

***Detailed Project Report for
Minimal multi commodity
processing line:***

Applicant: TRIFED

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1. Project Details at glance

1.1. Basic detail

The Tribal Cooperative Marketing Development Federation of India (TRIFED) came into existence in 1987. The Tribal Cooperative Marketing Development Federation of India (TRIFED), is a national-level apex organization functioning under the administrative control of Ministry of Tribal Affairs, Govt. of India. TRIFED has its registered and Head Office located in New Delhi and has a network of 13 Regional Offices located at various places in the country. The basic details of the firm are tabled below:

S.No.	Particulars	Details
1	Name of the Applicant	TRIFED
2	Legal Status of the Applicant	Government Organization
3	Registration No. of the Applicant/CIN	NA
4	PAN of Applicant	NA
5	Is the applicant registered with SFAC/NDDDB/NABARD/other Government agency	National-level apex organization functioning under the administrative control of Ministry of Tribal Affairs, Govt. of India

1.2. Experience of Lead Promoter(s)/Partners(s)/ Applicant entity in Food processing/cold chain/Agri produce/Agri-produce Logistics

S. No.	Name of Promoter/ Partner/entity	Shareholding	Details of Experience	Details of Turnover	Supporting Documents
1.	TRIFED	100%	TRIFED is already having its operations all over country with around 13 regional offices and 40 retail outlets in the name of TRIBES India. These outlets are operational for sale of tribal products including tribal handicraft products, textiles, clothing, tribal paintings etc. TRIFED also engages in sale of value added & processed food products through its retail outlets / franchisee stores / consignee stores. The products include Amla candy, Honey, Spices, Canned Tuna Fish products.	The annual income of TRIFED for the financial year 2016-17 was Rs. 5876.99 Lakhs.	Audited balance sheets & Profit & loss statement for FY 2016-17

1.3. Project Details

1.3.1. Components under the scheme

S. No.	Type of component	Details of component	Number proposed	Description
1	Forward Linkage :	NA	NA	NA
2	Backward Linkage	<ol style="list-style-type: none"> 1. Collection Centre cum Raw material storage warehouse 2. Multi fruit Processing Plant (Alma juice, Amla candy, Amchur, Jiuce etc.) 3. Minimal processing line for honey clarification and packaging 4. Minimal processing line for Cashew 5. Minimal processing line for Tamarind 6. Minimal processing line for making Fruit & Veg Pulp 7. Minimal processing line for making Ginger-Garlic Paste 8. Cold Room for finished products 	1 each	The majority of raw material would be procured from Tribes/ beneficiaries associated with TRIFED. However as per the requirement of the units, raw material from other parts of Chhattisgarh and nearby states would also be procured.
3	Transport :	NA	NA	NA

1.3.2. Sector of the Project:

Multi Commodity Processing and Packaging

1.3.3. Type of Operating Model

Captive/rental based on requirement

1.4. Land Details

TRIFED proposes to set up a processing unit for Non Timber/minor Forest Produces (NTFP) such as Amla, Mango, Honey, Cashew, Tamarind, Garlic, Ginger and other fruits and vegetables at Burundwara, Semra Jagdalpur, District Bastar, Chhattisgarh.

1.5. Proposed facilities

S. No.	Type of facility	No. of units	Capacity	Location (Linkage)		No. of days of operation
				Forward	Backward	
1.	Collection Centre cum raw material warehouse	1	250 SQM		✓	300
2	Multi fruit Processing Plant (Alma juice, Amla candy, Amchur, Jiuce etc.)	1	2 MT/Day		✓	300
3	Minimal processing line for honey clarification and packaging	1	1.6 MT/Day		✓	360
4.	Minimal processing line for Cashew	1	640 Kg		✓	260
5.	Minimal processing line for Tamarind	1	300 Kg/day		✓	260
6.	Minimal processing line for making Fruit & Veg Pulp	1	0.5 MT/Day		✓	260
7.	Minimal processing line for making Ginger-Garlic Paste	1	0.8 MT/Day		✓	260

7.	Cold Room for finished products	1	10 MT		✓	300
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1.6. Summary of Audited statement of accounts for last three years

The annual income of TRIFED for the financial year 2016-17 was Rs. 5876.99 Lakhs. Audited balance sheets & Profit & loss statement for FY 2016-17 is attached in the annexures. TRIFED is already having its operations all over country with around 13 regional offices and 40 retail outlets in the name of TRIBES India. These outlets are operational for sale of tribal products including tribal handicraft products, textiles, clothing, tribal paintings etc.

The details of the turnover of TRIFED are mentioned below:

Financial Year	Annual Income (Rs. In Lakhs)
2017-18	1859.01
2016-17	1137.11
2015-16	1232.51

1.7. Proposed project Financials

1.7.1. Estimated Project cost details

Tentative Total Project Cost (Rs in Lakhs)		
Description	Amount	Percentage
Land Development Charges	5.00	0.98%
Technical civil work	225.00	44.32%
Plant and Machineries	244.16	48.09%
Utilities	13	2.56%
Pre-Operative Expenses	5.50	1.08%
Contingencies	4.87	0.96%
Margin money for working capital	10.17	2.00%
Total Project Cost	507.70	100.00%

1.7.2. Means of Finance

Means of Finance	Proportion (%)	Amount (Lakhs Rs)
Equity	31.52%	160.03
One Time Grant from MoFPI	47.48%	241.06
Long Term Debt	21.00%	106.62
Total	100%	507.70

The proposed location of the project is Burundwara, Semra, Jagdalpur in Bastar District, Chhattisgarh which is an ITDP area identified by Ministry of Tribal Affairs (Source: <https://stcmis.gov.in/Documents/StatewiseITDPITDAArea.pdf>). Therefore as per scheme guideline dated 22.02.2018, the project is eligible for grant of 50% of the eligible project cost.

1.8. Details of catchment area of the project

The proposed location of the project is Burundwara, Semra Jagdalpur, District Bastar, Chhattisgarh. The majority of raw material would be procured from Tribes/ beneficiaries associated with TRIFED. Major districts identified as cluster based on our procurement plan include Bastar, Sukma, Kondagaon, Narayanpur and Bijapur. However the raw material would also be procured from the other nearby districts of Chhattisgarh, Odisha, Maharashtra, Telangana, Jharkhand, Madhya Pradesh and Andhra Pradesh as per the requirement of the units from Tribal in other states. In addition TRIFED would procure from identified tribal FPOs/FPCs in the region.

Details of proposed raw material in major districts of Chhattisgarh are as follows:

1.8.1. Fruit & Vegetables

PRODUCTION UNDER FRUITS CROP YEAR - 2017-18 (MT)

Name of Fruits	Raipur	Dhamtari	Durg	Bemetara	Rajnandgoan	Jagdulpur	Kondagoan	Kanker	Dantewada	Sukma	Korba	Raigarh	Jashpur	Koria	Narayanpur	Bijapur	Total
Mango	12990	7305	3952	3830	10101	8516	14568	12900	7391	1550	24515	38534	47810	18461	15585	1562	465150
Banana	60743	18680	53903	29480	29440	7666	15180	8016	5632	5800	32752	81010	9000	19800	1845	2807	637148
Papaya	47791	3768	51221	27270	7483	2543	8676	3546	1109	200	5233	13938	2585	16258	7592	765	384614
Gauva	8570	5953	6867	4420	4320	807	2532	14774	1366	1000	22865	9220	2219	8187	6557	515	198778
Leman	5312	72	1159	1560	4235	532	3449	3534	717	150	134	5662	1106	5179	14160	233	109250
Orange	0	705	55	0	120	0	0	0	0	0	32	160	0	0	0	0	1209
Jack Fruit	973	6710	1833	500	2754	15467	12214	27285	847	1050	3918	48120	11661	8256	2671	170	205590
S. Orange	44	0	375	145	126	0	49	0	0	0	463	360	0	0	213	0	2365
Cashew Nut	0	121	0	0	9	6655	4753	3679	638	0	61	4294	896	1255	724	33	23118
Custard Apple	132	175	540	0	993	241	1462	6483	138	0	5902	132	684	4880	702	59	48544
Litchi	0	0	0	0	0	9	58	0	62	0	22	3890	5940	4413	890	0	52501
Water Melon	3494	1290	1133	1200	1536	634	390	1294	33	350	3092	2413	204	0	0	0	39612
Musk Melon	1808	248	383	960	1243	1183	396	1018	0	400	1500	2026	0	0	0	0	27184
Ber	9515	4414	320	350	1125	2120	4614	4368	181	0	24975	9190	2896	0	45	0	75373
Aonla	3102	3252	1411	900	1552	1730	4387	1375	169	0	453	2842	332	8340	0	0	43289
Sapota	80	0	45	0	36	247	275	0	47	0	0	0	0	0	0	0	1789
Coconut	33	784	0	0	0	774	8691	1190	831	200	0	10	18	0	550	2546	15697
Pear	0	0	0	0	0	0	0	0	0	0	0	0	650	0	0	0	6794
Other	3551	10850	6203	1080	125	7440	31748	4136	792	120	21516	12351	5586	6998	5600	174	249797
Total	158307	64327	129651	71795	65323	56655	113442	93598	20019	10820	147433	234206	91599	102027	57134	8864	2592450

Source: Department of Agriculture, Chhatisgarh

Production under Vegetables Crop Year - 2017-18 (MT)

Name of Vegetable	Raipur	Gariyaband	Dhantari	Durg	Balod	Rajnandgoan	Kabirdham	Jagdulpur	Kondagoan	Kanker	Dantewada	Sukma	Bilaspur	Mungeli	Raigarh	Surguja	Surajpur	Narayanpur	Bijapur	Total
Cauliflower	32748	380	8220	66486	25918	14480	10890	9885	92371	17144	2007	625	18210	14156	11567	17520	22702	2399	154	48219
Cabbage	25936	2925	7973	64608	31879	3498	6390	12883	37520	12176	2097	750	17780	21000	16575	18075	17358	3018	444	415907
Brinjal	65863	3015	20910	110420	34990	30070	30000	14762	79306	25394	4163	2700	23900	20147	21912	24735	8868	5407	667	707180
Tomato	78945	2325	13645	190100	55077	31320	26100	11630	45728	19238	7414	4950	97737	66420	56249	34575	15935	5957	1222	1088674
Bhindi	28221	1100	10437	22676	6091	14145	12075	6341	33473	13298	3708	2250	16511	14520	19253	16737	13116	2706	864	323930
Potato	64652	2790	4216	23406	6351	24540	6000	4452	17866	10395	2013	2000	81134	26332	54301	90826	38872	3600	300	697280
Cawpea	6886	440	410	18823	8165	2060	1240	827	1317	1025	932	100	123572	11475	8405	0	1654	0	0	227114
Green Pea	1978	855	1478	3674	1361	13840	1408	1714	2604	920	156	50	2681	1635	5614	14730	10219	0	0	102222
Bitter Gaurd	992	1200	6372	12929	6480	41715	4725	4162	6967	5202	483	1120	1687	1368	3127	4835	5509	855	4	154376
Beans	1119	765	576	4065	390	26950	2710	1610	7740	2947	119	50	225	448	4814	6930	4173	0	0	94415
Cluster Beans	925	220	850	6546	1633	5160	5598	627	791	1346	0	0	804	320	591	0	0	0	0	37650
Kaddu	11431	2040	885	11097	1270	1190	3690	3900	1987	5152	984	525	1546	1564	2284	5716	800	1096	1	122876
Bottel Gaurd	15637	1620	3930	39183	14385	1860	6200	4244	14982	12607	1976	1050	3111	2415	10709	11862	2666	2939	319	254893

Sponge Gaurd	399	385	170	252	45	252	2052	723	131	1848	86	0	330	330	1646	0	166	0	0	24167
Arbi	4579	1400	80	1085	681	224	1210 0	1010 9	11427	3875	7706	180	5221	3900	2613	4783	868	0	15	98931
Radish	11793	234 0	2380	1000 8	2048	9380	6790	5324	7709 5	11969	322 4	800	5359	3264	7484	11919	4412	1907	380	23091 4
Carrot	0	275	120	3941	881	10115	3075	0	5	1160	42	100	1299	640	1025	500	876	0	2	38949
Leafy Veg.	2861	900	4120	1886 4	4406	492	3450	2270	2156	2343	954	300	4460	2627	6615	738	2738	0	12	91282
Kundru/P erwal	2761	165	290	4427	927	6675	0	735	4716	2594	304	0	295	101	2932	0	2282	0	0	41740
Sweet Potato	1130	180	1600	1152	403	693	2465	469	6206	2049	93	0	1992	620	2403	5671	819	911	0	45532
Jimikand	729	585	180	2880	1070	288	3690	744	528	5000	102	0	458	832	283	1250	0	0	0	26767
Onion	6488 5	1092 0	11356	4006 0	1088 5	1287	1972 5	11412	23155	3398 4	257 8	800	6452	9831	2603 0	19125	22927	9719	213 4	41546 5
Other	12085	0	5395 0	5974 0	9785	114	5650	4921	1828 9	4738	328 0	450	2860 23	9019 6	17906	18281	21396 4	440 0	770	93129 7
Total	4389 59	370 65	1598 13	7412 01	2283 42	2475 88	1798 01	1142 91	4891 79	2011 64	447 67	188 00	7028 47	2962 41	2872 82	3088 08	3909 24	449 14	72 89	6754 610

Source: Department of Agriculture, Chhattisgarh

1.8.2. Honey:

In India honey is consumed majorly as medicine owing to its various properties and as a substitute of sugar. The per capita consumption of honey in India is just 8 grams, whereas in Germany it is 1800 grams. About sixteen lakh people are directly or indirectly engaged in the bee keeping and allied activities.

As per third advance estimates of Ministry of Agriculture and Farmer welfare, the production of Honey in 2016-17 stood at 0.94 Lakh MT. The details of production of Honey in India is tabled below

State-wise Production of Honey in India (In ' 000 MT)							
States/UTs	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16*	2016-17*
Andaman and Nicobar Islands	0.11	0.08	0.09	-	-	-	
Andhra Pradesh	7.07	5.19	5.65	1.50	1.60	1.65	1.70
Arunachal Pradesh	0.56	0.41	0.45	-	-	-	0.00
Assam	2.95	2.16	2.36	6.50	0.25	0.85	1.00
Bihar	7.36	7.36	8.02	0.50	7.80	8.80	9.00
Chandigarh	0.06	0.03	0.03	-	-	-	-
Chhattisgarh	1.49	1.10	1.19	-	0.55	0.60	0.65
Delhi	0.08	0.04	0.04	-	-	-	
Goa	0.40	0.29	0.32	-	-	0.30	
Gujarat Including Daman and Diu	3.25	0.17	0.18	0.10	0.18	-	0.45
Haryana	5.34	3.92	4.27	4.00	4.30	4.50	4.00
Himachal Pradesh	2.76	2.03	2.21	5.00	4.80	5.15	5.20
Jammu and Kashmir	2.50	1.83	2.00	2.50	2.00	1.20	1.15
Jharkhand	0.45	0.33	0.36	1.20	1.25	1.20	1.25
Karnataka	6.37	4.67	5.09	2.00	1.95	2.00	2.00
Kerala	5.73	4.21	4.59	2.00	2.20	2.50	2.70
Lakshadweep	0.01	0.01	0.01	-	-	-	
Madhya Pradesh	2.78	2.04	2.23	1.50	1.75	1.85	2.15
Maharashtra including Dadra and Nagar Haveli	11.79	3.10	3.38	1.00	1.25	1.30	1.50
Manipur	0.59	0.39	0.42	-	-	-	0.00
Meghalaya	0.59	0.43	0.47	-	0.15	0.20	0.20
Mizoram	0.91	0.67	0.73	-	0.10	0.15	0.15
Nagaland	0.75	0.55	0.60	-	0.25	0.43	0.45
Odisha	1.97	1.44	1.58	0.75	0.90	1.00	1.25

Puducherry	0.11	0.08	0.09	-	-	-	
Punjab	7.12	5.22	5.69	14.00	13.80	14.90	15.00
Rajasthan	9.60	7.04	7.68	1.80	2.20	4.60	6.00
Sikkim	0.31	0.23	0.25	-	0.20	0.32	0.35
Tamil Nadu	6.02	4.42	4.82	1.50	1.45	1.50	1.80
Telangana	-	-	-	-	-	-	0.00
Tripura	0.40	0.29	0.32	-	-	-	0.00
Uttar Pradesh	14.36	18.32	19.97	12.50	13.50	15.00	17.00
Uttarakhand	1.88	1.38	1.50	1.80	1.90	2.10	2.50
West Bengal	6.34	4.65	5.07	15.00	15.50	15.60	15.80
Other	-	-	-	1.00	0.70	1.20	1.30
India	112.01	84.09	91.66	76.15	80.53	88.90	94.50

*Third advance estimates

Source: www.indiastat.com

1.9. Details of forward and backward linkage

1.9.1. Details of existing/proposed Linkages

The Tribal Cooperative Marketing Development Federation of India (TRIFED) came into existence in 1987. It is a national-level apex organization functioning under the administrative control of Ministry of Tribal Affairs, Govt. of India. TRIFED has its registered and Head Office located in New Delhi and has a network of 13 Regional Offices located at various places in the country.

The main objective of TRIFED shall be to serve the interests of its members in more than one State for the social and economic betterment of its members by conducting its affairs in professional, democratic and autonomous manner through self-help and mutual cooperation for undertaking marketing development of the tribal products.

The organization's Chief Executive is Mr. Pravir Krishna, IAS who is also the Managing Director of TRIFED. The cooperative society has many members from different state level Tribal Cooperative Federations/ Cooperation, State level Cooperative Corporations/ Federations dealing with tribal products and having at least 25% of their membership constituted by tribal, District/primary level Cooperative Society including the commodity specialised Cooperative Society dealing with tribal products and having at least 25% of their membership constituted by tribal, Government of India Government of India etc.

The details of membership of the cooperative organization is mentioned in the table below:

#	Name of Institution	Address	Contact
1.	Ministry of Tribal Affairs, Government of India,	Room No.737, "A" Wing, Shastri Bhawan, New Delhi-110 001	Office: 011-23073176
2.	National Agricultural Coop. Marketing Federation of India Ltd.,	NAFED House, 1, Siddartha Enclave, Ashram Chowk, <i>NEW DELHI-110014.</i>	<i>Office: 011-26341807/26344293</i>
3.	The Managing Director National Cooperative Development Corporation	National Cooperative Development Corporation 4, Siri Institutional Area, NEW DELHI-110016.	<i>Office: 011- 26510314</i>
4.	The Chairman, Girijan Cooperative Corporation Ltd	Girijan Cooperative Corporation Ltd, East Point Colony, Opp. Vuda Park, Visakhapatnam – 530023 (A.P.)	Office: 0891 2796164
5.	The Managing Director Tribal Development Coop. Corporation of Orissa Ltd	TDCCOL Building, Rupali Square, Saheed Nagar, Bhubaneshwar–751001 (ORISSA)	Office-0674 2542475
6.	Madhya Pradesh Laghu Vanupaj Vyapar Avem Vikas Sahkari Sangh Ltd	74, Bungalow, Indira Nikunj, Khel Parisar, Bhopal (M.P.)	Office -0755 2674202
7.	The Chairman Jharkhand State Cooperative Lac Marketing Federation Ltd.	Purulia Road, Ranchi- 834001 (JHARKHAND).	Office -06512532997
8.	<i>The Managing Director</i> Gujarat State Forest Development Corporation Ltd.,	1.9.2. "VANGANGA", 78 - <i>Alkapuri</i> Vadodara – 390 007 (GUJARAT).	Office - 0265 2355291
9.	M/s Rajasthan Tribal Areas Development Coop. Federation Ltd.	Janjati Vikas Bhawan,	Office - 0294 2490345

		Pratap Nagar, Udaipur – 313001 (RAJASTHAN).	
10.	The Managing Director West Bengal Tribal Development Cooperative Corporation Ltd.,	Sidhu Kanu Bhavan, KB-18, Sector-III, Bidhan Nagar, Kolkata – 700069 (WEST BENGAL)	Office-033 23351832
11.	The Managing Director Maharashtra State Cooperative Tribal Development Corporation Ltd.	Adivasi Vikas Bhawan, 2 nd flr., Ram Ganesh Gadkari Chowk, Old Agra Road, Nasik – 422002. (MAHARASHTRA)	Office -0253 2576860
12.	M/s Tamil Nadu Cooperative Marketing Federation Ltd.,	91, St. Mary's Road, Chennai– 600 018 (T.N.)	Office-044 24933054
13.	Bihar State Forest Development Corporation Ltd.,	Pawan Colony, Hinku Chowk, RANCHI-834 002 (Jharkhand)	
14.	M/s Assam Plain Tribes Development Corporation Ltd.,	Ganesh Market, Chairali, Ganeshguri, P.O. Dispur, Guwahati – 781005 (ASSAM).	Office- 0361 2201558
15.	Arnod Vrukut Krishi Bahu Uddeshya Sahakari Samiti Ltd	<i>Arnod, Distt. Chittorgarh (RAJASTHAN)</i>	Mobile- 09413584836
16.	The State Cooperative Marketing Federation of Tripura Ltd. (TRIPURA MARKFED)	P.O. A.D. Nagar Badarghat, Agartala – 799001 (TRIPURA WEST)	Office-0381 2375017/2375018
17.	M/s Himachal Pradesh State Forest Corporation Ltd.	Van Nigam Bhawan, S.D.A. Complex, Kasumpti, Shimla – 171009 (H.P.).	Office -0177 2622457
18.	Madhya Pradesh State Cooperative Marketing Federation Ltd., (MARKFED),	Jahangirabad, Bhopal (M.P.)	<i>Office -0755 2678463-68</i>
19.	Vasundhara Vrix Vanwandi Jalsinchan Vikas Sahakari Mandali Ltd.	<i>Vrindavan Campus, At. Lachhakadi, Ta. Vansda, Distt. Navsari – 396580 (GUJARAT)</i>	Office -02630 244179
20.	<i>M/s Todabhim Krya -Vikraya Sahakari Samity Ltd. Todabhim,</i>	<i>Karoli (Rajasthan)</i>	Office -07461 230301
21.	Santpur Large Area Multi-purpose Coop. Society Ltd.,	Village- Akhra Bhatta, Tehsil- Abu Road, Distt. Sirohi – 302076 (RAJASTHAN).	M- 9784591555
22.	<i>Atru Kray Vikray Sahakari Samiti Ltd.,</i>	<i>Atru, Distt. Baran-325318 (Rajasthan)</i>	<i>Office -07451 240232</i>
23.	M/s Karnataka State LAMPS Federation Ltd.	Sahakara Bhawan, 100 Feet Road, Mysore (KARNATAKA)	Office -0821 2441710

24.	The Lahoul Potato Growers Coop.Marketing Cum Processing Society Ltd.,	P.O. Manali, Distt. Kullu, (H.P.).	Office -01902- 252346
25.	Chhattisgarh State Minor Forest Produce (Trading & Development Cooperative Federation Ltd.	A-25, VIP Estate, Shankar Nagar, Raipur-492007 (CHHATTISGARH).	Office -0771 4065100
26.	M/s Himgiri Multi-purpose Cooperative Society Ltd.	B-Sector, Near Police Station, Naharlagun, ARUNACHAL PRADESH.	Office -0360 2351043
27.	Kinnaur District Cooperative Marketing & Consumer Federation Ltd.	Tapri (H.P.)	Office - 01786 261202
28.	M/s Jharkhand State Minor Forest Produce Co-operative Development & Marketing Federation Ltd.(JHAMCOFED),	3 rd floor, Jharkhand State Agricultural Marketing Board's Building, Itki Road, Hehal, Ranchi – 834 005 (JHARKHAND).	Office -0651 6999125
29.	The Kunduli Large Sized Multipurpose Co-op. Society Ltd.	At/Po. Kunduli, Via-Semiliguda Dist. Koraput - 764036 (ORISSA.)	Office -06853 225017

1.9.3. *Backward Linkage*

TRIFED aims to empower tribal people with knowledge, tools and pool of information so that they can undertake their operations in a more systematic and scientific manner. It involves capacity building of the tribal people through sensitization, formation of Self Help Groups (SHGs) and imparting training to them for undertaking a particular activity, exploring marketing possibilities in national as well as international markets, creating opportunities for marketing tribal products on a sustainable basis, creating a brand and providing other services.

In order to empower the lives of tribal community, TRIFED proposes to set up 1. Multi fruit Processing Plant (Alma juice, Amla candy, Amchur, Jiuce etc.), Minimal processing line for honey clarification and packaging, Minimal processing line for Cashew, Minimal processing line for Tamarind, Minimal processing line for making Fruit & Veg Pulp, Minimal processing line for making Ginger-Garlic Paste and Cold Room for finished products.

1.9.4. *Forward Linkage*

TRIFED has multiple retail outlets in India. These processed products will be sold under the “TRIFOOD” brand through the TRIFED owned retails stores TRIBES India, its franchisee stores/ Consignee stores (B to C model), or may be sold to other companies (B to B Model) etc. It indicates that the promoters already have existing forward linkages. The list of few of the outlets is as follows:

1. TRIBES INDIA, Shop No. 19 & 20, Ahmedabad Haat, Near Vastrapur Lake, Ahmedabad, Surat-395001 (Gujrat)
2. TRIBES INDIA Shop, 4th Floor Kanchanjangha Shopping Complex, Lall Market, Gangtok-737101 (Sikkim)
3. TRIBES INDIA, Hayden Hall Institute, 42 La Denla Road, Darjeeling-734101 (West Bengal)
4. TRIBES INDIA, Ratna Bhawan above Capitol Cinema Hall Darjeeling-734101 (West Bengal)
5. TRIBES INDIA, 9 Mahadev Road, New Delhi (Delhi)
6. TRIBES INDIA, Gallery No.2, Rajiv Gandhi Handicraft Bhawan, New Delhi (Delhi)

7. TRIBES INDIA, Hall No.2, Dilli Haat, INA, New Delhi (Delhi)
8. TRIBES INDIA, North Central Zone Cultural Central, 14 C.S.P Singh Marg, Allahabad (Uttar Pradesh)
9. TRIBES INDIA, 65-D, Rajpur Road, Dehradun (Uttarakhand)
10. TRIBES INDIA, Kulri Post Office, The Mall, Mussorie, Dehradun (Uttarakhand)
11. TRIBES INDIA, Near Onkarananda Ashram, BSNL Exchange, Rishikesh, Dist. Pauri Garhwal (Uttarakhand)
12. TRIBES INDIA, Opp. Saba Restaurant, The Mall, Manali, Dist.(Kullu) (Himachal Pradesh)
13. TRIBES INDIA, Shop no.17 A & B, Cooptex exhibition ground, 350 Pantheon Road, Egmore, Chennai-600008 (Tamil Nadu)
14. TRIBES INDIA, The Palace Chail, Dist.(Solan) (Himachal Pradesh)
15. TRIBES INDIA, Shop No.H-54, Sainik Market, Main Road, Ranchi-834001 (Jharkhand)
16. TRIBES INDIA, Shop No.14-15, Inner Court, GTB Complex, TT Nagar, Bhopal (Madhya Pradesh)
17. TRIBES INDIA, Mrignayani Showroom, Krishnapura, 165 MG Road, Indore (Madhya Pradesh)
18. TRIBES INDIA, Shop No.3 Metro Walk, Bittan Market, Bhopal (MADHYA PRADESH)
19. TRIBES INDIA, Panjabari Road, Panjabari, Near Srimanta Sankaradeva Kalakshetra, Guwahati (Assam)
20. TRIBES INDIA, Kamdhenu Building, Sonapati Bapat Marg, Near Bank of Baroda, Pune-411016 (Maharashtra)
21. TRIBES INDIA, M/s GCC Ltd. Premises, East Point Colony, Chinawaltair, Opp: Vuda Park, Vishakhapatnam-530017
22. TRIBES INDIA, MI Road, Rajasthan, Jaipur (Rajasthan)
23. TRIBES INDIA, Shop No. 5, 1st Floor, BDA Complex, Koramangla, Bengaluru-. 560034 (Karnataka)
24. TRIBES INDIA, Head Post Office Building, Ridsdale Road, Fort Kochi- 682001 (Kerala)
25. TRIBES INDIA, Tamilnadu Agricultural University, (TNAU) campus, Coimbatore-641 003 (Tamil Nadu)
26. TRIBES INDIA, Tamilnadu Tourism office building, Gandhi Mandapam road, Kanyakumari
27. TRIBES INDIA, Shop No. LNo1, Office of Divisional Head, Urban Haat Division, IDCO, Exhibition Ground, Unit- III, Bhubaneswar.
28. TRIBES INDIA, Shop No- F-36, Madhusudhan Marg, Near Railway Station Square, Rourkela,
29. TRIBES INDIA, Tallital Post Office, Nainital, Uttrakhand.
30. TRIBES INDIA at various airports.

In addition, TRIFED is planning to develop entrepreneurship within tribal community for selling the manufactured products. TRIFED is also conducting skill development programs and workshops for capacity building and developing new entrepreneurs in the tribal community. The entrepreneurs will be identified based on Family size, family income, education and capability.

2. Applicant and commodity profile

2.1. Applicant Profile

The Tribal Cooperative Marketing Development Federation of India (TRIFED), is a national-level apex organization functioning under the administrative control of Ministry of Tribal Affairs, Govt. of India. TRIFED has its registered and Head Office located in New Delhi and has a network of 13 Regional Offices located at various places in the country. The ultimate objective of TRIFED is socio-economic development of tribal people in the country by way of marketing development of the tribal products on which the lives of tribal depends heavily as they spend most of their time and derive major portion of their income.

The approach of marketing development of tribal products envisages TRIFED's role as a facilitator and service provider. The philosophy behind this approach is to empower tribal people with knowledge, tools and pool of information so that they can undertake their operations in a more systematic and scientific manner. It involves capacity building of the tribal people through sensitization, formation of Self Help Groups (SHGs) and imparting training to them for undertaking a particular activity, exploring marketing possibilities in national as well as international markets, creating opportunities for marketing tribal products on a sustainable basis, creating a brand and providing other services.

The activity of TRIFED is divided into two categories:

1. Minor Forest Produces (MFP) Development:

An important source of livelihoods for tribal people are non-wood forest products, generally termed 'Minor Forest Produce (MFP)/Non Timber Forest Products (NTFP) means all non-timber forest produce of plant origin and will include bamboo, canes, fodder, leaves, gums, waxes, dyes, resins and many forms of food including nuts, wild fruits, Honey, Lac, Tusser etc. The Minor Forest Produces provide both subsistence and cash income for people who live in or near forests. They form a major portion of their food, fruits, medicines and other consumption items and also provide cash income through sale. Minor Forest Produce (MFP) starts with the word "Minor" but is a major source of livelihood for tribal who belong to the poorest of the poor section of society. The Minor Forest Produce has significant economic and social value for the forest dwellers as an estimated 100 Million people derive their source of livelihood from the collection and marketing of Minor Forest Produce (Report of the National Committee on Forest Rights Act, 2011). The importance of Minor Forest Produces for this section of the society can be gauged from the facts that around 100 million forest dwellers depend on Minor Forest Produces for food, shelter, medicines and cash income. It is important for them for food, shelter medicines and case income beside providing critical subsistence during the lean seasons, particularly for primitive tribal groups such as hunter gatherers, and the landless. Tribals derive 20-40% of their annual income from Minor Forest Produce on which they spend major portion of their time. This activity has strong linkage to women's financial empowerment as most of the Minor Forest Produces are collected and used/sold by women. Minor Forest Produce sector has the potential to create about 10 million workdays annually in the country.

TRIFED in its endeavor to develop the marketing of minor forest produce is engaged in skill up gradation and capacity building of Minor Forest Produce gatherers with the objective of improving their income by way of organizing training for non-destructive harvesting, primary processing, value addition and marketing of Minor Forest Produces.

To ensure fair prices for the produce collected by tribals, assurance of buying at a particular price, primary processing, storage, transportation etc. the government of India has also launched the scheme of Minimum Support Price for MFPs.

2. Retail Marketing Development:

TRIFED is engaged in procurement and marketing of tribal art and craft items through its chain of 40 retail outlets called TRIBES INDIA which offers a range of tribal products, which include

- Metal Craft
- Tribal Textiles
- Jewellery
- Tribal Paintings
- Cane & Bamboo
- Pottery
- Gifts and Novelties
- Organic and Natural products

Through this initiative TRIFED provides a platform through which tribal products can be marketed in retail directly to the consumers and in the process ensures that tribal gets a fair price.

TRIFED has also been imparting training as part of its Handicraft / Handloom development activities. As part of this initiative TRIFED is providing training inputs for improving the skill & knowledge of tribal in design development, skill development of tribal people in making handicrafts and handloom products

TRIFED proposes to set up a processing unit for Non Timber Forest Produces (NTFP) such as Amla, Mango, Honey, Cashew, Tamarind, Garlic, Ginger and other fruits and vegetables at Burundwara, Semra, Jagdalpur, District Bastar, Chhattisgarh. These processed products will be sold under the “TRIFOOD” brand through the TRIFED owned retails stores TRIBES India, its franchisee stores/ Consignee stores, or may be sold to other companies for selling, etc.

The proposed project would help in getting better returns to the tribal people for the tribal products by improving the value of the produce by means of processing.

2.2. Commodity Profile

2.2.1. Amla

The Indian goose berry or Amla is an important minor fruit of arid zone and a crop of commercial significance. Amla is a highly versatile fruit which is widely used in food preparations. Amla- the Indian Gooseberry is an important horticultural crop of arid zone which is being grown in India for last many centuries. Amla is thought to have its origin in India. Amla is one of the important tropic and sub tropic fruits. This humble gooseberry is giving tremendous boost to horticultural production in several regions due to its major advantage over other horticultural crops, it adapts to ecologically poor growing conditions which encounter recurrent crop failure and there by economic crises.

So growing of Amla has also proved to be highly remunerative for the farmers especially owning marginal land. Area under Amla cultivation is increasing every year because of its low establishment costs. Excellent plantations of Amla fruit are coming up in Northern regions of India.

The total Amla production in India stood at 989,000 MT in year 2016-17 according to provisional estimates given by National Horticulture Board with area under production being 91,000 Ha. During the last couple of years both the area under production & total production of Amla have increased gradually which shows that farmers are getting more interested in Amla production because of better price realization & availability of modern techniques for assisting in production & post production activities. The table below shows the area, production & percentage change in both over previous years in production of Amla.

Years	Area ('000 ha)	Production ('000 tons)	% Change over previous year	
			Area	Production
2014-15	95	1173	--	2014-15
2015-16	88	972	-7.3%	2015-16
2016-17	91	989	3.4%	2016-17

Source: Horticulture Statistics, National Horticulture Board, 2017

Major Amla producing state in India are Uttar Pradesh, Madhya Pradesh, Tamil Nadu, Gujarat, Assam, Andhra Pradesh, Bihar, Rajasthan, and Chhattisgarh. The state of Chhattisgarh had around 43289 MT of Amla production in the year 2017-18.

2.2.2. Honey

Honey is made by bees in one of the world’s most efficient facilities, the beehive. The 60,000 or so bees in a beehive may collectively travel as much as 55,000 miles and visit more than two million flowers to gather enough nectar to make just a pound of honey. The color and flavor of honey differ depending on the bees’ nectar source (the blossoms). In fact, there are more than 300 unique kinds of honey originating from diverse floral sources as Clover, Eucalyptus and Orange Blossoms. In general, lighter colored honeys are mild in flavor, while darker honeys are usually more robust in flavor. An illustrative characteristics of honey collected from different flora is presented herewith:

Flora	Flavor	Color	Remarks
Mustard	None to unpleasant	Creamish	Granulates quickly
Litchi	Excellent	Light Golden	Preferred by buyers, slightly acidic

Sunflower	Faint aroma & pleasant flavor	Attractive Golden yellow	Crystals are Coarse
Eucalyptus	Absent	Light to dark amber	Medicinal Properties
Multi-floral	Pleasant	Mixed hues	Mixed taste and flavors

There are many different grades of honey available. Natural grade is different from industrial. Every batch of honey is special, even when from a similar region bees gather nectar from a wide variety of plants, producing distinct tastes. The variety produced by honey bees is the one most commonly consumed by people. Honey is also produced by bumblebees, stingless bees, and other hymenopteran insects such as honey wasps, though the quantity is generally lower and they have slightly different properties compared with honey from the genus Apies. Honey bees convert nectar into honey by a process of regurgitation and evaporation: they store it as a primary food source in wax honeycombs inside the beehive.

Rapeseed / Mustard Honey, Eucalyptus Honey, Lychee Honey, Sunflower Honey, Karanj / Pongamea Honey, Multi-flora Himalayan Honey, Acacia Honey, Wild Flora Honey, Multi and Mono floral Honey are some of the major varieties of Natural Honey.

Honey gets its sweetness from the monosaccharides fructose and glucose, and has about the same relative sweetness as granulated sugar. It has attractive chemical properties for baking and a distinctive flavour that leads some people to prefer it to sugar and other sweeteners. Most microorganisms do not grow in honey so sealed honey does not spoil, even after thousands of years.

Statutory specification of honey¹

Reference – PFA (Now FSSAI) and Agmark		
Definition: Honey is the natural sweet substance produced by honey bees from the nectar of blossoms or from secretions of plants.		
Physical Parameter: When visually inspected, the honey shall be free from any foreign matter such as mold, dirt, scum, pieces of beeswax, the fragments of bees and other insects and from any other extraneous matter.		
Color: The colour of honey vary from light to dark brown.		
Chemical Parameters (as per PFA) :		
S.no.	Parameter	Specification
1	Specific gravity at 27OC	Not less than 1.35
2	Moisture	Not more than 25 per cent by mass
3	Total reducing sugars	Not less than 65 per cent by mass
4	Total reducing Sugar for Carbia colossa and Honey dew	Not less than 60 per cent by mass
5	Sucrose	Not more than to 5.0 per cent by mass
6	Sucrose for Carbia colossa and Honey dew	Not more than 10 per cent by mass
7	Fructose-glucose ratio	Not less than 0.95
8	Ash	Not more than 0.5 percent by mass
9	Acidity (Expressed as formic acid)	Not more than 0.2 per cent by mass
10	Fiche's test	Negative
11	Hydroxyl methyl furfural(HMF), mg/kg	Not more than 80
	If Fiehe's test is positive, and hydroxy methyl furfural (HMF) content is more than 80 Milligram/kilogram, then fructose: glucose ratio should be 1.0 or more.	
12	No pesticide residues or antibiotics are allowed in honey.	
13	Lead – Not more than 2.5 PPM	
14	Copper - Not more than 30 PPM	
15	Arsenic - Not more than 1.1 PPM	
16	Tin - Not more than 250 PPM	
17	Zinc – Not more than 50 PPM	
18	Cadmium – Not more than 1.5 PPM	
19	Mercury – Not more than 1 PPM	
20	Methyl Mercury – Not more than 0.25 PPM	
In the matter of admissibility of antibiotics in honey, safety standards in India are similar to those in European Union, Codex Alimentarius and USA where they are completely prohibited.		

¹ <http://old.fssai.gov.in>

2.2.3. *Tamarind*

The ripe fruit of tamarind tree is used as a condiment. It is a moderate size to large, evergreen tree, up to 24 Mtr in high and 7 Mtr in girth. Bark is brown or dark gray, longitudinally and horizontally fissured. Leaves are paripinnate up to 15 cm long, leaflets are 10-20 pairs, oblong, 8-30 mm. Flowers are small, yellowish with pink stripes, pods are 7.5-20 cm long, 2.5 cm broad, 1 cm thick, more or less constricted between seeds, slightly curved, brownish colored. Seeds are 3-12 oblong compressed, 1.5 cm, dark brown shining. Endocarp is light brownish, sweetish or acidic, edible pulp, traversed by branched ligneous strands. The outer cover of the pod is fragile and easily separable. Tamarind pulp is used in numerous culinary preparations. It is also a raw material for the preparation of wine like beverages. The tamarind kernel powder is found to be extensively used for its sizing properties. As per the advance estimates the production of Tamarind in India is shown below:

Year	Area in “000” hectare	Production in “000” MT
2015-16	53.00	194
2016-17	49.00	197
2017-18 (Advance estimate)	50.00	203

Source – Indiastat and Spice Board of India

3. Project Details and attributes

TRIFED proposes to set up processing unit for Non Timber Forest Produces (NTFP) and other available raw material in the catchment area such as Amla, Mango, Honey, Cashew, Tamarind, Garlic, Ginger and other fruits and vegetables at Burundwara, Semra, Jagdalpur, District Bastar, Chhattisgarh. The proposed processing facilities are to offer facilities in terms of Multi fruit Processing Plant (Alma juice, Amla candy, Amchur, Juice etc.), value added honey production processing facilities, Cashew Processing line, Tamarind Processing line, Fruit & Veg Pulping line and Ginger-Garlic Paste line. It will help the Tribal people to tap demand for value added NTFP products to greater degree.

The purpose of establishing unit is mainly for:

- Facilitating Tribal to progressively establish and upgrade value-adding NTFP processing facilities and expand product and market mix
- Ensuring competitive market orientation of Tribal People.
- Add value to NTFP and other available raw material in the catchment area.
- Increasing livelihood incomes of tribal people through directly expanding the market and in turn contributing to additional employment generation in the region.

Envisaged benefits of the project

The envisaged facility will help the tribal population move up the value-chain; enhance processing capabilities and hence improve the livelihood of the tribal population.

- The unit would help the tribal people considerably increase turnover through producing value added products.
- Increase in livelihood of directly linked tribal population to TRIFED such as Self Help Groups (SHGs) immediately; and other tribal population in the area on long term basis
- Net value accruals to the tribal population to increase

Similar unit is not present in the proposed location as of now, this provides leverage to the facility in terms of better market tapping and thus remarkably contributes to the community.

3.1. Location of the project

The location of the facility is Burundwara, Semra, Jagdalpur, District Bastar, Chhattisgarh. The location provide strategic advantage in terms of availability of raw material. The site is well connected to major consumption hubs such as Nagpur, Kolkata, Vijayawada, Hyderabad and Pune. The site have sufficient power supply, water facility and sufficient basic infrastructure.

3.2. Site connectivity

Road connectivity: The National Highways passing through Jagdalpur are NH 30 (connecting Raipur to Vijaywada in Andhra Pradesh via NH 65), and NH 63 (connecting Jagdalpur to Nizamabad in Telangana) while passing through Maharashtra.

NH 30 at Raipur connects Jagdalpur to Asian Highway 46 leading to Nagpur and Kolkata. NH 30 near Vijayawada connects Jagdalpur to NH 65 leading to Hyderabad and Pune.

NH 63 at Bhopalpatnam connects with NH 163, which once completed, would connect Jagdalpur to Warangal and Hyderabad.

Railways: Some of the nearest railway stations to Jagdalpur are:

<u>Station</u>	<u>Distance</u>
(KPRR)KOTAPAR ROAD	29.85 Kms
(JYP)JEYPORE	59.14 Kms
(KRPU)KORAPUT	79.59 Kms
(DMNJ)DAMANJODI	94.92 Kms
(BGUA)BAIGUDA	102.69 Kms

4. Project economics and Means of Finance

The cost of establishing the facility is provided below for multi commodity processing units. The total covered area is 1500 SQM. The total project cost estimated is INR 507.70 Lakhs. The other details are provided below:

4.1. Project Cost

Tentative Total Project Cost (Rs in Lakhs)		
Description	Amount	Percentage
Land Development Charges	5.00	0.98%
Technical civil work	225.00	44.32%
Plant and Machineries	244.16	48.09%
Utilities	13	2.56%
Pre-Operative Expenses	5.50	1.08%
Contingencies	4.87	0.96%
Margin money for working capital	10.17	2.00%
Total Project Cost	507.70	100.00%

4.2. Means of Finance

Means of Finance	Proportion (%)	Amount (Lakhs Rs)
Equity	31.52%	160.03
One Time Grant from MoFPI	47.48%	241.06
Long Term Debt	21.00%	106.62
Total	100%	507.70

4.3. Building Cost

Building Cost is considered for the area 2250 SQM. The break-up for the facility is

Facility	Area (In SQM)	Cost in INR Lakh
Collection center cum raw material warehouse	250	25.00
One Time Grant from MoFPI	2000	200.00
Total	2250	225.00

4.4. Plant and Machineries

The cost of Plant and Machineries has been estimated based on the quotations from the supplier. TRIFED has considered quotations from some machinery suppliers upon considering parameters like price, service support and quality. The total cost of Plant and Machineries is INR 244.16 Lakh

Plant & Machinery	Amount (In INR Lakh)
Multi fruit Processing Plant (Juice, candy, etc.)	113.98
Dryer (For Amla, Amchur, Other Fruit and Veg etc.)	1.80
Multi Fruit Grinder (Pulverize)	0.80
Minimal Honey Processing Line	51.16
Minimal processing line for Cashew	10.75
Minimal processing line for Tamarind	15.00
All Fruit & Veg Pulping line	16.35
Air Conditioning for 10 MT Chilling Room	1.00
Ginger-Garlic Paste line	8.79
Weigh Bridge	8.00

Mango/Fruit cutter	5.25
Packaging machine (Foil +hand)	0.91
Metal Detector	2.50
Air compressor	0.60
Weighing scales	2.00
Vacuum cleaner	0.26
Miscellaneous Fixed items (Utensils, tables etc.)	5.00
Total Plant & Machinery	244.16

4.5. Utilities

Following utilities have been considered for the project

Utilities	Amount (in INR Lakhs)
DG Set	9.00
RO unit	4.00
Total	13.00

4.6. Pre-operative expenses

Pre-operative expenses are envisaged in terms of Interest during construction, legal & administrative expenses, registration, detailed civil engineering drawings with estimates and tender forms, tendering cost, telephone, stationery, Establishment costs, travel, and overheads during construction period including salaries etc.

Pre-Operative Expenses	Amount (in INR Lakhs)
Interest during construction period	2.93
Miscellaneous pre-operative expenses	2.57
Total	5.50

4.7. Contingencies

Contingencies has been considered as 1% of the total fixed assets excluding the cost of land.

The contingency charges for the Project (In INR Lakhs)		
Contingencies	@ 1 % of The Total Fixed assets	4.87

4.8. Margin money for working capital

The margin money of working capital estimated to be INR 10.17 Lakh.

5. Project Financials

5.1. Profit and Loss statement

Profitability Statement										
Year	1	2	3	4	5	6	7	8	9	10
Capacity Utilization	50%	50%	60%	70%	70%	75%	75%	75%	75%	75%
Production (Lakhs Rs)										
Revenue	880.23	880.23	1056.28	1232.32	1232.32	1320.35	1320.35	1320.35	1320.35	1320.35
Expenses	1	1.02	1.04	1.06	1.08	1.10	1.13	1.15	1.17	1.20
Raw material Cost	453.70	462.77	566.44	674.06	687.54	751.38	766.41	781.74	797.37	813.32
Packing Material	61.62	61.62	73.94	86.26	86.26	92.42	92.42	92.42	92.42	92.42
Other ingredients	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fuel	30.91	30.91	30.91	30.91	30.91	30.91	30.91	30.91	30.91	30.91
Water	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18
Employee Cost	90.12	90.12	90.12	90.12	90.12	90.12	90.12	90.12	90.12	90.12
Maintenance	12.86	12.86	12.86	12.86	12.86	12.86	12.86	12.86	12.86	12.86
Insurance	2.44	2.44	2.44	2.44	2.44	2.44	2.44	2.44	2.44	2.44
Admin & Selling Overheads	44.01	44.01	52.81	61.62	61.62	66.02	66.02	66.02	66.02	66.02
Total Expenses	695.83	704.90	829.69	958.44	971.92	1046.33	1061.35	1076.68	1092.32	1108.26
EBITDA	184.40	175.33	226.59	273.88	260.40	274.02	258.99	243.66	228.03	212.08
Interest Long Term Debt (LTD)	11.73	11.73	11.10	9.42	7.75	6.07	4.40	2.72	1.05	0.00
Depreciation	34.15	34.15	34.15	34.15	34.15	34.15	34.15	34.15	34.15	33.70
PBT	134.04	124.94	176.01	224.16	212.31	227.15	213.74	200.03	186.02	171.51
Tax	0.00	0.00	0.00	0.00	0.00	59.30	56.66	53.84	50.86	47.58
Net Profit (PAT)	134.04	124.94	176.01	224.16	212.31	167.85	157.08	146.19	135.15	123.93
Net Cash from Operations	168.20	159.09	210.17	258.31	246.46	202.00	191.24	180.34	169.31	157.63

5.2. Cash Flow Statement

<u>Cash flow statement</u>											
Year	0	1	2	3	4	5	6	7	8	9	10
Sources											
<u>Cash from Operations</u>											
PAT		134.04	124.94	176.01	224.16	212.31	167.85	157.08	146.19	135.15	123.93
Add Depreciation		34.15	34.15	34.15	34.15	34.15	34.15	34.15	34.15	34.15	33.70
Net Cash from Operations		168.20	159.09	210.17	258.31	246.46	202.00	191.24	180.34	169.31	157.63
<u>Cash From Financing</u>											
Equity	160.03										
Grant	241.06										
Term Loan	106.62										
Increase in Working Capital Borrowing	0	40.69	0.30	7.37	7.50	0.45	4.08	0.50	0.51	0.52	0.53
Total Cash inflow	507.70	208.89	159.39	217.53	265.81	246.91	206.09	191.74	180.85	169.83	158.17
Uses											
Capital expenditure	497.53										
Increase in Working capital		50.87	0.38	9.21	9.37	0.56	5.11	0.63	0.64	0.65	0.66
Repayment of principal		0.00	0.00	15.23	15.23	15.23	15.23	15.23	15.23	15.23	0.00
Total Uses	497.53	50.87	0.38	24.44	24.61	15.79	20.34	15.86	15.87	15.88	0.66
Opening Cash Balance	0	10.17	168.20	327.21	520.30	761.51	992.63	1,178.38	1,354.26	1,519.24	1,673.19
Surplus/ Deficit	10.17	158.02	159.01	193.09	241.21	231.12	185.75	175.88	164.98	153.94	157.50
Closing Cash Balance	10.17	168.20	327.21	520.30	761.51	992.63	1,178.38	1,354.26	1,519.24	1,673.19	1,830.69

Initial 18 months has been considered as construction period. In above table Year 0 (Zero) has been considered as construction period. The year will observe infusion of part of equity, grant and debt from the Financial Institution.

5.3. Balance Sheet

Balance Sheet											
Liabilities	0	1	2	3	4	5	6	7	8	9	10
Equity Capital	160.03	160.03	160.03	160.03	160.03	160.03	160.03	160.03	160.03	160.03	160.03
Reserve & Surplus	0.00	134.04	258.98	434.99	659.15	871.46	1039.30	1196.39	1342.58	1477.73	1601.66
Grant/ Subsidy	241.06	241.06	241.06	241.06	241.06	241.06	241.06	241.06	241.06	241.06	241.06
Net Worth	401.09	535.13	660.06	836.08	1,060.24	1,272.54	1,440.39	1,597.47	1,743.66	1,878.81	2,002.75
Term Loan	106.62	106.62	106.62	91.39	76.16	60.92	45.69	30.46	15.23	0.00	0.00
Working Capital Loan	0.00	40.69	40.99	48.36	55.86	56.31	60.40	60.90	61.41	61.93	62.46
Total Liabilities	507.70	682.44	807.68	975.83	1,192.25	1,389.78	1,546.48	1,688.83	1,820.30	1,940.74	2,065.21
Assets											
Gross Fixed Assets	497.53	497.53	497.53	497.53	497.53	497.53	497.53	497.53	497.53	497.53	497.53
Less Accumulated Dep.	0.00	34.15	68.31	102.46	136.62	170.77	204.92	239.08	273.23	307.39	341.09
Net Fixed Assets	497.53	463.38	429.22	395.07	360.92	326.76	292.61	258.45	224.30	190.14	156.44
Working Capital	0	50.87	51.24	60.45	69.83	70.39	75.49	76.12	76.76	77.41	78.07
Cash Bal	10.17	168.20	327.21	520.30	761.51	992.63	1,178.38	1,354.26	1,519.24	1,673.19	1,830.69
Total Assets	507.70	682.44	807.68	975.83	1,192.25	1,389.78	1,546.48	1,688.83	1,820.30	1,940.74	2,065.21

5.4. Financial Performance Indicators

<u>Financial Performance Indicators</u>											
Year		1	2	3	4	5	6	7	8	9	10
EBITDA Margin		20.95%	19.92%	21.45%	22.23%	21.13%	20.75%	19.62%	18.45%	17.27%	16.06%
PAT margin		15.23%	14.19%	16.66%	18.19%	17.23%	12.71%	11.90%	11.07%	10.24%	9.39%
Debt-Equity Ratio		0.20	0.16	0.11	0.07	0.05	0.03	0.02	0.01	0.00	0.00
Debt to EBITDA ratio		0.80	0.84	0.62	0.48	0.45	0.39	0.35	0.31	0.27	0.29
Interest Coverage Ratio		11.38	10.80	13.80	17.59	18.68	21.55	23.34	25.71	29.01	30.87
DSCR		11.38	10.80	7.16	8.89	8.93	9.80	9.84	9.86	9.88	30.87
Average DSCR		10.03									
<u>Calculation -Interest Coverage Ratio</u>											
EBITDA		184.40	175.33	226.59	273.88	260.40	274.02	258.99	243.66	228.03	212.08
Interest											
Long term Debt (LTD)		11.73	11.73	11.10	9.42	7.75	6.07	4.40	2.72	1.05	0.00
Working Capital Borrowing		4.48	4.51	5.32	6.14	6.19	6.64	6.70	6.75	6.81	6.87
Total interest paid		16.20	16.24	16.42	15.57	13.94	12.72	11.10	9.48	7.86	6.87
Interest Coverage Ratio		11.38	10.80	13.80	17.59	18.68	21.55	23.34	25.71	29.01	30.87
Average ICR		18.49									
<u>Calculations DSCR</u>											
EBITDA		184.40	175.33	226.59	273.88	260.40	274.02	258.99	243.66	228.03	212.08
Debt Payment											
LTD Interest		11.73	11.73	11.10	9.42	7.75	6.07	4.40	2.72	1.05	0.00
Interest on Working capital borrowings			4.48	4.51	5.32	6.14	6.19	6.64	6.70	6.75	6.81
principal payment		0.00	0.00	15.23	15.23	15.23	15.23	15.23	15.23	15.23	0.00
Total Debt Payment		16.20	16.24	31.65	30.80	29.17	27.95	26.33	24.71	23.09	6.87
DSCR		11.38	10.80	7.16	8.89	8.93	9.80	9.84	9.86	9.88	30.87
Average DSCR		10.0									
<u>Project IRR</u>											
Inflow											
PAT		134.04	124.94	176.01	224.16	212.31	167.85	157.08	146.19	135.15	123.93
Add depreciation		34.15	34.15	34.15	34.15	34.15	34.15	34.15	34.15	34.15	33.70
Total inflow		168.20	159.09	210.17	258.31	246.46	202.00	191.24	180.34	169.31	157.63

Outflow											
Capital expenses	497.53										
Increase in Working Capital	0.00	50.87	0.38	9.21	9.37	0.56	5.11	0.63	0.64	0.65	0.66
Principal Payment		0.00	0.00	15.23	15.23	15.23	15.23	15.23	15.23	15.23	0.00
Total out flow	497.53	50.87	0.38	24.44	24.61	15.79	20.34	15.86	15.87	15.88	0.66
Terminal Value											156.44
Net Cash inflow- Phase-1	(497.53)	117.33	158.71	185.73	233.71	230.67	181.67	175.38	164.47	153.42	313.41
IRR	32.97%										

The project IRR has been calculated as 31.70% over a period of 10 years.

5.5. Payback period

<u>Payback Period</u>											
Year	0	1	2	3	4	5	6	7	8	9	10
Capital investment	497.53										
Net cash inflow		117.33	158.71	185.73	233.71	230.67	181.67	175.38	164.47	153.42	313.41
Cumulative cash inflow		117.33	276.04	461.77	695.48	926.14	1,107.81	1,283.19	1,447.66	1,601.09	1,914.50
Is payback achieved		No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Payback Period		-	-	-	3.72	-	-	-	-	-	-

The payback period for the project is 3.74 years.

5.6. Depreciation

Book Depreciation-SLM											
		Years									
Assets	Value	1	2	3	4	5	6	7	8	9	10
Plant & Machinery	249.36	24.94	24.94	24.94	24.94	24.94	24.94	24.94	24.94	24.94	24.94
Mics. Fixed Assets	13.28	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	0.92
Buildings	234.90	7.85	7.85	7.85	7.85	7.85	7.85	7.85	7.85	7.85	7.85
Depreciation		34.15	34.15	34.15	34.15	34.15	34.15	34.15	34.15	34.15	33.70
Closing Bal											
Plant & Machinery	249.36	224.42	199.49	174.55	149.61	124.68	99.74	74.81	49.87	24.94	0.00
Mics. Fixed Assets	13.28	11.90	10.53	9.16	7.79	6.41	5.04	3.67	2.29	0.92	0.00
Buildings	234.90	227.05	219.21	211.36	203.52	195.67	187.82	179.98	172.13	164.29	156.44

Tax Depreciation-WDV		Years									
Assets	Value	1	2	3	4	5	6	7	8	9	10
Plant & Machinery	249.36	37.40	31.79	27.02	22.97	19.52	16.60	14.11	11.99	10.19	8.66
Mics. Fixed Assets	13.28	1.99	1.69	1.44	1.22	1.04	0.88	0.75	0.64	0.54	0.46
Buildings	234.90	7.85	7.58	7.33	7.09	6.85	6.62	6.40	6.19	5.98	5.78
Depreciation		47.24	41.07	35.79	31.28	27.41	24.10	21.26	18.81	16.71	14.90
Closing Bal											
Plant & Machinery	249.36	211.95	180.16	153.14	130.17	110.64	94.04	79.94	67.95	57.76	49.09
Mics. Fixed Assets	13.28	11.29	9.59	8.15	6.93	5.89	5.01	4.26	3.62	3.08	2.61
Buildings	234.90	227.05	219.47	212.14	205.05	198.20	191.58	185.19	179.00	173.02	167.24

5.7. Assumptions

5.7.1. Operating Assumptions

We have assumed that facility would remain in production for 250 days and the operation hours is considered as 16 hours per day. Further, one shift per day is considered for operation of plant.

Operating Assumptions		
Working Days	260	Days
Shift/day	1	Shift
Hrs./day of Operation	8	Hours

5.7.2. Insurance cost

The insurance cost on Plant & Machinery, other fixed assets and building cost would depend on types of insurance product being purchased. However for the DPR purpose we have assumed 0.50% of the value being insured for above mentioned cost items.

5.7.3. Repair & Maintenance Assumptions

The repair and maintenance cost of plant & machinery is considered at the rate of 5% of Plant and Machinery cost.

Insurance Cost/annum	
Particulars	Rate
Repair and Maintenance	5.00% of project cost excluding land and building

5.7.4. Selling and distribution expenses

Selling and distribution expenses include expenses related to marketing of product, sales personnel cost, travel cost, storage cost and others. It has been considered as 5% of revenue.

5.7.5. Raw material costing

Particulars	Assumption
Raw material requirement per day	5.4 MT
Raw material requirement per annum	1360 MT (250 days of operation)
Average Raw material purchase price	INR 62500/MT
Average Yield	67.5%
Average Selling price	INR 213333.3/MT
Finished product manufactured per annum	918 MT

Further, it has been considered that raw material cost will increase by 2% every year.

6.7.6. Packaging material costing

Packaging material cost @7% of sales value has been calculated. The cost include both primary and secondary packaging material cost.

6.7.7. Depreciation

Depreciation Rates	Book Depreciation	Tax Depreciation
Plant & Machinery	10.00%	15.00%
Office Furniture	10.00%	10.00%
Miscellaneous Fixed Assets	10.34%	15.00%
Buildings	3.34%	3.34%

6.7.8. Workforce assumption

Workforce Assumptions			
Grade/ Employee	Number	Salary/ pm (RS)	Total (Rs)
1. Manager	2	80000	960000
3. Quality Incharge	4	88000	1056000
10. Skilled Workers	5	100000	1200000
11. Semi/Unskilled Workers	30	300000	3600000
13. Fitters	4	60000	720000
14. Accountants	3	45000	540000
16. Security	4	36000	432000
17. Peon/Driver/Other support staff	6	42000	504000
Total	58	751000	9012000

6.7.9. Power consumption

Power Assumptions	Value
Rate/KW (Rs)	5.35
Load (KVA)	400
Average Power Factor	0.5
Drawn power at 80% in Kwh	6
Avg. Power Availability (Hours)	360000
Annual Consumption (KWH)	19.26
Annual cost of Power (Rs. in Lakhs)	5.35

6.7.10. Water consumption assumption

Water Assumptions			
Number of people	58		
Personal	20	Lit/day/Person	
Industrial	500	Lit/day	
Total Requirement/Day (Liters)	1660		
Requirement in KLD (rounding off)	2		
Total Monthly Consumption (Lit.)	60.00		
Water Charges/ KL/Month	25.00		
Water Cost/Month (Lakhs Rs)	0.02		

6. Project impact

The project will have following impacts:

Creation of Infrastructure: The project shall create state of the art infrastructure for value addition in Non-Timber Forest Produces (NTFP) such as Amla, Mango, Honey, Cashew, Tamarind, Garlic, Ginger and other fruits and vegetables and provide opportunity for the local tribal population to value add and gain addition price realization.

Employment creation: The unit shall create employment opportunities for approximately 58 persons at plant including contractual labors and a number of opportunities for skilled workforce. Local tribal population would be benefitted by getting a sustained buyer for their produce. Within 50 KM more than 5000 farmers will be benefitted.

Social impact: Presently local tribal population is dependent on the forest products for income generation and livelihood. Creation of the unit will impact positively on the income of these people. This income enhancement improves the living and social quality life for them.

Disclaimer

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