# Central Food Technological Research Institute, Mysore - 570 020

## Water soluble Turmeric Colourant (odourless) Formulation (WTCF)

#### 1. Introduction:

Curcumin enriched colourant (CEC) is prepared from spent turmeric oleoresin, a disposable industrial waste also known as Curcumin-Removed-Turmeric-Oleoresin (CRTO) by employing a suitable extraction procedure to separate the turmeric oil. The CEC is then converted to a water soluble formulation. This odourless and water soluble formulation can be used as a natural colourant to foods to make them acceptable, recognizable and appealing.

### 2. Market Potential:

The potential use of natural colours is mainly as natural food colourant to replace the synthetic colours. Apart from this they find applications as netraceutical and pharmaceutical formulations.

### 3. Process:

The steps involved in the production of WTCF are as follows:

- $\oslash$  CRTO is refined to get rid of the turmeric oil
- $\oslash$  The colour fraction suitably processed and blended to get the formulation of desired strength

## 4. Plant and Machinery:

The principal plant and machinery includes process vat, pressure filter, distillation unit, blending units, bottling unit etc.

The auxiliary equipments include boiler, electricity generator, weighing scales, quality control laboratory facilities, effluent treatment system etc.

### 5 PROJECT COST – FIXED COST – WORKING CAPITAL (in Rs. Lakhs) (estimate for a model project)

a)	Land & Land development (800 Sq. M)	4.00
b)	Building and civil works (203 Sq. M)	10.15
c)	Plant and machinery	45.07
<b>d</b> )	Auxiliary equipments	4.00
<b>d</b> )	Other fixed assets	5.00
<b>e</b> )	Pre-operative expenses	8.30
	Total fixed capital	76.52
	Working capital margin	9.29
	Total Project cost	85.81
	Total working capital required	38.18

9	Short term loan from financial institution		28.90
Means o	f finance		
	- LT loan:		51.17
	- Promoter's share:		34.64
	- Debt: equity:		1.5
6. Product	ion Capacity		
a)	Input		
R	aw material:	160 kg CRTO/ day	processing in 8 hrs
0	peration:	180 days per annun	1
b	) Out put		
Т	urmeric oil:	72 kg per day in	
V	VTCF:	396 kg per day	

• Please note that the above figures are tentative and needs updating.