3. Department of Horticulture and Plantation Crops

Pennaiyar

(upto Krishnagiri)

3. Department of Horticulture and Plantation Crops

Pennaiyar upto Krishnagiri Sub-Basin

3.1. Soil

- Mostly the soil nature is red-loam; sandy loam; black soil with pH ranging from 6.5 to 8.5
- Soil is tested by soil testing laboratory at Assistant Soil Chemist, Department of Agriculture, Krishnagiri
- Climate mainly tropical with temperature ranging from 21.0 to 34.7º C and relative humidity from 64 to 96 %
- In view of the large number of soil samples to be tested in the intensive cropping pattern, private sources like Agri. Clinic, MFL services also will be utilized in collaborative understanding with Agriculture Department

3.2. Ground realities

- Ridges & furrow system is followed for vegetables and Basin irrigation is followed for fruits

3.3. Labour Issues

- Availability of labor is very scarce.
- Labor availability is a problem due to migration of labors to urban area to get more wages by doing non agricultural works.
- Spinning mill / Ginning factories / Modern Rice-mill / Sago Industries are very popular in this sub-basin; hence, labour availability is a problem for aycut farmer
- Many farmers use family labour in addition to hired labour by paying exorbitant wages
- Migration of farm families are very common due to prevailing non favorable condition for farming

3.4. Existing Irrigation Potential

Sl No	Irrigation Potential	Area Ha
1	Fully irrigated	1308.00
2	Partially irrigated	1000.00
3	Gap Area	2173.53
	Total	**4481.53**

3.5. Irrigation

- Irrigation is by open well and borewell.
- Mostly farmers are using ridges and furrow irrigation system. Only less than 10 % of the farmers are using drip irrigation.
- Mainly farmers are raising crops under rainfed condition.Micro-irrigation with Fertigation will be implemented by Agri. Engg. Dept.

3.6. Existing Cropping Pattern And Season

Sl.No	**Crop**		**Season of Cultivation (Months)**	
			From	**To**
1	Fruits			
	1	Banana	January	December
	2	Mango	June-July	Onwards
2	Hybrid Vegetables			
	1	Bhendi	June-July	Onwards
			June-July	Onwards
	2	Tomato	June-July	Onwards
	3	Cabbage	June-July	Onwards
			June-July	Onwards
	4	Cauliflower	June-July	Onwards

3.7. Existing Horticulture Crop Scenario

The following horticulture crops are grown in the sub basin

S.No	Crop	Varieties	Without Project Area (Ha)	Production (M.T)	Productivity (M.T) / Ha
A.	Fruits Plants		74		
1	Banana	G – 9	38	1330	35.000
2	Mango	Neelum, Bangalora, Banganapalli, Alphonso	36	180	5.000
B.	Vegetables crops		150		
	Total		224		

Actual extension service available for TOT – government / private

- For transfer of latest farming techniques, many extension methods are being adopted. Besides distribution of inputs, required technical advice essential for the increased productivity are also given to the farmers
- 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 norms are not followed in reality due to vacancies at all levels of extension staff
- In view of the above, it is proposed to outsourcing Technical Input Provider – one person for the sub-basin for 3 years
- Need for more extension personnel are required

3.8. Current Status

- Farming System is predominantly conventional; non-technological and highly unproductive at that

3.9. Implementation Strategy

- Out of total ayacut area of 4482 Ha, horticultural crops would fill in in 2137 Ha – the break-up is : i. Fruits 328 ii. Vegetables 841 iii. Flowers 968

A. Demonstrations

- Demonstrations would play the ‘cause’ for the inspiration
- Impact would be in a ratio of 1:50

- High-tech demonstrations like Poly house, Shed net, Plastic malching, INM, IPM, Organic farming, Vermi compost etc. will be organized with assistance from NHM scheme and this effort will be supportive to the impact area expansion targeted under IAMWARM.
- Minimum one demonstration under each category will be organized in the sub-basins area.
- Cluster approach will be followed for organizing community nurseries under high-tech demonstration.

B. Area Expansion Programme

- A.E.P, aims sustaining the interest of ayacut farmer until a time the ayacut farmer reaches a threshold when he no longer needs the project support
- A.E.P is planned to run from I year, (15%), II Year of the project viz., 2009 – 10 from where it can pick up the impact spread
- A.E.P is programmed for III year of the project also, viz., 2010 – 11
- A.E.P is is partially subsidized, i.e., 50 % subsidy for vegetables & 75 % for fruits & spices & medicinal crops to the total package
- Impact area expansion in the sub-basin area with the assistance of on going central and state sector scheme will be covered as follows;

Sl. No.	Name of the Crop	Impact area to be covered
1	Aster	55 Ha
2	Chrysanthemum	180 Ha
3	Jasmine	30 Ha
4	Rose	30 Ha
5	Others	200 Ha
Total		**495 Ha**

3.10. Constraints

3.10.1. Seed

- Certified seeds & traditional low-yielding varieties of vegetable seeds are used by farmers at present. Many farmers use their own seeds & also exchange seeds among themselves
- Few innovative farmers get required seeds from private sources

- Hybrid seeds will be procured through local shopping procedures from reputed & quality seed corporate firms on World Bank guidelines

3.10.2. Contract Farming

- Contract farming is not followed in command area. Farmers are reluctant to adopt contract farming practice due to fluctuation in produce prices and for want of legal guarantee.
- Steps may be suggested to convince the farmers in coordination with Agriculture Marketing Department to take up contract farming at least for commercial crops .
- They will be exposed to the contract farming area during exposure visit

3.10.3. Pre & post harvest practices adopted

- Adopted –None

3.10.4. Intervention Suggested

Proposed Irrigation Facilities

- 2137 Ha under Horticulture Crops is suggested to be covered under micro irrigation with fertigation by the Agricultural Engineering Department
- Crop Intervention Suggested to be Taken up by Agriculture Marketing

Vegetables

- Grading
- Processing
- Packing
- Refrigerated vans for transport.
- Market Intelligence

Awareness would be created among the farmers in pre and post harvest techniques by giving training to the farmers.

3.11. Commodity Groups

Commodity Groups will be formed covering the fruits, vegetables, spices and condiments.

- The Groups will be trained in cultivation, transport, storage and marketing activities through trainings, Exposure visits etc.
- The assets created through Marketing Department and other agencies will be maintained by these groups alongwith Water Users' Associations.

Table –I

Area Expansion Programme with assistance from IAMWARM Project

S. No	Crop	Extent Proposed (Ha)				Subsidy Cost/Ha	Total Amount Proposed (Rs. in Lakhs)			
		2008-09	2009-10	2010-11	Total		2008-09	2009-10	2010-11	Total
I Fruits										
1	T. C. Banana	20	20	20	60	0.250	5.000	5.000	5.000	15.000
2	Mango	20	20	20	60	0.225	4.500	4.500	4.500	13.500
II Hybrid Vegetables/Spices										
1	Tomoto	20	20	20	60	0.150	3.000	3.000	3.000	9.000
2	Bhendi	15	10	10	35	0.150	2.250	1.500	1.500	5.250
3	Cabbage	20	20	20	60	0.150	3.000	3.000	3.000	9.000
4	Cauliflower	20	20	20	60	0.150	3.000	3.000	3.000	9.000
III Flowers										
1	Aster	10	10	-	20	0.120	1.200	1.200	-	2.400
2	Jasmine	10	10	-	20	0.120	1.200	1.200	-	2.400
3	Chrysanthemum	10	10	-	20	0.120	1.200	1.200	-	2.400
4	Rose	10	10	-	20	0.120	1.200	1.200	-	2.400
IV IEC/CB (includes Team Building and Change Management Training)							0.700	0.700	0.600	2.000
	Total	**155**	**150**	**110**	**415**		**26.750**	**26.000**	**19.600**	**72.350**

Total fund requirement from IAMWARM scheme

2008-09 26.750 lakhs
2009-10 26.000 lakhs
2010-11 19.600 lakhs

Total 72.350 lakhs