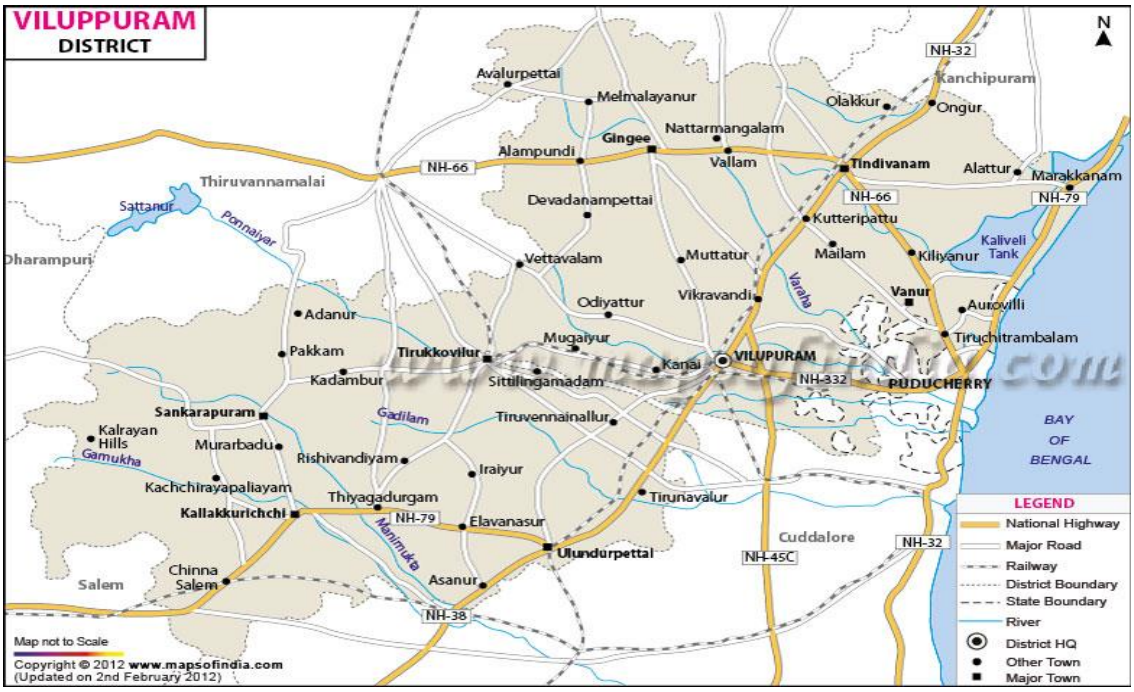
PART-I

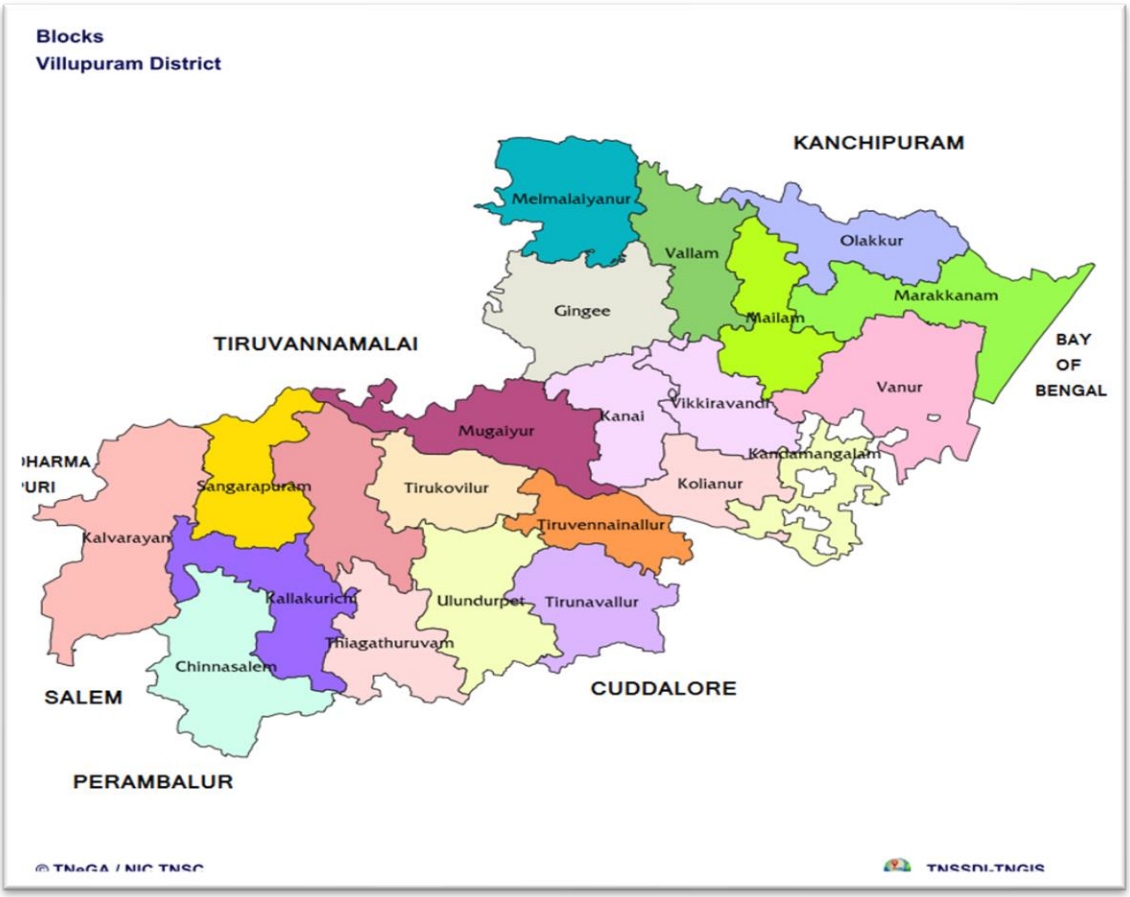
GENERAL INFORMATION

1.Kallakurichi District Road Map and Block Map

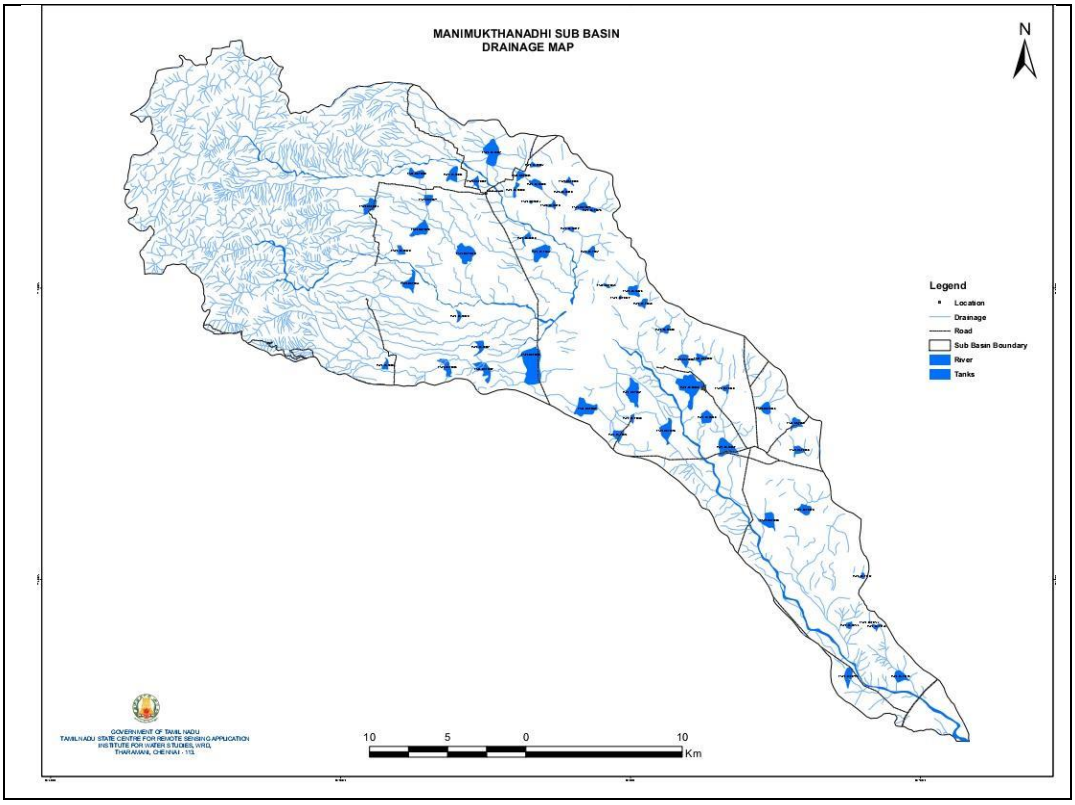
a. Kallakurichi District Road Map:



b.Kallakurichi District Map - Block wise



SUB BASIN MAP



DETAILED PROJECT REPORT

SUB-BASIN NAME	:	MANIMUKTHANADHI
District	:	KALLAKURICHI
WRD Region	:	Villupuram
District Covered	:	KALLAKURICHI

2. INTRODUCTION

DESCRIPTION OF MANIMUKTHANADHI SUB BASIN

The basin originates in Kalryan hills with drainage Area of 749.54 Km having I two drainages namely Mani river and Muktha river originating in the Northern part of the eastern slope of the Kalrayn Hills in Sankarapuram Taluk at an altitude of about 40 km and the Muktha River flows for 32 km. These two rivers confluence ManimukthaNadhi sub basin having18 Anicuts , 49 PWD tanks, and one ManimukthaNadhi reservoir having the totalAyacut of 5027 Hectares. Average rainfall is 950mm in this sub basin.

In the Manimuktha Nadhi Sub Basin, 33 Tanks (33 Non – system Tanks) 31 Supply Channel and 11 Anicuts.

One tank namely Alathur tank left out in this proposal. Seshasamuthram anicut included in this proposal now which is left due to taken under Kudimaramath 2019-2020 because of the dispute between the ayacutdhars and work dropped and intimated to the Government. Hence it is included in this proposal . Ka.Alambalam tank is not taken in this proposal because it was taken under Kudimaramath scheme 2020-21 and administrative sanction approvel for Rs. 50 Lakhs. But the Ayacut included in this proposal for agricultural improvements related activities doing by Line departments.

The work Proposed in this Sub Basin, 34 Tanks (Non – system Tanks) 31 Supply Channel and 10 Anicuts.

Tank Ayacut (34 Tanks)	:	2673.96 ha
AnicutAyacut (10 Anicuts)	:	160.25 ha
Total Ayacuts		**2834.21Ha.**

AYACUT AREA UNDER MANIMUKTHANADHI SUB BASIN:

S. No	Details	Registered Ayacut area [Ha]
1	Fully irrigated	1275.27.0
2	Partially irrigated	1011.65.0
3	Gap	547.29.0
	Total	2834.021.0

Command Area:

Tank Ayacut (33 Tanks)	:	2356.96
AnicutAyacut (11 Anicuts)	:	149.88
Total Ayacuts		**2506.84 Ha.**

3.. List of Blocks and Taluks covered in ManimukthanadhiSub Basin with Ayacut in ha.

District	Taluk	Block
Kallakurichi	Kallakurichi	Kallakurichi
		Thiyagaurgam
		Sankarapuram
		Chinnasalem
	Sankarapuram	Kallakurichi
		Thiyagaurgam
		Sankarapuram
		Chinnasalem
		Rishivanthiyam
	Chinnasalem	Kallakurichi
		Chinnasalem

4. Tank wise and Anaicut wise details

Sl. No.	Name of Tank	Unicode	Villages	Ayacut in Ha			
				Fully Irrigated	Partially Irrigated	Gap	Total
1	Chellampattu Tank	TN VE-06 T 0020	Chellampattu	22.02	21.20	10.47	53.69
2	Chittalur Tank	TN VE-06 T 0083	Chittalur	64.65	59.98	31.16	155.79
3	Kacharayapalayam Tank	TN VE-06 T 0042	Kacharayapalayam	35.95	36.40	17.53	89.88
4	Kalayanallur Small Tank	TN VE-06 T 0048	Kalayanallur	11.05	11.33	5.59	27.97
5	Kalayanallur Tank	TN VE-06 T 0040	Kalayanallur	11.40	10.42	6.15	27.97
6	Kallaerikuppam Tank	TN VE-06 T 0025	Kallaerikuppa	5.70	4.95	3.00	13.65
7	Kosapadi Tank	TN VE-06 T 0014	Kosapadi	23.29	23.60	12.84	59.73
8	Kudiyanallur Tank	TN VE-06 T 0102	Kudiyanallur	23.38	21.19	11.14	55.71
9	Koothakkudi Tank	TN VE-06 T 0156	Koothakkudi	34.87	35.75	16.56	87.18
10	Manjaputtur Tank	TN VE-06 T 0022	Manjaputtur	36.14	37.06	18.30	91.50
11	Ninnaiyur Tank	TN VE-06 T 0126	Ninnaiyur	19.87	19.39	9.82	49.08
12	Palaya SiruvangurPeriya Eri	TN VE-06 T 0026	Palayam	21.55	20.84	11.61	54.00

13	Palaya korakachandal Tank	TN VE-06 T 0027	Palaya korakachanda	1.95	1.99	0.95	4.89
14	Pallagacheri Tank	TN VE-06 T 0038	Pallagacheri	51.87	50.87	28.17	130.91
15	Pallipattu Tank	TN VE-06 T 0030	Pallipattu	8.67	8.77	4.23	21.67
16	Pandalam Tank	TN VE-06 T 0001	Pandalam	63.68	60.61	29.15	153.44
17	Peruvangur Tank	TN VE-06 T 0054	Peruvangur	22.89	22.60	12.46	57.95
18	Poikunam Tank	TN VE-06 T 0018	Poikunam	16.65	16.40	8.26	41.31
19	Pootai Tank	TN VE-06 T 0003	Pootai	45.18	43.18	24.60	112.96
20	Prithivimangalam	TN VE-06 T 0057	Prithivimangalam	61.58	57.03	33.45	152.06
21	Sembarampattu Tank	TN VE-06 T 0011	Sembarampattu	17.63	18.07	8.37	44.07
22	Sithathur Tank	TN VE-06 T 0122	Sithathur	19.93	18.95	9.72	48.60
23	Thandalai Tank	TN VE-06 T 0041	Thandalai	51.16	49.28	27.45	127.89
24	Thirukkanangur Tank	TN VE-06 T 0031	Thirukkanangur	47.50	46.89	25.85	120.24
25	Thyiyagai Tank	TN VE-06 T 0079	Thyiyagai	21.89	21.08	11.08	54.05
26	Udayamampattu Tank	TN VE-06 T 0051	Udayampattu	18.44	18.90	8.76	46.10
27	Udayanatchi Tank	TN VE-06 T 0124	Udayanatchi	23.84	24.09	11.98	59.91
28	Urangani Tank	TN VE-06 T 0007	Urangani	35.36	36.79	16.92	89.07
29	Vada Thorasalur Tank	TN VE-06 T 0046	Vada Thorasalur	20.37	19.36	11.20	50.93
30	Vadachettiyandal	TN VE-06 T 0019	Vadachettiyandal	19.20	18.38	10.60	48.18
31	Vadakanandal Kalleri Tank	TN VE-06 T 0034	Vadakanandal	43.36	43.76	21.68	108.80
32	Velanmandal Tank	TN VE-06 T 0032	Velanmandal	9.60	9.12	5.28	24.00
33	Ka.Alambalam Tank	TN VE-06 T 0037	Ka.Alambalam	38.45	27.52	17.81	93.78
			TOTAL	**949.07**	**915.75**	**482.14**	**2356.96**

Sl. No.	Name of Anicut	Villages	Ayacut in Ha			
			Fully Irrigated	Partially Irrigated	Gap	Total
1	Poottai Anicut	Pootai	10.10	11.62	5.77	27.49
2	Pandalam Anicut	Pandalam	0.00	0.00	0.00	0.00
3	Chellampattu Anicut	Chellampattu	0.00	0.00	0.00	0.00
4	Karadichithur Anicut	Karadichithur	0.00	0.00	0.00	0.00
5	Kumarapalaiyam Anicut	Kumarapalaiyam	4.54	4.31	2.49	11.34
6	Thavadipattu Anicut	Thavadipattu	0.00	0.00	0.00	0.00
7	Pallakatcheri Anicut	Karadichithur	24.91	24.01	11.85	60.77
8	Panaiyankaal Anicut	Rayapuram	20.67	17.64	10.19	48.50
9	Kootthakudi Anicut	Puthu Uchimedu	0.00	0.00	0.00	0.00
		TOTAL	**60.22**	**57.58**	**30.30**	**148.10**

Source: WRD, MANIMUKTHANADHISUB BASIN

5. Project Development Objectives:

To improve the service delivery and productivity of irrigated agriculture with effective integrated water resources management in Manimukthanadhi sub basin with the following broad objectives.

- "To achieve more income per drop of water "Increasing the water productivity by utilizing water efficient technologies and by raising high value low water requiring crops.
- Focus on sustainable intensification and diversification of crops. Concentrating on low water requiring crops like Millets, pulses and Oilseed crops.
- Dissemination of post harvest technologies, grading and value addition in crops like Millets, pulses and oilseeds to small holders farmers for improving the income level of the farmers.
- Encouraging the existing agro-entrepreneurs and to develop existing and new Farmer producer companies.

6. CLUSTER CLASSIFICATION

CLUSTERARE IDENTIFIED AND LISTED BELOW:

Sl. No.	No. of Cluster	Name of Cluster	Block	Taluk	District

7.PRESENT SCENARIO

Present Scenario in Kallakurichi District

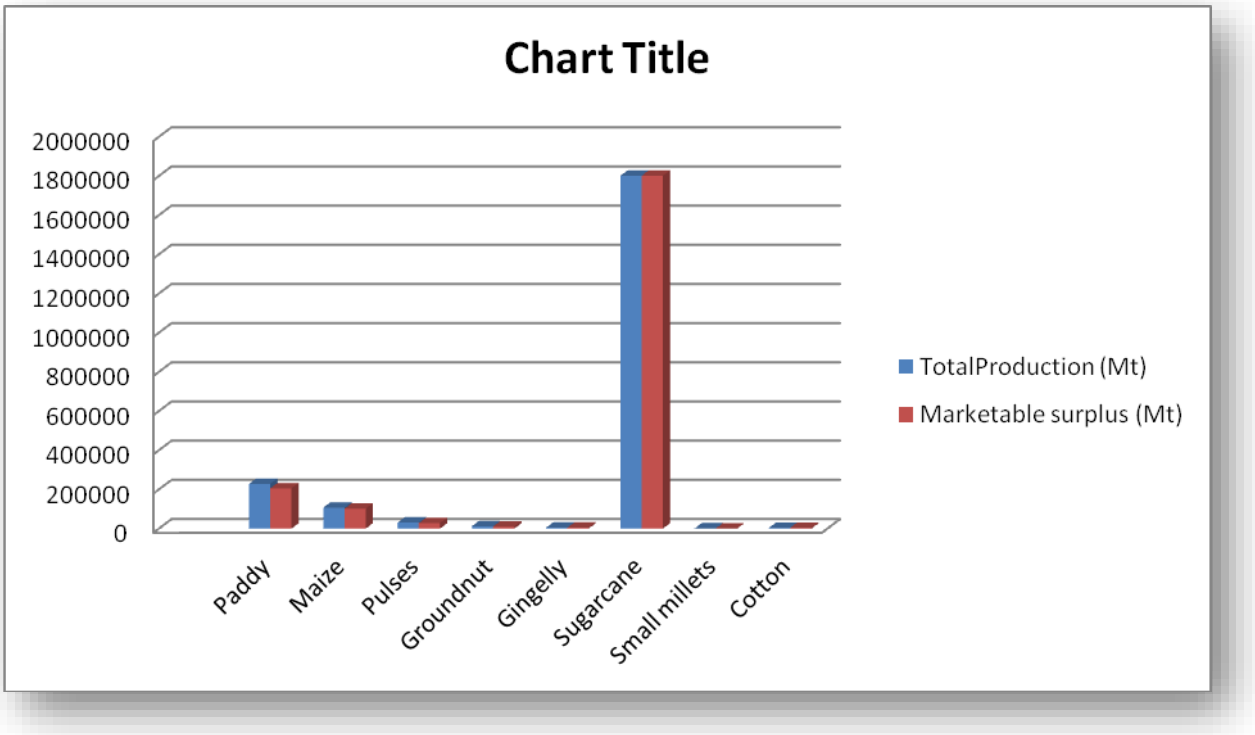
Kallakurichi district was earlier a part of Villuppuram district .It was then bifircated from Villuppuram district and became a seperate district on 26 th November -2019. At present Kallakurichi district comprises of 2 revenue division 6 revenue taluks, 2 municipality, 9 blocks panchayats 6 town panchayats and 397 village panchayats. According to the 2011 census Kallakurichi district had a population of 16,82,687.The main occupation is agriculture. From the Net cultivable area of 3.33 l. Ha the farmers are cultivating about 4.5 lakh ha. of gross cultivable area.

The total Geographical area of the district is around 3520 Sq.Kms. of which except Kalrayan hills the entire District is characterized by plains. Major portion of the plains is utilized for agricultural purpose. Most of the forest in the District lies in Kallakurichi and Thirukoilur Taluks.

8. KALLAKURICHI DISTRICT PRODUCTION, PRODUCTIVITY AND MARKETABLE SURPLUS.

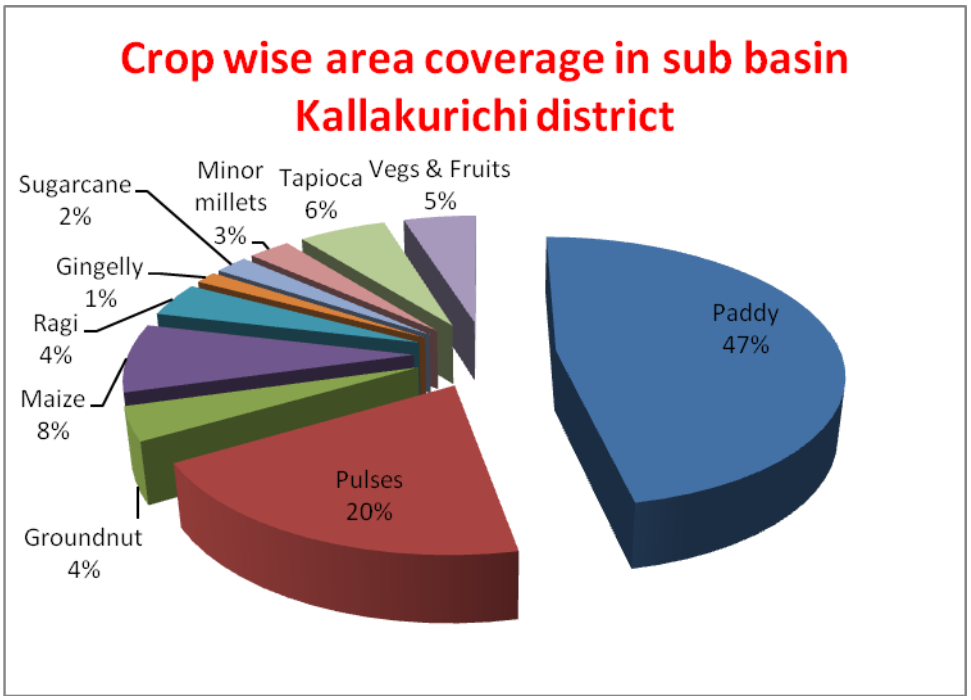
S. No	Name of the commodities Kallakurichi District	Total Area (ha)	Productivity Mts/Ha	Total Production (Mt)	Marketable surplus (Mt)
1	Paddy	55094	4.15	228640	205776
3	Maize	20641	5.2	107333	101966
4	Pulses	41665	0.74	30832	27749
5	Groundnut	5086	2.4	12206	10741
6	Gingelly	6677	0.75	5008	4758
7	Sugarcane	18011	100	1801100	1801100
8	Small millets	569	2	1138	1024
9	Cotton	7687	0.55	4228	4228
	Total	**155430**		**2190485**	**2157342**

PRODUCTION AND MARKETABLE SURPLUS – KALLAKURICHI DISTRICT



9. MANIMUKTHANADHI SUB BASIN PRODUCTION, PRODUCTIVITY AND MARKETABLE SURPLUS

S. No	Name of the commodities In the Sub basin	Total Area (Ha)	Productivity MTS/ha	Total Production (MT)	% Of Marketable Surplus	Marketable surplus (MT)
	ManimukthanadhiSubbasin Kallakurichi District					
1	Paddy	1994.00.0	4.150	8275.100	90	7447.590
2	Pulses	844.21.0	0.740	624.715	90	562.243
3	Groundnut	169.00.0	2.400	405.600	88	356.928
4	Maize	345.00.0	5.200	1794.000	95	1704.300
5	Ragi	173.00.0	2.200	160.600	90	144.540
6	Gingelly	62.00.0	0.750	46.500	95	44.175
7	Sugarcane	95.00.0	100.000	9500.000	100	9500.00
8	Minor millets	120.00.0	2.000	240.000	90	216.000
9	Tapioca	250.00.0	34.950	8737.500	100	8737.500
10	Vegs & Fruits	207.00.0	10.370	2146.590	90	1931.931



10.Cropping sequence

Cropping sequence in Kallakurichi district

Sugarcane/Paddy-Pulses –Millets
Paddy-Pulses –Oil Seeds

Area, Productivity, Production, Marketable Surplus of Major crops-Kallakurichi District

Sl.No.	Crop	Area (Ha.)	Productivity (MT)	Production (MT)	Marketable Surplus (MT)
1	Paddy	55094	4.15	228640	205776
2	Maize	20641	5.2	107333	101966
3	Pulses	41665	0.74	30832	27749
4	Groundnut	5086	2.4	12206	10741
5	Gingelly	6677	0.75	5008	4758
6	Sugarcane	18011	100	1801100	1801100
7	Small millets	569	2	1138	1024
8	Cotton	7687	0.55	4228	4228

Source: Department of Agriculture, Kallakurichi & G-Return Marketable surplus = Total Production – Total Consumption

Cropping Sequence: MANIMUKTHA NADHI sub basin

Paddy – Paddy – Pulses
Paddy – Groundnut- Pulses/ Sugarcane

CROP, AREA, PRODUCTION AND MARKETABLE SURPLUS IN MANIMUKTHA NADHI SUB-BASIN, KALLAKURICHI DISTRICT

S. No	Name of the commodities In the Sub basin	Total Area (Ha)	Productivity MTS/ha	Total Production (MT)	% Of Marketable Surplus	Marketable surplus (MT)
	Manimukthanadhi Sub basin Kallakurichi District					
1	Paddy	1994.00.0	4.150	8275.100	90	7447.590
2	Pulses	844.21.0	0.740	624.715	90	562.243
3	Groundnut	169.00.0	2.400	405.600	88	356.928
4	Maize	345.00.0	5.200	1794.000	95	1704.300
5	Ragi	173.00.0	2.200	160.600	90	144.540
6	Gingelly	62.00.0	0.750	46.500	95	44.175
7	Sugarcane	95.00.0	100.000	9500.000	100	9500.00
8	Minor millets	120.00.0	2.000	240.000	90	216.000
9	Tapioca	250.00.0	34.950	8737.500	100	8737.500
10	Vegs & Fruits	207.00.0	10.370	2146.590	90	1931.931

11. MANIMUKTHA NADHI SUB BASIN CROPPING PATTERN.

CROPPINGPATTERN

Name of the sub Basin **: Manimukthanadhi**
Nodal District : Viluppuram
Registered Ayacut Area **: 2834.21**
No. of WUAs :

Fully Irrigated : 1275.27 Ha
Partially Irrigated :1011.65 Ha
Gap : 547.29Ha
Total Ayacut Area : **2834.21** Ha

S. No.	Crop	Without Project				With Project				Increasing
		FI	PI	RF/G	TOTAL	FI	PI	RF/G	TOTAL	
I	**Perennial crop**									
1	Coconut	0	0	0	**0**	0	0	0	**0**	0
2	Mango	0	0	0	**0**	0	0	0	**0**	0
3	Guava	0	0	0	**0**	0	0	0	**0**	0
4	Casuarina	0	0	0	**0**	0	0	0	**0**	0
5	Fodder crops	10	0	0	**10**	44	0	0	**44**	34
	Total	**10**	**0**	**0**	**10**	**44**	**0**	**0**	**44**	34
II	**Annual Crop**				**0**				**0**	0
1	Sugarcane	152	0	0	**152**	95	0	0	**95**	-57
2	Banana	0	0	0	**0**	0	0	0	**0**	0
3	Tapiaco	85	0	0	**85**	250	0	0	**250**	165
	Total	**237**	**0**	**0**	**237**	**345**	**0**	**0**	**345**	108
III	**1st crop**									
1. a	Paddy	886.27	0	0	**886.27**	131	0	0	**131**	-755.27
b	Paddy - SRI	85	0	0	**85**	710	0	0	**710**	625
2	Maize	0	255	0	**255**	345	0	0	**345**	90
3	Ragi	0	131	0	**131**	173	0	0	**173**	42
4	Minor Millets	0	82	0	**82**	120	0	0	**120**	38
5	Pulses	0	363.65	0	**363.65**	528.21	0	0	**528.21**	164.56
6	Groundnut	0	135	0	**135**	169	0	0	**169**	34
7	Gingelly	0	45	0	**45**	62	0	0	**62**	17
8	Bhendi	21	0	0	**21**	51	0	0	**51**	30
9	Brinjal	5	0	0	**5**	15	0	0	**15**	10
10	Chillies (Green)	10	0	0	**10**	20	0	0	**20**	10
11	Snake gourd	5	0	0	**5**	20	0	0	**20**	15
12	Bitter gourd	1	0	0	**1**	16	0	0	**16**	15
13	Small Onion	10	0	0	**10**	65	0	0	**65**	55
14	Watermelon	5	0	0	**5**	20	0	0	**20**	15
15	Fallow	0	0	547.29	**547.29**	0	0	0	**0**	-547.29
16	Non Agrl. Purposes	0	0		**0**	0	0	0	**0**	0
	Total	**1028.3**	**1011.65**	**547.29**	**2587.21**	**2445.21**	**0**	**0**	**2445.21**	-142
	G. Total (I+II+III)	**1275.27**	**1011.65**	**547.29**	**2834.21**	**2834.21**	**0**	**0**	**2834.21**	0

IV	**2 nd crop**				**0**				**0**	0
1. a	Paddy	210	0	0	**210**	110	0	0	**110**	-100
b	Paddy - SRI	65	0	0	**65**	485	0	0	**485**	420
2	Maize	0	0	0	**0**	0	0	0	**0**	0
3	Ragi	0	0	0	**0**	0	0	0	**0**	0
4	Minor Millets	0	0	0	**0**	0	0	0	**0**	0
5	Pulses	0	155	0	**155**	316	0	0	**316**	161
6	Groundnut	0	0	0	**0**	0	0	0	**0**	0
	Total	**275**	**155**	**0**	**430**	**911**	**0**	**0**	**911**	481
V	**3rd crop**				**0**				**0**	0
1. a	Paddy	205	0	0	**205**	95	0	0	**95**	-110
b	Paddy - SRI	55	0	0	**55**	463	0	0	**463**	408
2	Maize	0	0	0	**0**	0	0	0	**0**	0
3	Ragi	0	0	0	**0**	0	0	0	**0**	0
4	Minor Millets	0	0	0	**0**	0	0	0	**0**	0
5	Pulses	0	0	0	**0**	0	0	0	**0**	0
6	Groundnut	0	0	0	**0**	0	0	0	**0**	0
	Total	**260**	**0**	**0**	**260**	**558**	**0**	**0**	**558**	298
	Grand Total	**1810.3**	**1166.65**	**547.29**	**3524.2**	**4303.2**	**0**	**0**	**4303.21**	779
	Cropping Intensity				**146%**				**178%**	32%

12. Marketing Channels

Marketing Channels of Kallakurichi District (Regulated Market, Farmer Market, Weekly Market and other existing market)

In Kallakurichi district the major crops cultivated are paddy, pulses, maize, cotton and sugarcane. The existing infrastructures developed in Kallakurichi district under various Government schemes like NADP, RIDF, and TN-IAMWARM-I cater to the needs of the local farming community in scientific methods of storage and transaction.

S. No	Infrastructures	No.	Capacity
1.	Regulated Markets	9	
2	RBH	1	
3	Storage godown (RMC)	1	4000 Mt
		4	2000 Mt
		5	1000 Mt
4	Cold storage (RMC)	2	25 Mt
5	Drying yard (RMC)	6	20mX20m
6	Farmers Market (Uzhavar Sandhai)	3	
7	Weekly markets	38	

Ware House details-TNCSC Godowns

Sl. No.	NAME OF THE GODOWN	CAPACITY
1	THIRUKOILUR	3000
2	ULUNDURPET	2100
3	KALLAKURUCHI	2000
4	SANKARAPURAM	1500
5	MRM KALLAKURUCHI (BUFFER)	4975
6	MRM THIRUKOVILUR (BUFFER	2000

District wise infra- structure -Existing Infrastructure in Kallakurichi District

S. No	Location	Regulated Market - Storage Godowns		Cold Storage (Capacity in MTS)	ABC/Collection Centre/ Mango Market Complex/RBH	No.of shops in Uzhavar sandhai	Weekly Shantha i
		Capacity / mts	No's				
1	Ulundurpet(RM)	1000 2000	2	25	RBH	48	3
2	Kallakurichi(RM)	1000 4000	3	25		42	6
3	Thiyagadurgam(RM)	1000 2000	2				3
4	Sankarapuram(RM)	1000 2000	2			34	7
5	Chinnasalem(RM)	1000 2000	2				6
6	Manalurpet(RM)		1				0
7	Moongilthuraipattu(		1				1
8	Gingee					1	5
9	Thirunavalur						1
10	Vellimalai						1
11	Thirukoilur						1
12	Rhishivandiyam						4
							38

RIDF GODOWNS IN COOPERATIVE INSTITUTIONS- Kallakurichi

Sl.No	Name of PACCS/APCMS	Capacity	Sl. No.	Name of PACCS/APCMS	Capacity
1	Asanur	100 MT	18	Ammayagaram	100 MT
2	Velkurichi	100 MT	19	Pethanur	100 MT
3	Ninnaiyur	100 MT	20	Thirukoilur	100 MT
4	Seerpanandal	100 MT	21	Keezhathazhanur	100 MT
5	Brammagundam	100 MT	22	G.Ariyur	100 MT
6	K.Pudupet	100 MT	23	Manalurpet	100 MT
7	Poottai	100 MT	24	Jambai	100 MT
8	Arasampattu	100 MT	25	T.Orathur	100 MT
9	Sozhampattu	100 MT	26	Sendhanadu	100 MT
10	Viriyur	100 MT	27	Kuncharam	100 MT
11	Moorarbath	100 MT	28	Kiliyur	100 MT
12	Pukkiravari	100 MT	29	Siruvangur	100 MT
13	Melur	100 MT	30	Thengiyanatham	100 MT
14	Mohur	100 MT	31	V.P.Agaram	100 MT
15.	Ariyaperumanur	100 MT	32	Bangaram	100 MT
16.	Eduthavainatham	100 MT	33	Tirukoilur CMS	500 MT
17.	Elavadi	100 MT	34	Kallakurichi CMS	500 MT

13. Existing FPO'S in Kallakurichi district

S. NO	NAME OF FPO	NAME OF THE BLOCK	PRODUCER ORGANIZATION PROMOTION INSTITUTION	CROP
1	Eriyur Manimutha Farmer Producer company., Eriyur, Chinnasalem	Chinnasalem	SFAC	Pulses and Minor millets
2	Sankarapuram Collective Farming Farmers Producer Company Ltd.,	Sankarapuram	SFAC	Ground nut and Maize
3	Kallakurichi District Collective Farming Producer Company ltd	Thiyagadurugam	SFAC	Pulses
4	TNIAMP Lower Vellar Farmer Producer Company Ltd.,	Ulundurpet	TNIAMP	Black Gram

PART-II

SUB BASIN'S

MARKETING SYSTEMS

1.INTRODUCTION.

By using a detailed analytical approach, this DPR has identified important information on marketing systems and emerging crops that will help in the development of the sub basin and increase the economic and income opportunities for farmers. Specific topics discussed in this report are as follows:

1. Emerging major crops of the sub basin
2. Price variation for emerging crops of the sub basin
3. Farmer assessment
4. Existing marketing scenario
5. Constraints in the marketing system
6. Recommendations

The World Bank assisted Tamil Nadu Irrigated Agricultural Modernization Project (TN IAMP) is an initiative of the Government of Tamil Nadu to overcome deficiencies in the present agriculture marketing system of the State. The present marketing system is weighed down by shortcomings. Although there is a good amount of marketable surplus in the sub basin, the producers do not get a reasonable price for their produce because of serious deficiencies in the present agricultural marketing system. Some of the main shortcomings in the system are:

i. There is a lack of standardization and enforcement of quality and grades;
ii. Farmers receive insufficient and ineffective information and services related to inputs;
iii. There is an absence of facilities for grading, packing, cold storage and processing;
iv. There is inadequate transparency in marketing; and
v. There is a lack of private sector investment.

This problem could be better addressed through different interventions resting on two primary pillars:

i) improving extension support to farmers, and,

ii) improving the agricultural marketing system.

Productivity improvement and production of improved quality of agricultural produce is necessary to make agriculture viable. The thrust so far has been on increasing agricultural productivity. As a result, the extension machinery of concerned departments has been heavily focused on increasing production. Market led extension has been lacking and this has resulted in a poor understanding of agricultural marketing by the marketing departmental agencies and the producers.

Various national programs like Rashtriya Krishi Vikas Yojana (RKVY), National Horticulture Mission (NHM), and National Food Security Mission (NFSM) have been implemented in the district. The proposed TN IAMP, with the assistance of the World Bank, is one out of the many steps taken by the Government of Tamil Nadu to address various issues and constraints so as to encourage the development of agriculture in the state. The components and subcomponents under TN IAMP are based on the overall strategy of the State. TN IAMP aims to enhance the productivity of agriculture and improve the quality of production by helping build the capacity of farmer producers through the Agricultural Technology Management Agency ('ATMA') programs. In order to enable farmers to be competitive in the market and fetch higher prices for their agriculture produce, alternative channels of marketing are being proposed and developed amongst which strengthening the present marketing structure, by way of modernization is of key importance.

The Project Development Objective (PDO) and overall objectives of TN IAMP are outlined below.

The Project proposes to improve the productivity and quality of produce in agriculture and allied sector by various interventions proposed under Component B. Farmers will get better and reasonable returns for their produce if their access to markets is improved. This can be achieved by developing infrastructure and creating alternative marketing channels as outlined in Component B. The components and sub components of TN IAMP and their component-level objective are enumerated below:

2. Intensification and Diversification of Market led Production

i. 1: Market-led Agriculture Technology Transfer
   Objective: To increase the productivity of agriculture by adopting modern technology
ii. 2: Agri Business Promotion Facility
   Objective: To create trained manpower to operate and manage infrastructure facilities
iii. 3: Market Information Services
   Objective: To improve market access for enhancing marketing opportunities for farmers
iv. 4: Livestock Support Services
   Objective: To strengthen sources of alternative income for farmers.

3. Improving Farmer Access to Markets

i. 1: Promoting Alternative Markets

1.1: Product Aggregation and Sale through Producers Association Objective: To provide improved post harvest handling facilities at village level

1.2: Warehouse Receipts Development

Objective: To improve the capacity of farmers on price risk mitigation

1.3: Rural Haat Markets

Objective: To strengthen alternative marketing channel of traditional rural haats

1.4: Introducing e-Marketing Platform

Objective: To establish e-trading as one of the alternative marketing channels

ii. 2: Modernizing Existing Markets

iii. 2.1: Modernizing Wholesale Markets

Objective: To improve transparency in all APMCs and to provide basic and productive infrastructure.

Walk through survey was conducted to identify gaps and issues to enable them to focus their efforts in further improving the productivity and production of agriculture in the state. Some of the key objectives are outlined below:

i. To identify gaps/issues in market led production.
ii. To study the existing marketing system of the district and to identify constraints in the marketing system.
iii. To suggest strategies and activities to overcome gaps in market led production.
iv. To suggest interventions to mitigate constraints in the marketing system of the district.

4. Emerging Major Crops in the Sub Basin Manimukthanadhi

On the basis of existing as well as expanding area and changing crop trends, we have selected Maize,

Black gram and Groundnut, as the emerging major crops of the sub basin. Based on the detailed analysis of the production, area, Maize, Black gram and Groundnut have been identified as the main cultivated crops and major food grains in the sub basin. The following table depicts the major trends in cropping pattern over the last 5 years for these 3 key crops of the sub basin.

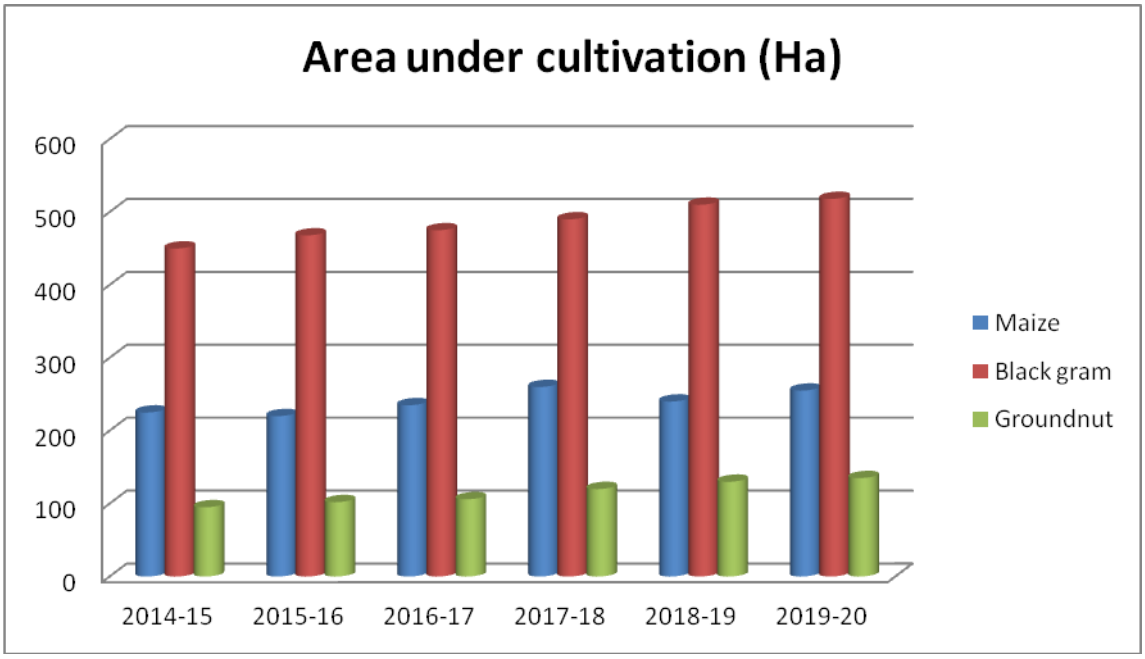
Area under cultivation (Ha)

Year	Maize	Black gram	Groundnut
2014-15	225	450	95
2015-16	220	468	102
2016-17	235	475	106
2017-18	260	490	120
2018-19	240	510	130
2019-20	255	518	135

Source: Department of Agriculture, Government of Tamil Nadu.

There has also been a increasing trend noticed in maize area cultivation due to a combination of high price consistency and an increase in availability of high-yield varieties of maize (7-9 Mts /ha). Maize is increasingly catering to industrial applications such as poultry-feed production and starch manufacturing, which is also driving market demand for Maize. Blackgram and Groundnut area in the sub –basin seems to be stable with minor differences in cultivation area.

Area under cultivation of Maize, Black gram and Groundnut (Ha) Graph (2014-15 to 2019-20)



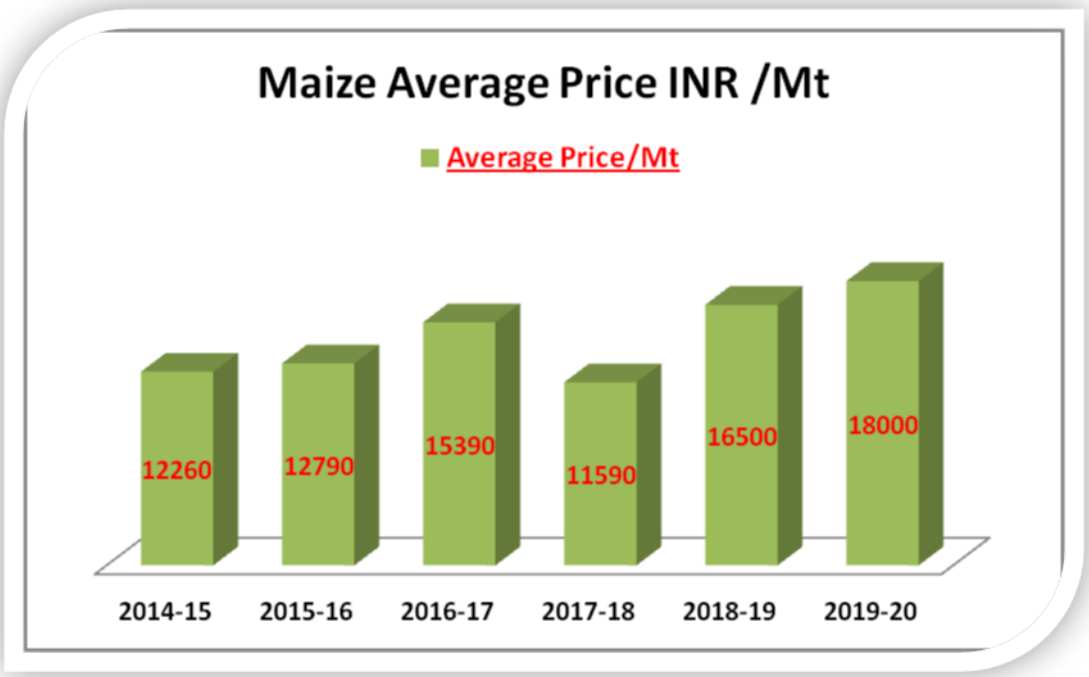
5. Crop-Wise Price Variation For Emerging Crops

We used market arrival data to calculate the price variations for the three crops.

Average price for Maize.

Year	Average arrivals in Mts	Average Price/Mt
2014-15	3718	12260
2015-16	491	12790
2016-17	4529	15390
2017-18	1357	11590
2018-19	4210	16500
2019-20	4951	18000

Price Variation: Maize



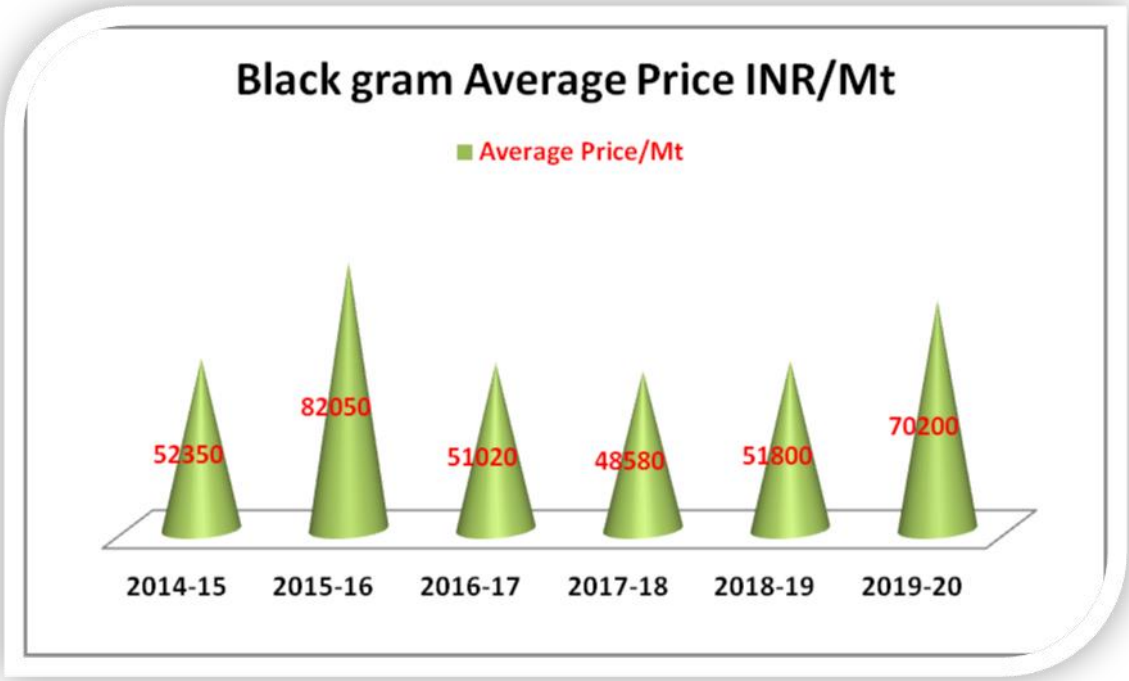
Source: Market Committee, Villupuram.

- The chart compares the average monthly price for a selected group of APMCs over the last 6 calendar years.
- The price for Maize was at its highest in 2019-20 (INR 18000) and there after decrease in 2017-2018 (INR 11590), and then price increasing in the following years.
- The price of Maize ranged from INR 11590 to INR 18000.

Average price for Black gram.

Year	Average arrivals in Mts	Average Price/Mt
2014-15	2962	52350
2015-16	2490	82050
2016-17	1991	51020
2017-18	3123	48580
2018-19	4468	51800
2019-20	4252	70200

Price Variation: Blackgram



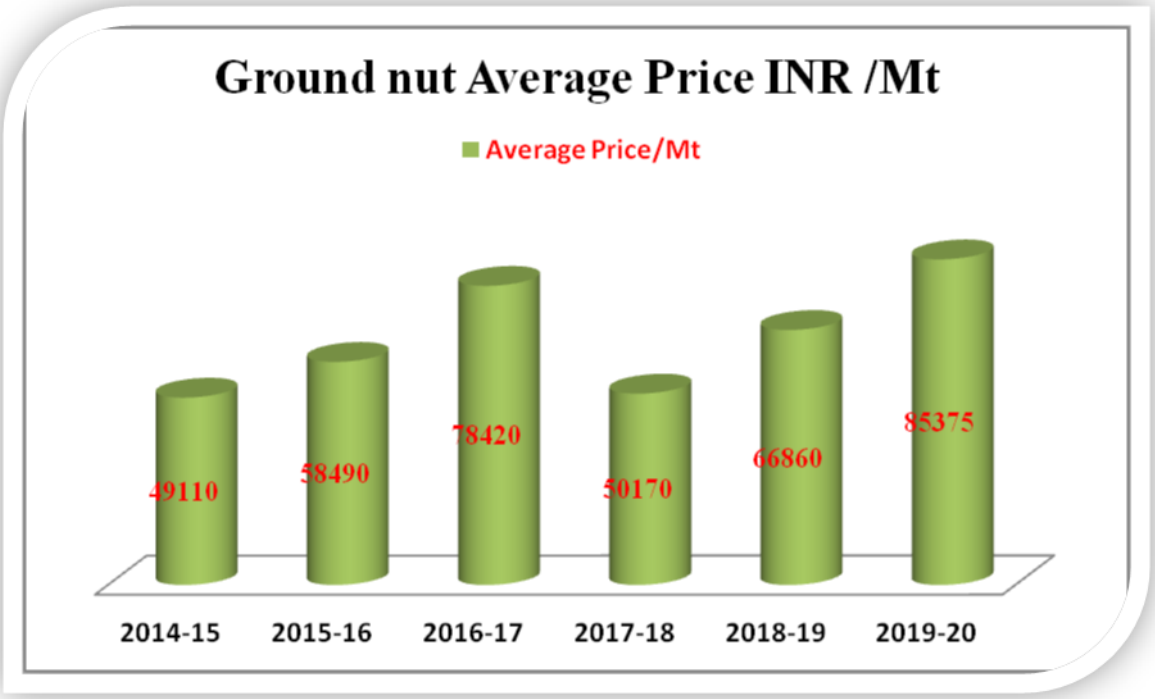
Source: Market Committee, Villupuram.

- The price for Black gram was highest in 2015-16, INR 82050/Mts. Thereafter there was decrease and increase in price reaching INR 70200 / Mts in 2019-20.
- The price of Black gram ranged from INR 48580 to INR 82050.

Average price for Ground nut.

Year	Average arrivals in Mts	Average Price/Mt
2014-15	1283	49110
2015-16	1400	58490
2016-17	1176	78420
2017-18	1809	50170
2018-19	1861	66860
2019-20	158	85375

Price Variation: Groundnut



Source: Market Committee, Villupuram.

- The chart compares the average monthly price for last 6 years
- The average price of Groundnut raised upto INR 78420 / MTs in 2016-17 then there was a dip in price in 2017-18 afterwards there is increase in price upto INR 85375/ MTS in 2019-20, showing an increasing trend in price.
- The price ranged from INR 49110 / MTs to INR 85375/ MTs.

6. Existing Marketing Scenario In The Sub - Basin

Agriculture in Lower Manimukthanadhi sub basin is diversified with a wide range of crops grown in the district. Major food grains are Paddy, Maize and Black gram. Amongst Oilseeds groundnut is the major crop.

7. Agriculture Produce Market Committees APMCs in Kallakurichi District

S. No	Location	Regulated Market - Storage Godowns		Cold Storage (Capacity in MTS)	ABC/Collection Centre/ Mango Market Complex/RBH	No.of shops in Uzhavar sandhai	Weekly Shanthai
		Capacity / mts	No's				
1	Ulundurpet(RM)	1000 2000	2	25	RBH	48	3
2	Kallakurichi(RM)	1000 4000	3	25		42	6
3	Thiyagadurgam(RM)	1000 2000	2				3
4	Sankarapuram(RM)	1000 2000	2			34	7
5	Chinnasalem(RM)	1000 2000	2				6
6	Manalurpet(RM)		1				0
7	Moongilthuraipattu(		1				1
8	Kachirayapalayam		1				1
9	Thirunavalur						1
10	Vellimalai						1
11	Thirukoilur						1
12	Rhishivandiyam						4
	Total						38

Agriculture Produce Market Committees APMCs in Muskundanadhi sub basin

S. No	Location	Regulated Market - Storage Godowns		T Sheds Nos
		Capacity / mts	No's	
1	Sankarapuram (RM)	1000 2000	2	1
2	Manalurpettai (RM)	1000	1	1
3	Moongilthuraipattu (RM)			1

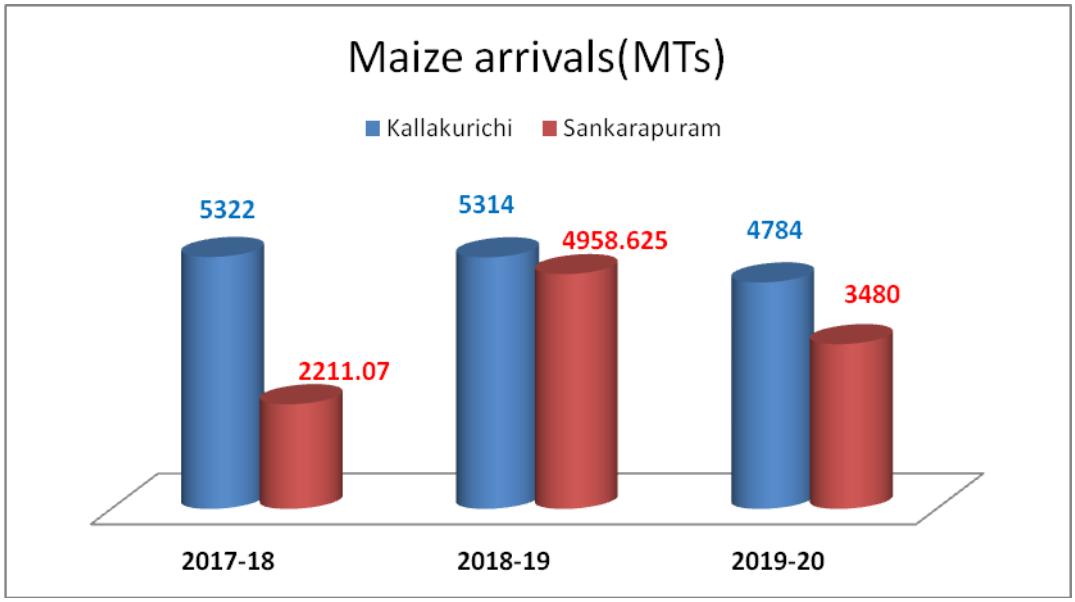
8, Private Agriculture Marketing System in the Manimukthanadhi sub basin

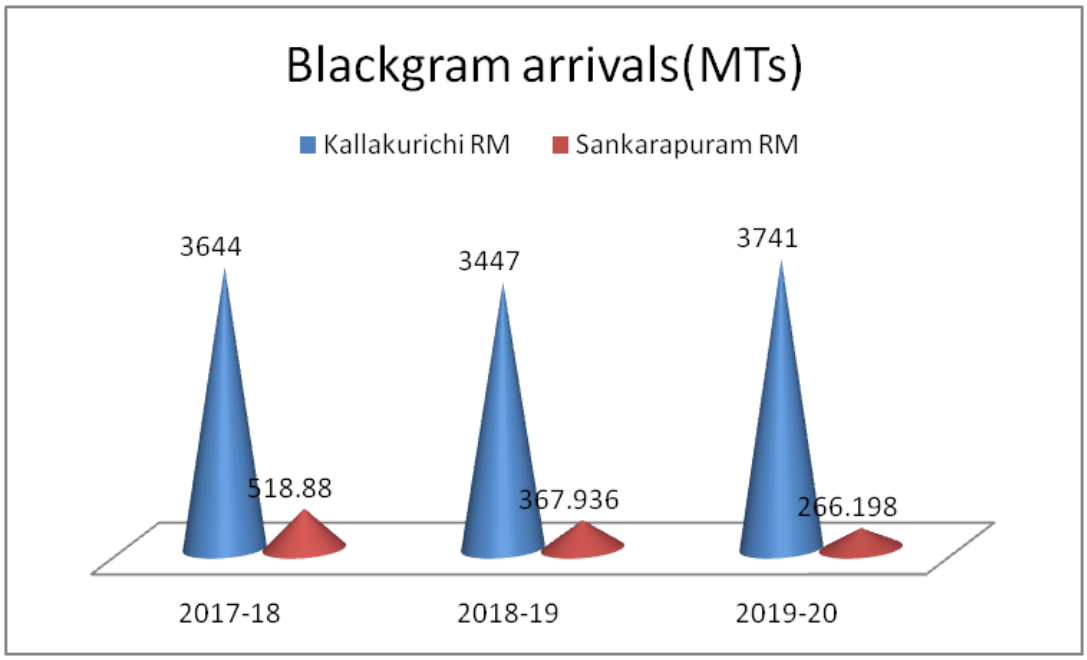
Sl. No	Name of licensed private trades	
	Within the APMC	Outside the APMC
1	Ragu Traders, No 54, Vilanthangal Road, Kallakurichi	Sri Ayyanar Traders, S/o. Kuppusami, MainRoad, Manalurpet
2	TSM Traders, No 1/91, Pillayar Kovil Street, Thachur, Kallakurichi.	Sri.Angalamman Traders, W/o. Venugopal, 12E.perumalkoil street, Manalurpet.
3	Sri Murugan Azhagu Traders, No 9B, Vilanthangal Road, Kallakurichi	S.Manikandan, S/o.Thoppai Chettiyar, Manalurpet.
4	Sri KarukinilAmarnthavan Traders, Vilanthangal Road, Kallakurichi.	Sri Iyyanarappan Traders, S/o.Kuppusami, 21. Mariyamman Koil Strret, Manalurpet.
5	Viruthambigai Traders, Vilanthangal Road, Kallakurichi	M.Ganesan, S/o.Manikkam, 114.A.Main Road, Manalurpet
6	G.K Traders, 106a, North street, Pirividayampattu, Munivazhai, Kallakurichi.	S.Manikandan, S/o.Sanmugam, 53, Chathiram Veethi, Manalurpet
7	Sri Ragavendira traders, No23, Chidambaram Pillai Street, Kallakurichi.	Vinayaga Stores, S/o.Duraisami, 57.Bazaar Street, Manalurpet.
8	Sri Lakshmi Traders, No88/95B, MRN Nagar, Kallakurichi.	R.Rathakrishnan, S/o.Ramanathan, T.V.Malai main Road, Manalurpet.
9	Sri Astalakshmi Traders, No 14, Teacher Nagar,Kachirayapalayam Road, Kallakurichi.	VVS Agencies , Prop: V.Subbaia, 55 A TVMalai Road, Manalurpet
10	Sri Dhanalakshmi Traders, Paramanatham Road, Sankarapuram.	Sri RajaMuruga traders, No.61.Bazar Street, Manalurpet
11	Sri Arumugam Traders, No 132, Mariyamman Kovil street, Ariyaperumanur, Kallakurichi.	Sindhu Pori mandi , P.Dhayalan, S/o.Palani, No.14 MGR Nagar, Manalurpet
12	Hari Traders, No 15/A, Vilanthangal Road, Kallakurichi	A.Karunakaran, S/o.Arumugam, 14.Senaithalaivar Veethi, Manalurpet

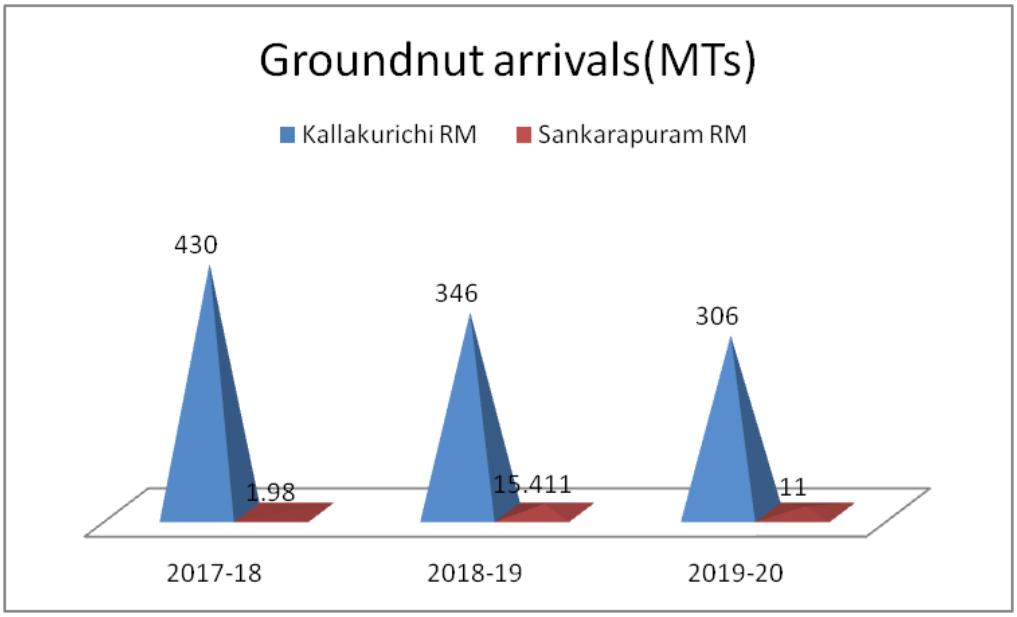
9. CONSTRAINTS, STRATEGIES & PROPOSED INTERVENTIONS FOR PROMOTING MARKET LED AGRICULTURE PRODUCTION IN SUB BASIN.

Sl. No	Issues	Strategy	Activity
1	Non adaption of Package of practices for improving quality of grains.	Promotion of pre harvest practices for bridging gap identified by DoA & Horti	Crop demonstrations
2	Non adaption of Post Harvest practices	Promotion of post harvest practices for bridging gap identified by DoA & Horti, Marketing	PHT demonstration and farmers training
3	Lack of market awareness	Awareness about sources of market information & intelligence	1. C.I.G. Group formation. 2. Pledge loan. 3. Farmers training. 4. Exposure visits

10, Market-wise Trend Analysis of Market Arrivals







In Kallakurichi District there are 9 APMCs functioning among them Sankarapuram comes under Manimukthanadhi subbasin and Kallakurichi comes near the subbasin Among the 2 APMCs in the Sub-Basin. are taken for studying the market trend.

Kallakurichi APMC has high arrivals of Groundnut, Block gram and Maize. Sankarapuram APMC has high arrivals of maize and in 2018-19 there was the highest arrivals (**4958.625** MTs.).

Reasonably good roads connect all APMCs in Kallakurichi District. All APMCs are running with good infra structure facilities.

11, POST- HARVEST MANAGEMENT FOR MAIZE

Post-harvest losses:

It is estimated that about 2.45 percent of maize is lost at farmers' level during harvesting, threshing, winnowing, transportation and storage. Estimated post-harvest losses at producers' level is given in below table .

Estimated post- harvest losses of maize at producers' level

Sl. No.	Operations	Losses (percent to total production)
1.	Transport from field to threshing floor	0.58
2.	Threshing	0.80
3.	Winnowing	0.53
4.	Transport from Threshing floor to storage	0.19
5.	Storage at farmers level	0.35
	Total	**2.45**

To minimize post harvest losses, the following measures should be followed.

- Maize cultivated for obtaining kernels (grains) should be harvested when the kernels are matured with 25 to 30 percent moisture.
- Use proper method of harvesting.
- Dry the cobs immediately before threshing and kernels should be dried sufficiently before storage.
- Losses in threshing and winnowing should be avoided by using proper machineries.
- Follow sanitation during drying, packing and handling to avoid contamination of kernels and protect from insects, rodents and birds etc.
- Use proper techniques for cleaning and further processing.
- Adopt grading practices for proper evaluation and obtaining better price.
- Use strong, and free from infestation packaging material for storage and transport.
- Use proper scientific technique in storage for maintaining optimum moisture content.
- Use pest control measures (fumigation) before storage.
- Provide aeration to stored grain and stir grain bulk occasionally.
- Use proper techniques while handling (loading & unloading), good and fast transport to avoid losses during transport.

The following harvesting care should be taken:

- Maize crop grown for grain should be harvested when it attains full maturity i.e. when husk

has turned yellow and grains are hard enough having 25 to 30 percent moisture.

- Do not wait for stalks and leaves to dry because they remain green in most of the hybrid and composite varieties.
- The cobs of maize are to be cut at the stalk.
- Remove the hair and husk from the cobs and then dry them in sun for seven to eight days.
- Protect the Maize cobs from rain and excessive dew by covering.
- Avoid pest infestation during drying and threshing etc.
- Kernels should be separated by beating the cobs or by Maize shellers.
- Avoid loss during shelling and winnowing.
- Dry the maize kernels (grain) sufficiently prior to packing and storing.
- Pack the maize kernels in jute bags free from infestation and obnoxious smell.

12, Marketing constraints for MAIZE:

Unstable prices:

Generally, the price of maize goes down in the post harvest period (3-4 months immediately after harvest) due to heavy arrivals in the market and later shoots up.

Spurt in production and heavy arrivals:

After the introduction of high yielding varieties of maize, the production has increased manifolds, increasing the arrivals in the markets, which results in distress sale after harvest.

Lack of marketing information:

Due to lack of market information regarding prevailing prices, arrivals etc., most of the producers market the maize in the village itself, which deprives them of getting remunerative returns.

Adoption of grading:

Grading of maize at producers' level ensures better prices to producers and better quality to consumers. However, most of the markets are lagging behind in providing grading services at producers' level.

Inadequate storage facilities in rural areas:

Storage facilities in villages are found to be inadequate which contributes to distress sale. Due to lack of storage facilities at rural stage, substantial quantity is lost.

Transportation facilities at producers' level:

Due to inadequate facilities of transportation at village level, in most of the states, producers are forced to sell maize in the village itself to itinerant merchants or traders directly at low prices.

Training of producer:

The farmers are not trained in marketing system. Training shall improve their skill for better marketing of their produce.

Malpractices in markets:

Many malpractices prevail in the markets of maize i.e. excess weighment, delay in payment, high commission charges, delay in weighing and auction,

Financial problem: Lack of market finance is one of the major marketing problems in the smooth running of marketing chain.

Infra-structure facilities:

Due to inadequate infra-structural facilities with producers, traders, millers and at market level, the marketing efficiency is affected adversely.

Superfluous middlemen:

The existence of a long chain of middlemen reduces the producer's share in consumer's rupee.

Managing marketing constraints.

- Crop wise Formation of Commodity Interest Group at village level.
- Federating all the CIF into FPO.
- Registration of FPO into FPC.
- Aggregating all the produce by FPC.
- Making marketing tie up with Processor / Exporters/Whole sellers.
- Providing market information about price
- Making credit facilities to FPC.
- Providing training to FPC members..

13, POST- HARVEST MANAGEMENT FOR PULSES

Different technologies for post harvest operations of pulse crops are available, traditional or improved, employed at various phases of post- harvest system depending upon the resourcefulness of the farmer growing the crop. A list of such operations are depicted in the below table:

Traditional and improved technologies for post-harvest operations.

Post-harvest operations	Traditional technologies	Improved technologies
Harvest	Manual	Manual and mechanized
Pre-drying	Standing or in shocks	Standing or in shocks
Storage of harvested crops	In fields or on threshing floor	In fields or on threshing floor
Threshing	Manual	Mechanized
Pre-cleaning	Hand winnowing	Mechanized
Drying	Natural	Artificial
Cleaning and sorting	Winnowing in the wind	Mechanized
Storage of grains	In traditional granaries	In bags or in bulk
Processing/Milling	Manual	Mechanized

Post-harvest losses

The expression "post-harvest losses" means a measurable quantitative and qualitative loss in a given product occurred during the various phases of the post-harvest system. In economic terms, sum of the losses in quantity and quality of the products inevitably leads to loss of money. In addition to direct economic losses, some losses result from poor management of post- harvest systems.

Seeds of poor quality, inappropriate farming practices and insect infestation in the field can obviously cause loss of produce even before harvest. From the harvest onward, the grain undergoes a series of operations during which quantitative and qualitative losses may occur. Table 2.2 indicates the type of losses that take place at prevailing conditions at various stages of post- harvest system.

Type of loss at different post harvest stages

Stage of operation	Type of loss
Late harvest	Shattering losses, losses due to attack of birds and other pests
Insufficient drying of grain	Losses due to development of moulds and insects
Improper threshing	Broken grains and threat of insect development at a later stage
Poor storage	Losses caused by combined action of insects, moulds, rodents and other pests
Improper milling	Broken and powdering loss
Transport	Quantitative loss
Defective packaging	Quantitative and qualitative loss

Estimated post harvest losses of pulses

Stages	Losses (%)
Harvesting	1.0-3.0
Handling	1.0-7.0
Threshing	0.5-5.0
Drying	1.0-5.0
Transport	0.5
Primary Processing	1.0
Storage	5.0-10.0
Milling	15.0-20.0
Total	25.0-50.0

MANAGING POST HARVEST LOSSES.

For long term storage pulses should be dried to < 14% moisture content and cooled to < 15^{o}C Temp.

To prevent spoilage, green seeds, dockage & foreign material should be removed prior to storage.

Pulses respire (breathe) in storage which raises seed moisture and temperature requiring regular monitoring and automated aeration.

Effective grain management practices and regular monitoring ensure safe storage of pulses at a high commercial grade, optimum quality and with minimum spoilage risk.

14. POST-HARVEST MANAGEMENT FOR GROUNDNUT.

Post-harvest losses :

Post-harvest losses in Groundnut occur at different stages at harvesting, threshing, cleaning, winnowing, packaging, transportation, storages, processing and marketing. The losses during harvesting are due to left out pods in the soil. It has been estimated that post- harvest pod losses in harvesting varies from 16 to 47 percent, in curing / drying 5 to 50 percent. However in transportation, the losses occur on account of pilferage, leakage of gunny bags and rough handling. The losses during storage are mainly due to driage loss and through damage by rodents and pests. Damage also occurs due to dampness which develops the moulds, leading to contamination with Aflatoxin.

To minimize post harvest losses, the following measures should be followed;

1) Timely harvest when soil contains sufficient moisture.
2) Use of proper method of harvesting.
3) Collection of the left out pods from the soil.
4) Striping pods properly by adopting better mechanical methods.
5) Drying the wet pods immediately after harvest.
6) Avoiding dampness of stored pods to avoid mould formation.

7) Avoiding the losses in threshing and cleaning, to minimize damaged pods.
8) Adopting grading practices to get more profit.
9) Using good packaging in storage and transportation.
10) Using was proper scientific technique in storage for maintaining optimum moisture content of pods.
11) Using pest and rodent control measures before and after the storage.
12) Storing the Groundnut in the form of pods and avoid in the kernels forms.
13) Providing aeration to stored pods and stire bulk pods occasionally to avoid dampness and pest infestation.
14) Staking of the gunny bags on wooden planks to avoid dampness.
15) Properly handling at loading and unloading of Groundnut with efficient and hygienic transportation facilities to reduce the losses at farm and market level.

CONSTRAINTS FOR GROUNDNUT.

1. Input availability
2. Marketing constraints.
3. Environmental constraints.

I. Input availability constraints.

1. Irrigation.
2. Labour shortage
3. Quality seeds.
4. Fertilizer availability.
5. Insecticides.
6. Machinery
7. Credit.

II. MARKETING CONSTRAINTS.

1. Lack of price Information.
2. Price variability
3. Storage losses
4. Transport
5. Low market demand.

III. ENVIRONMENTAL CONSTRAINTS.

1. Shortage/ Untimely rain.
2. High Temperature.

COUNTER MEASURES.

1. Supply of good quality seeds through Agricultural Extension Centres.
2. Development of drought resistant varieties through TNAU.
3. Creation of infrastructure for storage and market intelligence which will help the groundnut growers to get remunerative prices/returns for their produce.

Harvesting care :

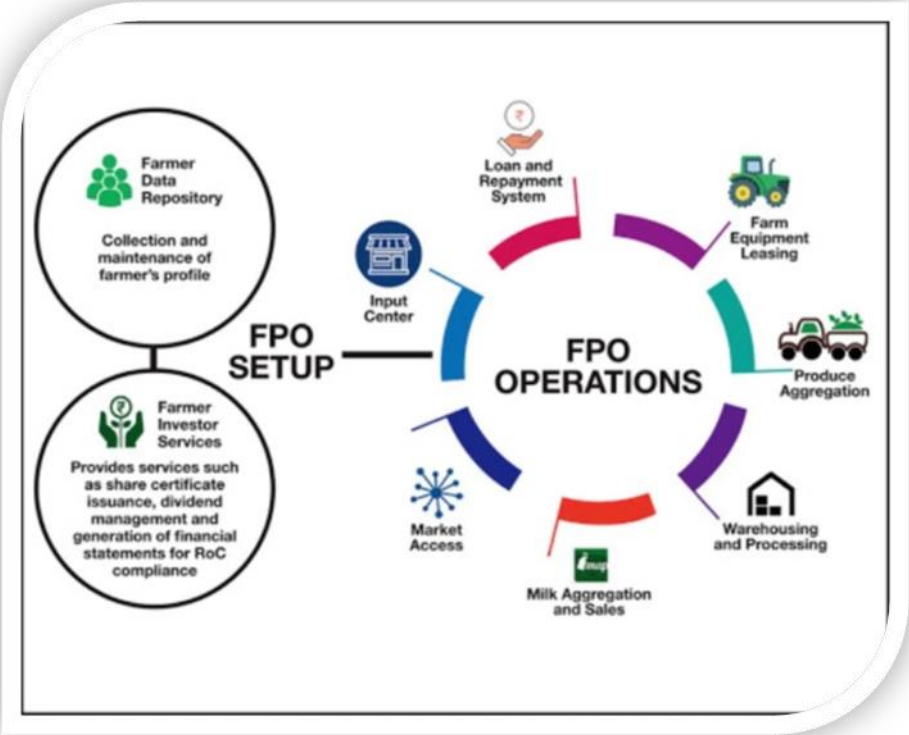
Harvesting of Groundnut comprises digging, lifting, windrowing and stacking of pods. Groundnut is harvested when plant foliage show yellowness. The pod is matured when it becomes hard and tough, and when there is dark tan discolouration inside the shell and the kernel become unwrinkled. Usually, the bunch varieties mature in about 100-105 days and the semi spreading and spreading varieties in about 125-135 days.

The following harvesting care should be taken;

1. Harvesting before maturity increases the free fatty-acid content in oil and with lesser shelling percentage, oil and protein content.
2. Immature Groundnut should not be harvested, as are more susceptible to fungal attack.
3. Delay in harvesting results in retention of more pods in soil and less yield.
4. Premature and delay in harvesting reduces viability of the seed kernel.
5. Harvest Groundnut in bright sunny day and avoid during humid/wet weather conditions.
6. Harvest Groundnut, when there is adequate moisture in the soil.
7. Protect the harvested Groundnut, from rain and excessive dew by covering.
8. Avoid heaping of harvested Groundnut to avoid mould formation, which leads in Aflatoxin contamination.
9. Stripped the pods from the plants after the harvest. If the stripping is delayed, spread the harvested plant for few days, which facilitates the drying of pods and air circulation.
10. Keep the harvested Groundnut separately for each variety, to get true to type variety i.e. kernel.
11. Dry the pods for 7-10 days, up to a safe moisture percent.
12. Usually the spreading and semi spreading varieties may be up rooted by harrowing, while bunch varieties may be up rooted by hand operation i.e. manually.
13. Harvesting should be done by adopting proper method harvesting.
14. Keep the proper moisture in the field of Groundnut during expected harvesting time

PART-III

WALK THROUGH SURVEY AND FORMATION OF FARMER PRODUCER COMPANY



1. Environmental and Social Management

This chapter envisages the mitigation of environmental impacts by assessing and effectively managing the potential environmental impacts due to the interventions under TNIAMP in Manimukthanadhi sub basin. The primary aim is to manage the impacts by suggesting suitable mitigation measures and monitoring its implementation. Further, Gender participation strategy and Grievance Redressal Mechanism will be devised and implemented suitably for all the sub-projects pertaining to TNIAMP

2. Summary of walk through survey

Sl. No	Walk Through Survey		Farmers request	Technical Solution							
	Date	Location		WRD	Agri	Horti	AED	TNAU	AGMT	AHD	Fisherie
1	2	3	4	5	6	7	8	9	10	11	12
1	01.06.2020	Thandalai	Sluice repair, Tank desilting, Bund strengthening, Removal of vegetation in the tank.	Bund standardisation , Sluice, Weir and Supply channel improvements.	-	-	-	-	-	-	-
2	01.06.2020	Alathur	Sluice repair, Tank desilting, Bund strengthening, Removal of vegetation in the tank.	Bund standardisation , Sluice, Weir and Supply channel improvements.	-	-	-	-	-	-	-
3	01.06.2020	Peruvangur	Sluice repair, Tank desilting, Bund strengthening, Supply channel , Removal of vegetation in the tank.	Bund standardisation , Sluice, Weir and Supply channel improvements.	-	-	-	-	-	-	-
4	02.06.2020	Thirukkanangur	Sluice repair, Tank desilting, Bund strengthening, Removal of vegetation in the tank.	Bund standardisation , Sluice, Weir and Supply channel improvements.	-	-	-	-	-	-	-
5	02.06.2020	Thiyagai	Sluice repair, Tank desilting, Bund strengthening, Removal of vegetation in the tank.	Bund standardisation , Sluice, Weir and Supply channel improvements.	-	-	-	-	-	-	-
6	02.06.2020	Udhayamampatu	Sluice repair, Tank desilting, Bund strengthening, Supply channel , Removal of vegetation in the tank.	Bund standardization , Sluice, Weir and Supply channel improvements.	-	-	-	-	-	-	-
7	02.06.2020	Pallagachery	Sluice repair, Tank desilting, Bund strengthening, Removal of vegetation in the tank.	Bund standardization , Sluice, Weir and Supply channel improvements.	-	-	-	-	-	-	-

8	05.06.2020	Pallagachery Anicut	Anicut Desilting, bund strengthening, removal of vegitaion,Head sluice repair and Body Wall repair in the anicut.	Skin Wall ,Apron Repair,Flood Bank formation, Head Sluice Repair	-	-	-	-	-	-	-

Proposals in Plan									
		WRD	**Agri**	**Horti**	**AED**	**TNAU**	**AGMT**	**AHD**	**Fisheries**
1	**2**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**
1	01.06.2020	Bund standardisation , Sluice, Weir and Supply channel	-	-	-	-	-	-	-
2	01.06.2020	Bund standardisation , Sluice, Weir and Supply channel improvements	-	-	-	-	-	-	-
3	01.06.2020	Bund standardisation , Sluice, Weir and Supply channel improvements	-	-	-	-	-	-	-
4	02.06.2020	Bund standardisation , Sluice, Weir and Supply channel	-	-	-	-	-	-	-
5	02.06.2020	Bund standardisation , Sluice, Weir and Supply channel improvements	-	-	-	-	-	-	-
6	02.06.2020	Bund standardisation , Sluice, Weir and Supply channel improvements	-	-	-	-	-	-	-
7	02.06.2020	Bund standardisation , Sluice, Weir and Supply channel improvements	-	-	-	-	-	-	-
8	05.06.2020	Skin Wall ,Apron Repair, Flood Bank formation, Head Sluice Repair	-	-	-	-	-	-	-

3. Summary of Feedback along with planned activities

The feedback of walk through survey and the planned activities are summarized below

Agricultural related

It was inferred that the farmers are mostly relying on conventional farm methodologies and following same cropping pattern. Hence to make them adopting new methodologies, the following activities are proposed. Farmers can be educated through introduction of field demonstration of improved production technology. Farmer's field schools to educate farmers shall be operationalized at block levels followed by capacity building through exposure field visits. During the survey, it was reported by the farmers about reduced soil fertility; hence, it was proposed to encourage the farmers for green manuring by adopting technologies like vermicomposting, practicing rice fallow pulses cropping in order to enhance the soil fertility. Another common problem prevailing in agriculture is water scarcity. Farmers have reported that often they cannot avail water for their crops up to full maturity. For this, it was proposed to switch from conventional paddy cultivation method to System of Rice Intensification (SRI). Through this, they can save appreciable quantity of water and also seed. It was also proposed to divert from high water guzzling crops to less water consuming crops like maize, oil seeds and horticulture crops.

Water conservation by introducing farm ponds

It was reported by farmers that they are facing acute loss due to failure of crops due to want of water whenever there is shortage of rainfall. To address this, it was proposed to introduce farm ponds as a mechanism for harvesting and storing the rain water in the lands of selected farmer's preferably marginal and small farmers in order to supplement their terminal irrigation needs.

Special Features of the sub basin:

There are no special features in respect of Manimukthanadhi sub basin

Gender Strategy:

Gender mainstreaming plays a vital role in water management and agriculture allied activities. To enhance women participation in the project, women farmers will be informed and made aware of their role in operation and maintenance of water management activities, decision making in the agriculture, labour opportunities in agriculture, encourage their participation in WUA, involvement in livelihood activities etc Specific capacity building programs like exposure visits could be organized for WUA representatives, women in Farmer Producer Organizations(FPO), Farmer Producer Companies (FPC), Dairy Interest Groups (DIG),etc. Team involvement of women in organized groups such as Self Helping Groups will be encouraged in anticipation, the percentage of women expected to involve in WRD, Agri related and Livelihood related activities are 30% ,50% and 54% respectively.

Grievance Redress Mechanism and Schedule for Establishment

Grievance Redress Mechanism (GRM) is an essential component of any project implementation, particularly if the project involves the local communities with diverse socio economic backgrounds as the major stakeholders. The grievance redress process will be a continuous, transparent and participatory process that would be an integral part of the project's accountability and governance agenda.

A project level GRM will be in place for addressing social, environmental and project related grievances. The GRM will have multi-level structures and processes. At the district level the committee is made up of respective JDs of line departments and EE, WRD of the sub-basin, this committee meets on weekly basis. This committee will look after the grievances related to irrigation and water management. At the next level the Collector heads the committee and convenes the meetings monthly once. The Collectors will take care of the other grievances related to the project activities. The next level is the HODs at the state level they contact remotely monthly once and organize meetings at every redress; he calls for a meeting once in six months and annually. For every six months report is prepared at all levels and send to the Secretary. Secretary occupies the next level in the structure and in charge of overall appeals and supervision of grievance at all levels.

A register for GRM and a box for receiving the Complaints and Grievances shall be maintained in the O/o the Executive Engineer for WRD and O/o of Joint Directors for line departments, who is implementing the TNIAMP intervention in that respective Sub Basin and a monthly report on the Grievances received and the action taken shall be sent to the respective Environmental Cell Division for review and submission to the MDPU. Periodical Monitoring of the Implementation of the GRM will be carried out by the Environmental Cell Division Engineers. In the project information boards provided at the working sites, along with the details of the project, the contact address along with official email and contact numbers of the officer to whom the Grievances has to be addressed shall be displayed. Further OK cards system will be used for transparency.

Efforts will be made to create awareness about GRC mechanism to the beneficiaries through use of flyers and pamphlets at the village, Block and District level. The implementation of GRM will operate by the Grievance Redress Cell (GRC) at the Block and District level .The grievances received should be entered in the GRM Register comprising of (a) Serial Number; (b) Case Number; (c) Name of the Grieved/Complainant; (d) Name of Father/Husband; (e) Gender (f) Age; (g) Full Address; (h) Brief details of grievance/complaint; (i) List of documents, if any, attached; (j) Details of previous grievance/complaint, if any; (k) Date of receipt of grievance/complaint and (l) Date of acknowledgement of grievance/complaint. The GRC will acknowledge receipt of all grievances/complaints, by registered post, within 7 days of receipt and will communicate its decisions/redress in writing to the complainants within 4 weeks depending on the nature of complaints and When closing the complaint, agreement should be made with the complainant on remedy, and both parties

sign to their approval of the case being closed and outcome accepted. Copies are kept in both hard copy and electronic (please see documentation of Grievance process) by both parties.

ESMF, ESMP &Screening Check list

For the environmental and social impacts (both positive and negative), Environmental and Social Management Framework (ESMF) enumerates a set of measures to minimize the adverse impacts and enhance the positive impacts which are intended to be adopted during the project implementation. This will not only ensure that environmental and social safeguard activities are implemented in accordance with the framework and processes but also that there are adequate funds/resources for implementation and supervision of social and environmental management plans. Accounting the nature and scale of environmental and social impacts, specific and reliable departmental Standard Operating Procedures along with suggested mitigation measures will be adopted for environmental and social safeguards. The Environmental and Social Management Plan (ESMP) integrates the baseline conditions, impacts likely to occur, and the measures which need to be implemented for amelioration of adverse impacts for proposed projects. The key activities considered under tank and canal rehabilitation are excavation of silt, disposal of silt, strengthening of bund, etc. The ESMP shall give particular attention to project sustainability issues such as EHS, construction camps and site office, prevention of pollution, user conflicts, etc. This detail will be included in Bid document and will be implemented by the prospective Contractor. Environmental and Social Management Plan (ESMP) and Screening Checklist will be adopted for construction related activities for packages costing more than Rs. 6.00 Core and individual tank costing more than Rs. 4.00 Core.

4. FORMATION OF FARMERS PRODUCER COMPANY.

The collectivization of producers, specifically marginal and small farm holders into producers' organizations is emerging as the effective possible pathway to address improved access to investments, technologies, knowledge support, inputs and markets. The Government of Tamil Nadu TN IAMP has identified Farmer Producer Organizations (FPOs) as the appropriate institutional form around which farmers would be mobilized and their collective capacity of production and marketing can be leveraged by strengthening their capacities.

A Farmer Producer Organization (FPO) is typically a society/company consisting of only practicing farmers who are also actual producers of specified commodity/ commodities, and is formed under as a Farmers Producer Company (FPC) under the Companies Act 2013. These organizations are created at the cluster, block, district or state level depending upon the needs of the producers considering the demand potential to adopt value chain approach to enhance farmers'/producers' economic and social benefits.

- The main aim of FPO is to ensure better income for the producers through an organization of their own.
- Small producers do not have the volume individually (both inputs and produce) to get the benefit of economies of scale.
- Besides, in agricultural marketing, there is a long chain of intermediaries who very often work non-transparently leading to the situation where the producer receives only a small part of the value that the ultimate consumer pays.
- Through aggregation, the primary producers can avail the benefit of economies of scale.
- They will also have better bargaining power vis-à-vis the bulk buyers of produce and bulk suppliers of inputs.

Essential features of a FPO.

a. It is formed by a group of producers for either farm or non-farm activities.

b. It is a registered body and a legal entity.

c. Producers are shareholders in the organization.

d. It deals with business activities related to the primary produce/product.

e. It works for the benefit of the member producers.

f. A part of the profit is shared amongst the producers.

g. Rest of the surplus is added to its owned funds for business expansion.

Institutions registered as cooperative societies and producer companies have legal provisions for sharing of profit earned by the FPO by way of dividend. Other legal forms do not explicitly provide for profit sharing. However, the FPO can offer better price for the produce it procures from the members, thus, benefiting the latter. Similarly, it can procure inputs/raw material in bulk and sell to members with low margin. Such activities are permissible for FPOs under all legal forms.

Important activities of FPO.

The primary producers have skill and expertise in producing. However, they generally need support for marketing of what they produce. The FPO will basically bridge this gap. The FPO will take over the responsibility of any one or more activities in the value chain of the produce right from procurement of raw material to delivery of the final product at the ultimate consumers' doorstep. In brief, the FPO could undertake the following activities:

1. Procurement of inputs
2. Disseminating market information
3. Dissemination of technology and innovations
4. Facilitating finance for inputs
5. Aggregation and storage of produce
6. Primary processing like drying, cleaning and grading Brand building, Packaging, Labeling and Standardization Quality control
7. Marketing to institutional buyers
8. Participation in commodity exchanges
9. Export

How would a FPO help the members?

A FPO will support the members in getting more income by undertaking any/many/all of the activities listed under point above. By aggregating the demand for inputs, the FPO can buy in bulk, thus procuring at cheaper price compared to individual purchase. Besides, by transporting in bulk, cost of transportation is reduced. Thus reducing the overall cost of production. Similarly, the FPO may aggregate the produce of all members and market in bulk, thus, fetching better price per unit of produce. The FPO can also provide market information to the producers to enable them hold on to their produce till the market price become favorable. All these interventions will result in more income to the primary producers.

FPO is an organization of the producers, specifically the primary producers. All primary producers residing in the relevant sub basin , and producing the same or similar produce, for which the FPO has been formed, can become member of the FPO. Membership is voluntary. The procedure for obtaining FPO membership depends on the bye-laws of the FPO. The founder-members are those who were there at the time of formation of the FPO. Other members join the FPO later. However, all members enjoy equal rights. A primary producer can become member of a FPO by submitting an application and a nominal membership fee. Some FPOs also charge annual membership renewal fee. Although primary producers obtain membership of FPO voluntarily, the promoting institution should make efforts to bring all producers into the FPO, especially the small producers.

Who is a primary producer?

Any person engaged in any activity connected with or related to any primary produce will be treated as producer. Primary produce means the produce of farmers from agriculture and allied activities.

Who will manage the FPO?

Each FPO will have an elected Board of Management / Board of Directors as per the bye-laws. The Board can engage professionals to manage its affairs. In the initial years, professional and managerial

assistance is usually extended by the POPI (Consulting Agency). As the leaders of the FPO gain experience, they should take over the affairs of the FPO completely.

Can a FPO engage professionals to manage its business?

All legal forms provide for engaging professional and other employees by the FPO. Such persons should be paid out of the income of the FPO. As far as possible, the income should come from value addition to the produce and not from price paid to members. If members get price less than the market, they will gradually move away from the FPO. The professionals and other employees should be paid at par with the prevailing market to ensure that they remain for long with the FPO. Compensation will also depend upon the business plan, ensuring a positive surplus.

Can a FPO procure produce from non-members?

The objective of the FPO is to ensure better income to the member-producers through aggregation and value addition. Therefore, procurement from non-members is usually not undertaken. However, market exigencies at times may necessitate such procurement. There should be provision in the by-laws of a FPO to enable procurement from non-members during such exigencies.

How much expenses will be incurred for registration of FPO?

Expenditure towards registration fee, stamp duty, preparation of documents and facilitation charges etc., will depend on the legal structure of the FPO. In general, establishment of a producer company is more expensive than other legal forms.

What should be the minimum and maximum number of members in a FPO?

The minimum number of membership depends on the legal form of the FPO. For example, 10 or more primary producers can incorporate a Producer Company under Section 581(C) of Indian Companies Act 1956 (same provisions are retained in the 2013 Act). There is no restriction on the maximum number of membership. Generally, the FPO will require certain minimum scale of operation to remain in business. This operation scale/volume is known as break-even level. Studies have shown that a FPO will require about 500 to 1000 active producers as members for sustainable operation.

Who can become a Producer Organization Promoting Institution (POPI)?

An NGO, like Consulting Agency can become a POPI. Basically, the POPI needs to be a legal entity so that it can enter into legally valid contracts with other institutions including the FPO which they seek to promote.

What are the roles and responsibilities of POPI?

The primary responsibility of the POPI is to see that the FPO reaches sustainable level of business and the staff of the FPO acquire technical and managerial capability to run the business successfully when the POPI withdraws its support. The principal role of the POPI is, therefore, to build the capabilities of the Staff and Management of the FPO through training and continuous hand-holding. The broad responsibilities of a POPI are indicated below:

a. Cluster identification
b. Diagnostic and Feasibility Studies

c. Business Planning
d. Mobilisation of Producers and Registration/Incorporation of PO
e. Resource Mobilisation
f. Development of Management Systems and Procedures
g. Business Operations
h. Assessment and Audit .

5. What is a business plan :

A business plan is essentially a written description of a business's future. It provides an in depth report on the environment in which the company functions, what the company plans to do in the near future and predictions on its performance. A business plan conveys business goals, the strategies to use to meet them, potential problems that may confront FPC's business and ways to solve them, the organizational structure of the business (including titles and responsibilities), and finally, the amount of capital required to finance FPC's venture and keep it going until it breaks even.

Characteristics of good business plan:

1. A good business plan follows generally accepted guidelines for both form and content. There are three primary parts to a business plan.

   a) The first is the business concept, where FPC discuss the industry, FPC's business structure, FPC's particular product or service, and how FPC plan to make business a success.

   b) The second is the *market place product*, in which FPC describe and analyze potential customers: who and where they are, what makes them buy and so on. Here, FPC also describe the competition and how FPC position itself to beat it.

   c) Finally, the financial section contains FPC's income and cash flow statement, balance sheet and other financial ratios, such as break-even analyses. This part may require help from accountant and a good spreadsheet software program.

2. Breaking these three major sections down even further, a business plan consists of six key components:

   I. Executive summary
   II. Business description
   III. Marketing Plan
   IV. Production Plan
   V. Operation and Management Plan
   VI. Financial Analysis

BUSINESS DESCRIPTION.

The FPC will produce the required quantity of commercial value crop seeds to the farmers, so that farmers can get better yield and farm income. Similarly, there is huge demand for the certified seeds in Tamil Nadu, taking in to consideration of demand of certified seeds, FPC will produce the required quantity of certified seeds on demand from other parties as follows.

6. EMERGING MARKETING MODELS AND AVENUES FOR FPCs.

I.Government supported pulses price stabilization scheme:

Central Government is doing pulse procurement through SFAC under Pulses Price Stabilization Scheme (PPSS) of Government of India. SFAC/NAFED does the procurement in partnership with the FPCs working in different pulses growing area of various States of India, either directly through FPC or through state federation of farmer's producer Companies who is coordinating the procurement activities in partnership with different member FPC. This programme benefits the farmers in terms of better price realization, timely payment and also provides a branding for the FPCs through coverage of maximum farmers of the area without any restrictions and any risk of market price fluctuation. There are two mechanisms through which the FPCs can participate in the scheme. First, the FPC can be directly contracted by the SFAC/NAFED for the procurement of pre- decided quantity and quality. All arrangements including registration of farmers, verification of KYC, management of procurement centre, quality control, payment of RM or other taxes, transportation of the materials to the SFAC/NAFED designated warehouse and obtaining Warehouse Receipts are the responsibility of the FPC. The claim for settlement is sent to the SFAC /NAFED electronically to receive payments in the FPC account, which in turn paid to the farmers by account payee cheque, a compulsory requirement. *The farmers must get their payment within 3-5 days of the trade. The FPCs receive 1.5–2 percent commission on the volume of transaction*. The Promoting Institution of the FPC can be a party to this arrangement to support the FPC.

II.On-door procurement model

This is a traditional, but the most popular model of commodity trading being practiced in most parts of the country. This model was the most preferred model for farmers as vendors reach the farmer's door, purchase and lift the produce from their home/ farm. Some part of the payment is made immediately and the remaining after sales of the produce which normally takes 1-2 weeks for the completion of the transaction. However, some pilferages exist in this model, particularly on weighing and price aspects where farmers loose. The FPCs came up with a revised version of this model with some variation from place to place which is as following :

- Farmers are informed about the quality parameters and procurement schedule in advance. This is normally based on crop harvesting and arrival.
- Daily highest and modal prices are communicated to the farmers (Wall display in the common place through village resource person or lead farmer)
- Third Party Quality Verification Agency is hired by the FPC (or arranged by the State Federation) for quality verification as per quality parameters pre- decided.
- The trade happens when farmers agree to the price offered by the FPC in accordance to the quality. This happens at the village level.
- Once the trade is executed the FPC takes the materials in their custody and send to the warehouse or to the party with whom it has selling agreement.
- Farmers are paid usually on the same day through cheque/ECS or cash in some cases. At the most delay can happen for three days.
- The FPCs pay the RM and other taxes
- The whole process is done very transparently and the weighing, etc. is done to the satisfaction of the farmers.

This is a very good model of spot procurement where farmers get better price and save transportation cost. However, this requires a forward marketing tie up for the FPCs. Also requires good amount of working capital. The DAM & AB can provide market linkage, working capital and logistical support to the FPCs especially where the FPCs are in the nascent stage.

III.. FPC lead localized seeds production and marketing model

Seeds production and marketing has emerged as one of the potential business activity for the FPC, particularly in States where seeds replacement rate is poor and/or farmers are using composite and synthetic crop varieties. In this model-

1. FPC registers farmers who are progressive, having irrigation facility, and be able to invest on crop health management.
2. Registered farmers are provided parent seeds for multiplication The farmers are also registered with Seed Certification Agency for 'on field' and process verification audit and provide third party guarantee for the quality of the seeds.
3. Continuous training is provided to the farmers on crop husbandry and quality maintenance
4. After harvest, seed is procured by the FPC on the rate of Department Price for grain. A Top-up amount is paid as premium.
5. The FPC does the processing of raw seeds and marketing on their own- local sale as well as through the outlets of other FPCs under their own brand name.

There is another model where the FPC works as organizer of seed production for State Federation/Private and Public companies for a volume and quality pre-decided. The FPC after processing, handover the unpacked seeds to the party for whom it has produced. The branding and marketing is done in this case by the other entity. In this model the farmers get higher yield due to practice of Good Agricultural Practices (GAP) taught during the programme. They also get premium price upfront. In Tamil Nadu, most of the FPCs will be involved in localized seeds production and marketing which has benefitted their farmers significantly and also helped them to achieve financial sustainability. The only limitation of this programme is that, the outreach would be always limited, and due to operational and technical reasons, only the progressive farmers (constituting a small minority) can be covered under this programme.

IV.Credit linked Production and Procurement Model

This is an emerging model, which helps both farmers and FPC by involving a Micro Finance Institution in the process. The model works like as following :

The FPC arranges credit for its member producers for agriculture inputs (seeds, fertilizers, farm machinery services and insurance, etc.) by linking members to an MFI. The FPC provides recommendation to the MFI for lending to a particular member without taking any legal responsibility of recovery of the loan. However, it provides buy-back guarantee to the producer borrower of his produce after harvest at the market rate. This is in a way an assurance to the MFI of the recovery of loan at the end of the season. The loan by the MFI is given in kind i.e. the agriculture inputs and services which farmer needs should be procured from the FPC outlet. Once the borrower farmer has received inputs and services the FPC would raise invoice to the MFI for reimbursement of the amount on behalf of the borrower farmer.

After production, FPC procure the produces of the borrower farmer in market rate, FPC sells it in the open market or process it as required and pays the farmer after adjustment of the credit amount directly or facilitates the repayment to the MFI through collection of cheque from the farmer. Since this finance is made against a well planned production and marketing plan hence possibility of failure is very less

This is a very good model provides end-to-end solution to the farmers from inputs and field preparation to crop husbandry service to the buy-back guarantee. On the other hand it expands the scope and importance of the FPC for its members and in the local context. It increases business several folds of the FPCs. The relevance of FPCs becomes very important among the members in this model. The FPC ensures that inputs and services supplied by it are of good quality and competitive in price.

Marketing Plan.

What ever the certified seeds produced by the FPC will be distributed to the FPC members. When certified seeds produced by the FPC, the expenditure will be less but net income will be more. Similarly on demand certified seeds will be produced by the FPC members on behalf of other Certified seed distribution agency on contract farming basis thereby FPC will get sufficient income.

Production Plan.

FPC will select the progressive farmers with assured irrigation facilities for the production of Seeds as per the demand. Such farmers will be selected in advance and sufficient quantity of Foundation seeds will be sourced from Govt or private agency, to supply to the farmers. All inputs like Fertilizer and Micro nutrient for the seed production will be supplied by the FPC besides giving Technology through FSC .Season wise farmer wise plan will be prepared by the Board of Director (Seed Production) with consultation of DDAB.

Operation and Management Plan.

The working Capital requirement for the production of Certified seeds will be sourced from the TNIAMP Grant by the Board of Director (Finance Management). If the seed is produced for the third part agency, the BoD will approach the agency and will get sufficient amount in advance for organizing the seed farms and the amount will be adjusted at the time of invoicing the quantity to the supplier.

Financial Management plan and analysis.

1. The financial analysis is extremely important, in most cases it is the decisive factor. The most significant analysis is the profitability promised by the proposed business; similarly, cash flow statement provides insight in to the sustainability of the proposed business. The business plan should contain income statement, balance sheet and the cash flow statement.

2. The financial statement should accompany financial analysis like break even analysis, return on investment, return on assets, return on equity, profit margin analysis, debt equity ratio, etc.

3. Typical Profitability Analysis Ratios to be included

Return on Investment (RoI) = Net Income / Average Total Assets

Average Total Assets = Total asset in the beginning + Total asset at the end /2

Return on Equity = Net Income / Average Stockholder' Equity

Average Stockholder Equity = total stockholder' equity in the beginning + End Equity / 2

Profit Margin = Net Income / Sales

Earnings per share = Net Income / Number of common share outstanding

7.Business Activities of FPC

FPC undertaking the following business activities.

Facilitating Input Supply:

Input supply of seeds and fertilizers for selected major crops grown in the area

Primary processing of Surplus Agri. Produce

Facilitating Collective Marketing of Surplus Agri Produce: Facilitating aggregation, primary processing and collective sale of produce

Members Growth of the Producer Company (For 5 Years)

Particulates	Y1	Y2	Y3	Y4	Y5
Total Members	500	525	550	575	600

8. Facilitation of Input Supply

Business Activities Proposed By Producer Company

Business Activity - 1 (Facilitation of Input Supply – Seeds, Fertilizers, Etc.) Need of the Proposed Business Activity

Need of this activity emerged from the discussion with the PG leaders. All farmers face challenges in buying good quality (certified) inputs due to supply constraints and collusion among dealers in the local markets. Inputs are mostly not available on time and the farmers often end up pay above the MRP. All these issues lead to the need of collective purchase of input and PC could be the entity to facilitate this activity for its members especially by creating linkages and negotiating with the companies.

Operational Plan

PC will follow a step-by-step procedure to perform this activity wherein series of consultations at PG, PC and market levels will be undertaken.

Advertising of services

The PC will advertise its services through a meeting of all PG leaders at least 2 months before the start of the sowing season (either Kharif or Rabi) to declare its intention to supply agro-inputs among the farmers of the cluster. Concurrently, public notices will be put up at prominent locations like schools, hospitals, government offices, GP premises and the FCSC informing all farmers about the availability of inputs.

Collection of indents

Each PG leader will collect input requirement along with quantity, choice of varieties and brands from all members of his/her PG on a template shared by the PC. The PG members will be encouraged to club their requirements in case of small and medium farmers if their need is below the standard packet sizes available in the market.

Enquiries from non-members will be directly attended by the PC office bearers.

PC Secretary will collect the filled-in templates from the respective PG leaders and non-members to collate the data for overall requirement of inputs for the PC.

Vendor selection

Once the final input requirement is finalized, PC leaders will start dialogue with input suppliers from the list of suppliers (see annexure) created by the FCSC SP. Interested parties will be asked to quote their prices and supply terms & conditions separately for each of the inputs. Based on the quotations and supply terms, best two will be shortlisted and one to one meeting will be arranged between suppliers & PC leaders for further negotiation &signing the supply contract(s). Payment &Delivery date(s) will also be finalized in the same meeting.

Pricing and payments

PC leaders will add its service charges including expenses to the price finalized with the input supplier to derive the price of inputs for the members. Charges proposed to be levied by the PC towards sourcing & supply of seeds are considered to be 6% and 7.5% of purchase value for member and non-members respectively and in terms of fertilizers it is 2% and 3% of the purchase value for member and non- members respectively.

The assumed rates and quantum of sale of the seeds are mentioned in the tables below.

The price and expected delivery dates will be intimated through an open notice and also shared in a meeting with the PG leaders. PG leaders will be asked to collect advance payments from respective group members and submit it to the treasurer of the PC. Individual farmers will be asked to deposit the advance payment to the PC treasurer directly by the PC office bearers. This process will be completed at least a week before the actual delivery date.

The PC will share details and indented quantum of farmers with the supplier (dealer/distributor/ manufacturer). The PC will maintain regular liaison with the supplier and also make advance payments to the supplier if necessary. This will ensure hassle free and timely supply of the inputs.

Delivery of inputs to farmers

The dealer will supply the indented inputs to the PC along with separate invoices raised in name of each farmer. On receipt of the inputs, PC office bearers will match the invoices and the goods and create separate lots for each PG. On the delivery day, PC leaders will hand over the inputs to the PG leaders who will receive the goods against a signed acknowledgement. PG leaders will in turn distribute the inputs among PG members based on the quantities indented and paid for by each member. Inputs along with the invoice will be supplied directly to the non-members from the FCSC premises only.

The PC functionaries will note the allotment number mentioned on each of the input bags and note the same while supply to the PG leaders. PG leaders will in turn note the allotment numbers while distributing the inputs among the members and share it with the PC treasurer. It will be used by the PC to address grievances from the farmer and seek replacement from supplier in case some lot is found to be defective.

It is assumed that the PC will utilize its regular work force and manage this activity within the general FCSC expenses. It will plan the activity in such a manner that neither extra work force nor additional expenses be required to complete it. All transportation expenses for the inputs to and from the FCSC will be borne by the farmers.

List of market players (input dealers)

Extensive discussions have been conducted with these suppliers to explore their willingness towards bulk purchase of inputs by PC and further sale of the same by FCSC. List of suppliers and manufacturers of various agri-inputs is presented under Annexure-1. While final negotiations will be conducted with the most potential suppliers shortlisted by PA, currently PC leaders have identified following potential input suppliers in their area who have shown interest to supply agri-input to FCSC.

a . DISTRIBUTION OF SEEDS:

Following is the business summary of seed facilitation;

Business summary of seed facilitation

SEEDS SUPPLY

Sl.No	Name of the Crop	Area to be covered	Requirement per Ha in Kgs	Total requirement in Kgs	Purchase rate per Kg	Total purchase amount (5*6)	Selling price per Kg	Total selling amount (5*8)	Profit (9-7)
	2	3	4	5	6	7	8	9	10
1	Pulses	50	20	1000	60	60000	80	80000	20000
2	Groundnut	50	140	7000	80	560000	100	700000	140000
3	Maize	50	20	1000	16	16000	20	20000	4000
	TOTAL					**636000**		**800000**	**164000**

(I). DISTRIBUTION OF SEEDS:

Following is the business summary of seed facilitation;

Business summary of seed facilitation

Sl.No	Particulars	Y1	Y2	Y3	Y4	Y5
1	No. of Members	500	525	550	575	600
	Area in Ha					
	Pulses	50	55	60	65	70
	Groundnut	50	55	60	65	70
	maize	50	55	60	65	70
	Seed Quantity (in KG)					
	Pulses-20Kgs/Ha	1000	1100	1200	1300	1400
	Groundnut-140Kgs/Ha	7000	7700	8400	9100	9800
	Maize. 20Kgs/Ha	1000	1100	1200	1300	1400
	Seed Value (in Rs.)					
	Pulses. 60/kg	60000	66000	72000	78000	84000
	Groundnut.80/kg	560000	616000	672000	728000	784000
	Maize.16/kg	16000	17600	19200	20800	22400
	TOTAL	**636000**	**699600**	**763200**	**826800**	**890400**
	Seed Revenue (in Rs.)					
	Pulses.80/kg	80000	88000	96000	104000	112000
	Groundnut.100/kg	700000	770000	840000	910000	980000
	Maize.20/kg	20000	22000	24000	26000	28000
	TOTAL	**800000**	**880000**	**960000**	**1040000**	**1120000**
	Profit					
	Pulses	20000	22000	24000	26000	28000
	Groundnut	140000	154000	168000	182000	196000
	Maize	4000	4400	4800	5200	5600
	TOTAL	**164000**	**180400**	**196800**	**213200**	**229600**

Critical Assumptions

- Producers willing to purchase seeds from FCSC is based on discussions held with BoDs of the PC
- The member growth is the estimate based on the discussions with the BoDs of the PC
- Seed Rate per acre is based on the Government approved distribution
- 5% inflations is considered for cost and revenue for every year
- Transportation expenses for the inputs to and pro from the FCSC will be borne by the farmers and the transportation cost of delivering the inputs at FCSC location will be ensured from the suppliers side
- Rate for the seed is based on the current market rate and is subject to change over a period of time
- Discount offered by the seed supplier is based on the difference in the rate at the distributor level and the retailer & may subject to change over a period of time (In business plan 10% average discount is considered)

b. DISTRIBUTION OF FERTILIZERS

Business Summary - Fertilizer

Meetings were held with farmers to understand their difficulties in procurement of fertilizers and come up with intervention ideas to reduce the same. Farmers stated that they face maximum difficulty in procuring the fertilizers that are required in bulk quantities. They stated that Urea, DAP and MOP are 3 major fertilizers required in large quantities. Farmers need to procure these from WS/Firms from Kanchipuram.. It entails high transaction cost and time. Therefore, the PC has decided to take up collective procurement of the above 3 fertilizers and make them available to the farmers at nearby locations. Requirement and usage of these fertilizers were ascertained from the farmers during the group meetings and the same were triangulated with information from the department personnel and the input suppliers to arrive at per acre requirement for different crops. Charges proposed to be levied by the PC towards sourcing & supply of fertilizers are considered at 2 to 3% of the purchase value for member and non-member respectively. Indenting, advance payment, invoice and distribution system will be similar to that followed for seed supply. The assumed rates and quantum of fertilizers are mentioned in the tables below.

Following is the business summary of fertilizer facilitation:

Business Summary – Fertilizer

FERTILIZER SUPPLY

Sl. No	Name of the Crop	Area to be covered (Ha)	Requirement per Ha in Kgs	Total requirement in Mts	Purchase rate per Mt	Total purchase amount	Selling price per Mt	Total selling amount	Profit
				(3*4)		(5*6)		(5*8)	(9-7)
1	2	3	4	5	6	7	8	9	10
1	Pulses	50							
	DAP		110	5.5	24000	132000	24720	135960	3960
	Urea		15	0.75	5922	4442	6097	4573	131
	Potash					0		0	0
2	Groundnut	50				0		0	0
	DAP		75	3.75	24000	90000	24720	92700	2700
	Urea		10	0.5	5922	2961	6097	3049	88
	Potash		90	4.5	16000	72000	16480	74160	2160
3	Maize	50				0		0	0
	DAP		135	6.75	24000	162000	24720	166860	4860
	Urea		245	12.25	5922	72545	6097	74688	2144
	Potash		85	4.25	16000	68000	16480	70040	2040

Following is the business summary of fertilizer facilitation:

Business Summary – Fertilizer

Sr. No.	Particular	Y1	Y2	Y3	Y4	Y5
1	Fertilizer Quantity (in KG)					
	DAP	16	17	18	19	20
	Urea	13.5	14	15	16	17
	MoP	8.75	9	10	11	12
2	Fertilizer purchase Value (in Rs.)					
	DAP	384000	403200	423360	444528	466754.4
	Urea	79947	83944	88141	92548	97175
	MoP	140000	147000	154350	162067.5	170171
	TOTAL					
3	Fertilizer sale Revenue (in Rs.)					
	DAP	395520	415296	436061	457864	480757
	Urea	82309.5	86425	90746	95283	100047
	MoP	144200	151410	158981	166930	175277
	TOTAL					
4	Fertilizer Profit					
	DAP	11520	12096	12701	13336	14003
	Urea	2363	2481	2605	2735	2872
	MoP	4200	4410	4631	4863	5105
	TOTAL	**18082.5**	**18987.13**	**19936**	**20934**	**21980**

Critical Assumption

- ✓ The Area under these producers are based on the average area (3.25 acres) per producer in the PC.
- ✓ The member growth is the estimate based on the discussions with the BoD of the PC
- ✓ Fertilizer dose per acre is based discussion with ATMA officials & PC Leaders
- ✓ Rate for the fertilizer is based on the current market rate and is subject to change over a period of time
- ✓ Discount offered by the fertilizer supplier is based on the difference in the rate at the distributor level and the retailer & subject to change over a period of time
- ✓ Member growth is 5% every year against total household of the cluster
  5% inflations is considered for cost and revenue for every year

(C). Business Activity-2 (Facilitation of Aggregation and Sale of Surplus Produce)

Need of the proposed business activity

Farmers of this cluster undertake individual sale of their produce. They sell their produce to traders in the local mandis only. They've limited exposure to other markets or sales channels. They have inadequate knowledge of business terms & conditions of other procurers like processors, traders of terminal markets, direct license holders etc. They submit to the dictates of the local traders due the inability to scout and link with other potential buyers and suffer from unfavorable trading terms.

Around 50% of the famers in this cluster go for distress sale of their produce in order to service credit availed for agro-input purchase and domestic requirements. This becomes more pressing after kharif due to the need for reinvesting on agro-inputs for rabi cropping.

The PC members decided to explore other markets with assistance from the FCSC service provider and line department officials to help the farmers expand their market in search for better prices and trade terms. They also decided to facilitate aggregated sale of produce.

Operational plan of the proposed activity Scouting buyers

PC Leaders will scout market players and make exhaustive commodity-wise list of potential buyers along with the terms of trade. They will shortlisted potential buyers based on negotiated settlements and draw up rate contracts. The PC will be handheld during this activity by the FCSC service provider during the 1st year of this business so as to enable them to do it independently in subsequent years.

Awareness generation

The PC will brief the PG leaders the terms of trade and quality specifications and prices prevalent at higher order markets. The PG leaders will in turn share the same with PG members and enlist quantum of surplus produce that each member is willing to sell collectively through FCSC. Public notices will also be put at important locations (like GP, School, Hospital, FCSC etc.) to make other farmers of the cluster aware about the initiative of the FCSC. Quality requirements and price offers of higher order market will be mentioned in such notices along with invitation to sell through FCSC.

c.Aggregation of Produce

Each PG leader will create a list of interested group members along with surplus quantum available for sale through FCSC. These lists will be submitted to the PC Secretary. Non-members directly convey their willingness and quantum of surplus produce to be sold through FCSC to the PC Secretary. Final list outlining the quality and quantum of produce available for sale through FCSC will be drawn up by the PC Secretary.

Soliciting and servicing orders

The PC will identify buyers from higher order markets and negotiate with them for rate contract and supply orders. As per the demand from these identified buyers the PC will undertake supplies at pre-negotiated rates. The PC will also undertake regular market scouting and maintain liaison with other buyers to ensure that regular enquiries are received by the FCSC. As and when a suitable order comes up, the PC will intimate the farmers through PG leaders and open notices about the crop, quality specifications and quantum requirement. The PC will intimate the terms of payment and time and location of aggregation under the same notice.

The PC will also take up spot sales from time-to-time based on queries from the market. In such cases, the PC will announce the rates to the farmers on daily or deal basis after deducting PC facilitation charges. Farmers will be asked to bring their produce to the FCSC at a given time. PC will monitor the entire process based on terms of the buyer. Record of the quality of produce & price offered will be noted at the FCSC and supply and

payment receipts will be issued to the farmers.

The PC will keep equipment like moisture meter and weighing machine for free use of members to facilitate trading. The PC will retain a small portion of the transaction amount as facilitation fee.

Payment to Farmers

Buyer will pay money of produce bought to PC that the PC will pass on to the members either through the PG bank account or directly to farmers in cash after deduction of facilitation charges. Facilitation charges will be calculated at 1% and 1.5% for member and non member respectively of the sale value. PG will then transfer money to members in case of account transfers. For other farmers, the treasurer of the PC will directly make the payment from FCSC counter.

The PC will insist on advance or spot payment from the buyer. It will negotiate and will extend a cash payment discount of 1.5% on sale value to the buyer in keeping with current market practices. It will pay the farmer at the earliest after receiving payment from the buyer. Under ideal circumstances, the farmer will get money within 48 hours of the transaction.

In the financial calculations, the rates for the produce have been maintained at the average mandi price of Kanchipuram MC at the time of preparation of this proposal. Number of variations have been shown over the 5 years of project period. This has been done to overcome hazardous estimations due to inconsistent movement of commodity prices and low annual increment of MSP.

Marketing strategy

The PC has extensively discussed the challenges and opportunities in marketing of agro-produce in the district and other major markets. Such deliberations were facilitated by inputs from the FCSC service provider. The FCSC service provider gained insights on the same through interaction with various market players covering, local traders, processing industries and terminal market traders. It was found that willingness exists among processors and terminal market traders to procure directly from a farmers' organization if quality and supply issues are suitably addressed. They are ready to offer rates that were better than those offered by the local traders with whom the farmers of this cluster have been traditionally dealing. Many of these buyers from higher order markets are ready to lift the produce from the FCSC if supply quantity is adequate and timely availability is ensured.

The PC will establish contacts with potential buyers. They will be guided by the FCSC service provider in the process. Samples of produce will be sent to the buyers and purchase terms negotiated with defined targets regarding price and payment terms.

The PC will undertake sale facilitation for both processed (cleaned and graded) and unprocessed (unclean) products. They will try to target specific market segments as buyers of the different categories of product. Pricing of the products will also be different for the processed and unprocessed categories. It is assumed that the unprocessed produce will sell at a discount of 15% compared to processed product.

The PC intends to reduce its dependence on local markets for sale of the farmers' produce with an eye on maximizing returns. Therefore, it targets to sell a part of the produce to processing industries and traders of terminal markets. It is assumed that better price will be realized from the higher order markets. However, for financial calculations the lower rates similar to those quoted at Kanchipuram MC have been used in keeping with the conservative nature of accounting practices.

Discussions have been conducted with various market players and their willingness towards purchase of commodities through FCSC has been explored PC would engage with them on a need basis and final negotiations will be conducted with the most potential buyers. Factors which the PC would consider to select the buyer include (i) quantum (economies of scale) and quality (which can be managed by the PA) of produce required by the buyer (ii) price offered (better), (iii) terms and conditions (convenient to PA), etc. While following buyers have emerged as the most potential ones, as shared earlier PC will take a decision to engage with the buyer who it feels provides the best offer.

Business summary of Aggregation of produce.

AGGREGATION OF PRODUCE.

Sl. No	Name of the Crop	Area (Ha) covered by		Total area in Ha	Productivity Mt per Ha	Total production in Mts. (5*6)	20% of production in Mts (20*7/100)	Purchase price per Mt	Total purchase in INR (8*9)	Selling Price per Mt	Total selling price	Profit
		Agri	TNAU									
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Pulses	50		50	0.6	30	6	60000	360000	80000	480000	120000
2	Groundnut	50		50	2.825 (1.977)	98.85	20	560000	11071200	700000	14000000	2928800
3	Maize	50		50	6.2	310	62	16000	992000	20000	1240000	248000
TOTAL												**3296800**

Business summary of Aggregation of produce.

Sl.No	Particulars	Y1	Y2	Y3	Y4	Y5
1	No. of Members	500	525	550	575	600
	Area in Ha					
	Pulses	50	55	60	65	70
	Groundnut	50	55	60	65	70
	Maize	50	55	60	65	70
	Production					
	Pulses-0.6	30	33	36	39	42
	Groundnut-Kernal. 1.977	99	109	119	129	138
	Maize.6.2	310	341	372	403	434
	20% of produce					
	Pulses.	6	7	7	8	8
	Groundnut.	20	22	24	26	28
	Maize	62	68	74	81	87
	Purchase price					
	Pulses.60000/Mt	360000	396000	432000	468000	504000
	Groundnut.80000/Mt	1600000	1760000	1920000	2080000	2240000
	Maize.16000/Mt	992000	1088000	1184000	1296000	1392000
	TOTAL	**2952000**	**3244000**	**3536000**	**3844000**	**4136000**
	20% of purchase value					
	Pulses	72000	79200	86400	93600	100800
	Groundnut	320000	352000	384000	416000	448000
	Maize	198400	217600	236800	259200	278400
	TOTAL	**590400**	**648800**	**707200**	**768800**	**827200**
	Selling value					
	Pulses.80000/Mt	480000	528000	576000	624000	672000
	Groundnut. 100000	1977000	2174700	2372400	2570100	2767800
	Maize.20000	1240000	1364000	1488000	1612000	1736000
	Total	3697000	4066700	4436400	4806100	5175800
	Profit					
	Pulses	**120000**	**132000**	**144000**	**156000**	**168000**
	Groundnut	**377000**	**414700**	**452400**	**490100**	**527800**
	Maize	**248000**	**276000**	**304000**	**316000**	**344000**
	Total	**745000**	**822700**	**900400**	**962100**	**1039800**

IV) Sale of Value added Pulses.

The pulses value added seeds will be distributed to the members as well to big Stores.

d. BUSINESS PLAN FOR VALUE ADDED PULSES.

Toor dal milling is a profitable business in India as well in Tamilnadu also. But there is no such industry in Kanchipuram district. All type of dal is getting mostly from other State only. So if FPC start such business, it will fetch good business in long way, there by FPC will get sufficient income by sale of dal.

The are under pulses especially Black gram is Ha and Green gram is ….. ha with average productivity is Kgs/Ha. Hence the production will be around Mts/Annum. Generally, pulses are consumed as one of the variety of food preparation after conversion into de husked split pulse which can be cooked easily. It is assumed that more than 70% of the pulse produced in India is converted into dal.

Milling of pulses is into practiced as a small scale rural operation during ancient times and more recently it is into large commercial operation because of the increase in demand for the food.



Raw material Raw material requirement details.

Total annual production	50 Mts.
Productivity per Ha	0.600 Mts
Total area required	85 Ha.
Supply of Dal within the project area.	50 Mts
Supply of Dal outside the project area	35 Mts.

Sl.No	Name of the Crop	Seed requirement for value addition	Purchase Value @ Rs.60000/Mt	Selling price @ Rs.80000	20% of total purchase value
1	Blackgram	50	3000000	4000000	600000
		35	2100000	2800000	420000
	TOTAL		5100000	6800000	1020000
			This is 20% aggregation value		72000
		Balance WC requirement			948000

Cost of the product and profit percentage.

Capacity utilization is 85 Mts/Annum

Sale Cost of dal is Rs. 80000/ Mt

Annual sales of 85 Mts @ Rs. 80000/Mt Rs. 6800000

Profit per mt /- Rs.20000/

Total profit for 85 Mts Rs. 20000*85=1700000/-

Dal mill machinery.





The machinery for dal mill includes the pre cleaner, de-husker, grader, bucket elevators, aspirators and blowers, control panels, destoner, pedal mixer and packing unit.

Process of dal milling.

The basic process in dal milling is cleaning the raw materials, adding oil and sun or mechanical drying, grading, conditioning and de-husking, splitting, separation, polishing and bagging.

The main process is removal of the outer husk layer ans splitting the grain into two equal halves for the milled dal is the main thing involved and the next one is drying method.

Raw Grains
Grain Cleaning Process
Pitting into Roller Dehusker
Oil Smearing Process
Water Treatment Process
Polishing Process
Drying & Cooling Process
Dehusking Process
Splitting Process
Final Split Dal

e. SEED PRODUCTION PROGRAMME.

Seed is considered the basic input for enhancing agricultural production and productivity. Efficacy of all other agricultural inputs, such as fertilizers, pesticides and irrigation, etc., as well as the impact of agro-climatic conditions, is largely determined by the quality of the seed used. The estimated contribution of seeds in the productivity is considered to be 20-25 per cent. Therefore, ensuring the availability of quality seeds for enabling farmers to achieve higher agricultural production is a strategic requirement.

The seed programme largely adheres to the limited generation system for seed multiplication. The system recognizes three generations—breeder, foundation and certified seeds—and provides adequate safeguards for quality assurance in the seed multiplication chain to maintain the purity of variety as it flows from the breeder's backyard to the farmers

Seed quality is maintained through seed certification, seed testing, seed labelling and seed law enforcement by the State Seed Certification Agencies. Seed testing is carried out by seed analysts who are experts in seed technology, and seeds being sold in the market are compulsorily required to be labelled as prescribed under the Seeds Act, 1966. Seed quality standards are prescribed under the Seeds Act, 1966 and Seed Rules, 1969. The label should contain the minimum prescribed seed quality standards.

To ensure the quality of seeds being sold in the market, state governments appoint Seed Inspectors under the Seeds Act, 1966 and the Seeds (Control) Order, 1983. These inspectors draw samples from seed packets being sold in the market and send these samples to the notified seed testing laboratories for quality checking. If any seed is found to be sub-standard, or any seed dealer is found to be in contravention of the provisions of the Seeds Act or

It is well known that many farmers do not have access to certified seeds and depend on farm-saved seeds for boosting agricultural production.

Hence FPC has programmed to produce certified seeds of Black gram in 50 Ha. to distribute the same to FPC members for next year. The required quantity of Foundation seeds will be get through Government source and through private source and all area will be brought under Seed certification. Therefore farmers will get good enough production and quality of seeds, as well good return of income.

Sl.No	Crop	Area in Ha	Seed requirment in Ha	Total seed requirment in Kgs	Cost of Foundation seed /kg	Total cost required	Registration charges per sowing report	No of sowing report required	Total amount required
1	2	3	4	5	6	7	8	9	10
1	Blackgram	20	20	400	90	36000	25	50	1250

Field Inspection charge/Ha	Total amount required	Total certified seed production in Kgs	No of 20 kg pack required	Cost of cloth bag/no.	Total cost for cloth bags	Cost certification tag (Blue colour) /no.	Total cot for tags	Seed testing charges/ sample	No of samples to be tested
11	12	13	14	15	16	17	18	19	20
125	2500	12000	600	20	12000	2.1	25200	30	50

Total amount required for testing	Processing charges per kg	Total processing charges	Transport charges both from & To/mt	Total transport charges for 12 Mts	Total expenses	Selling price of certified seeds/kg	Total selling price	Cost of buying price/ kg	Total buying price	Total profit
21	22	23	24	25	26	27	28	29	30	31
1500	1.5	18000	200	2400	76150	85	1020000	75	900000	120000

9.. UTILIZATION OF TNIAMP GRANTS.

a. Start up Grants

The Project will support for newly formed FPOs with a bridge funding to meet out the initial expenditure involved in engagement of technical manpower, purchase of office equipments and to meet out the other contingencies immediately after registration of new FPOs through start up grant. This grant will be utilized by the FPC from registration to business take off. Registered FPCs supported by TNIAMP will be eligible. The consultancy firm will prepare proposal to get start up grant from the project and it will be sent to Commissioner of Agricultural Marketing and Agri Business through Deputy Directors of Agriculture (Agri Business). The proposal will be scrutinized by ABPF Cell and it will be approved by TNIAMP Cell. It will be released as grant in aid by Deputy Directors of Agriculture (Agri Business) through ECS to FPCs to meet out the following expenditure:

1. Honorarium to CEO
2. Honorarium to accountant
3. Purchase of furniture and computer
4. To meet out the initial office rent of the FPO immediately after FPO formation
5. To meet out the contingencies like electricity bill and stationery.

The monitoring will be done by the Deputy Directors of Agriculture (Agri Business) on regular basis and Head quarter TNIAMP Cell. An amount to meet out the above expenditure is Rs. 10.00 Lakh (Rs.5 Lakh/year) for 2 years period after completion of registration.

b. Productive/Capital Investment for New FPC on matching grant basis (80:20)

Approved FPCs may avail the grant by contributing 20% in a Joint Account after which the project would release 80% subject to a ceiling of Rs. 20.00 Lakh to FPCs account through ECS. MoU would be signed between FPCs and the Department for release of project grant to FPCs. Funds will be released in three instalments @ 50%, 30% and 20% based on performance appraisal by ABPF. Deputy Directors of Agriculture (Agri Business) will monitor the performance on regular basis and report to TNIAMP Cell in Head quarter. This grant will be utilized for initial business plan execution after registration of FPO.

It is proposed to create Farmer Common Service Centre (FCSC) which will provide the facilities like cleaning, grading, packing and input marketing to FPCs with the main objectives of aggregation of agricultural produce.

Farmer Common Service Centre (FCSC)

Sl.No	Purpose	Nos required	Unit Cots in INR	Total Cost (INR)		
				1st yr	2nd yr	Total
1	Building-Rent	1	7000/Month	84000	84000	168000
2	Seed grader, Gravity separator, De stone, Blowers, Weighing & Stitching machine	1	500000	500000	-	500000
3	Other fixed assets, Furnitures, Electricals, Computer, Printer etc	1	200000	200000	-	200000
4	Other expenses			100000	100000	200000
	TOTAL			884000	184000	1068000

c. Business Expansion grant for new FPC (75:25)

The project will also support for expansion of business. FPCs who successfully utilized the start up and matching grant released from the project will be eligible for availing business expansion grant of up to Rs. 30.00 Lakh. The business plan for expansion grant can either be a part of and a progress of the (1) original business plan prepared for availing matching grant or (2) it may be fresh business expansion plan in addition to or (3) in deviation of the original Business Plan. The business plan prepared by the Consultancy firm will be sent to TNIAMP Cell and the business plan will further be scrutinized by the ABPF Cell and sent to TNIAMP Cell for approval with their objective in assessment and recommendations.

Approved FPCs may avail the grant by contributing 25% in a Joint Account after which the project would release 75% subject to a ceiling of Rs. 30.00 Lakh to FPCs account through ECS. MoU would be signed between FPCs and the Department for release of project grant to FPCs. Funds will be released in three installments @ 50%, 30% and 20% based on performance appraisal by ABPF. Deputy Directors of Agriculture (Agri Business) will monitor the performance on regular basis and report to TNIAMP Cell in Head quarter.

On the above, first and third is not possible, since our FPC is a new one. For availing the Grant we have to start a new business on the following.

1. Selling of seeds to the members.
2. Selling of Fertilizers to the members.
3. Selling Biocides/Pesticides/Bio fertilizers to the members

CUSTOM HIRING MACHINE.

Sl.No	Name of the Machine	Nos required	Cost per unit	Total Cost	No of days in operation	Profit per day after all expenses	Total profit (6*7)
1	2	3	4	5	6	7	8
1	Paddy Thrasher	1	125000	125000	200	250/hr*8 hrs	400000
2	Paddy Combined Harvester	1	2000000	2000000	200	1100/hr*8	1760000
3	Weighing machine 100 Kg capacity	2	15000	30000			
4	Gunny bag stitching	2	5000	10000			
5	Groundnut Decorticator	1	700000	700000	150	200/ hr*8	240000
	TOTAL			**2865000**			**2400000**

MAN POWER REQUIRMENT

Sl.No	Man Power	Total requirement	Monthly salary	Annual financial requirement
1	Supervisor cum Store keeper -For value addition & Farm Machineries	1	15000	180000
2	Skilled labour	2	12000	288000
3	Unskilled labour	3	8000	288000
4	Postage			5000
5	Travel expenses			100000
6	Other Mis expenses			100000
	Total			961000

ABSTRACT:

Sl.No	Purpose	Project Cost	TNIAMP Grant	FPC Share/Individual share	Profit
I	**Productive Investment for New FPC (80:20)**				
1	Seed supply	636000			164000
2	Fertilizer supply	603947			18082
3	Produce Aggregation (20% of 8523000)	590400			745000
4	FCSC	884000			
5	Production of Certified seeds	76150			120000
	TOTAL	**2790497**	**2000000**	**790497**	**1047082**
II	**Business Expansion grant for new FPC (75:25)**				
	Custom Hiring machineries	2865000			2400000
	Value added Pulses	948000			1700000
	Man power	961000			
	TOTAL	**4774000**	**3000000**	**1774000**	**5100000**
	Net profit				

d. SUPPORTING EXISTING FARMER PRODUCER COMPANY:

Eligibility Criteria for new/existing FPC to release grant:

- 51% of the members of the existing FPOs should be from the sub-basin area.
- It should be a duly registered FPC as per Companies Act.
- The number of its individual shareholders should not be less than 500.
- Minimum 33% of its shareholders should be small, marginal and landless tenant farmers.
- It should have a duly elected Board of Directors (BoD) with a minimum of 5 members and with minimum one woman member.
- It should have Management Committee responsible for the business development of the FPC.
- It should have minimum paid up share capital of Rs.10.00 Lakh.
- FPC should contribute 25% amount for the business activity.
- It should have a business plan with details of existing assets and budget for next 18 months that is based on a sustainable, revenue model as may be determined by the implementing agency.
- The FPC should have an account with a bank and bank passbook with transaction details.
- Certificate from bank for credit worthiness.
- It should have a statement of Accounts audited by a Chartered Accountant (CA) for at least for one full financial year.
- Maintenance of mandatory Register as per Register of Compliance (RoC).
- Copy of AoA, MoA and incorporation Certificate.
- Copy of minutes for last four BoD meetings.
- Copy of availed Grant documents.

- **Existing FPO'S in Kallakurichi district**

S. NO	NAME OF FPO	NAME OF THE BLOCK	PRODUCER ORGANIZATION PROMOTION INSTITUTION	CROP
1	Kallakurichi District Collective Farming Producer Company ltd	Thiyagadurugam	SFAC	Pulses

- **Grant for existing FPO for expansion of business plan (75:25):**
- The project will also support for expansion of business. FPCs who successfully utilized the start up and matching grant released from the project will be eligible for availing business expansion grant of up to Rs. 30.00 Lakh. The business plan for expansion grant can either be a part of and a progress of the original business plan prepared for availing matching grant or it may be fresh business expansion plan in addition to or in deviation of the original Business Plan. The business plan prepared by the Consultancy firm will be sent to TNIAMP Cell and the business plan will further be scrutinized by the ABPF Cell and sent to TNIAMP Cell for approval with their objective in assessment and recommendations.
- Approved FPCs may avail the grant by contributing 25% in a Joint Account after which the project would release 75% subject to a ceiling of Rs. 30.00 Lakh to FPCs account through ECS. MoU would be signed between FPCs and the Department for release of project grant to FPCs. Funds will be released in three installments @ 50%, 30% and 20% based on performance appraisal by ABPF. Deputy Directors of Agriculture (Agri Business) will monitor the performance on regular basis and report to TNIAMP Cell in Head quarter. This grant will be utilized for expansion of business plan during 3 year..

e. Business Plan development for Agri Entrepreneur:

- Business plan of small scale enterprises with an project cost of Rs. 5,00,000 will be supported. The business plan for trained agri entrepreneur will be prepared by the Agri Business Specialist of each zone and it will be sent to TNIAMP Cell through Deputy Director of Agriculture (Agri Business). The same business plan will be scrutinized by the ABPF at Headquarter and approved by the TNIAMP Cell. An amount of Rs. 1,00,000 will be disbursed by the Deputy Director of Agriculture (Agri Business) through bank to each agri entrepreneur for facilitating credit support.

f. Credit facilitation and business execution support

The Agri Business Specialist will facilitate necessary credit through bank for agri entrepreneur's business plan to take up business activities and the proposal will be sent to TNIAMP Cell through Deputy Director of Agriculture (Agri Business) for approval. The agri entrepreneur whose turnover is Rs. 2,00,000 per annum will be eligible. An amount of Rs. 1,00,000 will be disbursed by the Deputy Director of Agriculture (Agri Business) to eligible agri entrepreneur for business execution as back ended support through bank. MoU between the Deputy Director of Agriculture (Agri Business) and Agri Entrepreneur will be signed to avail credit support.

Sl.No	Name of the Activity	Target		TNIAMP Grant (L.Rs)
		Phy	Fin (L.Rs)	
1	BP development	10	10	10
2	Credit facilitation and execution support	10	10	10
	TOTAL			**20**

The above entrepreneurs will be selected from the trainees who had undergone facilitation workshop training. Those farmers selected from the Facilitation workshop training, will be given training again for Entrepreneurship development. From this training programme 10 Nos of farmers will be selected to avail the above benefit.

g. Matching grant for entrepreneurs (50:50):

The project will promote agro entrepreneurship by women entrepreneur in the area of value addition, food processing and other agri related allied activities. Women farmer from the sub-basin who have undergone certificate training to be priority specified and acquired, minimum education qualification with capacity to invest for the business will be supported upto 50% of the total project cost or to a maximum of Rs. 5.00 Lakh whichever is less. The business plan prepared by the Agri Business Specialist will be sent to TNIAMP Cell and the business plan will further be scrutinized by the ABPF Cell and sent to TNIAMP Cell for approval with their objective in assessment and recommendations. Approved women entrepreneurs may avail the grant as back ended support by contributing 50% after which the project would release 50% subject to a ceiling of Rs. 5.00 Lakh to women entrepreneurs account through ECS. MoU would be signed between women entrepreneurs and the Deputy Directors of Agriculture (Agri Business) for release of project grant to women entrepreneurs. Deputy Directors of Agriculture (Agri Business) will monitor the performance on regular basis and report to Head quarter TNIAMP Cell.

h. Institutional strengthening and capacity building:

The Government of Tamil Nadu Agribusiness and agriculture marketing department have significant capacity gaps in agribusiness and agriculture marketing. To build the technical capacity of its staff, the project would support technical trainings in agribusiness, agriculture marketing, supply chain management and other relevant topical issues; exposure and learning visits (domestic and international) to learn nuances of agribusiness development; Technical training like Market Intelligence, Reduction of Post-harvest losses, Food processing and value addition, Agri Entrepreneurship Development Programme, Export promotion etc. through the institutions like MANAGE, NIAM etc.

i. Facilitating PPP Mechanism / Interface Workshop

It is proposed to conduct interface workshops, seminars, consultative meeting and conferences at State level and District level periodically during all six years project period for market linkages with stake holders and banks. The Deputy Directors of Agriculture will conduct interface workshop at District level with the help of Agribusiness specialist who will be at zonal level. Proposed amount for interface workshop is Rs. 3.00 Lakhs and spilt up is detailed below:

Sl.No	Details	Amount (Rs.)
1	Hall Rent	25000/-
2	Stage arrangement(Banner and other publicity materials)	50000/-
3	Public Addressing System	10000/-
4	Training kit with study materials @ 100x Rs.700	70000/-
5	Refreshment charges @ Rs.375x100x2	75000/-
6	Honorarium @ Rs.1000x5x2	10000/-
7	Vehicles hiring charges(3days)	20000/-
8	Exhibition arrangement	20000/-
9	Documentation (Photos album)	20000/-
	Total	300000/-

j.Facilitation Workshop:

The Workshop for lead farmers, existing entrepreneurs, new entrepreneurs, etc will be conducted by the Deputy Director of Agriculture (Agri Business) and zonal Agri Business Specialist within 3 years project period.

Sl.No	Details	Amount (Rs.)
1.	Hall Rent	10,000
2.	Stage arrangement(Banner and other publicity materials)	10,000
3.	Public Addressing System	10,000
4.	Training kit with study materials @ 50x Rs.200	10,000
5	Refreshment charges @ Rs.200x50	10,000
6.	Honorarium @ Rs.1000x5	5,000
7.	Vehicles hiring charges	15,000
8.	Documentation (Photos album)	5,000
	Total	75000/-

k.Training for Entrepreneurship for 2 days:

Selected farmers/individuals/entrepreneurs through workshop will be trained as Agri Entrepreneurs.

Sl.No	Details	Amount (Rs.)
1.	Hall Rent	20,000
2.	Stage arrangement(Banner and other publicity materials)	10,000
3.	Public Addressing System	10,000
4.	Training kit with study materials @ 50x Rs.200×2	20,000
5	Refreshment charges @ Rs.200x50	10,000
6.	Honorarium @ Rs.1000x5×2	10,000
7.	Vehicles hiring charges	15,000
8.	Documentation (Photos album)	5,000
	Total	1,00,000/-

FINANCIAL INDICATORS: Profit & Loss Account.

Particulars	Y1	Y2	Y3	Y4	Y5
Revenue from processing Value added service charge	1700000	1785000	1874250	1967963	2066361
Revenue from facilitation of seed supply	164000	180400	196800	213200	229600
Revenue from facilitation of fertilizer supply	18082	18987	19936	20934	21980
Revenue from Custom hiring machineries	2400000	2520000	2646000	2778300	2917215
Revenue from Aggregation of produce	745000	822700	900400	962100	1039800
Seed production	**120000**	**126000**	**132300**	**138915**	**145860**
Total Revenue					
Fixed Cost (Excl. of Depreciation, Amortization and Interest)					
Variable Cost					
Total Operational Expenses					
Earnings Before Interest, Depreciation, Taxes and Amortization (EBITDA)					
Depreciation					
Amortization					
Earnings Before Interest and Taxes (EBIT)					
Interest Expense					
Earnings Before Taxes (EBT)					
Tax					
Earnings After Taxes (EAT)					
Profit (loss) carried to Balance Sheet					

CASH FLOW OF FPC

Sl.No	Particulars	Y1	Y2	Y3	Y4	Y5
1	**Revenue**					
1	Revenue from processing Value added service charge	1700000	1785000	1874250	1967963	2066361
2	Revenue from facilitation of seed supply	164000	180400	196800	213200	229600
3	Revenue from facilitation of fertilizer supply	18082	18987	19936	20934	21980
4	Revenue from Custom hiring machineries	2400000	2520000	2646000	2778300	2917215
5	Revenue from Aggregation of produce	745000	822700	900400	962100	1039800
6	**Seed production**	**120000**	**126000**	**132300**	**138915**	**145860**
	Total Revenue	5147082	5453087	5769686	6081412	6420817
2	**Equity/ Share capital**	1000000				
3	**MACP Investment Grant**	5000000				
4	**Amortization**					
5	**Depreciation**					
	Sub Total (A)					
	Cash Outflow (Rs.)					
1	**Capital Expenditure**					
a	Furniture and Fixtures	200000				
b	IT and Infrastructure					
c	Land and Building	168000				
d	Plant and Machinery	500000+ 2865000				
e	Preliminary Expenses	200000				
2	**Operational Expenditure**					
a	Fixed Cost (Excl. Of Interest)	961000				
b	Variable Cost					
3	**Dividend**					
4	**Tax**					
	Sub Total (B)					
	Net Cash Flow (A-B)					
	Opening Cash and Bank					
	Cumulative Cash Balance					

Financial Indicators

Net Profit Ratio:
The average net profit ratio for 5 year is **…. %**.

Internal Rate of Return (IRR):
The project internal rate of return **should be more than 10%** as per the current financial scenario of the country. The project **IRR is ….. %** therefore it is clearly indicating that the project is feasible for investment.

Break Even Point:

The average break even percentage is **……%** and as per financial standards it should be below 60%.

Payback Period:
The Payback period for the project is **… years … months** and equity payback period is **.. year … months**. It should **be less than 4 to 5 years** therefore the project payback periods is within the limit.

Net Present Value
With a discount rate of 10% and a span of 5 years, the projected cash inflows are worth **Rs. ……** today, which is greater than the initial cash outflow of **Rs. ……** . The resulting positive NPV of the above project is **Rs. ……..** which indicates that pursuing the above project may be optimal.

Return on Capital Employed
The return on capital employed for the project is **……. %** which is above the expected financial standards.

Return on equity
The return on equity for the project is **……. %** which is above the expected financial standards.

Individual benefits of each PC member

The members of the PC are envisaged to gain from the activities of the FCSC. Such benefits can be categorized into direct and indirect benefits. Under direct benefit, the PC are set to benefit from their share in the profit due to ownership of shares in the PC.

**Note - No Dividends are distributed in the initial years and the profit is retained for future expansion.*

However, the indirect benefits far outweigh the direct ones. Such benefits are hereunder.

1. Purchase of inputs
2. Reduction in transport cost and time due to availability of inputs in the village.
3. Lower price of inputs due to passing on of bulk purchase discounts by PA
4. Timely availability of quality inputs due to planned and negotiated purchases by PA
5. Aggregated sale of produce
6. Better rates than APMC due to lower deductions in weight and lower transaction charges
7. Proper weighing and rate fixation due to transparent operations
8. Stability in rates due to negotiated rate settlement with buyers by PA
9. Processing of produce
10. Availability of facility for value addition where there was none
11. Better rates for produce
12. Enhanced asset value
13. Increased value of shares in a profitable business entity leading to asset enhancement

PART-IV

GENDER PARTICIPATION, GRIEVENCE REDRESSAL MECHANISM

GENDER PARTICIPATION, GRIEVENCE REDRESSAL MECHANISM AND MOBILIZATION OF SMALL AND MARGINAL FARMERS IN FPO

1. GENDER / WOMEN EMPOVERMENT.

1. The focus group discussions with women groups and stakeholders held at different project locations (during walk through survey) by a team to identify gender issues relevant to TN IAMP which are given below:

- Low/ less participation of women in development program.
- Women play significant role in agriculture and other related activities, however these are not recognized by communities.
- Ownership of agricultural land is generally in the name of men.
- Women cultivators have problems in accessing markets particularly because of social and economic constraints in reaching nearby markets.
- Wages to women are generally underpaid and are not at par with male workers for same type of work.

Though it is not realistic to address all issues and concerns of women, a right approach would be to focus on specific issues that could address those that are most relevant to the project outcome. The approach therefore is to formulate specific project interventions focusing on women and supplement them with the existing government programs for the socio-economic benefit of women. Specific measures under the project could include creating required infrastructure (like resting place, clean sanitation facilities etc.) to facilitate women visiting the markets and help them participate in the trading activities. Following this approach, the gender development strategy of the project includes specific activities such as: identifying infrastructure needs and facilities for women members at market, working with women Self Help Groups (SHGs) in the construction activities, organizing training for active participation of women members in the market committees, and ensuring that women members attend all meetings of the market committee or Producer Company.

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Guidelines for Implementing gender Strategy.

Stage	Process	Activities	Output
Preparation	Identify gender concerns through participatory consultations	List issues and prioritize	Issues identified that need to be addressed if possible under the project
	Inform about the project activities and benefits	Organize meetings with the women farmers	Sensitization of women on project objectives and activities
	Sensitize other stakeholders on gender concerns/issues	Organize workshops on gender sensitization	Sensitization of other stakeholders on the importance of gender
Implementation	Encourage women participation in project activities	Work with women Farmers/groups for active participation in the project activities	Active women participation
	Encourage equal wages for equal work in all project works		Actual wages paid to women
Operation	Encourage women participation in WUA	Organize training for active participation of women in WUA Encourage more women members to attend meetings of WUA	No of training organized No of women attended

2.The strategy for the inclusion of women is given below:

Stages	Strategy	Planned Activities

Preparation	Inform on project details, identify gender concerns/ issues in relation to the project activities	▪ A stakeholder consultation meeting will be conducted in which the issues related to women will be discussed. ▪ Pre launch workshop will be organized at APMC for stakeholders including women.
Implementation	Ensure women participation in project activities	▪ Local women workers will be given preference in construction activities to be undertaken under e-Negotiable Warehouse. ▪ Appropriate representation to women is already given and will be ensured further in APMC Managing Committee.
	Ensure equal wages for equal work in all construction related works.	A wage register will be maintained at work site to ensure, check and monitor whether equal wage is paid to equal work involved in construction activities under e-Negotiable Warehouse.
	Ensure no women harassment under the project	▪ An Anti- harassment Cell comprising members at APMC will be formed to discuss the issues related to women harassment. ▪ A complaint register will be maintained at RM to ensure quick redressed of women abuse and related issues.
Operation	Ensure women participation in the working of APMC	▪ The RM will organize need based trainings, meetings etc. ▪ Women representatives will be given opportunities to participate in various outside trainings and workshops. ▪ Participation of women in management of RM will be ensured.
	Employment generation for women in sub project activities	Involvement of local women in RM activities will be encouraged and ensured that the RM continue in operation & post operation period.

3.Social Safeguards, Environment & Grievance redress mechanism.

Grievance Redress Mechanism is part and parcel of the machinery of any project. No administration can claim to be accountable, responsive and user-friendly unless it has established an efficient and effective

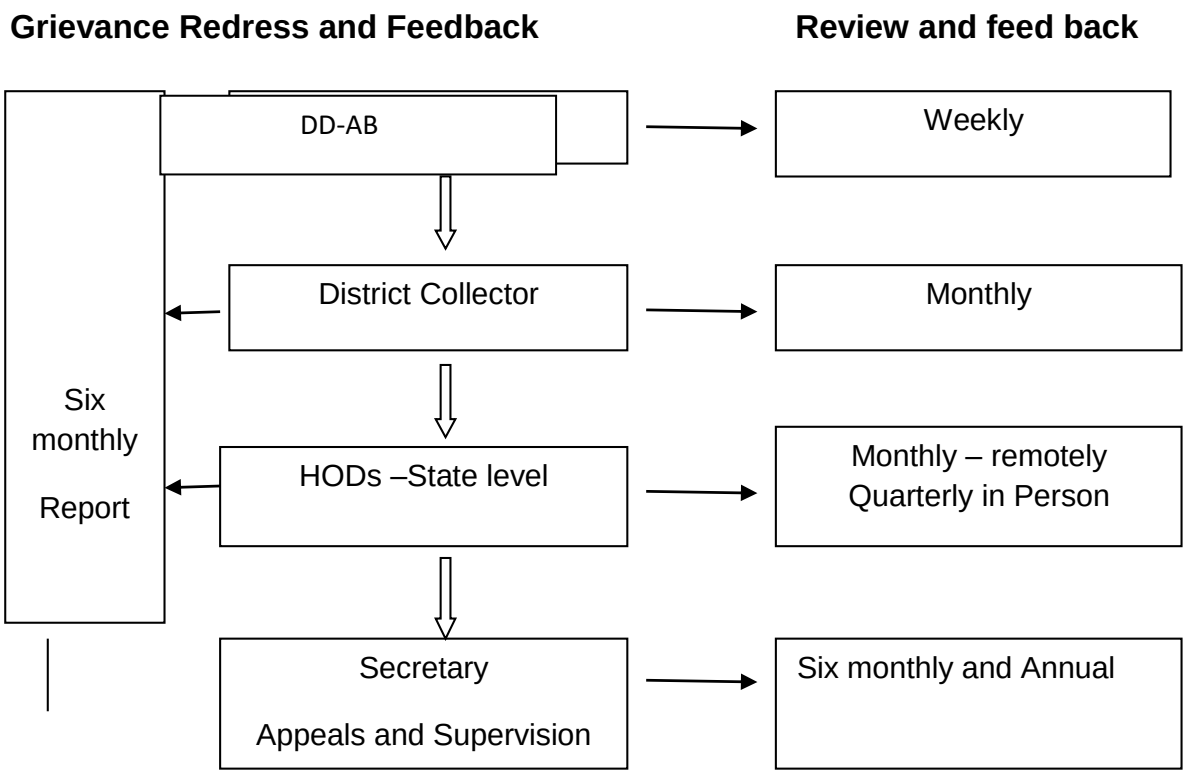
grievance redress mechanism. In fact, the grievance redress mechanism of an organization is the gauge to measure its efficiency and effectiveness as it provides important feedback on the working of the administration.

- ❖ The grievance redress process will be a continuous, transparent and participatory process that would be an integral part of the project's accountability and governance agenda.
- ❖ A project level GRM will be in place for addressing social, environmental and project related grievances.

Prompt and Effective Redress of Grievances

a. grievances should be necessarily acknowledged, with an interim reply within 5 days of receipt and redressed within 1 month of receipt in the Organisation. The same time limit should apply even if co-ordination with subsidiary offices or another Department/Organisation is involved. In such instances special efforts, to be suo moto disclosed when reports are called, should be made.
b. No grievance will be rejected without having been independently examined. At a minimum, this means that an officer superior, to the one who delayed taking the original decision or took the original decision that is cause for grievance, should actually examine the case as well as the reply, intended to be sent to the grievance holder.

Grievance Redress Mechanism-Flow chart



- ❖ For every six months report is prepared at all levels and sent to the Secretary.

- ❖ Effort will be made to create awareness about GRC mechanism to the beneficiaries through use of flyers and pamphlets at the village, Block and District level.
- ❑ The GRC will receive and redress grievances and complaints that are formally brought to the GRC in writing by the persons and/or group of persons who have a grievance because of the Program's adverse impact on him/her and them.
- ❑ The grievance would, among others, relate to payment of compensation and involuntary resettlement assistance in accordance with the eligibility criteria as set out in this Resettlement Policy Framework(RPF).

Process of GRC

- Open House at the Block and District levels.
- The GRC will receive all grievances/complaints and enter them in the Grievance Register;
- The GRC will work out a timeframe to redress grievances/complaints if such grievances/complaints are not redressed during the first meeting;
- The GRC will acknowledge receipt of all grievances/complaints, by registered post, within 7 days of receipt;
- The GRC will consider and redress grievances/complaints through public and transparent process in which all those who have lodged their grievances and complaints in order to facilitate transparency and accountability;
- The GRC will communicate its decisions/redress in writing to the complainants within 4 weeks depending on the nature of complaints.

Complaints/Grievances Register

- (a) Serial Number;
- (b) Case Number;
- (c) Name of the Grieved/Complainant;
- (d) Name of Father/Husband;
- (e) Gender (f) Age;
- (g) Full Address;
- (h) Brief details of grievance/complaint;
- (i) List of documents, if any, attached;
- (j) Details of previous grievance/complaint, if any;
- (k) Date of receipt of grievance/complaint and
- (l) Date of acknowledgement of grievance/complaint
- When closing the complaint, agreement should be made with the complainant on remedy, and both parties sign to their approval of the case being closed and outcome accepted. Copies are kept in both hard copy and electronic (please see documentation of Grievance process) by both parties

4.MOBILIZATION OF SMALL AND MARGINAL FARMERS IN FPO.

INTRODUCTION.

Nearly 92% of operational holdings in Tamil Nadu being small and marginal holdings, have limited capacity to mobilize credit, adopt latest technologies and to add value to their agricultural produce. Hence, to make them avail these benefits and to increase their income, the Government of Tamil Nadu is implementing an innovative programme for organizing small and marginal farmers into **'Farmer Producer Groups'** which will be federated into **'Farmer Producer Organisations'** to promote collective farming for credit mobilization, better adoption of technology and to facilitate effective forward and backward linkages. During the project period 80 such Farmer Producer Organization are proposed to be promoted, each comprising not less than 500 farmers so as to cover at least 40000 to 80000 farmers during the project period. Each Farmer Producer Group will be given a grant of Rs.10 lakh besides channelising grants and credit available to Farmer Producer Organizations from NABARD and Small Farmer Agri Business Consortium.

The concept of FPO is to identify small and marginal farmers in a contiguous area and group them as Farmers Interest Groups **(FIG).** 5 FIGs would be integrated into a Farmer Producer Group **(FPG).** Such FPGs would be encouraged to adopt mixed farming and add value to the supply chain of the agricultural produce through Micro Enterprises and service Institutions owned and operated by them. Each FPG would consist of minimum 100 farmers so as to cover at least 40000 to 80000 farmers during the project period. About 5 to 10 such groups in a contiguous area which would be later federated into Farmer Producer Organization (FPO).

After the approval of FIGs by District Collector, five such FIGs in the same village or nearby villages within a Block or adjacent Blocks cultivating the same or similar crops in a season will be federated into one Farmer Producer Group (FPG) comprising at least 100 Small Farmer / Marginal Farmer.

Objectives of the project

1. To mobilize small and marginal farmers into Farmers Producer Groups to share knowledge on better practices, cost effective agricultural technologies aiming at increased productivity.
2. To upgrade the Farmer Interest Groups into Farmer Producer Organization for improved livelihood keeping in mind the collective interest of the farmers of better profit.
3. To provide promotional support in terms of financial assistance for formation of groups, Social capital development, Human resource Development, registration of Farmer Producer Organizations, purchase of farm machineries, etc.,
4. To remove hurdles in enabling farmers' access to credit facilities and markets.
5. To create an conducive environment for collective production and marketing for better profitability and sustainability.
6. To retain the interest of farmers in Farming occupation

Expected outputs:

1. Increase in area under production and productivity.
2. Diversification from food grains into high value agriculture.
3. Improved marketing, postharvest management and value addition.
4. Establishing CGs and FPOs and facilitating PPPs will lead to increased incomes of beneficiaries.
5. Higher price through better aggregation and new market channels.
6. Dissemination of improved market information.
7. Reduced input prices resulting from procurement by FPOs in bulk.
8. Increased value addition.
9. Support productive postharvest management infrastructures.
10. Substantial employment generation due to area increase.

Sl.No	Designation	Mobile number
1	Deputy Director of Agriculture Agri Business, i/c Kallakurichi.	Mrs. G.Kannagi 9443787717
2	Agricultural Officer,i/c Agri Business. Kallakurichi.	Mrs.M.Pushparani, 8248110335

Sd/- G. Kannagi,
DEPUTY DIRECTOR OF AGRICULTURE
AGRI BUSINESS,(i/c)
KALLAKURICHI.

Annexure-1

5. Yearwise Financial Split up:

BUDGET OUTLAY FOR 3 YEARS

TNIAM Project

S.NO	Name of the Interventions	ManimukthaNadhi Sub basin Kallakurichi						Total Financial (L.Rs.)
		2020-21		2021-22		2022-23		
		Physical (nos)	Fiancial (L.Rs.)	Physical (nos)	Fiancial (L.Rs.)	Physical (nos)	Fiancial (L.Rs.)	
I	**Improving Farmer Access to Markets**							
A	**Support for new Farmer Producer Company**							
1	Consultancy charges for Formation of FPCs for first year and Business plan development and execution for next 2 years (i.e totally for 3 years)	1	1.920		5.940		5.940	13.800
2	1 MTS (Mobilisation Training Specialist) and 2 FOs (Field Organizers) for first year only		4.680					4.680
3	.FPCs formation and registration (Awareness Campiagn, meetings with CGs, Registration Cost)		3.800					3.800
4	Start up grant for administrative and contingent expenses		-		5.000		5.000	10.000
5	Productive Investments for FPCs (Matching grant basis on the basis of Approved Business Plans). This could include support for investment on processing, grading/ sorting, mechanization, storage, packacing, value addition, input sale to members, branding and promotional activities etc) 80% Grant : 20 % farmer contribution				20.000			20.000
6	Business expansion Matching Grant : (75% Grant - 25 % Farmer contribution)						30.00	30.000
	Sub-total		**10.40**	**0.00**	**30.94**	**0.00**	**40.94**	**82.280**

Annexure-2

6.CLUSTER WISE INTERVENTIONS

S. NO	Name of the Interventions	MushkundaNadhi Sub basin Kallakurichi						Total Financial (L.Rs.)
		2020-21		2021-22		2022-23		
		Physical (nos)	Fiancial (L.Rs.)	Physical (nos)	Fiancial (L.Rs.)	Physical (nos)	Fiancial (L.Rs.)	
I	**Improving Farmer Access to Markets**							
B	**Supporting Existing Farmer Producer Companies**							
	1. Consulting support for Business Expansion (2 years)	1	30.000	0	0.00	0	0.00	30.000
	2. Business expansion Matching grant (75% Grant - 25 % Farmer contribution)							
	Sub Total	**1**	**30.000**	**0.00**	**0.00**	**0**	**0.00**	**30.000**
C.	**e-Negotiable Warehouse Receipt Financing**							
	1. Pilot Investment in 4 selected godowns	0	0.000	0	0.000	0	0.000	0.000
	Grand Total (A+B+C)	**-**	**40.400**	**0.00**	**30.940**	**0**	**40.940**	**112.280**
II	**Promoting Agri Enterprises**							
A	**Facilitating PPP Mechanism**							
	Interface Workshops/ Seminars/ Conferences at State and District level	1	3.000	0	0.000	0	0.000	3.000
B.	**Supporting Agro-enterprenuers to provide services to farmers**							
1	Facilitation workshop (50participants per workshop)	2	1.500	0	0.000	0	0.000	1.500
2	Training for Entreprenuership (30 participants/batch) for 2 days	0	0.000	0	0.000	0	0.000	0.000
3	Business Plan development routed through ABPF	0	0.000			0	0.000	0.000
4	Credit facilitation and business execution support through service providers routed through ABPF	0	0.000	0	0.000	0	0.000	0.000
5	Matching grant for women individual agri-entrepreneur as back ended subsidy through bank on pilot basis (Agro Processing, Value Addition)	1	5.000	0	0.000	0	0.000	5.000
	Sub-total	**-**	**9.500**		**0.000**	**-**	**0.000**	**9.500**
	Grand Total (I+II)	**-**	**49.900**	**-**	**30.940**	**-**	**40.940**	**121.780**

Annexure-4

7. CALANDER OF OPERATION.

Sl. No	Name of the Interventions	Month wise operation														
		Apr-2020	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan 2021	Feb	Mar	Apr	May	Jun
I	NEW FORMATION OF FPC															
1	On board consulting Agency			1												
3	Baseline survey				1											
4	Preliminary meeting-Awareness campaign					2										
5	CGs formation						3									
6	Conducting meeting with CGs/FIGs									2						
7	Identifying members for BoD and Chairman											15 days				
8	Trust building/Business Motivation for CGS												3			
9	Registration															15 days
		Jul-21	Aug	Sep	Oct	Nov	Dec	Jan-22	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10	Business Plan preparation															
11	Release of Startup grant	50 %						30 %			20%					
12	Release of productive Investment															

S.No	Interventions	Apr-20	May	Jun	Jul	Aug	Sep	Oct	Nove	Dec	Jan 21	Feb	Mar	Apr	Jun	jul
II	**SUPPORTING EXISTING FPCS**															
1	Identification & Completion															
2	Processing & making eligibility															
3	Release of Business expansion Matching Grant															
	By FPC (25%)															
	By Dept (75%)															
III	**e-Negotiable warehouse receipt**															
1	Identification & Selection of RM															
2	Preparation of Estimates															
3	Inviting EoI															
4	Sorting of firms															
5	Calling RFP															
6	Evaluation process															
7	Award of contract															
8	Starting construction work.															
9	Completion of work															

Sl. No	Name of the Interventions	Month wise operation														
		Apr-2020	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan 2021	Feb	Mar	Apr	May	Jun
V	AGRI BUSINESS PROMOTION FACILITY															
1	On board ABPF															
2	Value Chain Analysis in 10 Major crops															
3	ToR for virtual market study															
4	Impact studies															

Sl. No	Name of the Interventions	Target in Nos	Aug-21- to Aug-22	Aug 22to Aug 23	Aug-23 to Aug 24	Aug-25 to Aug 26
1	Interface workshop					
2	Facilitation workshop					
3	Training to entrepreneurships					
4	Business Plan Development					
5	Matching grant for Entrepreneur					
IV	FACILITATING PPP MECHANISM					
1	State level investors meet					
2	Consultative meeting					
3	National Seminars					
4	MOU between private buyers and FPC					
5	Evaluation of business plan of FPC					