6. Agricultural Marketing and Agri Business

PENNAIYAR UPTO KRISHNAGIRI SUB - BASIN

6. 1. Objective

To increase the productivity of water in irrigated agriculture and to build a Framework of Resources Management. The efforts of the Agricultural 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

In the sub-basin there is one Reservoir (Kalavarapalli), 12 Anicuts and 6 Tanks 55% of the command area are being irrigated with the supplementation of wells, out of 7 Blocks, 2 Blocks are over exploited, 4 semi critical and one safe.

6. 3. Existing Marketing scenario: -

Registered Ayacut	:	4481 Ha
Fully Irrigated Area	:	1308 Ha
Partially Irrigated Area	:	1000 Ha
Gap Area	:	2173 Ha

6. 4. Cropping pattern

S. No.	Major Crop	Area/Hec		Harvesting Month
		W.O.P	W.P	
1	Paddy	1590	1870	December – January
2	Ragi	545	1805	January – February
4	Vegetable	205	917	October – November February – March
5	Flowers	-	1000	-

- In the PENNAIYAR UPTO KRISHNAGIRI Sub basin, farmers mostly depend upon the tradition based cropping pattern. With regard to drying yard, few farmers are using traditional size drying yard and many are using conventional mud floor and few of them use village roads as Drying Yards.

- There are no proper Storage Godowns also in the Sub Basin except one available at Agricultural Co-operative Marketing Society at Kavaripattinam. The available godowns at nearby Regulated markets are insufficient and needed to be expanded by Marketing Department.

6. 5. Market arrangements

- Regulated Markets are available at **Hosur, Kelamangalam Krishnagiri and Kaveripattinam**. Among these four Regulated Markets, two of them are functioning in the rented building which is having no adequate Storage and Drying yard facility. Among the notified agricultural crops, Groundnut Paddy and Ragi are mainly cultivated in the Sub basin area.
- Rice Mills are abundantly available in the Sub basin area. In Kaveripattinam Regulated Market Notified area there are 5 Rice Mills and 10 wholesale merchants for Paddy. About 8745 M.T. of paddy per year are being harvested by the farmers in this area and 50 % of the produce are sent to various districts. Paddy growers in the Sub basin are largly depending upon the near by hulling units and wholesale merchants. During the harvest season, traders enter into the village and purchase the produce directly from the farmers by which farmers get less price and in some cases less weighment also.
- One Ragi polishing Unit is available at Berigai and another one at Hosur owned by private sector.
- There are two Farmers Markets (Uzhavar Santhai) available at Hosur and Krishnagiri in which vegetables are sold. Farmers usually get advances from the traders and they are bound to sell the produce to the particular traders. In this process the prices will not be competitive and also the farmers will receive the sale produce after deduction of other marketing charges.

6. 5. Post Harvest Technology

- Pre and post harvest practices are not adopted in the sub basin area. Farmers usually store their produce in their own houses which are facilitating the attack of stored product pests, rats etc. Providing village godowns and drying yards would be the main strategy to in overcome the problem. The godowns when constructed should be maintained by Farmers Associations or Commodity groups at their own costs.

6. 6. Quality Control Measures.

- No scientific grading work is done at present. Commercial Grading centres and Agmark Laboratories with scientific equipments are to be established in the nearby Regulated Markets.

- At present, produces are transported generally by vans and mini Lorry. For improving the transport facility, cargo auto and mini auto are to be suggested in future.

6. 7. Market Intelligence.

Sub groups of WUA i.e. commodity groups are to be formed and the group leader must be trained to have contact with Market Intelligence Centres and wholesale Mundies etc. Regarding paddy cultivators, WUA are trained by the nearby TNAU Reseach Centre, Paiyur. Vegetable Market details of near by Farmers Market at Hosur are available in the Website i.e. www.uzhavarsanthaihosur.in Agmark Nic Centres are also available for Market intelligence.

6. 8. Shortage Experienced by the Farmers

Sl. No.	Commodity	Shortage Months
1	Paddy	April – November
2	Ragi	May – December
3	Vegetables	June – August

6. 9. Walk through Survey

Walk through Survey were made in the Anicut irrigation area along with the allied departments. Discussed with the farmers belonging to the Anicut area. Detailed information regarding IAMWARM project was focused. During the survey constraints and farmers' demands were studied.

6. 10. Farmers / Stockholders perception for improvement

- Horticultural plantations are to be increased by diversification.

Fruits : Mango and Banana
Flowers : Rose and Crysanthimu

- Value addition in Horticultural crops:

  Providing Pack houses for cleaning, washing and grading vegetables and flowers.

- Marketing infrastructures to be provided:

  i) Agri Business Centre
  ii) Threshing floor/Drying yard.
  iii) Collection centre
  iv) Market information facility

6. 11. Solutions and Requirements Recommended

Part I :

- Rainfall is not distributed uniformly throughout the year in the Sub - basin. Maximum rainfall is received during South West Monsoon.
- The cropping system is dominated by Paddy, Ragi, Groundnut, Vegetables and Flowers.
- Existing proposal for tomato market at Nallore i.e. nearby Hosur to be promoted by Marketing Department.

Part II : Marketing interventions:

Sl. No.	CONSTRAINTS AND CHALLENGES	COUNTER MEASURES
1	Lack of Market facilities	For improving the marketing, formation of sub groups at WUA level suggested.
2	Poor Post harvest practices	Training to farmers on post Harvest practices.
3	Improving existing market utilization	Strengthening the existing Market infrastructures like threshing floor/drying yard, Collection centre.
4	Ensuring collective bargaining /marketing	Sub groups of WUA are to be formed for this purpose (i.e) Commodity groups.

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%

Part III: 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
- Stack holders consultation
- Suitable marketing infrastructures based on gap area cropping and diversification.

The following marketing Components/ infrastructures were decided.

Sl. No.	Particulars	Nos.	Estimated cost (Rs. in lakhs)
1	I.E.C. (Information, Education Communication) & C.B.		4.00
2	Agri Business Centre (ABC)	1	= 17.00
3	Collection Centre	1	= 2.00
4	Threshing floor /Drying yard	4	= 12.00
	Total		**35.00**

Phasing of work

The work will be phased out as follows:.

Sl. No.	INFRASTRUCTURE	PHASE				Amount in Lakhs	Finance		
		I	II	III	TOTAL		I	II	III
1	I.E.C. (Information, Education Communication) & C.B.	LS	LS	LS	LS	4.00	2.0	1.0	1.0
2	Agri Business Centre (ABC)	-	1	-	1	17.00	-	17.0	-
3	Collection Centre	-	1	-	1	2.00	-	2.0	-
4	Threshing floor /Drying yard	-	2	-	2	12.00	-	-	12.0
	Total	**-**	**4**	**3**	**7**	**35.00**	**2.0**	**20.0**	**13.0**

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.

Agri Business Centre (ABC):

Location : Lingapuram

Crops : Vegetables and Flowers

One Agri Business Centre is proposed at Lingapuram village of Pennaiyar upto Krishnagiri Sub Basin where Vegetables and Flowers are largely cultivated. The location was decided in consultation with Agriculture / Horticulture Departments based on the diversification. The above village is situated at a distance of 17 K.M from the existing Hosur Regulated Market and Farmers Market (Uzhavar Santhai)

The proposed tomato Market with Cold Storage is at a distance 10 K.M. from the village. Two Reliance India Ltd Vegetable purchase centres are available near by the village (15 K.M distance). Maket Linkage can be made with the purchasing centres.

The following infrastructure is proposed for Agri Business Centre (ABC)

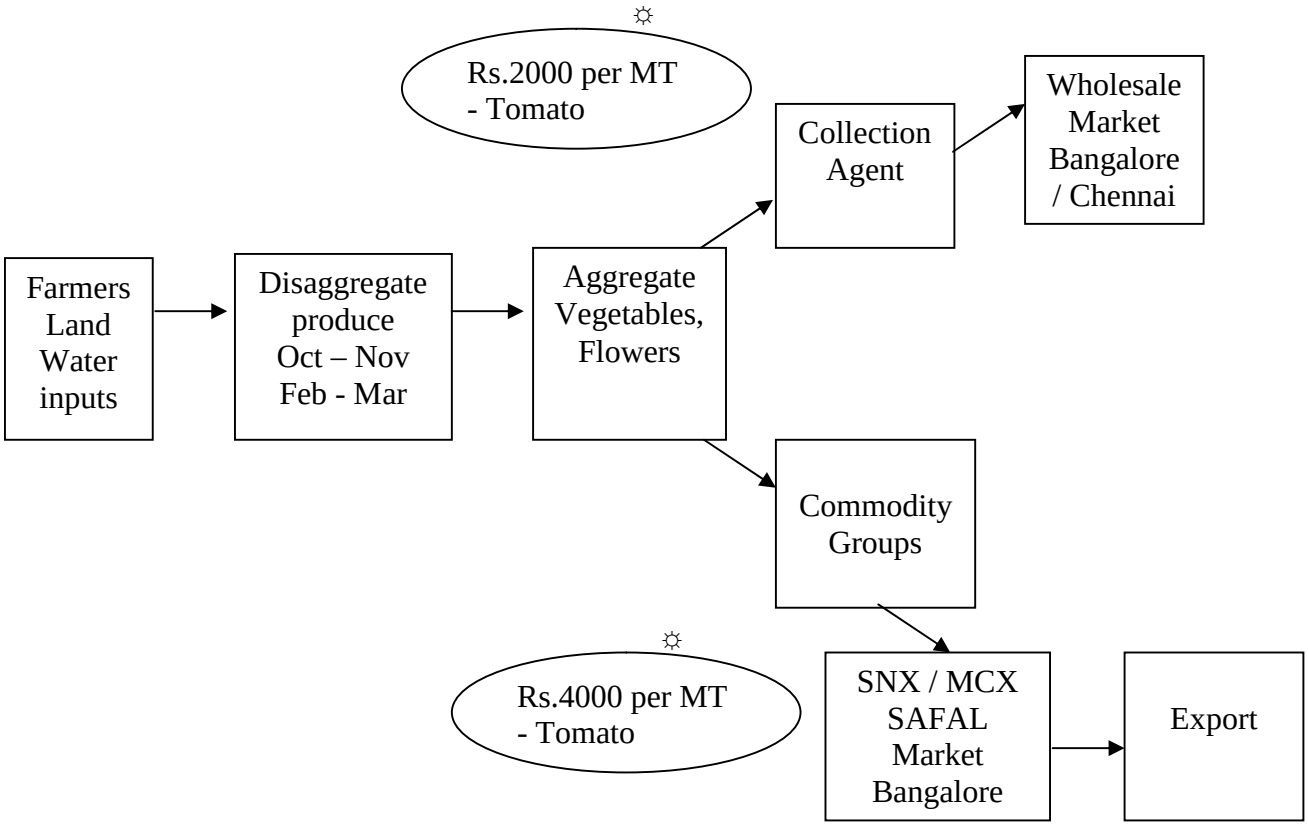
1. Storage shed / Collection centre
2. Input shops
3. Knowledge centre
4. Office Building
5. Vehicle stand / Yard
6. Sanitary arrangements

Agri Business Centre

The proposed ABC will be created at Lingapuram village, which has great potential for Vegetables and Flowers. This ABC will provide infrastructure facilities and also serve as a knowledge Centre based on ‘Hub and Spokes’ concept.

Among other things, ABC will develop value chains for different crops. The expertise available with senior marketing facilitators and the wisdom of the members of Commodity Groups will be utilized fully towards this. A model value chain.

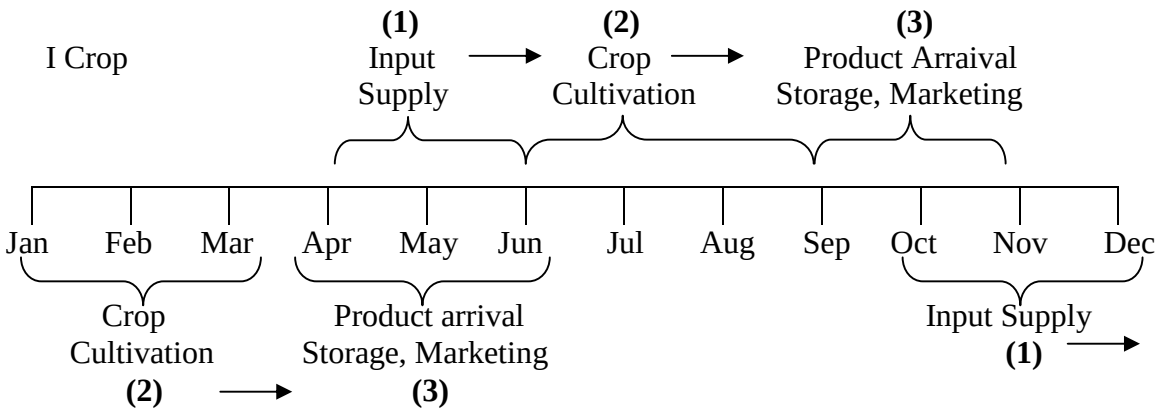
Model Value Chain



☼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



Strategy to be adopted in Agri Business Centre

1. ABC can be maintained by a federal set up of Commodity Groups and monitoring by the Agricultural Marketing Facilitator.

2. Commodity Groups will be trained to maintain the Agri Business Centre by Hub and Spokes method. While the ABC will be hub with basic facilities for Storage Centre for TOT etc., the spokes will constitute the different villages (see details) around ABC experiencing different activities.

3. Especially, youngsters from the Commodity Group may be utilised.

4. Places or villages around Agri Business Centre will be identified for the collection process of Vegetables and Flowers.

5. Proper distribution agents or traders will be identified by the Commodity Group and will have regular contact at ABC.

6. Maintenance of input shops and sanitary arrangements will be maintained by lease process.

7. Information, study process will be conducted by way of training by the Agricultural Marketing staff periodically for which one knowledge centre provided in the Agri Business Centre infrastructure.

8. The various developments envisaged in marketing will trigger new awakening among farmers that may require closer contacts with MCX / SNX and other players of national / global marketing of crops like Vegetables, Flowers etc. It is therefore necessary that IEC & CB activities are also enlarged so that all the farmers in the sub-basin are well exposed to the modern development of marketing.

9. Villages suggested for collection process of Vegetable and Flowers are as follows:

Sl. No.	Name of the Village		Distance from A.B.C.
1	Thumanapalli	-	7 K.m.
2	Mallasandaram	-	5 K.m.
3	Bellathur	-	3 K.m.
4	Alasapalli	-	5 K.m.
5	Berigai	-	11 K.m.
6	Bagalur	-	2 K.m.

10. Places suggested for distribution process.

Sl. No.	Name of Place		Distance from A.B.C.
1	Hosur	-	17 K.m.
2	Bangalore	-	40 K.m.

LOCATIONS:

Based on the intensity of cropping and consequent availability of harvested produce the following locations for marketing infrastructure were proposed in the Sub Basin area.

Agri Business Centre(ABC):

1 Lingapuram. - (Kodiyalam Anicut)

Thrashing Floor/Drying yard

1. Gengaleri - (Gengaleri Anicut)
2. Gooliyam - (Gooliyam Anicut)
3. Ennegolpudur - (Ennegol Anicut)
4. Oddahalli - (Oddahalli Tank)
5. Sokkadi - (Sokkadi Tank)

Collection Centre

1. Samanapalli - (Bothinatham Anicut)

Reality Check

Infrastructural Needs of Sub Basin

1. Name of Structure : Agri Business Centre
2. Name of Sub-basin : Pennaiyar upto Krishnagiri
3. Location / Village : Lingapuram
4. Block : Hosur
5. Influence Area of each Structure (Ha. and village around) : 90.94.0 Hect.
6. Details of Crops grown :

	Name of Crop	Area (Ha)	Productivity (Kg/Ha)	Total Production (MT)
a	Paddy	32.46.0	5500	178.5
b	Ragi	17.74.0	2000	35.4
c	Vegetables	12.79.0	10000	128.0
d	Flowers	0.15.0	10000	1.5

7. Marketable Surplus (M.S) :

	Name of Crop	% of M.S.	Quantity in M.T. or Nos.
a	Paddy	50 %	89.25
b	Vegetables	95 %	121.00
c	Flowers	100 %	1.50

8. Any other Storage facility available in the influence area.

a) Nil

b) Nil

9. Additional facility required : Storage Shed, Drying yard, Pack House Knowledge Base / Training (Hub & Spokes)
10. Facility now proposed : Agri Business Centre

Reality Check

Infrastructural Needs of Sub Basin

1. Name of Structure : Drying Yard
2. Name of Sub-basin : Pennaiyar upto Krishnagiri
3. Location / Village : Gengaleri
4. Block : Krishnagiri
5. Influence Area of each Structure (Ha. and village around) : 73.99.0 Hect.

6. Details of Crops grown :

	Name of Crop	Area (Ha)	Productivity (Kg/Ha)	Total Production (MT)
a	Paddy	42.99.0	5500	236.0
b	Ragi	9.20.0	2000	18.4

7. Marketable Surplus (M.S) :

	Name of Crop	% of M.S.	Quantity in M.T. or Nos.
a	Paddy	50 %	118.0
b	Ragi	10 %	1.8

8. Any other Storage facility available in the influence area.

a) Nil

b) Nil

9. Additional facility required : Drying Yard

10. Facility now proposed : Drying Yard

Reality Check

Infrastructural Needs of Sub Basin

1. Name of Structure : Drying Yard
2. Name of Sub-basin : Pennaiyar upto Krishnagiri
3. Location / Village : Ennegolpudur
4. Block : Krishnagiri
5. Influence Area of each Structure (Ha. and village around) : 55.90.0 Hect.

6. Details of Crops grown :

	Name of Crop	Area (Ha)	Productivity (Kg/Ha)	Total Production (MT)
a	Paddy	35.50.0	5500	195.0
b	Ragi	8.50.0	2000	17.0

7. Marketable Surplus (M.S) :

	Name of Crop	% of M.S.	Quantity in M.T. or Nos.
a	Paddy	50 %	98.0
b	Ragi	10 %	1.7

8. Any other Storage facility available in the influence area.

a) Nil

b) Nil

9. Additional facility required : Drying Yard

10. Facility now proposed : Drying Yard

Reality Check

Infrastructural Needs of Sub Basin

1. Name of Structure : Drying Yard
2. Name of Sub-basin : Pennaiyar upto Krishnagiri
3. Location / Village : Oddahalli
4. Block : Krishnagiri
5. Influence Area of each Structure (Ha. and village around) : 95.95.0 Hect.

6. Details of Crops grown :

	Name of Crop	Area (Ha)	Productivity (Kg/Ha)	Total Production (MT)
a	Paddy	62.37.0	5500	343.0
b	Ragi	9.40.0	2000	18.8

7. Marketable Surplus (M.S) :

	Name of Crop	% of M.S.	Quantity in M.T. or Nos.
a	Paddy	50 %	172.0
b	Ragi	10 %	1.8

8. Any other Storage facility available in the influence area.

a) One Drying yard available

b) -

9. Additional facility required : Drying Yard

10. Facility now proposed : Drying Yard

Reality Check

Infrastructural Needs of Sub Basin

1. Name of Structure : Drying Yard
2. Name of Sub-basin : Pennaiyar upto Krishnagiri
3. Location / Village : Sokkadi
4. Block : Krishnagiri
5. Influence Area of each Structure (Ha. and village around) : 162.94.0 Hect.

6. Details of Crops grown :

	Name of Crop	Area (Ha)	Productivity (Kg/Ha)	Total Production (MT)
a	Paddy	105.91.0	5500	583.0
b	Ragi	14.52.0	2000	29.0

7. Marketable Surplus (M.S) :

	Name of Crop	% of M.S.	Quantity in M.T. or Nos.
a	Paddy	50 %	292.0
b	Ragi	10 %	2.9

8. Any other Storage facility available in the influence area.

a) Nil

b) Nil

9. Additional facility required : Drying Yard

10. Facility now proposed : Drying Yard

Reality Check

Infrastructural Needs of Sub Basin

1. Name of Structure : Collection Centre
2. Name of Sub-basin : Pennaiyar upto Krishnagiri
3. Location / Village : Samanapalli
4. Block : Soolagiri
5. Influence Area of each Structure (Ha. and village around) : 95.79.0 Hect.

6. Details of Crops grown :

	Name of Crop	Area (Ha)	Productivity (Kg/Ha)	Total Production (MT)
a	Paddy	57.45.0	5500	316.0
b	Vegetables	13.90.0	10000	139.0

7. Marketable Surplus (M.S) :

	Name of Crop	% of M.S.	Quantity in M.T. or Nos.
a	Paddy	50 %	158.0
b	Vegetables	95 %	132.0

8. Any other Storage facility available in the influence area.

a) One Drying yard maintained by Panchayat

b) -

9. Additional facility required : Collection Centre

10. Facility now proposed : Collection Centre

PRODUCTIVITY AND MARKETABLE SURPLUS DETAILS (CROPWISE)

Detail	W.O.P (Crops)				W.P. Crops			
	Paddy	Ragi	Vegetables	Flowers	Paddy	Ragi	Vegetables	Flowers
Area (In Hect.)	1590	545	205	-	1870	1805	917	1000
Productivity / Hect / M.T	5.0	2.0	10.0	-	7.0	2.75	12.0	10.0
Total Production (M.T)	8745	1090	2050	-	13090	4964	11004	10000
Marketable Surplus. %	50%	10%	95%	-	50%	10%	95%	100%
Marketable Surplus (M.T)	3975	109	1968	-	6545	496	10454	10000
Rate / M.T	Rs.4500	Rs.5000	Rs.6000		Rs.5000	Rs.6000	Rs.6000	Rs.20000
Total Value (Lakhs)	196.7	5.45	118.0	-	327	29.8	627	2000
Marketing Media	Marketed through Rice Mill owners and whole seller	Marketed through whole seller	Marketed through Commission agents	Marketed through Export Agents	-	-	-	

Capacity building of Farmers.

Farmers in Pennaiyar Upto Krishnagiri Sub-basin mostly depend upon the traditional based cropping pattern. Therefore the priority would be given for training farmers on “Demand or Market driven cropping pattern.

The following are the major subjects that would be dealt with in Capacity Building Programmes for farmers in Agniyar Sub-basin.

- Demand driven cropping pattern / Market linked cropping pattern
- Marketing practices
- Value Chain analysis
- Storage and transportation
- Export Opportunities
- Marketing Kiosks

- Post harvesting technologies
- Food Processing
- Grading and value addition

Capacity building programmes for this Sub-basin would focus more on exposing farmers on food processing and marketing, they will be taken to Agro based industries, major markets, Food processing Units and KVKs. Farmers need to be trained on extensive usage of “Marketing Kiosks”. The fist stage of capacity building programmes would focus on Sensitising farmers to trigger Change and second stage on Marketing Skills and Management. The change process would aim at facilitating the farmer to realize the need for direct involvement in trading. The sequence of Capacity building programmes at Sub-basin level could be as enlisted below.

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. Seminar / Workshop : This is also at Cluster level. Active and Potential farmers will be identified to be trained in Marketing Skills. SHG members will be encouraged to participate in it.

4. Follow-up Visits: Follow-up visits will be carried out to ensure the sustainable application of new skills, methods and ideas.

5. 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”.

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.

SHG members and other active and potential youth in the village may be considered for training on “Marketing Skills”. Involvement of SHG members would be an effective proposition as most of the SHG members are also affected by the present agrarian crisis. This would also provide “Livelihood” for SHG members.

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 Education 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 and outside the state will be organized for Commodity groups (each group may have 20 to 25 farmers). Besides marketing strategies, farmers will also be exposed to storing, sorting, grading and packing methods and skills. Farmers will be taken to regulated markets at Hosur, Krishnagiri and Kaveripattinam.

The cluster level trainings could be conducted at Agri Business Centre at Ligapuram.

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	75 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.	60 farmers in 2 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.	100	Training		One day, at selected villages
Cluster level	Networking with Private enterprises, Corporate companies for direct trading.	1st, 2nd and 3rd year.	150 in different batches.	Interface / Workshop		One day, at a convenient place for farmers.

Estimated Budget – Pennaiyar upto Krishnagiri

	Training content	Description of the cost		Total in Rs
Component 1. Change Behaviour				
Village Level	Village meetings and Campaigns.	IEC		9000
		Telecasting in Local Cable TV	5000	
		Printing of Pamphlets	4000	
Cluster Level	Convincing farmers on the need for direct trading. 5 days Exposure visit. Outside the state.	Food: 75 farmers x Rs.150 x 5 days	56250	225000
		Travel: 75 farmers x Rs.1000	75000	
		Accommodation: 75 farmers x Rs.150 x 5 days	56250	
		Incidentals: 75 farmers x Rs.100 x 5 days	37500	
	Familiarizing farmers with Food Processing & Post Harvesting techniques. Exposure visit. 2 days. Within the state.	Food: 60 farmers x Rs.150 x 2 days.	18000	54000
		Travel: 60 farmers x Rs.200	12000	
		Stipend: 60 farmers x Rs.200	12000	
		Accommodation: 60 farmers x Rs.100 x 2 days.	12000	
Component 2:Technical				
Village level	One day training on Technical Education on Food Processing & Post Harvesting technologies	Food: 100 farmers x Rs.150	15000	32000
		Travel: 100 farmers x Rs.10	1000	
		Stipend: 100 farmers x Rs.100	10000	
		Resources Persons Rs.500 x 4	2000	
		Stationery	1000	
		Training Hall rent	3000	
Cluster level	One day, Interface Workshop - Networking with Private enterprises, Corporate companies for direct trading.	Food: 150 farmers x Rs.150	22500	80000
		Travel: 150 farmers x Rs.100	15000	
		Stipend: 150 farmers x Rs.50	7500	
		Resources Persons Rs.1000 x 8	8000	
		Stationery 150 farmers x Rs.30	4500	
		Hall Rent Rs.5000 x 4 occasions	20000	
		Miscellaneous	2500	
Grand Total				**400000**