AGRICULTURE DEPARTMENT

NICHABANADHI

IAMWARAM PROJECT

DETAILED PROJECT REPORT

AGRICULTURE DEPARTMENT

Sub basin	:	NISHABANADHI
Basin	:	VAIPPAR
District	:	TIRUNELVELI
WRO Region	:	MADURAI
Blocks Covered	:	VASUDEVANALLUR, SANKARANKOVIL AND KURUVIKULAM BLOCKS OF TIRUNELVELI DISTRICT AND VEMBAKOTTAI BLOCK OF VIRUDUNAGAR DISTRICT

2. INTRODUCTION

Nichabanadhi Sub-basin is selected for the second phase implementation of IAMWARM Project in Tamil Nadu under World Bank Assistance.

The registered Ayacut area of the Nichabanadhi Sub-basin is 4200 Ha. The 6 year average rainfall in the division is 741.2 mm. The important crops grown in the sub basins are Paddy, maize, Pulses, Cotton, Sugarcane, sunflower, etc.

2.1 OBJECTIVE

To increase the income of the farmers per unit of land / per unit of irrigation water.

2.2 Plan

- Diversification of low profit high water crops to high profit, low water crops, especially to commercial crops.
- Gap area coverage with irrigated crops.
- Transfer of latest production technologies to increase the productivity through.
  - Demonstrations, training and exposure visits
  - Distribution of critical inputs in time
  - Frequent field visits
  - Strengthening information and publicity
  - Timely evaluation and documentation of reports and achievements.

2.3 The details of month wise, season wise, and year wise rainfall of the Sankarankovil division is given in the table below for the last 6 years from 2001 to 2006

DETAILS OF RAINFALL RECEIVED (In mm)							
Taluk: Sankarankovil.							
Month	Normal Rainfall	Actual Rainfall received					
		2001	2002	2003	2004	2005	2006
Winter							
January	40.1	212	-	-	51	-	8.4
February	32.2	-	43.0	76.4	-	37	-
Winter Total	72.3	212	43.0	76.4	51	37	8.4
Summer							
March	41.3	3.0	38.0	49	-	57	76.6
April	78.3	125.0	39.0	167	74	-	44.5
May	46.0	7.0	57.0	42.6	142	-	-
Summer Total	165.6	135.0	134.0	258.6	216	57	121.1
S.W.Monsoon							
June	11.1	38.0	-	8	6	4	11.4
July	18.3	27.0	-	7	-	42	8.3
August	17.7	-	-	18	9	-	1.0
September	31.5	20.0	53.0	28	84	30	21.1
S.W.Monsoon Total	78.8	85.0	53.0	61	99	76	61.9
N.E.Monsoon							
October	169.2	158.0	254.0	214	189	130.9	273.1
November	183.6	261.5	304.2	94	267	251	352.8
December	71.7	21.0	3.0	78	10	70.9	11.5
N.E.Monsoon Total	424.5	440.5	611.2	386	466	452.8	637.4
TOTAL	741.2	872.5	791.2	782	832	837.8	808.7

2.4 SUB BASIN - BASE LINE DATA

IAMWARM PROJECT - NISHABANADHI SUB BASIN

2.4.1. Land utilization pattern (9 fold classification)

1.	Forests	
2.	Unused Barren land	103 ha
3.	Land utilized for other practices except cultivation	-
4.	Waste land	37 ha
5.	Grazing land	20 ha
6.	Leftover cluster of coconut trees fruit trees etc	94 ha
7.	Current fallow land	242 ha
8.	Other waste land	501 ha
9.	Net area under cultivation	3205 ha
		4200 ha

2. Important Agriculture seasons (Furnish with months)

1. Annual
2. I crop (Sep - Jan)
3. II crop (Feb - May)
4. III crop (June - Sep)

3. Cropwise important technologies practices adopted.

1. Paddy - SRI Technique
2. Pulses - Improvement of pulses production by 2% DAP solution spray, INM
3. Cotton - INM, IPM
4. Sunflower - Use of Hybrids
5. Maize - INM, use of Hybrids

4. Existing soil types:

1. Black soil
2. Red soil

Problem soils if any with extent : Presence of alkaline soils at some extent.

5. Important farm related infrastructure available – No

6. Details of existing adoption/prevalenee of following practices (in ha)

1.	SRI	-	20ha
2.	Precision farming	-	5 ha
3.	Bio fertilizers	-	50 ha
4.	INM/IPM	-	INM-Nil IPM - 10 Ha
5.	Organic farming	-	30 ha
6.	Micronutrient application	-	Nil

7. Crop demonstration laid (Nos)

1.	Paddy	=	6
2.	Pulses	=	6
3.	Cotton	=	5
4.	HB' Maize	=	-
5.	Groundnut	=	-
6.	Coconut IPM	=	-
7.	Coconut INM	=	-
8.	Groundnut IPM	=	-
9.	Organic farming	=	5

8. Non crop demonstration laid (Nos)

i.	Coirpith compost	ii.	Vermi compost
	Nil		Nil

9. Cropwise (Irrigated) important varieties and its duration.

1.	Paddy	-	120 days
2.	Cotton	-	165 days
3.	Maize	-	115 days
4.	Sunflower	-	75 days
5.	Pulses	-	65 days

10. Average size of Holdings (Irrigated) ha = 2369 ha

Farm Families = 800 to 1000

11. Number of farmers:

Marginal	Small	Large	Total
250	600	150	1000

12. Any other item which are relevant and important:

Agricultural crops are cultivated based on the availability of water in the sub basin mostly during rainy season.

2.5 Existing Agricultural Practices in the Sub basin are:

2.5.1. Distribution of Inputs

(a) Seeds:

Certified seeds of paddy, Maize, pulses, and cotton, Sunflower are distributed through AEC's. Private outlets are also distributing the certified seeds to a limited extend. But in crops like maize, sunflower, cumbu, and vegetables, private hybrid seeds distribution is more than Agriculture Department.

(b) Soil

The Soil types are as follows.

1. Block Soil Series
2. Red Soil Series

Farmers testing their soils mostly once in a year with the assistance of the Agriculture extension staff of the area. The soils are mainly tested through the departmental Soil Testing Labs (STL) and Mobile Soil Testing Labs (MSTL) available nearby. Few farmers rarely test their soils through TNAU and private sources also.

C. Organic Farming

Organic farming is not in practice so far in the sub basin. Necessary steps are being taken to educate the farmers through demonstrations and publicity. But many of the farmers apply organic manures along with chemical fertilizers in their fields. However 100 % use of organic manures is not

practiced in the sub basin by the farmers. Slowly farmers are aware of the benefits of the use of organic manures and it may take some more time to adopt significantly. In future, the scope of application of organic manures is more for horticulture crops, especially for vegetables and flower crops which fetches special price through elite consumers.

(d) INM and IPM Practices

Farmers are applying unlimited quantity of fertilizers in wetland. However meagre quantity of fertilizer is only applied for rain fed crops. Limited farmers adopt INM and IPM practices. The adoption of these practices will increase significantly in future due to the extension efforts proposed to be taken by the Department.

(e) Actual Extension Services Available for Transfer of Technology (TOT)

For transfer of latest farming techniques, many extension methods are being adopted. One of the main extension services is existence of Agriculture Extension Centres in all the block headquarters and sub depots in the needy locations. Through AEC's required critical farm inputs especially seeds, bio-fertilizers, bio-pesticides, micro nutrients and sprayers are distributed to the farmers mostly under subsidized cost. Up to date knowledge of farming is lacking among the farmers at large. Besides distributing farm inputs, required technical advice is essential for increased productivity. As per the Training and Visit program norms, there must be one Village Extension Worker (VEW) for every 800 to 1000 farm families. But such norm is not followed in reality due to vacancies at all levels of extension staff.

Actual Extension Services available for TOT

Government - Agricultural Extension Centres

Agricultural Development Officer	3
Agricultural Officer	5
Assistant Agricultural Officer	7
Total	**15**

2.5.2. Ground Realities of Irrigation Practices-

The details of water availability season wise and source wise are given below.

S. No	Source	Season	Period	Quality
1	Tanks	Pishanam	Oct-Jan	Good
2	Wells	Pishanam	Nov - Feb	Good
		Summer	Mar-May	Average

a. Micro Irrigation

Micro irrigation practices are increasing year by year and becoming popular among the farmers. The details of area to be covered under drip irrigation in the project is given under the head counter measures.

b. Drip with Fertigation

Fertigation practice is being popularized among the farmers and is used only for sugarcane crop now by few farmers. Slowly, the practice will be extended to the other crops like cotton.

2. 6. NICHABANADHI SUB BASIN - CROPPING PATTERN

Sl. No	Season	Name of the crop	Without project				With Project			Difference (HA)
			F.I	P.I	Gap	Total	F.I	Gap	Total	
1 (a)	**Perennial**	Coconut	94			94	94		94	0
		Fodder				0	85		85	85
		Gap			140	140		140	140	0
		(a) Sub Total	**94**	**0**	**140**	234	**179**	**140**	319	85
1 (b)	**Annual**	Sugarcane	324			324	324		324	0
		Banana	56			56	176		176	120
		(b) Sub Total	**380**	**0**	**0**	**380**	**500**	**0**	**500**	120
2	**I Crop**	Paddy	1965	227		2192	1650		1650	-542
	(Sep-Jan)	Cotton	28	82		110	110		110	0
		Chillies				0	100		100	100
		Tomato	10			10	30		30	20
		Brinjal				0	20		20	20
		Bhendi				0	21		21	21
		Gourds				0	17		17	17
		Fodder Cholam				0	75		75	75
		Maize	55	372		427	700		700	273
		Sunflower				0	340		340	340
		Pulses				0	318		318	318
		(c) Sub Total	**2058**	**681**	**0**	**2739**	**3381**	**0**	**3381**	642
		Total (a+b+c)	**2532**	**681**	**140**	**3353**	**4060**	**140**	**4200**	847
		Fallow	**0**	**0**	**857**	857	**0**	**0**	0	-857
		Grant Total	**2532**	**681**	**997**	**4210**	**4060**	**140**	**4200**	-10
3	**II Crop**	Paddy	198	68		266	100		100	-166
	(Feb-May)	Cotton	82	150		232	232		232	0
		Tomato				0	30		30	30
		Brinjal				0	30		30	30
		Bhendi				0	39		39	39
		Gourds				0	16		16	16
		Sunflower				0	250		250	250
		Pulses	76	36		112	152		152	40
		Maize				0	300		300	300
		Total	356	254	0	610	1149	0	1149	539
4	**III Crop**	Pulses		89		89	100		100	11
		Maize				0	50		50	50
		Sunflower				0	100		100	100
		Total	356	254	0	610	250	0	250	539
							1399		1399	
		Overall Grant Total	**198**	**1068**	**997**	2263	**5934**	**140**	5599	3336
		Cropping Intensity				**54**			**130**	

2. 7. Cropping Pattern

I. Perennial crops:

Among the perennial crops, importance is given to the sugarcane crop in panaiyur ayacut area.

II. First season crop:

During the first season the cultivation area has been increased to 4060 Ha from 3203 Ha. The rain fed gap of 997 ha and partially irrigated area of 681 Ha will be converted in to fully irrigated area in the project. More importance is given to the commercial crops like maize, sunflower, hybrid vegetables which fetches very good marketability.

III. Second season crops:

Summer crops like cotton, pulses, maize, sunflower are given due importance. It is proposed to increase the area under cultivation by converting the un cropped area (736 Ha) to Fully irrigated cropped area.

IV. Third Season Crops:

Pulses are generally grown in the season, Marginal increase in area (by 11 ha) in proposed as fully irrigated crop under pulses.

2. 8. Components of Activities

The developmental components of activities for the sub-basin were finalized based on the field experience gained and the necessity felt during the joint walk through survey of the cross section of the sub-basin and also as per the decision taken during the joint meeting with the WRO, Line Department, WUA / FA and also as per the discussion had with the local Agriculture Extension officers of sub-basin. The main objective of the components proposed is to improve the productivity per unit of area / per unit of irrigation water. These components of activities may increase the standard of living of the farmers by getting more income than before.

The physical and financial requirement for the development components of activities have been worked out for 3 years of project period.

2. 9. CROPWISE AREA, PRODUCTION, PRODUCTIVITY AND INCOME

S. No	Crop	Area (Ha)			Productivity (MT/Ha)			Production (MT)			Income of Project (Lakhs)		
		WOP	WP	INCRS	WOP	WP	INCRS	WOP	WP	INCRS	WOP	WP	INCRS
1	Paddy (as rice)	2458	1750	-708	4.018	4.670	0.652	9876.244	8172.5	1703.744	1185.149	980.7	-240.44
3	Maize	427	1050	623	2.500	3.000	0.500	1067.5	3150	2082.5	64.05	189	124.95
4	Sunflower	0	690	690	1.200	1.500	0.300	0	1035	1035	0	186.3	186.3
5	Pulses	201	570	369	0.500	0.700	0.200	100.5	399	298.5	25.125	99.75	74.625
6	Cotton	342	342	0	1.500	2.000	0.500	513	684	171	102.6	136.8	34.2
7	Sugarcane	324	324	0	75.000	100.000	25.000	24300	32400	8100	252.72	336.96	84.24
8	Coconut	94	94	0	70 No / Tree / yr	100 No / Tree / yr	30 No / Tree / yr	9.87 Lakhs nuts	14.1 Lakhs nuts	4.23 Lakhs nuts	29.61	42.3	12.69
	Total	3752	4726	974	84.72	111.9	27.152	35857.24	45840.5	9983.3	1659.25	1971.81	312.56

2. 10. Challenges thrown up by Diversification / Area Expansion / Gap Coverage

1. WRO should ensure quality irrigation water availability throughout the cropping period for the proposed cropping pattern. WRO should ensure flexibility in giving irrigation water during sowing to harvest seasons, so that farmers can get water in time to do various cropping operations as and when they need.
2. Proposed cropping pattern for the project given in the table is based on the Agro climatic suitability, market trend, soil type and also based on the choice of the farmers (WUA).
3. Required certified seeds and inputs should be made available in all the Agriculture Extension Centres (AEC), and Regional Research Stations, TNAU and through private sources.
4. Regarding diversion and introduction of new crops / hybrids, lengthy discussions were held with the WUA / FA during the joint walkthrough and also in joint discussion meetings and the farmers accepted the new approach. To change the mind-set of the farmers, trainings and demonstrations will be arranged to convince them. Required publicity and propaganda will be done through various media to educate farmers in time.
5. In addition to the available Agriculture Extension Services, in the sub-basin a well established farmer information centre is to be developed in the project implementing area.
6. Information Education and Communication (IEC) facilities will be strengthened at AEC level. Required trainings will be imparted both to the farmers, extension workers periodically with the assistance of TNAU.

2. 11. Solutions and Recommendations

To overcome the challenges detailed above, the issues were discussed during the joint walkthrough in the sub-basin and also during the joint meetings with WRO, Line Department officials and WUA / FA etc.

During the above meetings and walkthrough, the farmers were consulted frequently and the demands were chalked out. The details of WUA / FA demand & Agriculture components of activities which was finalized during the joint meeting are given below along with the cost estimate for three years.

2.12. Diversification of crops

The total Ayacut area of the sub-basin is 4200 ha, of which only 3203 ha is under cultivation. Hence there is a gap of 997 ha which is kept as fallow. In this gap area, it is proposed to cover with maize, sunflower and hybrid vegetables, the full gap will be covered with in the project period of 3 years.

During the joint meeting held with the Water Users Association/ Farmers Association (WUA / FA), WRO and other Line Department Officials it was decided to take up diversification of crops in the proposed cropping pattern for the project which are market driven / profit oriented commercial crops. **Accordingly maize, pulses, sunflower, sugarcane and hybrid vegetables** are selected. The cultivation of these crops in the respective tank areas have also been fixed based on the soil conditions and agro climatic suitability. It is also decided to supply the required certified seeds, hybrid seeds etc. AEC, duly following World Bank procurement norms.

2.13. Location of the diversified crops

Maize and sunflower are to be introduced in the tail end of the Ayacut. Since the paddy is not fetching good income. It is proposed to replace it with sugarcane din the project in panaiyur.

2.14. Strategy:

The farmers will be encouraged to go in for well irrigated maize, sugarcane, sunflower cotton & pulses crops till WRO works are completed and gap area is irrigated by Surface Water.

2.15. Commodity Groups:

In cluster villages commodity groups for the Focus crops like Paddy, Maize, Pulses, will be formed to ensure full adoption of production technologies to get maximum productivity and also to get the maximum price for the produce.

For each focus crops depends upon the area 5 to 10 groups comprising 20 to 25 farmers in each groups will be formed. Required training on crop production, value addition, and market strategies will be imparted to the members of the respective groups.

The members of the commodity groups will also be utilized as opinion makers to motivate the fellow farmers growing the particular crop of interest.

The commodity groups members will be included in the exposure visit to acquire additional knowledge and interest in growing the crop of their choice. It is

also proposed to entrust the task of maintaining the assets to be created under the project to the commodity groups wherever the WUAs are not formed.

2.16 Description of the components of activities finalized & agreed are given below:

1. SRI – (Demonstration)

Many farmers not following the recommended doses of plant nutrients as per the soil test for the crops and Planting of Single Seedling with wider Spacing and Especially for paddy the adoption is poor. More nitrogenous fertilizes are applied often. Bio-fertilizers and Micro nutrient application are also poor for paddy crops. Hence 10 Nos. of 10 ha. (100 ha.) SRI demonstration have been proposed. The total cost of this component is Rs.6.000 lakhs. Due to this demonstration, the present productivity of paddy from 4.018 Mt. / ha. (as rice) could be increased to 4.67 MT/ ha. (as rice) in the project. This demonstrations will be laid in the farmers fields.

2. Improvement in pulses production (Demonstrations)

The present productivity of pulses in the Sub basin is only 500 kg /ha. It is due to non adoption of DAP foliar spraying by many farmers during flowering and pod formation stages as recommended. Application of micro-nutrient like zinc sulphate is also not followed by many farmers. Hence to educate the farmers and bring up the pulses productivity, 5 numbers of 10 ha. (50 ha.) pulses demonstration have been proposed. The total cost of the component is Rs.1.250 lakhs. Through this demonstrations the present pulses productivity of 500 kg. / ha. could be increased to 700 kg. / ha. in the project period. This demonstration will laid in the individual farmers fields.

3. Improvement in Maize Production (Demonstration)

The productivity level of existing maize varieties are far lower than that of the high yielding modern Hybrids. in order to improve the productivity and thereby the increasing the net income of the farmers, package demonstration with high quality hybrid seeds of maize is suggested. It is proposed to lay 60 Ha. (6 No. of 10 Ha.) of demonstration the total cost of the demonstration is Rs.2.400 lakhs.

2.17. Details of Demonstrations Proposed

Sl. No	Name of Crop	Area under cultivation	Demonstration Area (Ha)
1.	Paddy	1750	100
2.	Maize	1050	60
3.	Pulses	570	50
	Total		210

2. 18. Expected Outcome

The expected outcome through the project is summarized below.

30% to 40% adoption of new technological practices.

20% to 50% increase in productivity.

10% to 20% increase in farm income.

To achieve the above outcomes, the proposed components of activities by the Agriculture Department are as follows.

2. 19. IAMWARM PROJECT - NISHABANADHI SUB-BASIN

Sl.No	Name of the Component	Unit Cost (Rs)/ Ha	Physical Ha.				Influence Area Ha.	Financial (Rs in Lakhs)			
			2008-2009	2009-2010	2010-2011	Total		2008-2009	2009-2010	2010-2011	Total
I	Crop activity demonstration										
a.	SRI	6000	50	50	0	100	700	3.000	3.000	0.00	6.000
b.	Maize	4000	30	30	0	60	600	1.200	1.200	0.00	2.400
c.	Pulses	2500	30	20	0	50	500	0.750	0.500	0.00	1.250
	Sub Total		110	100	0	210	1800	4.950	4.700	0.00	9.650
	IEC/CB							1.350	1.000	0.00	2.350
	Grand Total							6.300	5.700	0.000	12.000

* includes Sub-basin team building and change management training.

Farm implements cost for SRI

Cost of Rotary weeder, Marker etc. @ the rate of Rs.1750/ha. } 1.750 lakhs

2.19.1 Subsidised cost of demonstration:

SRI Rs.6000/ha

Maize Rs.4000/ha

Pulses Rs.2500/ha

2.19.2 Total Cost for the SRI Demonstrations Proposed (TNAU Norms): SRI / ha

S. No	Particulars	Amount(Rs.)
1	Seed cost with seed treating chemicals (8kg/ha) @ Rs. 25 /kg	200.00
	Cost of nursery raising	500.00
	Cost of fertilizers (150:50:50 kg NPK / ha)	
	Urea - 330 kg @ Rs. 5 / kg	1650.00
	Super Phosphate - 312.5kg @ Rs. 4 /kg	1260.00
	Muriate of Potash – 83 kg @ Rs.4.75/ kg	395.00
	$ZnSO_4$ 25 kg @ Rs. 25 / kg	625.00
	Cost of Bio fertilizer (Azospirillum and Phospho bacteria @ 10 pockets each)	120.00
	Pseudomononas 2.5 kg / ha @ Rs. 100 /kg	250.00
	Biopesticides	1000.00
	Total	**6000.00**

2.19.3 Total Cost for the Maize Demonstrations Proposed (TNAU Norms): Maize/ha

Sl. No	Particulars		Amount in (Rs.)
1	Hybrid Seed Cost (20 kg/ha) @ Rs.150/kg	:	3000.00
2	Cost of fertilizers	:	
	Urea – 160 Kg @ Rs.5/kg	:	800.00
	Bio inoculants	:	200.00
	Total	**:**	**4000.00**

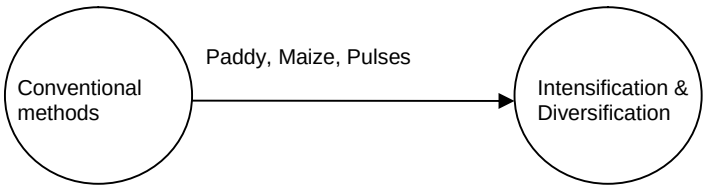
2.19.4 Total Cost for the Pulses Demonstrations Proposed (TNAU Norms): Pulses/ha

S.No	Particulars		Amount(Rs)
1	Seed cost with seed treating chemicals (25kg/ha) @ Rs. 50/kg	:	1250.00
2	DAP 10 kg / ha @ Rs.13/kg	:	130.00
3	MOP 41.5 kg @ Rs.4.75/kg	:	200.00
4	Super phosphate 230 kgs @ Rs.4/kg	:	920.00
	Total		**2500.00**

IAMWARM Project – Agriculture Department
Capacity Building Programmes for Farmers in Nichabanathi Sub-basin.

Capacity building of Farmers.

If farm ecology and economics go wrong, nothing else will go right in agriculture. This is the principal message of the current agrarian crisis. The agrarian crisis is likely to spread if the economics of small-scale farming is not improved. It is, hence, imperative to include the small and marginal farmers in a large numbers in the capacity building programmes of Nichabanathi Sub-basin.



1. Capacity building programmes for this Sub-basin would focus on two major components, viz, 1. Change Behaviour and 2. Technical input. Both the components would find their respective places at two levels namely village and cluster. However, training efforts at village level would focus more on “Change Behaviour”, while training programmes at cluster level would give priority for technical input.

Prior to initiation of Capacity Building programmes for farmers, it has been proposed that the AAOs can have informal discussions with farmers in small groups. “Grama Thinnai” is a quite common site in most of the villages where farmers and agricultural laborers would gather together to chat with each other in an informal way. This traditional village platform can effectively be used by AAOs in order to initiate the discussions and trigger the thinking process towards “Change Behaviour” in agriculture practices.

2. Training strategies have been devised keeping in view some of the socio-cultural characteristics of farmers in this region. Village meetings and campaigns have been proposed for propagations of Less Water Intensive and sustainable agriculture practices. Exposure visits at cluster level would be appropriate to facilitate farmers to be convinced that it is possible to change their agriculture practices for better and sustainable results. Demonstrations at the village level would be organized to introduce new technical and methodological aspects followed by workshop at cluster level to impart pertinent skills.

3. 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. Follow-up visits would also be focused on enhancing the confidence levels of farmers in order to motivate them for continuous application of new skills and methods in their fields.

4 Farmers, SHG members and other Community leaders who have been actively involving in Community Development Activities in the village may be identified and motivated to participate in the IAMWARM Project as “Change Agents”, hereinafter referred as CAs. CAs from Agriculture Sector may be motivated to attend training at cluster level and used as trainers at the village level CB programmes. CAs may also act as Nodal members for the project at the village level.

6.5 (a) 5 The sequence of Capacity building programmes at Sub-basin level could be as enlisted below.

1. Village Meetings and Campaigns: IEC materials will be used. Farmers will be sensitized through Village meetings and Campaigns on “Water Resources and Conservation” along with the need for new methods and best alternatives for enhancing their farm income.
2. Exposure visits: This is organized at cluster level. Selected farmers will be taken for exposing them on new agricultural practices, methods, skills and ideas.
3. Seminar / Workshop: This is also at Cluster level. Active and Potential farmers will be identified to be referred as “Change Agents”. These Change Agents will attend Seminar / Workshop. IEC materials such as Posters, Pamphlets and leaflets may be used as training aids.
4. One day trainings and On field/site trainings: The Change Agents, who have attended Seminar / Workshop will also be the resource person for On field training programmes at village level, along with the concerned Department Field Functionaries or Officers.
5. Follow-up Visits: Follow-up visits should be made to ensure the sustainable application of new skills, methods and ideas.

Training Matrix

	Training content	Time frame	No.of trainees / Villages	Type of CB Programme	Who will do it	Duration and Location
Component 1. Change Behaviour						
Village Level	Awareness on the concept of "more crop/profit for drop of water".	April –May 3 years	All Villages in Sub-basin	Village Campaign, Village level meetings.	AAO & ADO	One day, at selected villages.
	Awareness creation on "SRI – Paddy, Maize and Pulses.	August – September 3 years	All Villages in Sun-basin	Village level meetings.	AAO	One day, at selected villages.
Cluster Level	"Seeing is believing" – SRI cultivation	August 2008	150 farmers in batches	Training Exposure visit (Within the district and State)	ADO & AAO	Two days, venue to be selected.
	"Seeing is believing" – Maize and Pulses	September	75 farmers	Training Exposure visit (Within the district and State)	ADO & AAO	Two days, venue to be selected.
Component 2:Technical						
Village level	"SRI Paddy Cultivation".	September –October 3 years	200	On Farm Training	ADO & AAO	One day at each village.
	SRI skill training or Laborers		75 Laborers	Training	ADO & AAO	One day at villages.

Estimated Budget

Estimated Budget				
	Training Content	Description of the Cost		Total In Rs.
Village level – Change Behaviour	Campaigns and Village meetings.	IEC Materials		25000
		Telecasting in Local Cable TV	10000	
		Printing of Pamphlets	5000	
		Wall Paintings	5000	
		Hiring of Street theatre team	2500	
		Others	2500	
Cluster level - Change Behaviour	Exposure visit, SRI Cultivation for 100 farmers for two days.	Food: 150 farmers x Rs 100 x 2 days	30000	75000
		Travel: 150 farmers x Rs 100	15000	
		Stipend: 150 farmers x Rs 100	15000	
		Accommodation: 150 farmers x Rs 50 x 2 days.	15000	
	"Exposure visit" – Maize and Pulses – 50 farmers. One day	Food: 75 farmers x Rs 100 x 2 days	15000	37500
		Travel: 75 farmers x Rs 100	7500	
		Stipend: 75 farmers x Rs 100	7500	
		Accommodation: 75 farmers x Rs 50 x 2 days.	7500	
Village level - Technical	On Farm trainings	Lump-sum	50000	50000
Cluster level - Technical	One day training – SRI skills for 50 Laborers -	Food and travel.	15000	22500
		Incidentals.	7500	
Total Training of personnel on Management aspects Grand Total In lakhs				210000 25000 235000 2.350