

Various issues, problem and opportunities have been identified on the basis of primary and secondary information, along with results of the SWOC analysis of the existing farming system available under different AES. This was done with a view to develop need based extension and research strategies for the district. It is grouped under six categories such as agriculture production system, horticulture production system, animal production system, fish production system, natural resource management and participatory research. Each issue was gain categories as E, R & P where E = Extension, R= Research & P= Policy. A summary statement of issues with relevance to different AES is given in the following table.

1. AES-I Plain Land Irrigated

Management of Technologies	<ul style="list-style-type: none"> ✦ Decreasing trend in use of organic manures in rural pocket ✦ Knowledge and skill gap in INM, IPM, IDM, IWM & ICM ✦ Crop diversification from paddy to non-paddy gaps in rain fed high lands ✦ Expansion of area under cash crops ✦ Non availability of improved seeds materials for tuber crops ✦ In-adequate staff position in all Departments ✦ Gap in skill and production technology of all crops. ✦ Commercial cultivation of floriculture and mushroom ✦ Scope for plantation crops and of medicinal plant ✦ Establishment of processing plant in horticultural sector ✦ Improper health care, poor sanitation measures in cowshed of livestock ✦ Opportunity for expansion of Goatery for landless farmer. ✦ Technological gap in adoption of scientific production ✦ Practices for a good yield in fishery sector ✦ Poor technological infrastructures ✦ Scope for intensive Pisciculture in ponds/tanks, MIPS etc. ✦ Poor knowledge on soil and water conservation technologies ✦ Strengthening the work of Pani panchayat and renovation of field channels of all water sources
Management of Inputs	<ul style="list-style-type: none"> ✦ Non availability of designed and improved variety of seeds and seed materials both in agriculture & horticulture sector ✦ Non-availability of Bio-fertilizer ✦ Lack of water storage structure for rain water harvesting to save the crop at the time of critical period ✦ Expansion of area under seed village programme of paddy and pulses ✦ Expansion of area on vegetable seeds production. ✦ Non availability of poultry feeds and livestock medicines for animals in rural areas ✦ Steps to be taken to make it available in rural areas ✦ Non availability of low cost feed for Pisciculture ✦ Renovation of MIPS, LIPs & its field channel for better management of input like irrigation water in this district

Management of Markets	<ul style="list-style-type: none"> ✦ Day by day production cost of both field and horticultural crops are rising which renders low profit to the farmers ✦ Excess post-harvest loss (specially in vegetables and fruits) due to unorganized market in all sectors ✦ Interference and Exploitation by middlemen. ✦ Formation of more number of Farmers Interest Group(FIG),Commodity Interest Group (CIG) at village level ✦ Scope of establishment of cold storage ✦ Lack of agro processing and post-harvest handling technique
Management of Services(Credit & Insurance)	<ul style="list-style-type: none"> ✦ Non availability of timely credit for purchase of inputs for any production system in all sectors. ✦ The insurance facilities should be simplified and expanded in all sector
Management of Infrastructure	<ul style="list-style-type: none"> ✦ Steps to be taken to establish soil lab, agro-clinic and cold storage at Gram Panchayat and Block level. ✦ The network of irrigation water management should be strengthen for judicious water use

2. AES-II Rain fed Plateau

PRIORITIES ISSUES AND OPPORTUNITIES

Management of Technologies	<ul style="list-style-type: none"> ✦ Line sowing of short duration paddy varieties ✦ Introduction of low water duty crops ✦ Use of agricultural waste for composting ✦ Skill oriented training for development of horticulture nursery ✦ Promotion of drip and sprinkler irrigation in horticultural crops ✦ Improvement of desi cows by artificial insemination ✦ Exchange of box among village to prevent inbreeding depression in goat ✦ Popularization of SRI, LT and LS method ✦ Training and demonstration on use of herbicide ✦ Development of entrepreneurship through skill oriented training ✦ Promotion for commercial cultivation of onion ✦ Value addition of milk ✦ Backyard poultry rearing ✦ Cultivation perennial fodder crops
Management of Inputs	<ul style="list-style-type: none"> ✦ Supply of tissue culture banana plantlet ✦ Subsidization on drip and sprinkler irrigation ✦ Supply of fodder seeds to farmers ✦ Supply of seeds of non-paddy crops ✦ Supply of seeds of different vegetables ✦ Demonstration on agriculture implement and machinery ✦ Supply of fry and fingerlings of fish
Management of Markets	<ul style="list-style-type: none"> ✦ Cooperative system of marketing for pulse and oilseed crops ✦ Preponderance of middle man has to be restricted ✦ Fixation of minimum support price for crops, fruits and vegetables ✦ Community approach in milk and meat marketing ✦ Tie up OMFED, Big Bazar, ICT and Reliance Fresh

Management of Services(Credit & Insurance)	<ul style="list-style-type: none"> ■ Insurance coverage for all crops ■ Agril. loan availability to farmers and farm women ■ Availability of credit to rural youth for entrepreneurship development ■ Availability of credit for establishment of processing plant for paddy, pulse ,oilseeds, vegetables and fruits ■ Establishment of rice mill for preparation of different value added product from rice ■ Availability of credit for cultivation of fruit crops ■ Extending insurance to livestock
Management of Infrastructure	<ul style="list-style-type: none"> ■ RLI establishment to avail sufficient water ■ Construction of community threshing floor ■ Construction of storage godown and ware house ■ Excavation of community compost pit ■ Construction community centre for training activities ■ Provision for gobar gas plant to individual/community ■ Construction of community godown for storage of agriculture implements ■ Construction of shed for goat/sheep for individual /community basis ■ Subsidization for sinking of dug well ■ Creation of infrastructure for processing of pulse, oilseeds fruits and vegetables ■ Establishment of Govt. nurseery for supply quality planting material ■ Construction of check dam irrigation project on Kalara jhuli perineal stream and Tel river

3. Agriculture and Allied Production System

SI No	Issues, Problems, Opportunities	Relevance to the AES	
		AES-1	AES-2
1.	Considerable Yield gap in crops like Paddy, Greengram, Blackgram, Groundnut, Chickpea due to.		
	Non availability of desired variety of seeds	Y	Y
	Low seed replacement rate	Y	Y
	Decreasing trend in use of organic manure	Y	Y
	Non availability of bio fertilizer	Y	Y
	Lack of irrigation & rain water harvesting	Y	Y
	Soil acidity	Y	Y
	Poor adoption of technology	Y	Y
	Knowledge and skill gap in INM & IPM	Y	Y
	Non availability for timely credit for purchase of inputs.	Y	Y
2	Low profit from Agricultural crops due to		
	Lack of organized market	Y	Y
	Rise in production cost	Y	Y
	Exploitation by the middle men	Y	Y

SI No	Issues, Problems, Opportunities	Relevance to the AES	
		AES-1	AES-2
	Low quality of the produce	Y	Y
3	Resurgence of pest population and environmental degradation due to		
	Application of wrong and over/under dose of P.P chemicals	Y	Y
	Non adoption of IP practices	Y	Y
	Inadequate field staff		
	Opportunities		
1	Crop diversification from paddy to Non-paddy crops in rain fed high lands.	Y	Y
	Expansion of area under sunflower	Y	Y
2	Expansion of area under sugarcane	Y	Y
	Expansion of area under paddy	Y	Y
	Expansion of area under seed village programme of paddy and pulses	Y	Y

HORTICULTURE PRODUCTION SYSTEM

SI No	Issues, Problems, Opportunities	Relevance to the AES	
		AES-1	AES-2
1	Significant yield gap in vegetable & fruit crop due to <ul style="list-style-type: none"> ■ Timely non-availability of inputs ■ Lack of irrigation potential ■ Knowledge and skill gap in improved production technology ■ Non adoption of IPM and INM practices ■ Excess post-harvest loss ■ Inadequate research recommendation based on farming situation 	Y	Y
2	Low profit in vegetables due to <ul style="list-style-type: none"> ■ Lack or organized market infrastructure ■ Want of farmers group/organization ■ Lack of cold storage facilities ■ Interference of middle men ■ Lack of agro-processing and post-harvest handling technique 	Y	Y
3	Low yield in root and tuber crops due to <ul style="list-style-type: none"> ■ Non availability of improved seed materials ■ Gap in skill & knowledge in production technology 	Y	Y
4	Inadequate field staff	P	Y
	OPPERTUNITIES		
1	Expansion of area under Hybrid vegetable	Y	Y
2	Scope of introduction of Mushroom	Y	Y
3	Commercial cultivation of floriculture	Y	-
4	Expansion of area on vegetable seed production	Y	-

SI No	Issues, Problems, Opportunities	Relevance to the AES	
		AES-1	AES-2
5	Expansion of area on mango, lemon, guava etc	Y	Y
6	Scope for plantation of medicinal plant	Y	-
7	Establishment nurseries for production of quality planting materials	Y	Y
8	Dry land horticulture in rain fed upland	Y	-
9	Establishment of processing plant	Y	-
LIVE STOCK PRODUCTION SYSTEM			
1	<p>Low productivity in dairy animals due to</p> <ul style="list-style-type: none"> ■ In adequate green fodder ■ Improper health care, like vaccination, deworming etc. ■ Non-availability of service in the rural areas of the time of need ■ Poor sanitation and housing ■ Non availability of medicines inn rural areas ■ Natural crossing by stra bulls ■ Knowledge & skill gap among farmers ■ Limited insurance facility 	Y	Y
2	<p>Low profit in dairy product due to</p> <ul style="list-style-type: none"> ■ Un organized market ■ Distress sale of milk in local market 	Y	Y
3	<p>Low productivity of poultry birds due to</p> <ul style="list-style-type: none"> ■ Technological gap in nutrition management and housing etc. ■ Serious disease problem ■ Low adoption of improved breeds ■ Non availability of poultry feeds in rural areas. 	Y	Y
OPPORTUNITIES			
1	Artificial Insemination in dairy and goats	Y	Y
2	Opportunity for expansion of goatery by land less farmers	Y	Y
3	Scope for establishment of chilling plant	Y	Y
4	Scope for establishment of processing plant for milk	Y	Y
5	Scope for green fodder cultivation	Y	-
6	Scope for introduction of improved backyard poultry	Y	Y
FISH PRODUCTION SYSTEM			
1	<p>Low productivity of fish is due to</p> <ul style="list-style-type: none"> ■ Technological gap in adoption of scientific production practices ■ Improper management and maintenance of tanks ■ Lack of ownership of community water bodies ■ Non availability of low cost feed ■ Inadequate availability of fish seed/finger lings ■ Lack of adequate credit flow into fishery sector 	Y	Y
2	Low profit due to	Y	Y

SI No	Issues, Problems, Opportunities	Relevance to the AES	
		AES-1	AES-2
	<ul style="list-style-type: none"> ✘ Lack of growers organization ✘ Lack of storage & processing facilities ✘ Exploitation by middle men 		
3	Lack of interdepartmental co-ordination for extension programme in fishery sector	Y	Y
OPPORTUNITIES			
1	Scope for intensive pisciculture in ponds/tanks, MIPs with organization support	Y	Y
2	Establishment of fish seed hatchery & fish seed production units	Y	Y
3	Establishment of fish feed plant	Y	-
NATURAL RESOURCE MANAGEMENT			
1	Degradation of land due to <ul style="list-style-type: none"> ✘ Excess run off and raindrop impact ✘ Loss of organic matter from soil ✘ Loss of vegetative cover 	Y	Y
2	Depletion of soil nutrient is due to <ul style="list-style-type: none"> ✘ Excess run off of rain water and soil erosion ✘ Inadequate application of organic matter ✘ Indiscriminate use of chemical fertilizers 	Y	Y
3	Poor water management is due to <ul style="list-style-type: none"> ✘ Lack of skill in rainwater harvesting ✘ Un-bunded upland ✘ Lack of co-ordination & awareness among the members of pani panchayat (WUAs) 	Y	Y
4	Loss of vegetative cover due to <ul style="list-style-type: none"> ✘ Cultivation of pasture lands and over grazing ✘ Keeping the land fallow 	Y	Y
5	Soil acidity due to <ul style="list-style-type: none"> ✘ Leaching of base material due to soil erosion ✘ Non-use of soil amendments 	Y	Y
OPPORTUNITY			
1	Soil conservation measures by <ul style="list-style-type: none"> ✘ Agronomic practices ✘ Mechanical measures ✘ Biological measures ✘ Integrated watershed management 	Y	Y
2	Adoption of appropriate agro forest system in degraded soil by <ul style="list-style-type: none"> ✘ Alternate land use ✘ Plantation of field bonds 	Y	Y
3	Development of water resources for irrigation through <ul style="list-style-type: none"> ✘ WUAs/Pani Panchyats 	Y	Y

SI No	Issues, Problems, Opportunities	Relevance to the AES	
		AES-1	AES-2
4	ISSUES IN R-E-F LINKAGE		
	1) Fund constraints for conducting participatory research to evolve location specific recommendation	Y	Y
	2) Lack of specialized man power for participatory research	Y	Y