

1. AES-1 Plain Land Irrigated

Agriculture Production System

Major Field Crops Gap Matrix (Max. GAPS = 10, No GAP = 0)												
Particular	Rice	Maize	Black gram	Green gram	Arhar	Sunflower	Groundnut	Sesamum	Niger	Mustard	Sugarcane	Fiber
Technology	2	3	2	2	2	2	4	3	3	3	3	2
Input	2	3	3	3	3	4	4	5	5	4	3	2
Market	4	5	2	2	2	4	5	5	4	5	9	9
Services	2	2	2	2	2	2	2	3	2	3	2	2
Infrastructure	6	6	6	5	5	6	6	5	6	6	5	6
Total	16	19	15	14	14	18	21	21	20	21	22	21

Issues	Opportunities
<ul style="list-style-type: none"> ✦ Predominance paddy cultivation in rain fed upland ✦ Interference and exploitation by middle man is more ✦ Non-availability of timely credit for purchase of inputs ✦ Distress sale & post-harvest loss ✦ Non-availability of quality seeds ✦ Non-availability of climate resilient variety ✦ Low seed replacement rate ✦ Decreasing trend in organic manure ✦ Decline of organic matter content in soil ✦ Non-availability of bio-fertilizers ✦ Lack of rain water harvesting structure ✦ Lack of knowledge on IPM and INM ✦ Low adoption of technologies ✦ Non-availability of organized markets ✦ Rise in production cost & risk involving technologies ✦ Low yield from traditional & old high yielding varieties 	<ul style="list-style-type: none"> ✦ Crop diversification in rainfed upland ✦ Procurement of food grains through <i>mandis</i> at panchayat level ✦ Scope for development of marketing infrastructure and storage godown ✦ Timely availability of credit to farmers by cooperative societies & bank ✦ Expansion of area under seed village programme with provision of processing plant at block level ✦ Backyard composting and green manuring /biogas plant/vermi composting ✦ Setting of bio-fertilizer production unit at district levels ✦ Pani panchayat/WHS /MIPs/LIPs ✦ Existence of KVKs/NGOs/Line Depts./ ICT dealing with agriculture ✦ Existence of SHGs/ Cooperative societies/Banks/ NABARD ✦ Existence of MARFED/ producer cooperatives ✦ Product based Community farming, adoption of low cost technologies ✦ Expansion of area under different hybrids

Horticulture Production System

Major Horticultural crops (Max. GAPS = 10, No GAP = 0)			
Particular	Fruits	Spices	Vegetables
Technology	4	2	2
Input	4	8	2
Market	2	9	4
Services	5	4	4
Infrastructure	5	5	5
Total	20	28	17

Issues	Opportunities
<ul style="list-style-type: none"> ✦ Timely non-availability of inputs ✦ Lack of quality planting material ✦ Lack of micro irrigation potentials ✦ Lack of knowledge and skill on improved production technologies ✦ Non-adoption of IPM and INM practices ✦ High cost hybrid seeds of vegetables ✦ Indiscriminate use of pesticides in vegetables ✦ Improper care and management of crops ✦ Lack of infrastructure for value addition & processing ✦ Lack of cold storage ✦ Huge post-harvest losses ✦ Disorganized market/infrastructures ✦ Lack of farmer groups/ organizations/producer groups ✦ Interference of middle man ✦ Inadequate field staffs ✦ Non-adoption of commercial technology ✦ Lack of crop insurance ✦ Lack of alternate viable livelihood options ✦ Low income of farm family 	<ul style="list-style-type: none"> ✦ Availability of public sector hybrid & HYV of crop seeds by Hort. Dept. ✦ Outreach for Horticulture Dept. to <i>Panchayat</i> level ✦ Establishing of nursery for production of quality planting materials ✦ Increasing irrigation potential by WHS/MIPs/LIPs <i>Pani panchayat</i> ✦ Existence of KVKs/NGOs/ Line Depts. ✦ Commercial seed production of vegetables ✦ Training & demonstration on IDM & IPM ✦ Establishment of food processing unit ✦ Scope for establishing cold storages & cooling chamber ✦ Establishment of community nursery for production quality planting materials ✦ Commercial cultivation of onion, chili and garlic ✦ Expansion of area under hybrid vegetables ✦ Formation of different producer groups ✦ Commercial cultivation of fruit crops ✦ Active role of RMCs ✦ Insurance of horticultural crops ✦ Area expansion under fruit crops in upland ✦ Promotion of dry land horticulture in rain fed areas ✦ Scope for mushroom production ✦ Commercial cultivation of floriculture with marigold, tube rose and rose

Livestock Production System

Major Animals (Max. GAPS = 10, No GAP = 0)				
Particular	Dairy	Backyard Poultry	Broiler Poultry	Goatery
Technology	3	3	3	3
Input	6	5	4	6
Market	5	6	7	6
Services	3	4	6	4
Infrastructure	7	8	7	8
Total	24	26	27	27
Issues	Opportunities			
<ul style="list-style-type: none"> ✦ No fodder cultivation ✦ Unhygienic housing ✦ Poor vaccination and deworming ✦ Unavailability of medicines ✦ Non-availability of quality feeds ✦ Lack of knowledge and skill on animal husbandry ✦ Limited insurance facility ✦ Lack of marketing infrastructure 	<ul style="list-style-type: none"> ✦ Encouragement for round the year of fodder production ✦ Existence of veterinary Dept. <i>GOMITRA</i> & JK Group extension worker ✦ Outreach through veterinary Dept. to <i>Panchayat</i> level. ✦ Artificial insemination of <i>Deshi</i> cow ✦ Fodder seeds, Feed supply through Veterinary Dept. ✦ Capacity building of farmers 			

<ul style="list-style-type: none"> for livestock products ✦ Fluctuation of price of livestock products ✦ Improper nutrition ✦ Frequent occurrence of epidemic ✦ Limited encouragement to farmers through subsidy ✦ Predominance of desi breeds of cows, poultry and goats 	<ul style="list-style-type: none"> ✦ Extending insurance for livestock ✦ Creation of marketing infrastructure through cooperative societies & farmers producer organization ✦ Scope for milk processing ✦ Suitable transport facility for livestock product ✦ Capacity building of extension personnel ✦ Vaccination and deworming by LI ✦ Providing credit through cooperative society & Bank
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Fishery Production System

Fishery Intervention (Max. GAPS = 10, No GAP = 0)	
Particular	Fishery
Technology	2
Input	7
Market	8
Services	7
Infrastructure	8
Total	32

Issues	Opportunities
<ul style="list-style-type: none"> ✦ Traditional production practices ✦ Poor managements of existing water bodies ✦ Lack of ownership of community water bodies ✦ No excavation of new water bodies ✦ Unavailability of sufficient fry, fingerling & yearling ✦ Lack of knowledge & skill of the farmers ✦ Lack of credit flow into fishery sector ✦ No insurance coverage of fish farmer ✦ Non-availability of exotic breed of fish ✦ No treatment of pond water ✦ Lack of refrigerated storage & transport ✦ Poor processing facility ✦ No organization of fish producers 	<ul style="list-style-type: none"> ✦ Capacity building of farmers through training & demonstration ✦ Renovation of old water bodies ✦ Encouragement to farmers for sinking of new water bodies ✦ Supply of sufficient fry, fingerling & yearling by fishery Dept. & private hatchery ✦ Extending insurance facilities to fish farmers ✦ Introduction of exotic species of fish in the district ✦ Proper treatment of water bodies after soil & water testing ✦ Creation of infrastructure for refrigerator transport & short term storage of fish ✦ Establishment of processing industries ✦ Formation of fish producer organization

2 AES-II Rain fed Plateau

Agriculture Production System

Major Field Crops Gap Matrix (Max. GAPS = 10, No GAP = 0)

Particular	Rice	Black gram	Green gram	Arhar	Sesamum	Niger	Mustard
Technology	6	9	9	8	9	9	9
Input	3	5	5	7	5	6	9
Market	2	5	5	9	7	8	8
Services	6	9	9	9	9	9	9
Infrastructure	9	10	10	8	9	9	10
Total	26	38	38	41	39	41	45

Issues	Opportunities
<ul style="list-style-type: none"> ✦ Occurrence of drought in upland ✦ Broad casting of rice in upland ✦ Insufficient application FYM ✦ Unavailability of quality seeds at farmers door steps ✦ Deterioration of soil health ✦ Unavailability of seeds of YMV resistant Greengram Varieties ✦ Low price of pulses in local market ✦ No processing plant for seed production of pulse crops ✦ Impurity of quality seed during threshing ✦ Lack of storage space for food grain ✦ Predominance paddy cultivation in rain fed upland ✦ Interference and exploitation by middle man is more ✦ Non-availability of timely credit for purchase of inputs ✦ Distress sale & post-harvest loss ✦ Non-availability of quality seeds ✦ Non-availability of climate resilient variety ✦ Low seed replacement rate ✦ Decreasing trend in organic manure ✦ Decline in organic matter content of soil ✦ Non-availability of bio-fertilizers ✦ Lack of rain water harvesting structure ✦ Lack of knowledge of IPM and INM ✦ Low adoption of technologies ✦ Non-availability of organized markets ✦ Rise in production cost & risk involving technologies ✦ Low yield from traditional & old high yielding varieties 	<ul style="list-style-type: none"> ✦ Popularization of drought tolerant HYV of rice ✦ Developing fruit crop plantation with drip irrigation ✦ Line sowing & SRI method of cultivation ✦ Providing quality seeds through sale centre & private agency ✦ Improving soil health by crop rotation, addition of organic matter & soil reclamation ✦ Introduction of YMV resistant HYV of Greengram ✦ Seed processing centre for pulse should be established ✦ Establishment of community threshing floor ✦ Establishment of community ware house of storage go down ✦ Procurement of pulses, oilseeds through cooperative societies ✦ Encouragement to farmers for composting & vermicomposting etc. ✦ Crop diversification in rainfed upland ✦ Procurement of food grains through mandis at panchayat level ✦ Scope for development of marketing infrastructure, storage go down ✦ Timely availability of credit by cooperative societies & bank ✦ Expansion of area under seed village programme with provision of processing plant at block level ✦ Backyard composting and green manuring /biogas plant/vermi composting ✦ Setting of bio-fertilizer production unit at district levels ✦ Pani panchayat/WHS /MIPs/LIPs ✦ Existence of KVKs/NGOs/line depts./ ICT dealing with agriculture ✦ Existence of SHGs/ Cooperative societies/ Banks/ NABARD

	<ul style="list-style-type: none"> ✦ Existence of MARFED/ producer cooperatives ✦ Product based Community farming, adoption of low cost technologies ✦ Expansion of area under different hybrids
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Horticulture Production System

Major Horticultural crops (Max. GAPS = 10, No GAP = 0)		
Particular	Spices	Vegetables
Technology	No crop	6
Input	-	3
Market	-	2
Services	-	9
Infrastructure	-	9
Total	-	29

Issues	Opportunities
<ul style="list-style-type: none"> ✦ Lack of information on characteristics of var. & hybrid marketed by public sector ✦ Timely non-availability of inputs ✦ Lack of quality planting material ✦ Lack of micro irrigation potentials ✦ Lack of knowledge and skill in improved production technologies ✦ Non-adoption of IPM and INM practices ✦ High cost hybrid seeds in vegetable ✦ Indiscriminate use of pesticides in vegetables ✦ Improper care and maintenance of crops ✦ Lack of infrastructure for value addition & processing ✦ Lack of cold storage ✦ Huge post-harvest losses ✦ Disorganized market/infrastructure ✦ Lack of farmer groups/organizations/producer groups ✦ Interference of middle man ✦ Inadequate field staffs ✦ non-adoption of commercial technology ✦ Lack of crop insurance ✦ Lack of alternate viable livelihood options ✦ Low income of farm family 	<ul style="list-style-type: none"> ✦ Availability of public sector hybrid & HYV by Hort. Dept. ✦ Outreach for horticulture dept. to <i>panchayat</i> level ✦ Establishing of nursery for production of quality planting materials. ✦ Increasing irrigation potential by WHS /MIPs/LIPs <i>Pani panchayat</i> ✦ Existence of KVKs/NGOs/ Line Depts. ✦ Commercial seed production in vegetables ✦ Training & demonstration on IDM & IPM ✦ Establishment of food processing unit ✦ Scope for establishing cold storages & cooling chamber ✦ Establishing of nursery for production quality planting materials ✦ Commercial cultivation of onion ,chili, garlic ✦ Expansion of area under hybrid vegetables ✦ Formation of different producer groups ✦ Commercial cultivation of fruit crops ✦ Active role of RMCs ✦ Insurance of horticultural crops ✦ Area expansion under fruit crops in upland ✦ Promotion of Dry land horticulture in rain fed uplands ✦ Scope for mushroom production

	<ul style="list-style-type: none"> ✦ Commercial floriculture with marigold, tube rose and rose
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Livestock Production System

Major Animals (Max. GAPS = 10, No GAP = 0)				
Particulars	Dairy	Backyard Poultry	Broiler Poultry	Goatery
Technology	2	8	-	5
Input	6	9	-	9
Market	2	2	-	2
Services	8	9	-	8
Infrastructure	9	9	-	9
Total	27	37	-	33

Issues	Opportunities
<ul style="list-style-type: none"> ✦ No fodder cultivation ✦ Unhygienic housing ✦ No vaccination, deworming etc. ✦ Unavailability of medicines ✦ Non-availability of quality feeds ✦ Lack of Knowledge and skill of animal husbandry ✦ Limited insurance facility ✦ No marketing infrastructure for livestock products ✦ Fluctuation of price of livestock products ✦ Improper nutrition ✦ Frequent occurrence of epidemic ✦ Limited encouragement to farmers through subsidy ✦ Predominance of desi breeds of cows, poultry, goats 	<ul style="list-style-type: none"> ✦ Encouragement of fodder production round the year ✦ Existence of veterinary dept. GOMITRA & JK Group in extension work ✦ Outreach through veterinary Dept. to <i>Panchayat</i> level. ✦ Artificial Insemination of desi cow ✦ Fodderseeds, Feed supply through veterinary dept. ✦ Capacity building of farmers ✦ Extending insurance for livestock ✦ Creation of marketing infrastructure through cooperative societies & farmers producer organization ✦ Scope for milk processing ✦ Suitable transport facility for livestock product ✦ Capacity building of extension personnel ✦ Vaccination and deworming by LI ✦ Providing credit through cooperative society & Bank

Fishery Production System

Issues	Opportunities
<ul style="list-style-type: none"> ✦ Traditional production practices ✦ Poor managements of existing water bodies ✦ Lack of ownership on community water bodies ✦ No excavation of new water bodies 	<ul style="list-style-type: none"> ✦ Capacity building of farmers through training & demonstration ✦ Renovation of old water bodies ✦ Encourage farmers to excavate new water bodies ✦ Supply of sufficient fry, fingerling & yearling

Issues	Opportunities
<ul style="list-style-type: none"> ✦ Unavailability of sufficient fry, fingerling & yearling ✦ Lack of knowledge & skill of the farmers ✦ Lack of credit flow into fishery sector ✦ No insurance coverage to fish farmer ✦ Non-availability of exotic breed of fish ✦ No treatment of pond water ✦ Lack of refrigerated storage & transport ✦ No processing facility ✦ No organization of fish producers 	<ul style="list-style-type: none"> by Fishery Deptt. & private hatchery ✦ Extending insurance to fish farmers ✦ Introduction of exotic species of fish in the district ✦ Proper treatment of water bodies after soil & water testing ✦ Creation of infrastructure for refrigerator transport & short term storage of fish ✦ Establishment of processing industries ✦ Formation of fish producer organization