6. Agricultural Marketing and Agri Business

KALINGALAR SUB - BASIN

6.1. Objective

To increase the productivity of Crops in irrigated agriculture and to build a frame work of resource management. The efforts of Agriculture Marketing will be directed towards identifying new markets for existing / proposed Crops, better access to pre / post harvest technologies required for value addition and ensure profitable market prices for the farmers, in convergence with the efforts of other Departments.

6. 2. Introduction:

The Kalingalar Sub Basin is bounded on the north by Deviar Sub Basin and south by Nichabha Nadhi Sub Basin.

The area of the Sub-Basin is 2257 hectares. The Sub-basin is covered in Tirunelveli District.

The Kalingar originates from western ghats and runs through Vasudevanallur and ends at Panaiyur.

6. 3. AREAS COVERED UNDER KALINGALAR SUB BASIN

Sl. No	Name of District	Name of Taluk	Name of Block	No of Villages Benefited
1	Tirunelveli	Sivagiri	Vasudevanallur	4
2.	Tirunelveli	Sankarankovil	Sankarankovil	2

6. 4. Existing Cropping Pattern:

Total Ayacut Area	:	2257 Ha
Fully irrigated area	:	1393 Ha
Partially Irrigated area	:	483 Ha
Gap Area	:	381 Ha

6. 5. Along with the above Gap Area and due to the changing Cropping Pattern in the two seasons, the following major crops are to be cultivated:

S. No.	Crops	Area in Ha.			
		I st Crop	II nd Crop	III rd Crop	Total
1	Paddy	1000	60	--	1060
2	Pulses	130	200	120	450
3	Maize	200	200	--	400
4	Sunflower	150	200	--	350
5.	Vegetables	15	325	--	340
6.	Cotton	--	200	--	200

The farmers mostly depend upon the tradition based cropping pattern for winnowing and threshing and the farmers are using mud floor and mostly village roads. Threshing floors are not available for full utilisation.

6. 6. Existing Cropping Scenario

Major crops and area

Area/Ha Quantity / M.T.

Crop	Fully Irrigated (Ha)	Partially Irrigated (Ha)	Total (Ha)	Total Storable Quantity (M.T.)
Paddy I	1002	336	1338	5571
Paddy II	41	68	109	
Cotton I	--	24	24	303
Cotton II	28	150	178	
Pulses I	34	26	60	64
Pulses II	26	85	111	
Sugarcane	301	114	415	

6. 7. Existing Marketing Scenario

6. 7. 1. Infrastructure

No sufficient infrastructure is available in the Sub Basin Area, except the following.

		Capacity
Storage Godowns, 5 Nos at Sankarankoil	-	3000 MT
Storage Godowns, Co-op. Marketing Society	-	1000 MT

6. 7. 2. Markets - Specialized / General markets

Regulated Markets:

Sl. No.	Location	Produces dealt	Infra structure available	Capacity
1	Sankaran kovil	Cotton, Groundnut, Chillies, Paddy, Blackgram Coriander	Godowns - 5 Threshing Floor - 1	3000 M.T.
2.	Sivagiri		NIL	--

Average market prices prevailed--in Rupees per MT

Sl.No	Commodity	Glut Season	Scarcity season
1	Paddy	6000	7500
2	Cotton	20000	30000
3	Pulses	13000	18000

Local Mandies / Commission agent system

6. 8. Market Arrangements

Paddy :

Most of the farmers sell their paddy to the millers directly. Small quantity is brought to the Regulated Market for sale by farmers local petty traders also intervene in glut season and purchase from the farmers at village level and sell it to the millers or they themselves become agents to the traders of Madurai and Kerala and purchase paddy on their behalf and transport it to Madurai or Kerala as the case may be left over paddy for sale at the time of next planting need to be stored neat and clean. Tamil Nadu Civil Supplies Corporation during peak harvest season open sub centres for purchase of paddy from the farmers in one or two season. Only meagre quantity is purchased by TNCSC.

Cotton :

Farmers bring cotton to the Commission Mandies for sale. Ginning Factory / Cotton traders purchase cotton from commission mandies. 1 % is charged as commission from the sale proceeds from the farmers.

Pulses :

Pulses are brought to the nearest commission mandies at Rajapalayam and Sankarankovil. Few petty merchants also purchase pulses from the farmers and sell it to the wholesalers.

6. 9. Pre and Post Harvest Practices

a. GRADING

No scientific grading work is done at present. In the case of cotton, the good cotton Kapas and the Kottuparuthi (pest & disease attacked, discoloured) are heaped separately in the space available within the house. Likewise, in chillies the pest & disease attacked and immature are separated manually and stored in heaps after sun drying them. In paddy, manual winnowing is done to segregate immatured defectful grains and foreign matters. It is properly dried and stored in the existing local storage bins available with the household.

b. TRANSPORTATION

No specific difficulty is experienced. The produces like paddy, groundnut etc., are transported generally by vans and Lorries, two wheelers are used for carrying vegetables to the nearest marketing centres for improving transport facilities cargo auto and mini auto to be suggested in future on seeing the expansion of area under Vegetables, Fruits etc.

c. CONTRACT FARMING

At present no contract farming practice is adopted. But in future it is suggested for crops like Cotton and Vegetables.

d. SOURCE OF MARKET INFORMATION

Now, the market information is spread only through news papers, phone messages and mass media. Commodity Groups are to be formed and the

group leaders must be trained to have contact with market intelligence centres and wholesale mundies etc. The system of communication should be improved by adopting latest IT methods.

6. 10. CONSTRAINTS AND RECOMMENDATIONS

The following constraints are seen in the sub basin and recommendations also given against the constraints.

Sl. No.	Constraints	Recommendations
1	Want of assured market	Linkage with manufacturers in terms of {i.e. maize) contract farming.
2	Lack of market facilities	For improving the marketing, collection centres and formation of marketing sub groups at WUA level are suggested i.e. Vegetables.
3	Poor post harvest practices	Rural godowns proposed for avoidance of storage loss Training to farmers on post-harvest practices. - IEC.
4	No collective action	For diversified crops, formation of FIGs / commodity groups
5	Lack of market information	Improving the market information system through IT Kiosks
6	New practices in quality control	Quality control is attended by Agmark lab at Tirunelveli and commercial grading at Sankarankovil.

6. 11. SOLUTIONS AND RECOMMENDATIONS

6. 11. 1. Consultative process undertaken in the Sub Basin

Co ordination Committee at district level has been formed with WRO / PWD and Line Departments i.e. Agriculture, Horticulture, Agricultural Engineering, Agricultural University, Agricultural Marketing, Animal Husbandry and Fisheries.

Informal WUAs were formed based on farmers membership. However, elections are to be conducted within a short period. These Associations were consulted and walkthrough Surveys have also been made. The meetings were conducted along with walk through survey.

During the Walk Through Survey the cross section of Sub Basin has been covered through walking and the farmers' demands were studied.

Along with this, the topography of the area, cropping, water availability, life style, transport etc were also observed. This background facilitated in understanding

the stake-holders problems and the solutions are suggested accordingly. For marketing, simple solutions like godowns and threshing floors were suggested repeatedly by which the farmers hope that they will go a long way in getting better prices.

6. 12. Need for Construction of Storage Godown

The proposed Storage Godown at Vasudevanallur will help the farmers to reduce the post harvest losses. Usually prices are very low at the time of harvest. Farmers are forced to sell their produce at low price due to poor storage facilities. If storage godowns are constructed such distress sale at the time of harvest may be avoided which will result in getting better price for the farmers.

The need for storage Godowns for paddy and pulses are as follows

Crop	Area (Ha)	Productivity (M.T./Ha)	Production (MT)	Storable Produce (MT)
Paddy	1447	5.5	7959	5571
Pulses	171	0.5	86	64
Cotton				303
				6518

Among the diversified crops recommended in the Kalingalar Sub-basin, the major diversified crops namely Cotton, Maize and Pulses required storage facility to get better price to the producers. The marketable surplus of the above diversified crops is about 6500 MT.

At present no storage facility is available in the sub basin area except the godowns available with the co-operative marketing society with 1000 MT capacity. Most of the farmers store their produces in their houses only.

6. 13. Need for Construction of Drying yard

At present the farmers are in the habit of drying their produces on the roads and on the road sides and due to this sand, stones etc., are getting mixed with the produces and the grade of the produces fall and fetch a lesser price. Because of this there is a loss of produce to a significant extent and admixtures are adulterated in the produce and the quality of the produce deteriorates.

To minimize post harvest losses of agricultural produce it is necessary to construct Threshing floors. Utilization of Threshing floors will improve the quality of the farm produce and minimize the yard losses. It leads to value addition of produces.

Every produce saved is equal to production and hence the national economy will rise. By constructing the Threshing floors, the losses are minimized and the grades are maintained and by this reason the farmer gets a fair and higher price.

6. 14. Change in Cropping Pattern :

		With out project (Ha)	With project (Ha)
Fully Irrigated	=	1393	2225
Partially Irrigated	=	483	0
Gap	=	381	32
Total Ayacut Area	=	2257	2257

MARKETABLE SURPLUS
(WITHOUT PROJECT)

S.No.	Crop	Area (Ha)	Productivity (M.T/Ha)	Total Production (M.T)	Marketable Surplus		Value in Lakhs
					%	Qty (M.T)	
1.	2.	3.	4.	5.	6.	7.	8.
1.	Coconut	70	70 Nuts per tree / year	7. 35 Lakh Nuts	98	7. 20	22.05
2.	Sugarcane	415	75	31125	100	31125	319.03
3.	Banana	25	33	825	99	817	31.36
4.	Paddy (in terms of rice)	1447	4.018	5814	70	4070	667.69
5.	Cotton	202	1. 5	303	100	303	60.60
6.	Maize	4	2. 5	10	75	8	0.60
7.	Pulses	171	0.5	85. 5	75	64	21.38

MARKETABLE SURPLUS
(WITH PROJECT)

S.No.	Crop	Area (Ha)	Productivity (M.T/Ha)	Total Production (M.T)	Marketable Surplus		Value in Lakhs
					%	Qty (M.T)	
1.	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**
1.	Coconut	70	70 Nuts per tree / year	7. 35 Lakh Nuts	98	7. 20	22.05
2.	Sappota	25	10	250	100	250	50.00
3.	Fodder cutting	20					
4.	Sugarcane	415	100	41500	100	41500	425.38
5.	Banana	200	33	6600	99	6534	250.80
6.	Paddy (in terms of rice)	1060	4.670	4950	70	3465	594.02
7.	Cotton	200	2.0	400	100	400	80.00
8.	Vegetables	350	10	3500	100	3500	245.00
9.	Maize	400	3.0	1200	75	900	72.00
10.	Pulses	450	0.7	315	75	236	78.75
11.	Sunflower	350	1.5	525	100	525	94.50

PULSES :

Pulses are proposed to be grown in an area of around 450 Hectares in the sub basin area. Entrepreneurs will be identified and they will be provided with all assistance to purchase pulses without commission agent. In addition, commodity group will be formed in these clusters to identify common problems and rectify the same.

MAIZE :

With regard to Maize, tie up arrangements are to be made with poultry farms like Suguna, Shanthi etc., The arrangements will be formalized through formation of Commodity Group and also creating a federal set up at Sub-basin level, so that the collective bargaining power of farmer will be increased. During the running of Commodity Groups hardware components like godown, drying yard etc., which will be necessary for value addition of the produce will be identified and provisions are made in the Sub Basin's plan subsequently.

In addition to the specified size of the grains @ 360 grain / 100g, it is essential that moisture content of the produce is maintained constantly below 12% for grains

and 9% for seed purpose through proper testing methods at least at a central place to facilitate profitable marketing. Awareness will be created among the farmers on these crops through IEC and CB components.

SUNFLOWER :

Sunflower is to be cultivated in an area of around 350 Ha. in the sub basin area. Oil mills will be contacted for tie up arrangements. Contact farming will also be arranged.

VEGETABLES

Vegetables like Bhendi, Brinjal, Chillies and Gourds are extensively proposed to be grown in the clusters. When 340 Ha of such crops are grown, it is essential that marketing support is extended to these farmers. Daily discussions in the centre on pricing for collecting these fresh vegetables is essential.

Societies in the nearby State and Markets both with in and outside state will be contacted to purchase the Vegetables in the Sub basin area to fulfill their needs which will help the farmers to get better price for the vegetables in the farmyard itself.

6. 15. Marketing Strategy Adopted.

- Sub group of WUA i.e. Commodity group Training programme along with traders.
- Publicity and Propaganda arrangements.
- Survey of existing cropping /marketing scenario
- Stakeholders consultation
- Suitable marketing infrastructure based on gap area cropping and diversification area cropping.

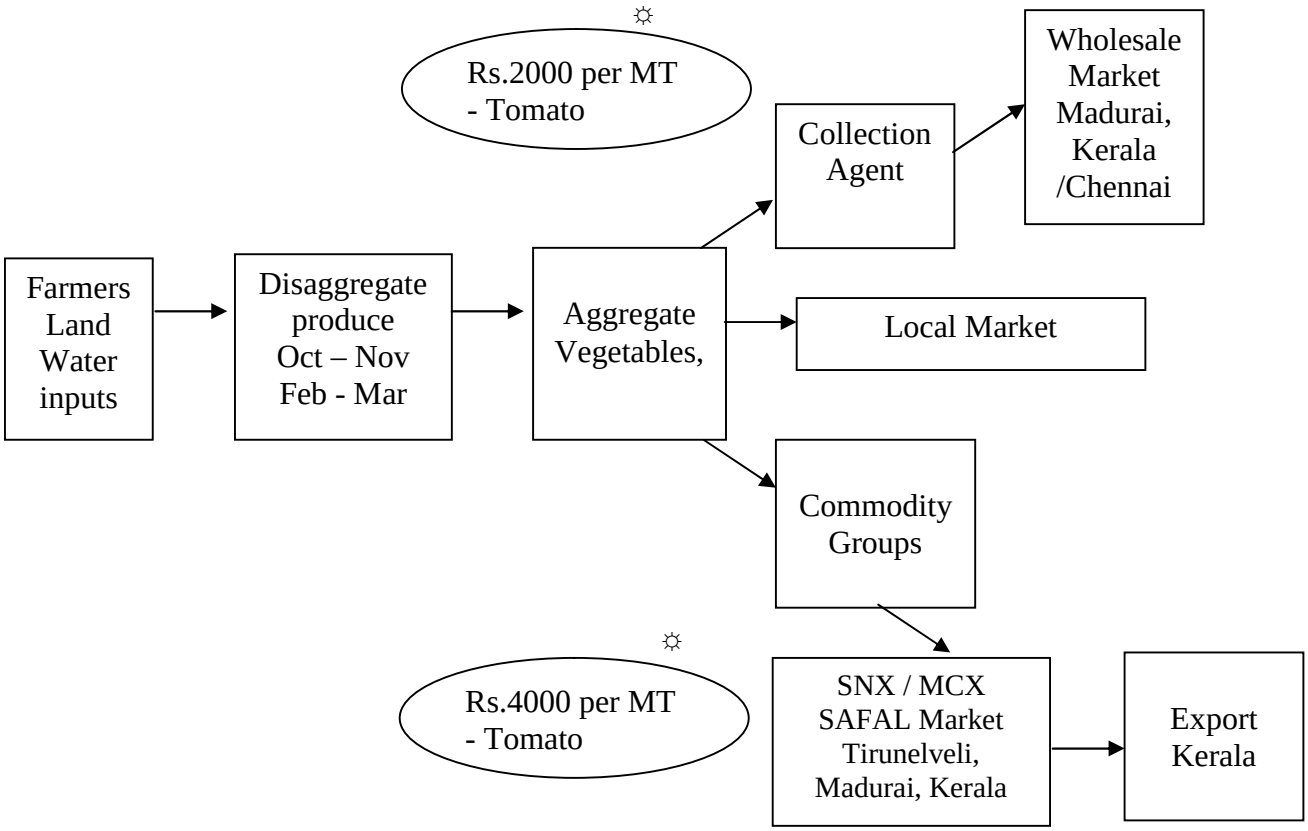
6. 16. Farmers Training Programme

1. Imparting Training on Produce Production Technology and Marketing aspects.

2. Training for Market Linkages through line ups such as Safal National Exchange of India Limited, Bangalore, Tanflora, Hosur Reliance India Limited, Bangalore and Hosur.

3. Exposure visit to areas with Market potential.

Model Value Chain



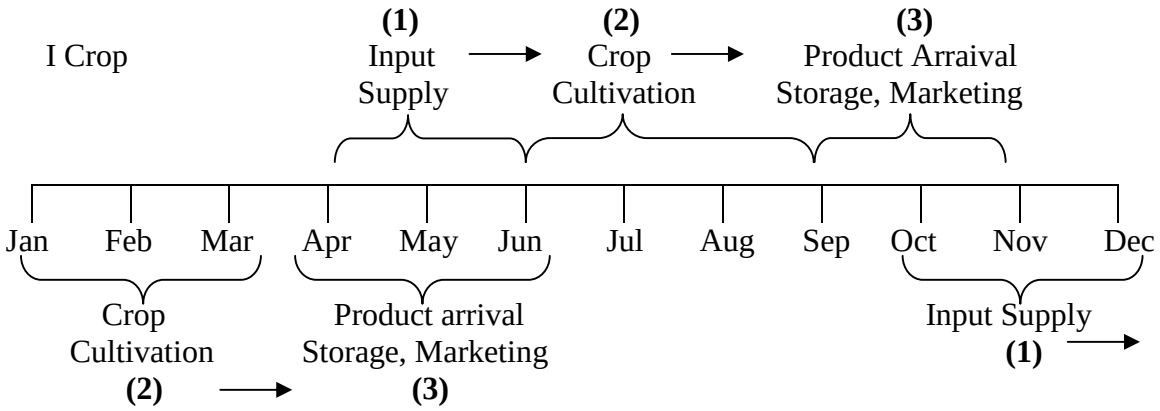
☼Point of Project intervention Method :- Commodity Groups and Direct negotiation with wholesale purchasers.

Regulated release from storage for

-- Price regulation

-- Quality enforcement

Crop Business Plan



6. 17. STAKE HOLDERS DEMANDS (List)

The Stake holders in different parts of the Sub Basin repeatedly requested the following improvements.

a, Storage Godowns

b. Thrashing Floors / Drying Yards

c. Market Information

d. More knowledge about pre & post harvest technologies.

The following components have been decided and included in the project.

S. No	Particular	Nos.	Total Cost Rs. in lakhs
1.	Threshing floor / (Drying Yard)	1	**3.00**
2.	Storage godown	1	**6.00**
3.	IEC & C.B		**3.00**
	Total	2	**12.00**

6. 18. Phasing of work

The work will be phased out as follows:

S.No		I		II		III		Total	Total cost in lakhs
		Unit	Amount in lakhs	Unit	Amount in lakhs	Unit	Amount in lakhs		
1	Drying yard	-	-	1	3.00	--	--	1	3.00
2	Storage godown			1	6.00	--	--	1	6.00
3.	IEC & C.B		1.00		1.00		1.00		3.00
	Total	**-**	**1.00**	**2**	**10.0**	**--**	**1.00**	**2**	**12.00**

6. 19. Locations:

Based on the diversification of cropping and consequent availability of harvested produce based on tank-wise details, the following locations for marketing infrastructure are proposed.

Drying yard

1. Vasudevanallur

Storage Godown:

1. Vasudevanallur

IEC & CB:

Farmers will be trained about the know how of modern cultivation, Post Harvest Technologies, Value addition, food processing and Grading etc., The farmers will be taken to SAU, Agro Based Industries, Major markets, Food processing Units and KVK, within the state and also outside the state. The one day Interface work shop will be arranged with Traders.

6. 20. Assets to be Managed

Storage godown and Threshing floor on completion will be handed over to the federal set-up of the Commodity Groups at the first instance. As and when WUAs are formed the assets will be transformed to them. The WUAs have to maintain these assets and for this they have to collect hire charges from the users at nominal rates. The hire charges etc. should be fixed by them on par with that of other organisations in similar conditions, in the adjoining areas.

6. 21. Project Outcome

1. % increase in value of marketing surplus - 75%
2. % increase in Commodity arrival to markets - 75%
3. % of decrease between farm gate and wholesale price – 25%

Capacity building of Farmers.

The farmers in Kalingalar Sub-basin need training in the areas of Marketing practices, demand driven cropping pattern, Post harvesting technologies, food processing and value chain analysis. IEC will provide information pertaining to market inputs.

1. Interface Workshop: To create links between the farmer and the trader.
2. Exposure visits: This is organized at cluster level. Selected farmers will be taken for exposing them on Food Processing, Storage and Marketing.
3. Follow-up Visits: Follow-up visits will be carried out to ensure the sustainable application of new skills, methods and ideas.
4. Commodity Groups (CGs)-Ground Nut, Maize, Pulses - will be facilitated to take part in trainings and exposure visits as and when it is appropriate as specified in Training Matrix given below.

An Interface Workshop will be organized to minimize the gap between the farmer and the trader, this workshop would also provide input for planning capacity building programmes for farmers in “Agricultural Marketing”. This will be organized at Vasudevanallur.

Follow-up visits have been proposed at regular intervals to substantiate and fine-tune the skills that have been imparted in exposure visits and Workshops.

Village Level: Village level meetings and campaigns will be organized to sensitize farmers on the need for involving themselves in direct trading. Facts and figures will be presented in the form of a Case Study to make them realize the importance of direct trading for making more profit.

As far as Agricultural Marketing is concerned, more Technical training programmes on price information, quality standards (grading and sorting) will be organized at village level, in groups formed on the basis of different commodities they produce. Simultaneously, active and potential farmers will be identified for participating in exposure visits.

Cluster level: Exposure visits to Agricultural Food Processing & Marketing Places within the state will be organized for Commodity groups (each group may have 20 to

25 farmers). (If possible the exposure visits may be organised in collaboration with AED and Horticulture department). Besides marketing strategies, farmers will also be exposed to storing, sorting, grading and packing methods and skills. The farmers will be taken to SAU, Agro Based Industries, Major Markets and Food Processing units.

An Interface workshops for a minimum of 3 commodity groups (each commodity group will have 20 to 25 farmers) will be organized in which Farmers, representatives from KVK, representatives from TNAU and Private Enterprises will be participating.

The Nodal Officer of the Sub-basin will have to ensure the inclusion of small and marginal farmers from marginalized communities in all their capacity building programmes. Women farmers will be identified and motivated to participate in the training programmes.

Training Matrix

	Training content	**Time frame**	**No.of trainees**	**Type of CB Programme**	**Who will do it**	**Duration and Location**
Component 1. Change Behaviour						
Village Level	Sensitising farmers on the need for direct trading	1st Year	All villages in the Sub-basin.	Village meetings and Campaigns. IEC		One day, at villages.
Cluster Level	Convincing farmers on the need for direct trading	1st Year	60 farmers in batches	Exposure visit, interaction with farmers.		Five days, outside the state.
	Familiarizing farmers with Food Processing & Post Harvesting techniques.	1st , 2nd and 3rd year.	40 farmers in 3 batches	Exposure visit, interaction with farmers.		Two days, within the state.
Component 2:Technical						
Village level	Technical Education on Food Processing & Post Harvesting technologies	2nd and 3rd year.	50	Training		One day, at selected villages
Cluster level	Networking with Private enterprises, Corporate companies for direct trading.	1st , 2nd and 3rd year.	60 in different batches.	Interface / Workshop		One day, at a convenient place for farmers.

Estimated Budget - Kalingalar

	Training content	Description of the cost		Total in Rs
Component 1. Change Behaviour				
Village Level	Village meetings and Campaigns.	IEC		12000
		Telecasting in Local Cable TV	5000	
		Printing of Pamphlets	5000	
		Others	2000	
Cluster Level	Convincing farmers on the need for direct trading. 5 days Exposure visit. Outside the state.	Food: 60 farmers x Rs 150 x 5 days	45000	153000
		Travel: 60 farmers x Rs 1000	60000	
		Accommodation: 60 farmers x Rs 100 x 3 days.	18000	
		Incidentals: 60 farmers x Rs 100 x 5 days	30000	
	Familiarizing farmers with Food Processing & Post Harvesting techniques. Exposure visit. 2 days. Within the state.	Food: 40 farmers x Rs 150 x 2 days.	12000	36000
		Travel:40 farmers x Rs 200	8000	
		Stipend: 40 farmers x Rs 200	8000	
		Accommodation: 40 farmers x Rs 100 x 2 days.	8000	
Component 2:Technical				
Village level	One day training on Technical Education on Food Processing & Post Harvesting technologies	Food: 50 farmers x Rs 150	7500	18000
		Travel: 50 farmers x Rs 10	500	
		Stipend: 50 farmers x Rs 100	5000	
		Resources Persons Rs 500 x 2	1000	
		Stationery	1000	
		Training Hall rent	3000	
Cluster level	One day, Interface Workshop - Networking with Private enterprises, Corporate companies for direct trading.	Food: 60 farmers x Rs 150	9000	41000
		Travel: 60 farmers x Rs 100	6000	
		Stipend: 60 farmers x Rs 50	9000	
		Resources Persons Rs 1000 x 4	4000	
		Stationery 60 farmers x Rs 30	1800	
		Hall Rent Rs 5000 x 2 occasions	10000	
		Miscellaneous	1200	
	On Site Interactions and Follow-up visits	Lump-sum	40000	40000
Grand Total				**300000**

Convergence Table – Kalingalar Sub – Basin (Cluster – I)

Sl. No.	Name of the Cluster villages	Total Area (Ha.)			Agri. Marketing	
		WOP	WP	F. Crop	Acti.	Nos. / Ha.
1	**Naranapuram**			Paddy, Pulses, Maize and Sunflower		
	Rappaikulam	73	90			
	Periya paraikulam	90	50			
	Illankulam	115	165		MOU Commodity Group (Maize, Pulses) Godown Threshing Floor / Drying yard	
	Pudukulam	99	135			
	Chinthammani					2
	Manaltherikulam	66	120			
	Vasudeyanallur					
	Vasu-bigtank	327	390			1
	Direct channel					
	Kunikarai kal	8	9			1
	Pottakulam kal	47	55			
	Pudumadai kal	23	16			
	Naranapuram					
	Illankulam kal	53	75			
	Sakkiliyan kal	30	45			
	Total					

Convergence Table – Kalingalar Sub – Basin (Cluster – II)

Sl. No.	Name of the Cluster villages	Total Area (Ha.)			Agri. Marketing	
		WOP	WP	F. Crop	Acti.	Nos. / Ha.
2	**Naranapuram**			Paddy, Pulses, Maize and Sunflower		
	Naraperiyakulam	40	105			
	Thirumalapuram					
	Kulasekaraperi-kulam	312	375		MOU Commodity Group (Maize, Pulses)	
	Kudaloor					
	Kudaloorkulam	223	215			
	Panaiyur					
	Vayalimitta kulam	86	142			
	Panaiyurkulam	311	200			
	Direct channel					
	Naranapuram					
	Kalingalar kal	25	15			
	Total					