1. AES-1 Plain Land Irrigated

### Agriculture Production System

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

<table>
<thead>
<tr>
<th>Particular</th>
<th>Rice</th>
<th>Maize</th>
<th>Black gram</th>
<th>Green gram</th>
<th>Arhar</th>
<th>Sunflower</th>
<th>Groundnut</th>
<th>Sesamum</th>
<th>Niger</th>
<th>Mustard</th>
<th>Sugarcane</th>
<th>Fiber</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>4</td>
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<td>3</td>
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</tr>
<tr>
<td>Input</td>
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<td>3</td>
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<td>2</td>
<td>2</td>
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<tr>
<td>Infrastructure</td>
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<td>5</td>
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<td>14</td>
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<td>21</td>
<td>21</td>
<td>20</td>
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</tbody>
</table>

#### Issues
- Predominance paddy cultivation in rainfed upland
- Interference and exploitation by middleman 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 PM 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

#### Opportunities
- Crop diversification in rainfed upland
- Procurement of food grains through mandis 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 Deps./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)

<table>
<thead>
<tr>
<th>Particular</th>
<th>Fruits</th>
<th>Spices</th>
<th>Vegetables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology</td>
<td>4</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Input</td>
<td>4</td>
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<td>2</td>
</tr>
<tr>
<td>Market</td>
<td>2</td>
<td>9</td>
<td>4</td>
</tr>
<tr>
<td>Services</td>
<td>5</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>5</td>
<td>5</td>
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</tr>
<tr>
<td>Total</td>
<td>20</td>
<td>28</td>
<td>17</td>
</tr>
</tbody>
</table>
### Issues
- 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

### Opportunities
- Availability of public sector hybrid & HYV of crop seeds by Hort. Dept.
- Outreach for Horticulture Dept. to Panchayat level
- Establishing of nursery for production of quality planting materials
- Increasing irrigation potential by WHS/MIPs/LIPs Pani panchayat
- 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

<table>
<thead>
<tr>
<th>Major Animals (Max. GAPS = 10, No GAP = 0)</th>
<th>Dairy</th>
<th>Backyard Poultry</th>
<th>Broiler Poultry</th>
<th>Goastery</th>
</tr>
</thead>
<tbody>
<tr>
<td>Particular</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technology</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Input</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Market</td>
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<td>6</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>Services</td>
<td>3</td>
<td>4</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Infrastructure</td>
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<td>8</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>Total</td>
<td>24</td>
<td>26</td>
<td>27</td>
<td>27</td>
</tr>
</tbody>
</table>

### Issues
- 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

### Opportunities
- Encouragement for round the year of fodder production
- Existence of veterinary Dept. GOMITRA& JK Group extension worker
- Outreach through veterinary Dept. to Panchayat level.
- Artificial insemination of Deshi cow
- Fodder seeds, Feed supply through Veterinary Dept.
- Capacity building of farmers
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

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

<table>
<thead>
<tr>
<th>Fishery Intervention (Max. GAPS = 10, No GAP = 0)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Particular</strong></td>
</tr>
<tr>
<td>Technology</td>
</tr>
<tr>
<td>Input</td>
</tr>
<tr>
<td>Market</td>
</tr>
<tr>
<td>Services</td>
</tr>
<tr>
<td>Infrastructure</td>
</tr>
<tr>
<td><strong>Total</strong></td>
</tr>
</tbody>
</table>

Issues

- 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

Opportunities

- 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) |
### Issues

- Occurrence of drought in upland
- Broad casting of rice in upland
- Insufficient application of FYM
- Unavailability of quality seeds at farmers' doorstep
- 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 of paddy cultivation in rainfed upland
- Interference and exploitation by middleman 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 rainwater 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

### Opportunities

- 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 warehouse 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
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**Horticulture Production System**

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<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Particular</td>
</tr>
<tr>
<td>Technology</td>
</tr>
<tr>
<td>Input</td>
</tr>
<tr>
<td>Market</td>
</tr>
<tr>
<td>Services</td>
</tr>
<tr>
<td>Infrastructure</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

**Issues**

- 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
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Livestock Production System

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Dairy</th>
<th>Backyard Poultry</th>
<th>Broiler Poultry</th>
<th>Goaterly</th>
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<tbody>
<tr>
<td>Technology</td>
<td>2</td>
<td>8</td>
<td>-</td>
<td>5</td>
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<tr>
<td>Input</td>
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<td>Market</td>
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<td>Services</td>
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<td>9</td>
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<tr>
<td>Infrastructure</td>
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<td>9</td>
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<tr>
<td>Total</td>
<td>27</td>
<td>37</td>
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</table>

Issues
- 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

Opportunities
- Encouragement of fodder production round the year
- Existence of veterinary dept. GOMITRA & JK Group in extension work
- Outreach through veterinary Dept. to Panchayat level.
- Artificial Insemination of desi cow
- Fodder seeds, 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

<table>
<thead>
<tr>
<th>Issues</th>
<th>Opportunities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traditional production practices</td>
<td>Capacity building of farmers through training &amp; demonstration</td>
</tr>
<tr>
<td>Poor managements of existing water bodies</td>
<td>Renovation of old water bodies</td>
</tr>
<tr>
<td>Lack of ownership on community water bodies</td>
<td>Encourage farmers to excavate new water bodies</td>
</tr>
<tr>
<td>No excavation of new water bodies</td>
<td>Supply of sufficient fry, fingerling &amp; yearling</td>
</tr>
<tr>
<td>Issues</td>
<td>Opportunities</td>
</tr>
<tr>
<td>-----------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Unavailability of sufficient fry, fingerling &amp; yearling</td>
<td>by Fishery Deptt. &amp; private hatchery</td>
</tr>
<tr>
<td>Lack of knowledge &amp; skill of the farmers</td>
<td>Extending insurance to fish farmers</td>
</tr>
<tr>
<td>Lack of credit flow into fishery sector</td>
<td>Introduction of exotic species of fish in the district</td>
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<tr>
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<td>Establishment of processing industries</td>
</tr>
<tr>
<td>Lack of refrigerated storage &amp; transport</td>
<td>Formation of fish producer organization</td>
</tr>
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<td>No processing facility</td>
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<td>No organization of fish producers</td>
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