### PRE-FABRICATED BUILDING MATERIALS

#### 1. INTRODUCTION

Prefabricated building materials made of cement concrete with reinforcement include door frames, windows, frames, chaijahs, roof slabs, lintels, ventilators, wall partition panels, compound wall panels, cement concrete small pillars for compound wall, slabs for canal lining, tiles, personal linings, sills, trusses etc. The use of prefabricated building materials/components is gaining acceptance in mass construction and construction of houses for economically weaker sections for low cost houses and speedy construction. This also eliminated the use of wood to a certain extent.

### 2. RAW MATERIALS

Portland

Sand

Stone chips

High strength deformed rods

M.S.rods & binding wire

#### 3. MANUFACTURING PROCESS

This process is quite simple and the technical aspects involved are very less and do not require heavy machinery. Generally iron or seasoned teak wooden moulds are used for the manufacture of precast products depending upon their shape, size, design and specifications. Cement sand and aggregate in proper ratio with adequate water are mixed in concrete mixer. The desired moulds are well lubricated and filled with concrete mixture to 1/2 thickness of the mould, then the metal skeleton and other wooden pegs are placed in the mould at desired spots of the mould so that the wooden pegs can be used for fixing the metal fixtures such as hinges, latches etc, later. the mould is filled with concrete mixture and the vibrator is passed on the surface of the filled mould to ensure hard mass by removing the air bubbles and loose water. The mould is allowed to dry. After removing from the mould the precasted building material is cured for 21 days. After inspection, the product are ready for marketing.

# **4. MANPOWER REQUIREMENT**: 15

## 5. PROJECT COST

Total capital investment		Rs
Fixed capital		9,75,000
Working capital		8,26,600
	Total	18,01,600
6. COST OF PRODUCTION (per annum)		
		Rs
Total recurrin	g cost per year	49,59,600
Depreciation:		
i) building		38,750
ii) Machiner	y	9,800
iii) Office fur	niture	4,000
iv) Moulds a	nd fixtures	13,000
v) Interest o	n Total Capital	324288
Investment		024200
	Total	53,49,438
PROFIT (per annum)		
Annual turnove	SAMRAMBH	60,86,620
Cost of production		53,49,438
Net profit		7,37,182
BEP		45.9 %