING OF READY MIX CONCRETE</b>			
<b>Item to be Manufactured</b>	<b>Ready mix concrete(RMC)</b>		
Manufacturing Capacity per day		2,000	kg
No. of Working Hour		8	
No of Working Days per month		25	
No. of Working Day per annum		300	
Total Production per Annum		6,00,000	kg
Total Production per Annum		24,000	Bags of 25 kg
Year		Capacity	READY MIX CONCRETE
		Utilisation	
I		55%	13,200.00
II		60%	14,400.00
III		65%	15,600.00
IV		70%	16,800.00
V		75%	18,000.00

**COMPUTATION OF RAW MATERIAL**

Item Name	Quantity of Raw Material	Unit	Unit Rate of	Total CostPer Annum (100%)
Aggregates	110.00	Tonne	650.00	71,500.00
Cement	250.00	Tonne	6,500.00	16,25,000.00
Fly ash	125.00	Tonne	1,800.00	2,25,000.00
Sand	100.00	Tonne	3,200.00	3,20,000.00
Packing material				1,20,000.00
Total				<b>23,61,500.00</b>
Total Raw material in Rs lacs				23.62

<b>COMPUTATION OF CLOSING STOCK &amp; WORKING CAPITAL</b>					
PARTICULARS	I	II	III	IV	V
<b>Finished Goods</b>					
(5 Days requirement)	0.75	0.84	0.93	1.02	1.12
<b>Raw Material</b>					
(5 Days requirement)	0.22	0.25	0.27	0.29	0.31
<b>Closing Stock</b>	<b>0.96</b>	<b>1.08</b>	<b>1.20</b>	<b>1.31</b>	<b>1.43</b>

<b>COMPUTATION OF WORKING CAPITAL REQUIREMENT</b>			
Particulars	Amount	Margin(10%)	Net Amount
Stock in Hand	0.96		
Less:			
Sundry Creditors	0.30		
<b>Paid Stock</b>	<b>0.66</b>	<b>0.07</b>	<b>0.60</b>
Sundry Debtors	5.19	0.52	4.67
<b>Working Capital Requirement</b>			<b>5.27</b>
<b>Margin</b>			0.59
<b>MPBF</b>			<b>5.27</b>
<b>Working Capital Demand</b>			<b>5.00</b>

<b>BREAK UP OF LABOUR</b>				
Particulars	Wages	No of	Total	
	Per Month	Employees	Salary	
Supervisor	22,000.00	1	22,000.00	
Plant Operator	18,000.00	3	54,000.00	
Unskilled Worker	14,000.00	2	28,000.00	
Helper	10,000.00	1	10,000.00	
Security Guard	6,000.00	1	6,000.00	
			1,20,000.00	
Add: 5% Fringe Benefit			6,000.00	
Total Labour Cost Per Month			1,26,000.00	
Total Labour Cost for the year ( In Rs. Lakhs)		8	15.12	

<b>BREAK UP OF SALARY</b>				
Particulars	Salary	No of	Total	
	Per Month	Employees	Salary	
Manager	20,000.00	1	12,000.00	
Accountant cum store keeper	18,000.00	1	18,000.00	
Sales	15,000.00	1	15,000.00	
Total Salary Per Month			45,000.00	
Add: 5% Fringe Benefit			2,250.00	
Total Salary for the month			47,250.00	
Total Salary for the year ( In Rs. Lakhs)		3	5.67	

<b>COMPUTATION OF DEPRECIATION</b>					
Description	Land	Building/shed	Plant & Machinery	Furniture	TOTAL
Rate of Depreciation		10.00%	15.00%	10.00%	
<b>Opening Balance</b>	Leased		-	-	-
Addition	-	5.00	9.50	1.50	16.00
	-	5.00	9.50	1.50	16.00
		-	-	-	
TOTAL		5.00	9.50	1.50	16.00
Less : Depreciation	-	0.50	1.43	0.15	2.08
WDV at end of Ist year	-	4.50	8.08	1.35	13.93
Additions During The Year	-	-	-	-	-
	-	4.50	8.08	1.35	13.93
Less : Depreciation	-	0.45	1.21	0.14	1.80
WDV at end of IIInd Year	-	4.05	6.86	1.22	12.13
Additions During The Year	-	-	-	-	-
	-	4.05	6.86	1.22	12.13
Less : Depreciation	-	0.41	1.03	0.12	1.56
WDV at end of IIIrd year	-	3.65	5.83	1.09	10.57
Additions During The Year	-	-	-	-	-
	-	3.65	5.83	1.09	10.57
Less : Depreciation	-	0.36	0.88	0.11	1.35
WDV at end of IV year	-	3.28	4.96	0.98	9.22
Additions During The Year	-	-	-	-	-
	-	3.28	4.96	0.98	9.22
Less : Depreciation	-	0.33	0.74	0.10	1.17
WDV at end of Vth year	-	2.95	4.22	0.89	8.05

REPAYMENT SCHEDULE OF TERM LOAN					11.0%		
Year	Particulars	Amount	Addition	Total	Interest	Repayment	CI Balance
<b>I</b>	Opening Balance						
	Ist Quarter	14.40	-	14.40	0.40	-	14.40
	IInd Quarter	14.40	-	14.40	0.40	-	14.40
	IIIRD Quarter	14.40	-	14.40	0.40	0.80	13.60
	Ivth Quarter	13.60	-	13.60	0.37	0.80	12.80
					1.56	1.60	
<b>II</b>	Opening Balance						
	Ist Quarter	12.80	-	12.80	0.35	0.80	12.00
	IInd Quarter	12.00	-	12.00	0.33	0.80	11.20
	IIIRD Quarter	11.20	-	11.20	0.31	0.80	10.40
	Ivth Quarter	10.40		10.40	0.29	0.80	9.60
					1.28	3.20	
<b>III</b>	Opening Balance						
	Ist Quarter	9.60	-	9.60	0.26	0.80	8.80
	IInd Quarter	8.80	-	8.80	0.24	0.80	8.00
	IIIRD Quarter	8.00	-	8.00	0.22	0.80	7.20
	Ivth Quarter	7.20		7.20	0.20	0.80	6.40
					0.92	3.20	
<b>IV</b>	Opening Balance						
	Ist Quarter	6.40	-	6.40	0.18	0.80	5.60
	IInd Quarter	5.60	-	5.60	0.15	0.80	4.80
	IIIRD Quarter	4.80	-	4.80	0.13	0.80	4.00
	Ivth Quarter	4.00		4.00	0.11	0.80	3.20
					0.57	3.20	
<b>V</b>	Opening Balance						
	Ist Quarter	3.20	-	3.20	0.09	0.80	2.40
	IInd Quarter	2.40	-	2.40	0.07	0.80	1.60
	IIIRD Quarter	1.60	-	1.60	0.04	0.80	0.80
	Ivth Quarter	0.80		0.80	0.02	0.80	- 0.00
					0.22	3.20	

Door to Door Period      60 Months  
Moratorium Period        6 Months  
Repayment Period         54 Months

<b>CALCULATION OF D.S.C.R</b>					
<b>PARTICULARS</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>
<b>CASH ACCRUALS</b>	7.00	7.02	8.39	9.50	11.30
Interest on Term Loan	1.56	1.28	0.92	0.57	0.22
Total	8.56	8.30	9.31	10.08	11.52
<b>REPAYMENT</b>					
Repayment of Term Loan	1.60	3.20	3.20	3.20	3.20
Interest on Term Loan	1.56	1.28	0.92	0.57	0.22
Total	3.16	4.48	4.12	3.77	3.42
<b>DEBT SERVICE COVERAGE RATIO</b>	<b>2.71</b>	<b>1.85</b>	<b>2.26</b>	<b>2.67</b>	<b>3.37</b>
<b>AVERAGE D.S.C.R.</b>			<b>2.52</b>		



<b>COMPUTATION OF ELECTRICITY</b>				
<b>(A) POWER CONNECTION</b>				
Total Working Hour per day		Hours	8	
Electric Load Required		HP	30	
Load Factor			0.7460	
Electricity Charges		per unit	7.50	
Total Working Days			300	
<b>Electricity Charges</b>				4,02,840.00
Add : Minimim Charges (@ 10%)				
<b>(B) DG set</b>				
No. of Working Days			300	days
No of Working Hours			0.3	Hour per day
Total no of Hour			90	
Diesel Consumption per Hour			8	
Total Consumption of Diesel			720	
Cost of Diesel			65.00	Rs. /Ltr
Total cost of Diesel			0.47	
Add : Lube Cost @15%			0.07	
Total			<b>0.54</b>	
Total cost of Power & Fuel at 100%				4.57
Year		Capacity		Amount (in Lacs)
I		55%		2.51
II		60%		2.74
III		65%		2.97
IV		70%		3.20
V		75%		3.42

## **DISCLAIMER**

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