STRATEGIC RESEARCH AND EXTENSION PLAN OF PAKUR DISTRICT, JHARKHAND

Prepared by

Agricultural Technology Management Agency

(ATMA)

PAKUR District, JHARKHAND State

Under the guidance of

SAMETI , JHARKHAND

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I INTRODUCTION

Agriculture continues to contribute about 25 percent of national income and remains a major sector that employs 60 percent of the labor force in rural India. A closer look at the agriculture sector for its progress in the last two decades in relation to the economic reforms would help to identify the challenges that face the sector and to provide potential policy and programme options that will increase agricultural growth which could directly contribute to overall economic growth and further reduction in rural poverty.

Focusing on the agricultural sector in the context of economic reforms is also important given the recent emphasis by the UPA government on the urgent need for addressing the concerns of the rural poor, devolving power to the local panchayats, and developing a unified national market for enhancing the agricultural income of the rural population.

Although economic reforms initiated in the early 1990s had an indirect effect on the agriculture sector and its performance, it is important to examine various policy measures that have been implemented phase by phase in the 1980s and 1990s that have laid potential implications for the growth of the agricultural sector. The economic reforms initiated in 1991 provided a major jump start for liberalization of the agriculture sector as well. Prior to the initiation of economic reforms in 1991 the Indian agriculture sector was plagued with high levels of regulations, in the context of both domestic and foreign markets.

Such regulations have had their origin, which goes back in the 1960s, when the country was faced with acute food shortage and famine like conditions. Several controls and regulations were placed in order to achieve self sufficiency in food production and to provide an adequate supply of food to the country's burgeoning population.

From 1965 to 1980, the agriculture sector was characterized by high level of investment in research and development with a focus on achieving self-sufficiency through increased an introduction of HYVs ad lib use of fertilizer and insecticide.

The green revolution technologies along with several policy support measures were adopted and implemented such as fertilizer subsidy and extension system which helped to achieve self-sufficiency in food grains by the early 1970s. Until the early 1980s the emphasis continued to be self-sufficiency in food grain production in staple crops such as rice and wheat.

In the process minor crops, such as oilseed and pulses had been given relatively less importance. Further, due to emphasis on irrigated agriculture in order to achieve food self sufficiency, the dry lands and marginal areas had to wait for their turn. The technology mission of the mid 1980s emphasized the development of dry land agriculture with national integrated dry land development programs and special technologies task force for the development of pulses and oilseeds. While the production of pulses and oilseeds increased through the technology mission its level remained low.

In the early 1990s the investment in agricultural research and development has seen a decline compared to levels in the 1970s. Furthermore, the production levels of cereal crops reached a plateau. The agricultural reforms that accompanied economic reforms in the 1990s have led to many policy changes in the ground. Yet, the impact of such reforms and policy measures on the performance of the agricultural sector in the 1990s compared to the 1980s is still being debated.

Over the past many decades the dissemination of agricultural technologies has not effectively percolated to the grass root level in spite of the presence of various extension agencies. An extension agency had been addressing the needs of farmers, but in an isolated manner with no co-ordination among themselves.

Lack of sound feed back mechanism has been caused system fatigue. At present public extension services for agriculture is centrally directed and highly target oriented. Two changes in the extension approach would benefit. First, it would be desirable to move from fragmented message based extension process to a broad based farm management approach. Extension must be focused on conservation and

better use of natural resource of basin and maximizing farm profits by assessing the market potential.

Second, it would be rewarding to shift from "Contact-farmer approach to group approach".

The changing economic scenario in India and Jharkhand like the need for appropriate agricultural technologies and agro-management practices to respond to food and nutritional security, poverty alleviation, diversifying market demand, export opportunities and environmental concerns are posing new challenges to the technology dissemination system. It is expected that future agricultural growth would largely accrue from improvements in productivity of diversified farming systems with regional specialization and sustainable management of natural resources, especially land and water. Effective linkages of production system with marketing and agro-processing; and developing an army of trained Private Extension Service Providers, and other value added activities would play an increasing role in the diversification of agriculture.

The agro-climatic planning approach was intended to take an integrated view of the agricultural economy in relation to resource base and linkages with other sectors implying future agricultural development specific to agro-eco regions with a multi disciplinary approach. Several key system constraints of previous extension system such as multiplicity of technology transfer system, narrow focus on agricultural extension lack of farmers focus and feedback, inadequate technical capacity within extension system, lack of local capacity to validate and refine technology, limited research-extension linkage,poor communication capacity, inadequate operating resources for extension etc. were identified.

The objectives of ITD component are to increase quality of technology being disseminated by the existing extension system, to become more demand-driven and responsive to solving farmers problems, strengthen research-extension-farmer linkage, increase the financial sustainability of the public extension system, move towards shared ownership of the agricultural technology system and generate replicable experiences that can be documented, analyzed and used in other areas.

For achieving the objectives of the ITD component, under institutional adjustments and operational changes, Agricultural Technology Management Agency (ATMA) a registered society under Societies Registration Act 1860 has been established in PAKUR district in 2006 and registration has been completed in January 2009 .It serves as the focal point for integrating research and extension activities and for decentralizing day to day management of the public agricultural technology system. All research and extension units within the PAKUR district including KVK, key lin departments and farmers' representatives become constituent members of the ATMA. ATMA would have linkages with departments of the government and research organization and other non-government organizations (NGOs) and agencies associated with agricultural development in the district. For this ATMA has to develop demand-driven, situation specific, multi furious oriented Strategic Research and strategic programming of PAKUR district. The SREP is the basic document which not only decides the

development activities that need to be carried out, but also in which manner and by whom it is to be done.

A number of management tools have been developed which are helpful in facilitating farmers involvement in an effective manner. Based upon these tools, participatory methodology has been worked out for preparing the SREP. The present document has emerged through application of such tools in limited number of villages by selected multi-disciplinary team of PAKUR district.

The SREP has two sections i.e. diagnostic section and strategic section. In the diagnostic section, information about the district and different agro-ecological situations along with analysis of participatory data of the selected villages and SWOT analysis of the existing farming systems are covered. In the strategy section the proposed research and extension strategies and various activities under each strategy are explained. The modalities and operational guidelines are also indicated in the SREP.

II METHODOLOGY

The strategic research and extension plan (SREP) of Pakur (Jharkhand) was prepared following the participatory methodology to reflect the issues and needs of the farming community. The main steps followed for the preparation of SREP are as follows:

2.1 Formation of Multi-Disciplinary Groups

For each AES, a Multi-Disciplinary group comprising 7-8 members from different line departments, Scientists from KVK, leading NGO (Agricultural and Related activities executing NGO of Pakur) and one progressive farmer from the identified village was constituted as AES team. These groups were given the task of collecting of primary information from the representative village's using PRA tools and techniques for the preparation of SREP. The revised format for the collection of field data through participatory method was also given to each AES team members.

2.2 Principle of Methodology

Productivity is defined as the net increment in valued product per unit of resource, land, labour energy or capacity. Productivity is commonly measured as financial yield / net per hecter or man-hour or unit of energy in term of investment, whether monetary or any other mode. Stability in related to agri-related activities in the degree which Productivity remains constant in sprite of Normal small scale fluctuations in environmentally sustainable variable situations such as climate or in commercially viable condition of market. Stability is most conveniently measured by the reciprocal of the coefficient of variation in productivity.

Sustainability can be defined as the ability of a system to maintain its productivity when subject to stress or perturbation or any emerging viable situations. A stress is hereby defined as a regular some times continues relativity. Small unpredictable disturbance, unviable environmental, ecological situation, soil salinity, indebtedness or low productivity. A perturbation by contras is an irregular frequent relatively large or unpredictable disturbance such as caused by drought, flood or arrival of new pest.

Unfortunately, measurement is difficult and can often only be done retrospectively. Lack of sustainability may be indicated by declining productivity but equally, as experience suggests,

collapse may come suddenly and without warning. Equitability is a measure of how evenly the productivity of the agro ecosystem is distributed among the human beneficiaries. The more equitable the system the more evenly are the agricultural products, the food or the income or the resources, shared among the population of the farm, village, state, even nation. It can be represented by a statistical measurement such as the Gini coefficient.-eco-system analysis.

- Quicker than conventional
- Can be applied in field Situations
- Learning form farmers
- Semi-structured approach with flexibility and innovativeness
- Understands processes through farmers involvement
- Tran formulation of technology into land
- Result oriented approach
- Eco-system analysis

Producing significant improvement in the performance of a system requires changes in only a few key management decision. Identification and understanding of these key relationship and decisions require a related number of these key/problem questions to be defined and answered.

Keeping in view the assumptions, four patterns are chosen to reveal the key functional relationship that determine the properties of an agro-eco-system. There are space analysis, time analysis, flow analysis and decision analysis.

The first three analysis provided an understanding about the properties of agro-ecosystem, whereas, the fourth analysis reflects the process of human management of agro-eco-system. Understanding the behavior and important properties of a system requires knowledge of only a few key functional relationship. The is not necessary to know everything about an agro-eco-system in order to produce a realistic and useful analysis.

For agro-eco-system analysis, Participatory Rural Appraisal (PRA) tools have been used for pattern analysis.

Pattern analysis of an agro-eco-system includes the following four types.

i. Space analysis ii. Time analysis iii. Flow analysis iv. Decision analysis

i. Space analysis: Space analysis is done to understand and identify the position of elements spatially.

ii. Time analysis: Time analysis is done to understand the changing trends of various happenings in an agro- eco-system.

iii. Flow analysis: It is done to identify the pathways of transformation of energy, money, food, nutrition and the causes-effects in a logical sequence.

iv. Decision analysis: It is done to understand the process of human management of agro-eco-system that is household level to community level.

Pattern Analysis	Objective of Analysis	Tools/technique to be used	Purpose (of tools)
1. Space analysis	To define system boundaries To identify enterprises/problem access	Social map Resource map Transects System diagram	To delineate system boundaries
2. Time analysis	To study seasonal changes over, cropping sequence, labour, credit peaks, prices etc.	Crop calendar Seasonality to know trend of various factors involved in crop production. (rainfall, income disease, Insect pest, input availability, labour etc.) Time line to know historical profile	To know cropping sequence over the year
3. Flow analysis	To study pattern of flow or transformation of various features (tangible e.g. Money, Fertilizers, Insecticides, Feed, as well as intangible e.g. information, etc.) in a given agro-eco-system	Table Matrices Network diagram Flow diagrams Problem matrices	To know causes and effects. To know various channels, flow of the factors. (their causes and effect) To know cause and constraints involved in a given agro-eco-system.
4. Decision analysis	To identify various option/matrix regarding the identified need/problem as well as choices of masses	Matrix ranking Pen wise ranking	To prioritize problem as well as to know choke and preference of the features regarding any option/solution.

Type of analysis and tools Agro-eco-system Analysis

Agro-eco-system Analysis Approach was technically developed in Thailand in later part of 70's initially as the University of Chaiang Mai by Gordon Conway and his faculty men later spread to other parts of the world through south East Asia. This approach draws on system and ecological thinking; it combines analysis of systems and system properties (productivity, stability, sustainability and equitability) which are essentially descriptive in nature and summarize the status of given agro-eco-system. But these can also be used in a normative fashion as indicators of performance.

Choice of methodology-agro-ecosystem analysis

The past decade has witnessed considerable shift in the methodology for transfer of technology projects from standard schedule based survey approach to Participatory Appraisal and Analysis. In its new approach, the activities which were previously appropriated by outsides are instead carried out by local rural people themselves. This approach is, in general, called as Participatory Rural Appraisal (PRA) which has been defined as "An approach and methods for learning about rural life and conditions from, with and by rural people." The prepositions have sometimes been reversed in order to read by, with and from. This phenomenon is more than jest learning. PRA as a term is also used to describe a variety of approaches. It has evolved from, draws on and resonates with several traditions. Some of its methods do appear to be new, but some have been rediscovered.

In a world of continuously quicker and closure communication, the transfer and sharing of ideas have become more rapid and untraceable. So these sources and traditions have, like fools in a braided stream, intermingled more and more over the past decade, and each also continues in several forms; but directly or indirectly all have contributed to a confluence in PRA; and as with other confluences, the flow has speeded up and innovation and change have accelerated.

Properties of Agro-Ecosystem

However this complexity, at least in terms its dynamic consequences, can be captured by four system properties which, together describe the essential behavior of agro ecosystem (Conway 1983, 1985a). These are productivity, stability, sustainability; they are relatively easy to define although not equally easy to measure.

Selection of AES CORE TEAM

Selection of members of multi-disciplinary 13 officer minimum one officer of each line Government departments. Viz, Agriculture, animal husbandry, Fishery, Soil Conservation, Sericulture, Horticulture and Scientists from KVK, Maheshpur, Pakur and NGOs was made to provide them basic training / exposure orientation about the concept of Extension Reforms for development of SREP.

Training of MDT

The selected officers and scientists of MDT were given training on theoretical aspects of SREP.

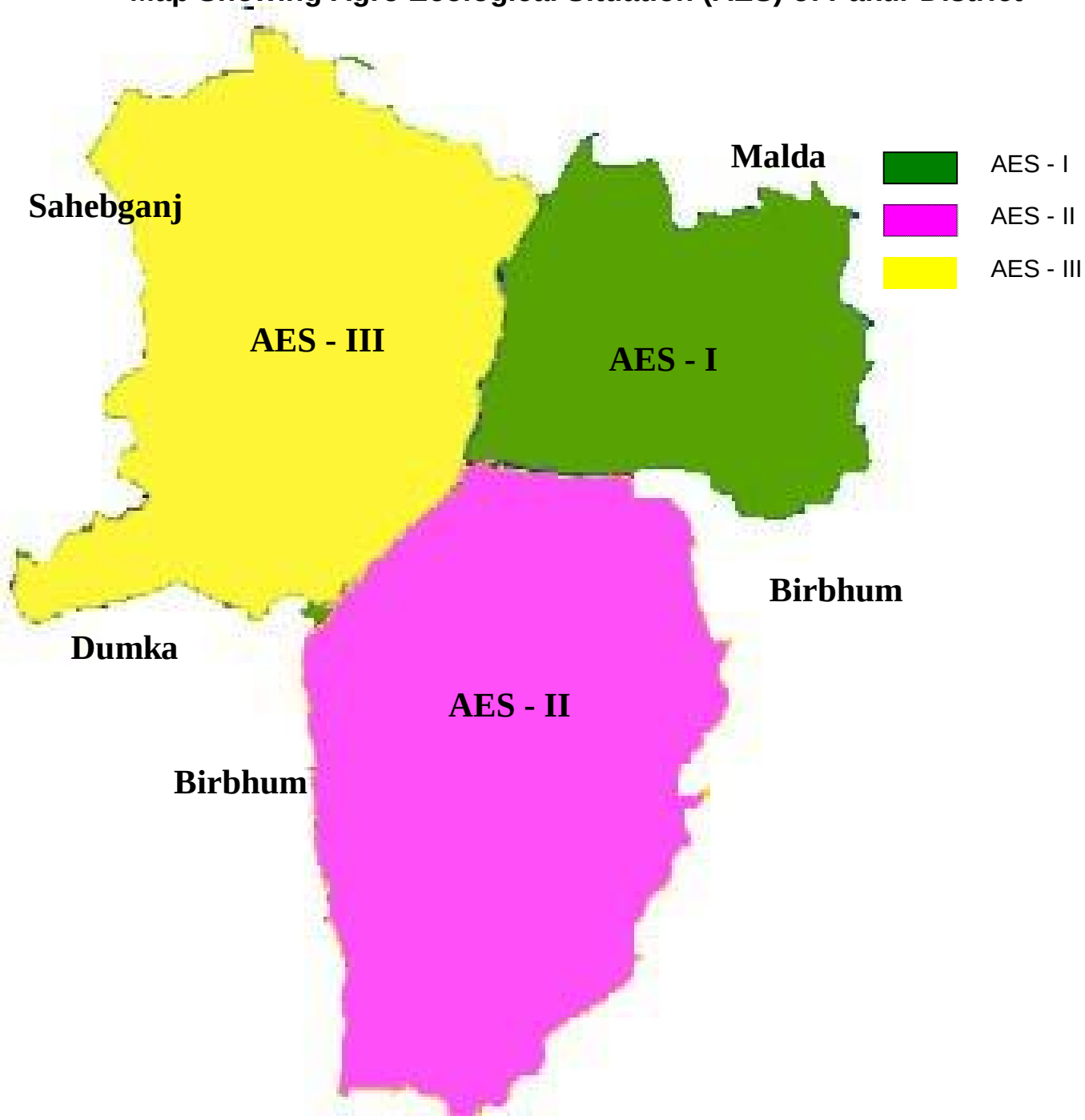
By Technical Experts. In this training program following topic were cover.

- Concept of Present of Extension system and ATMA model of Jharkhand
- Extension Reform and Methodology.
- Roles and Responsibilities of Stakeholders/MDT members.
- Orientational concept of SREP.
- Orientational concept of Participatory Rural Appraisal (PRA) and adaptive tools.
- Concept of farming system approach.
- Farming system based Situation.
- Concept and evaluation of Gender participation .
- Field Exercise on PRA data collection.

Identification of Agro-ecological situations (AES)

On the basis of important factors like topography, types of crop grown and sources of irrigation, 3 different agro-ecological situations (AES) were identified in the district Pakur for the preparation of situation specific, farmers' demand oriented SREP.

Map Showing Agro Ecological Situation (AES) of Pakur District



Sl. No.	Name of AES	Feature	Blocks Covered	Total Geographical area(in Hectare)	% of total Geographical area
1.	AES-I	Rain fed, Undulated land. Red latté rite to clay loam.	Pakur and Hiranpur	39173.57	21%
2.	AES-II	Irrigated , Plain sandy Loam to Clay loam.	Maheshpur and Pakuria	70710.84	39%
3.	AES-III	Rain fed, Hilly, forest, red latte rite gravel soil & clay loam.	Amrapara and Litipara	68311.42	38%

Selection of Members

Selection of members of multi-disciplinary team (MDT) of 13 officers and 11 representative from different NGO's and progressive farmers of Pakur district each Group Consists officers representative NGO's and progressive farmer's from Viz. Agriculture, Horticulture, animal husbandry, Fishery, Soil Conservation, Seri Culture, Agri-business center and one woman members.

Three AES zones are identified by core team members as follows:

AES I (PAKUR AND HIRANPUR): Representative village-Jikarahati Nayatola (Water logged Area)

Team members names:-

- Md. Sahabuddin, BAO,Pakur (Team In charge)
- Dr. Denesh kumar, BAHO,Pakur
- Dr. Binod kumar, SMS (Soil) KVK, Maheshpur, Pakur
- Mrs. Roj Meri Hebrum, Chairman, Schith berogrs sangs, Pakur
- Mrs. Jotika Soren, LEO,Pakur
- Shri. Trivun Dubey, Milk cooperative society, Pakur
- Shri. Manoj Kumar Mishra, Sanchalak, ABC, Pakur
- Shri. Sunil Das, Plant Protection supervisior, Pakur
- Shri. Ram Bhadhur, Representative Yadgar Foundation, Pakur

AES II (MAHESHPUR AND PAKURIA): Representative village-Baliapatra (plain and rain fed Area)

- Shri. Gyan Sharan Mishra, BAO, Mahespur, Pakur (Team In charge)
- Dr. Farhat Jabbar, TVO, Mahespur, Pakur (Data Collection In charge)
- Shri. Rajesh Kumar, LEO, Mahespur, Pakur
- Mrs. Maya Kumari, SMS(Home sciences) KVK, Maheshpur, Pakur
- Shri. Sives Bakeshi, Project Coordinator, Tagor Society, Maheshpur, Pakur
- shri. Suderasan Pandey, Representative Navjagerti Kendra, Pakuria, Pakur
- Shri. Gulab singh, BAO, Pakuria, Pakur
- Shri. Nand Kishor Ram, Sanchalak, ABC, Maheshpur, Pakur

AES III (LITTIPARA AND AMRAPARA): Representative village-Padarkola

- Shri. Radha Raman Agrawal, BAO, Litipara, Pakur (Team In charge)
- Shri. Surend Narayan Saha, EO, Hiranpur, Pakur (Data Collection In charge)
- Shri. Pankaj Seth, SMS, (AH), KVK, Maheshpur, Pakur
- Shri. Debakre Parshad, EO, Litipara, Pakur
- Shri. Umesh Parshad Mandal, J.E., Litipara, Pakur
- Shri. Abhimanu Thakur, Sanchalak, ABC, Amrapara, Pakur
- Shri. Raghuveer Pandit, Member Governing Board, ATMA, Pakur.
- Shri. Sanjay Kumar Sinha, P.P.S. Pakur

Training of core members of AES team was conducted from 07 Jan 08 – 09 Jan 08 at Pakur. Work of Primary Data Collection was Started from 20.05.08 to 27.05.08. Detail program as Follow.

20.05.08 one day Orientation an Training Program.

21.05.08 – 25.05.08 Data Collection of Representative villages.

26.05.08 – 27.05.08 Compilation and analysis of Data Collected.

28.05.08 – 29.05.08 Preparation of SREP.

28.02.09-15.06.09- Repreparation, resummarisation and computer compilation started at ATMA Pakur

18.06.09- SREP draft of Pakur completed .

Formation of District level data resummarisation and Computer Compilation team of active member of line department, Pakur formed:

1. **Dr. Manish Ranjan I.A.S. Chief patron**
   D.C. cum Chairman ATMA, Pakur
2. **Sri. Bimal Kumar Lakra Administrative and technical support**
   D.A.O cum P.D. ATMA, Pakur
3. **Dr.Farhat Jabbar,TVO,Mahespur,Pakur Overall Technical Support**
4. **Md. Sahabuddin, B.A.O.,Pakur**
5. **Shri. Gyan Sharan Mishra, B.A.O., Mahespur, Pakur**
6. **Shri. Radha Raman Agrawal, B.A.O., Litipara, Pakur**

Private computer operator team

Computer Summarization and computer compilation Team Following Private Persons of Pakur.

1. **Md. Mehboob Alam.**
2. **Ranjit Prasad.**
3. **Danish.**
4. **Shashi Gupta.**

Identification of representative villages for each AES

During the course of AES training, three major Agro-Ecological Situations (AES) were identified and representative villages based on various agro-ecological factors were selected.

Conducting field survey

Field survey was conducted in Pakur district from: 21.05.08 to 25.05.08 during which members of the inter-disciplinary group collected data and information for the preparation of SREP. The primary data collected during field survey was checked with various farmers groups in the village through triangulation and Analysis.

The collected data was summarized and presented by each AES team in the presence of scientists from BAU, Ranchi along with the senior level officers from all concerned departments and farmers from representative villages.

Collection of Secondary Information

Secondary data used for preparing SREP was collected from different publications from the records of the district offices of Agriculture , Horticulture, Animal Husbandry, Soil Conservation, Agriculture Marketing Board, Statistical office and database bank prepared by SRI and NIC Website.

Compilation Summarization and Presentation of Data

A core team comprising of 3 members from the AES teams facilitated by SAMETI Facilitators undertook the job of tabulation, analysis of data collected by various AES teams and preparation of the first draft of SREP was presented before MANAGE Consultant .

The data from each representative village was discussed in detail with the scientists of BAU, Ranchi before its compilation. During the presentation and review it was emphasized by MANAGE Consultant, that agro-processing, post harvest management of produce, public-private partnership, formation of FIG needs emphasis to make the SREP of Pakur district a useful document for the different stakeholders.

Role of SAMETI, Jharkhand in Preparation of the SREP

SAMETI, Jharkhand Provided Technical Backup and support to the project at state level and capacity building for stakeholders of ATMA district in particulars. Faculty members of SAMETI, Jharkhand, Hyderabad and Facilitator of SAMETI did the necessary training for development of SREP. The views, suggestions and guideline of the state level SREP Coordinator & Director, SAMETI; National Consultant of MANAGE and State Nodal officer (ATMA Schemes), Jharkhand were incorporated at various stages for the final output. The constant efforts put forth by the Faculty members and Facilitator of SAMETI, Jharkhand, Training Organizer & Scientists of KVK of Pakur and Project Director of ATMA have been a source of inspiration.

III BACKGROUND INFORMATION OF THE DISTRICT

DISTRICT PROFILE & BASIC INFORMATION

Pakur was upgraded into District on the 28th January 1994 and the State of Jharkhand was formed on 15th, 2000 and Pakur included in the state The District Covers an area of over 1806 sq.kms (178195.83 hect.) having one Civil subdivision with 4 Towns and 1250 villages divided into 6 Blocks. This is a District on the border of Bihar-West Bengal. Malda, Murshidabad and Birbhum District of west Bengal, surrounding it from the east and Dumka and Sahebganj from the west. Total House Holds-Rural – 126737 Urban – 6250 .

The Pakur District is primarily rural and most of the population resides in villages. Tribal population of the district lives in Undeveloped Area. The speed of urbanization has been moderately slow due to rural economy based on agriculture. There are two organized coal industrial sector and many an unorganized sector of stone (chip) so seasonal migration of labors is common.

Total Population of the District as per 2001:- 701664 out of this 6.65 lac Live in villages. Density of population 388 per square kms Literacy rate 30.54 % (Male 40.19, Female 20.44) Out of total population 44% (3.1 lac) working population 35% (1.11 lac) of population are Involved in cultivation 30% (0.96 lac) are Agricultural Labor 8.71% (0.27 lac) Out of Total population 56% Comprise ST.

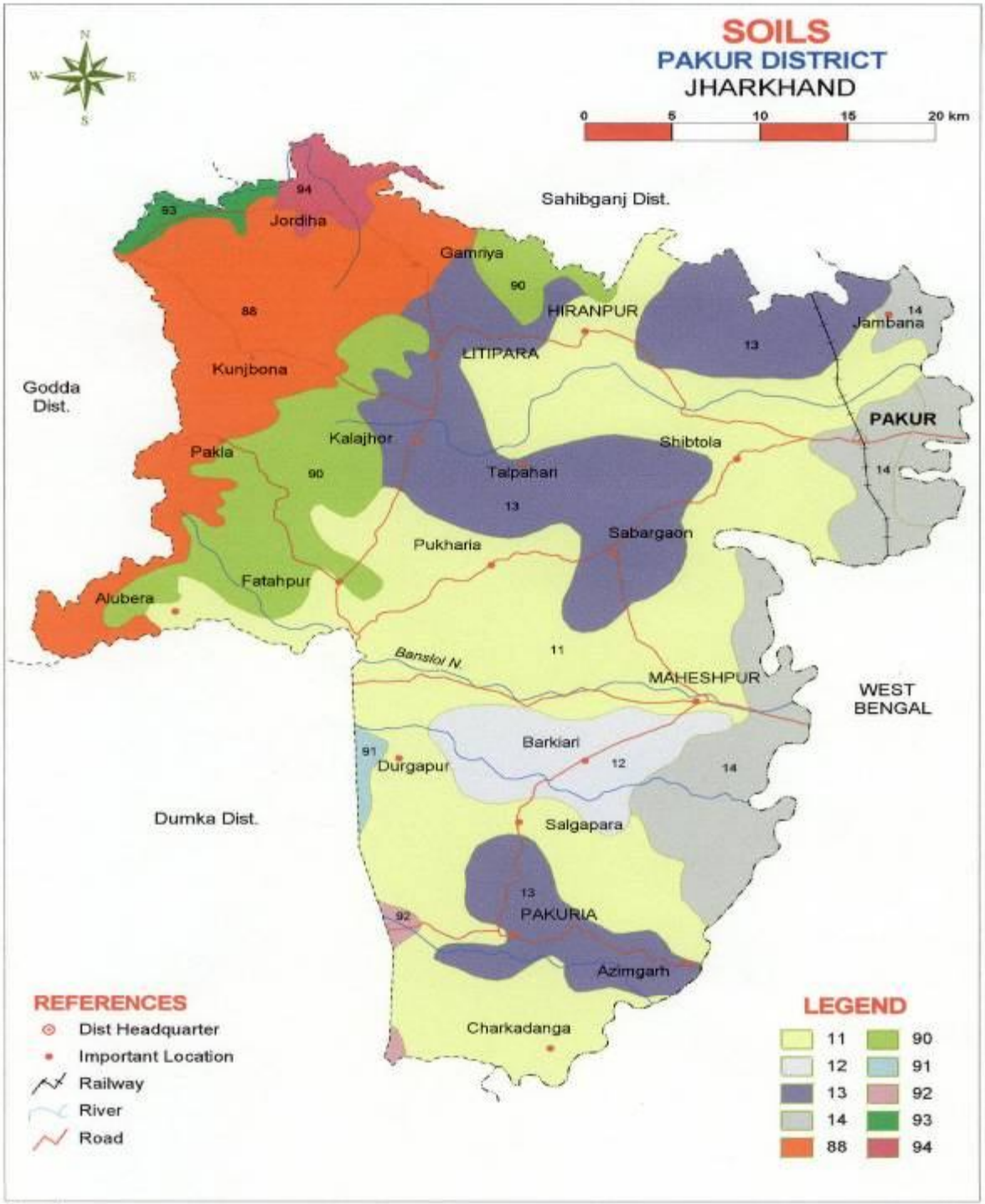
The elevation of Pakur district is about 35.5 Meter above the mean sea level (MSL) the hills in the district are widely scattered. There are low land in Eastern part which are seasonally water logged while the North West side with hills they are stone hills. South West side is plain and rain fed area which is suitable for agricultural purposes.

Pakur is commonly call us Paikur" was Past of old Sahebganj dist. Till 1994 when it was upgraded to district. Some parts of Pakur was part of West Bengal till 1956 when it was merged with other parts of Sahebganj district. Pakur fall under Santhal Paragana Tenecy Act. 1855. This district falls under central and North eastern plateau of agro climatic Zone of IV as nomenclature's called. Agriculture and allied activities are predominant activities of Pakur till Jharkhand State formed. Traditionally of Pakur is know for quarrying unorganized industry. Recently, Coal-mine industry in organised Sector developed. About 75% of district Population earn livelihood from agriculture & allied sector (Animal husbandry). These livelihood provide raw material to the small and village population and also supporting the allied sector. Geographically, the district is divided into the region, one comprising Littipara block with old sedimentary soil ficient in nutrients and other area has fertile and alluvial soil. Agriculture is predominantly rain fed. Duck farming along with fisheries is a for domestic income.

SOIL INFORMATION

Pakur soil is occurring in different land forms have been characterized during soil resource mapping of the state on 1,25,000/- Scale and three soil namely Entisols, ineeptisols and Alfisols were observed in Pakur. Alfisols were dominant soil covering 65% of TGA followed by Entisols 25.2% and intisols (92%) soil PH 4.5 to 7.8.

The organic carbon content in the soil ranges from .08 to 5.54% soil of 64.5% area have high surface organic available Nitrogen content in the surface soils of the district ranges between 55 Kg/ to 682 Kg/ha. Baring the Littipara and some part of Pakur and Amrapara, the soil is predominantly alluvial in nature.


SOILS
PAKUR DISTRICT
JHARKHAND
0 5 10 15 20 km
N
W E
S
Sahibganj Dist.
Godda Dist.
Dumka Dist.
WEST BENGAL
Jordiha
Gamriya
HIRANPUR
Jambana
LITIPARA
Kunjbona
PAKUR
Kalajhor
Shibtola
Pakla
Talpahari
Sabargaon
Pukharia
Fatahpur
Alubera
Bansloi N.
MAHESHPUR
Barkiari
Durgapur
Salgapara
PAKURIA
Azimgarh
Charkadanga
94
93
88
90
13
14
11
12
91
92
REFERENCES
Dist Headquarter
Important Location
Railway
River
Road
LEGEND
11
12
13
14
88
90
91
92
93
94
Fig. - 1

Classification of Soil of Pakur

Alfisols	-	80.4
Inceptisols	-	17.0
Vertisols	-	0.60

PH of Soil at Pakur is 4.9 – 7.7, 88.9% of soil is acidic, 2.6% alkaline 40.5% of land have acidic problems.

Table – 1

(PH>5.5)

S.N.	Classification of land	Area (00 H.)	% of total George.
1.	Highly acidic (PH-4.5-5.00)	150	8.3
2.	Soundly acidic (PH-5.5-5.5)	581	32.2
3.	Moderately acidic (PH-5.6-6.00)	586	32.5
4.	Less acidic (PH-6.1- 6.6)	287	15.9
5.	Neutral (PH- 6.6- 7.3)	118	6.5
6.	Less alkaline (PH-7.4-7.8)	46	2.6
7.	Other	37	2.00
Total : -		1805	100

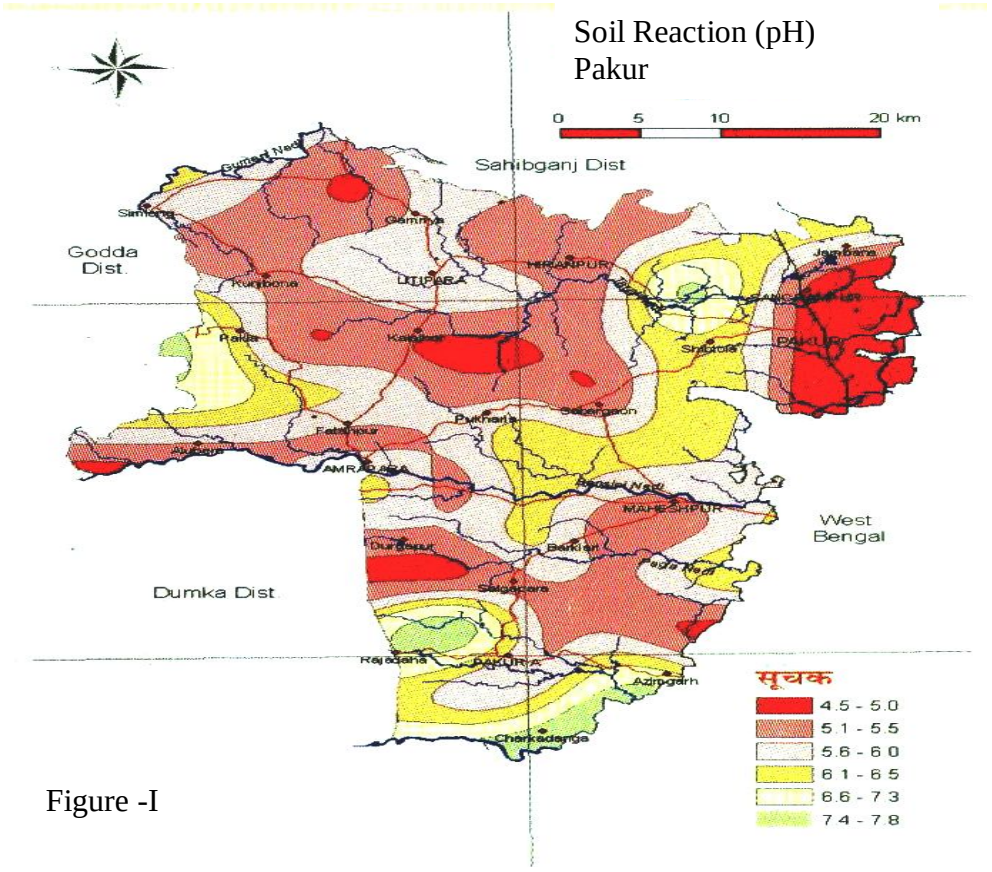


Figure -I

Organic matter

Organic matter contends varies 0.28 to 2.17 % , 29.5 % of geographies soil have moderate to low organic content while 68.5 % of soil have high carbonic matter.

Figure (2)

S.N.	Organic Contends (%)	Area (HA)(00)	% of total soil
1.	Less (0.50% or less)	154	8.6
2.	Medium (0.50-0.75)	377	20.9
3.	High (0.75 or more)	1237	68.5
4.	Other	37	2.00
Total :-		1805	100.00

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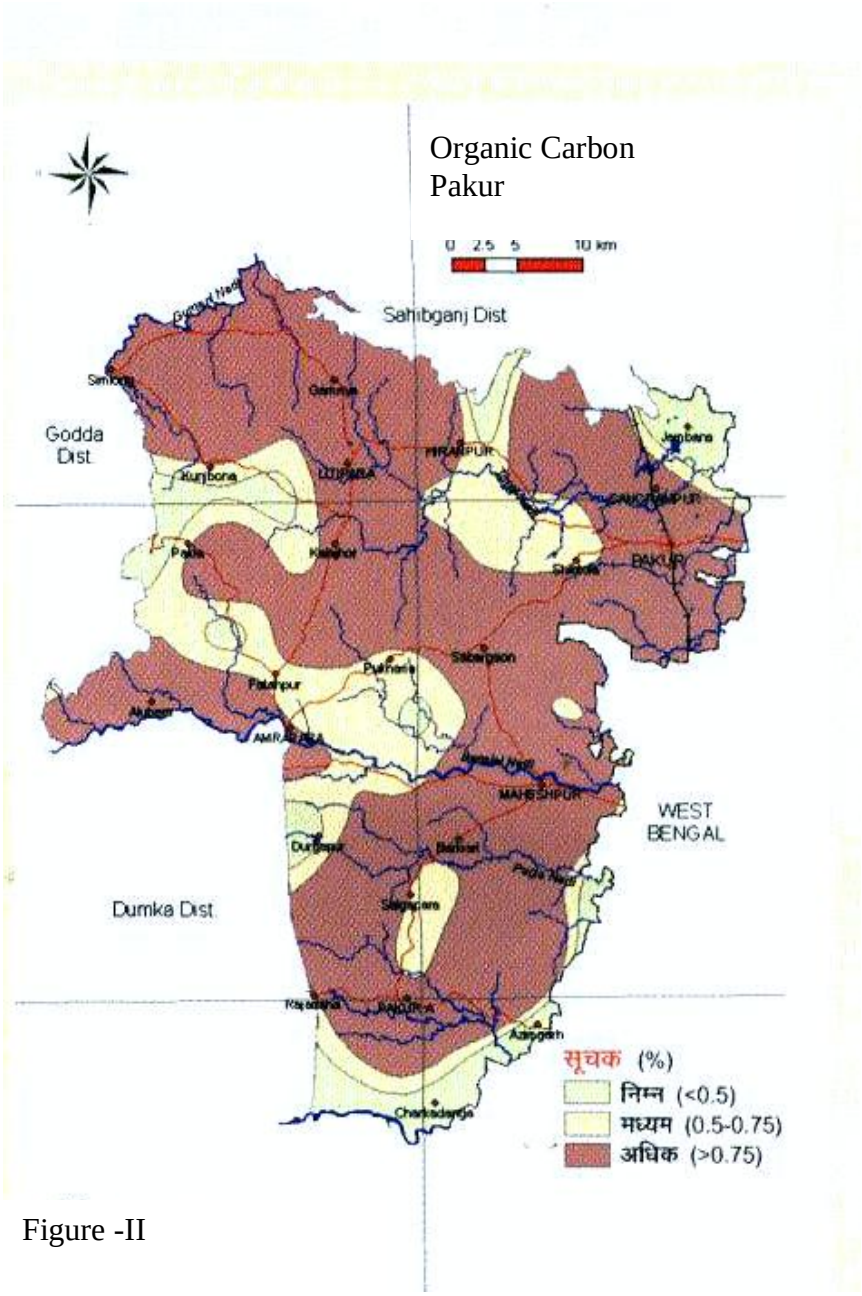


Figure -II

Available nitrogen

Availability of Nitrogen varies from 257 kg / ha to 624 kg/heater. Majority land have nitrogen contemnors moderate (87.9%) and (7%) of land have highly available.

S.N.	Available nitrogen (kg/heater)	Area (00 HA)	% of total geographies
1.	Low (280 kg/heater or less)	56	3.1
2.	Medium (280 kg/heater-560)	1586	87.9
3.	High (560 or more)	126	7.00
4.	Other	37	2.00
Total :-		1805	100.00

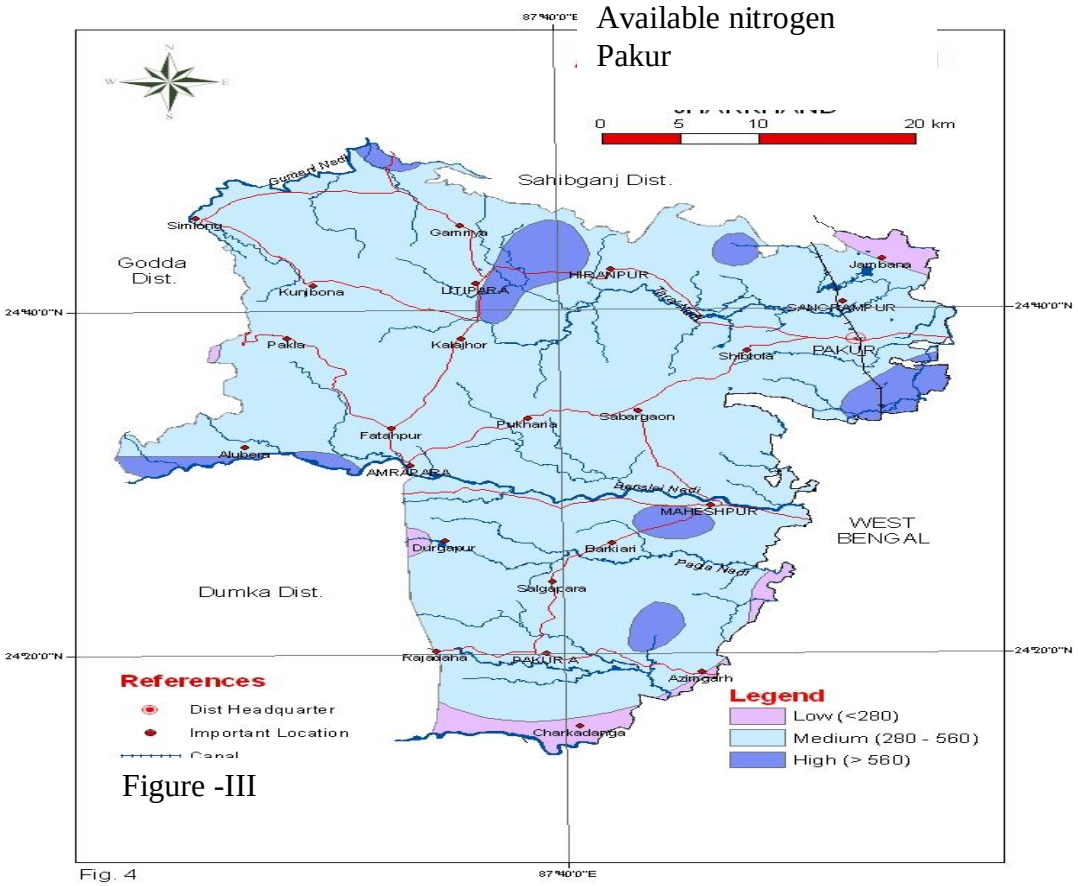


Figure -III

Fig. 4

Available Phosphorus

Available of phosphorus in Pakur 1.00-25.1 kg / ha.

75.3 of total land have shortage of phosphorus aw 22.5 % Land have moderate amount of phosphorus.

S.N.	Available Phosphorus	Area (00 HA)	% of total
1.	Low (10 kg/ha or less)	1359	75.3
2.	Medium (10-15 kg/ha)	406	22.5
3.	High (15 kg/ha)	3	0.2
4.	Other	37	2.00
Total :-		1805	100.00

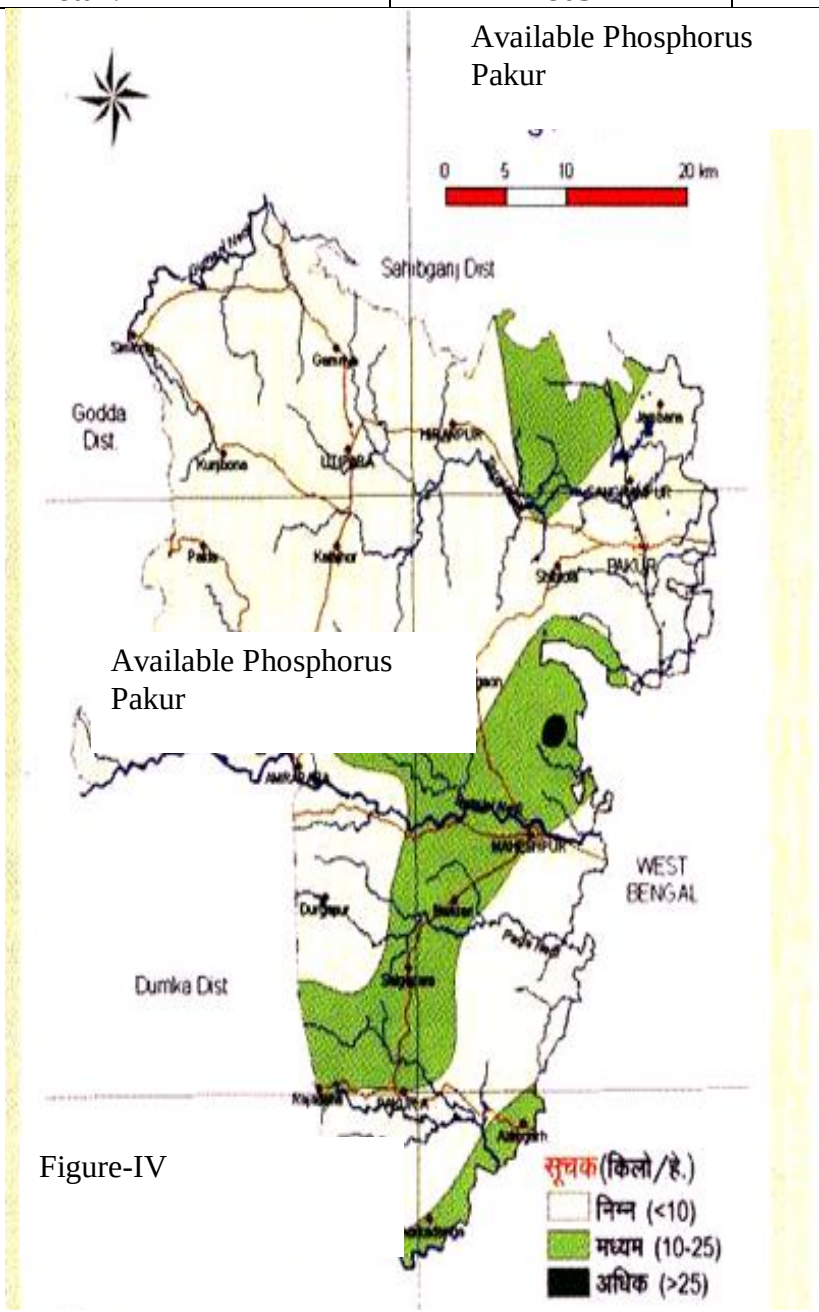


Figure-IV

Availability of Potash

Availability of potash at Pakur varies 54-700 kg/ha Majority land have modeler land of potash (46.3%) and 25.1% of land have critically low. 26.6% land have high contend of Potash.

S.N.	Available Potash	Area (00 HA)	% of total
1.	Low (108 or less)	453	25.1
2.	Medium (108-280)	835	46.3
3.	High (280 or more)	480	26.6
4.	Other	37	2.00
Total :-		1805	100.00

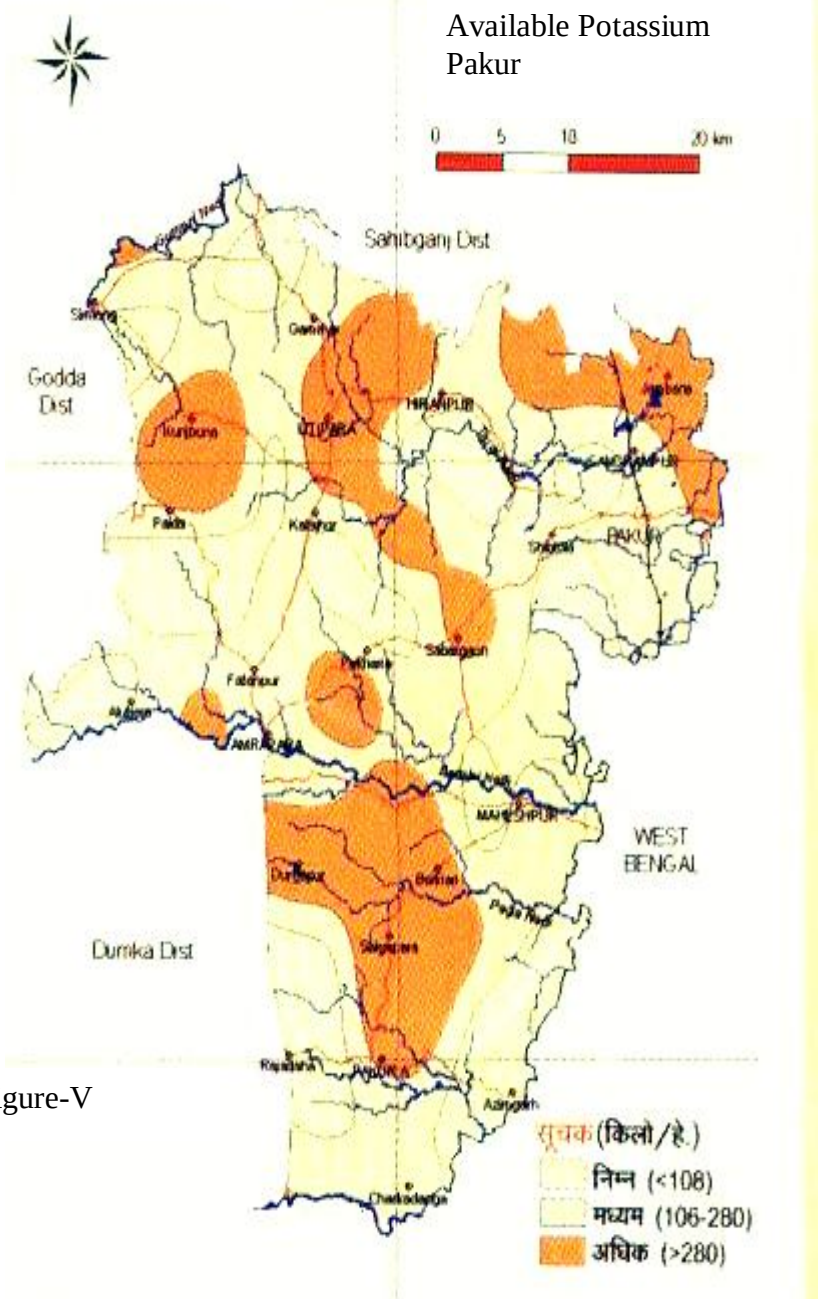


Figure-V

Available of sulphar

Availability of sulphar at Pakur varies 2.50-35.35 mg/kg of soil. 42.2% of land have low lonfent 41.4% have moderate 14.4% have high contow of sulfur at apper layer of land.

S.N.	Available Potash	Area (00 HA)	% of total
1.	Low (10 or less)	761	42.2
2.	Medium (10-20)	747	41.4
3.	High (20 or more)	260	14.4
4.	Other	37	2.00
Total :-		1805	100.00

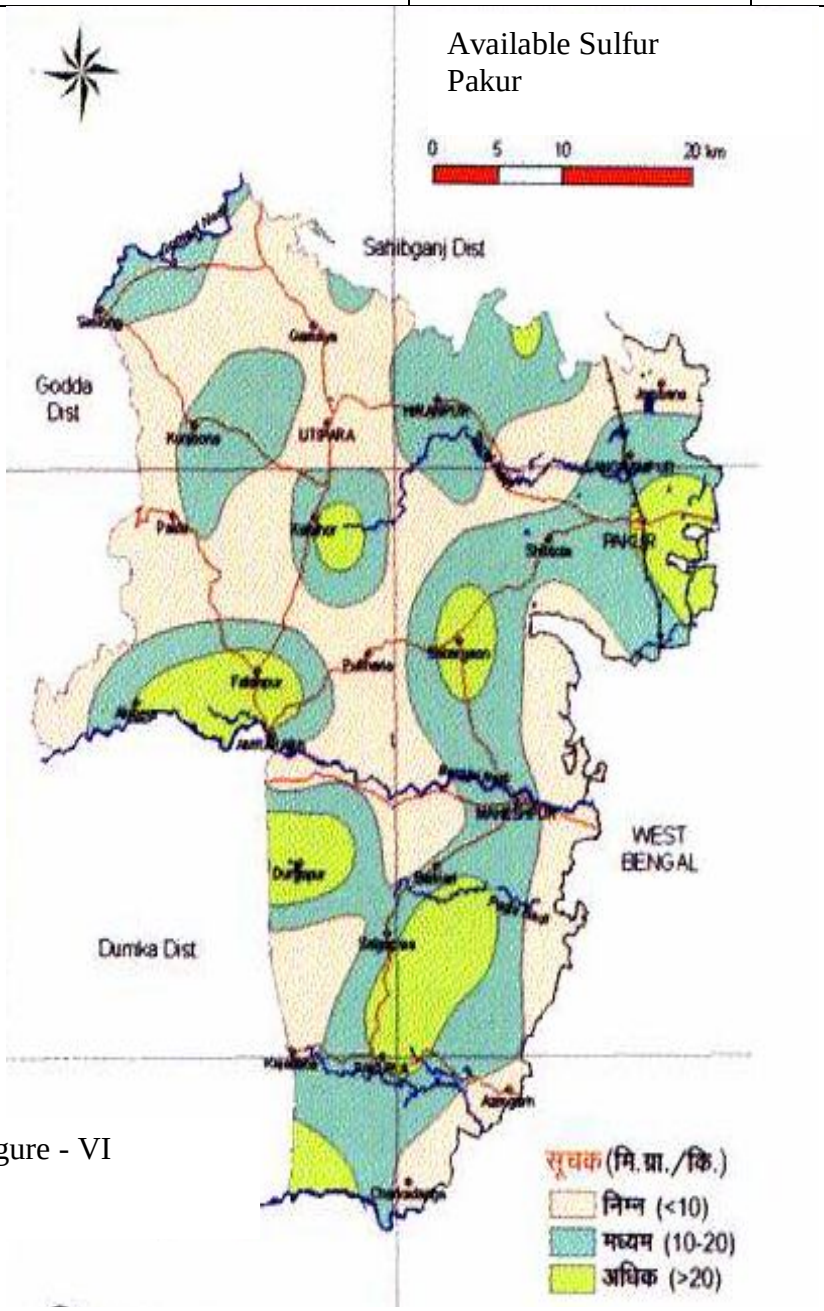


Figure - VI

Availability of Mieronutrients

Availability of micronutrient or critical level it level available boron (98%) copper (97.3%) and available silicon (84.5%) have very much 27.2% total land have Deficient

(27.2) in Boron while 70.8 have rich in Boron.

S.N.	Available Boron	Area (00 HA)	% of total	Evaluate
1.	(0.25 or less)	310	17.2	Deficient
2.	(0.25-0.50)	180	10.00	Deficient
3.	(0.50-0.75)	219	12.1	Rich
4.	(0.75 or more)	1059	58.7	Rich
5.	Other	37	2.00	
Total :-		1805	100.00	

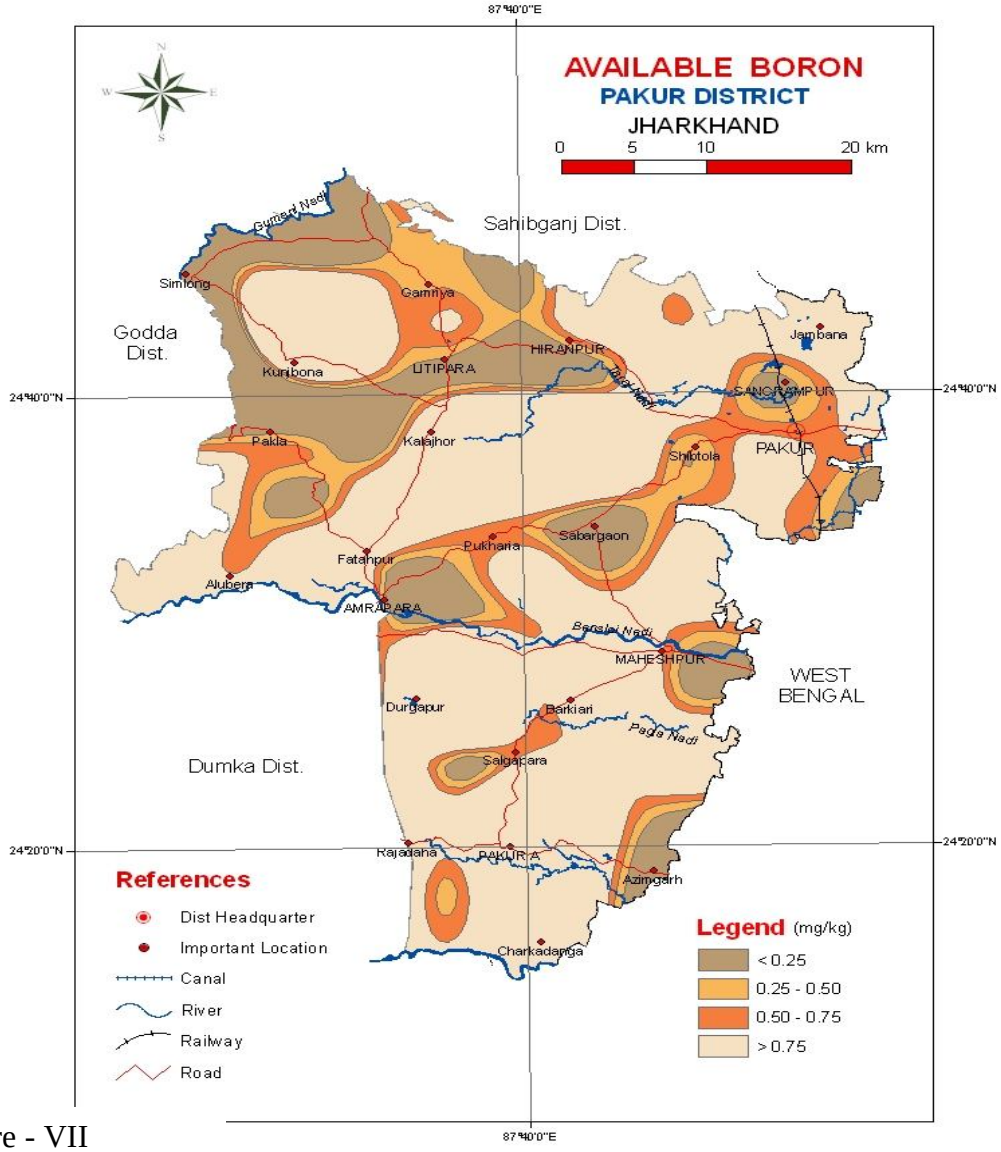
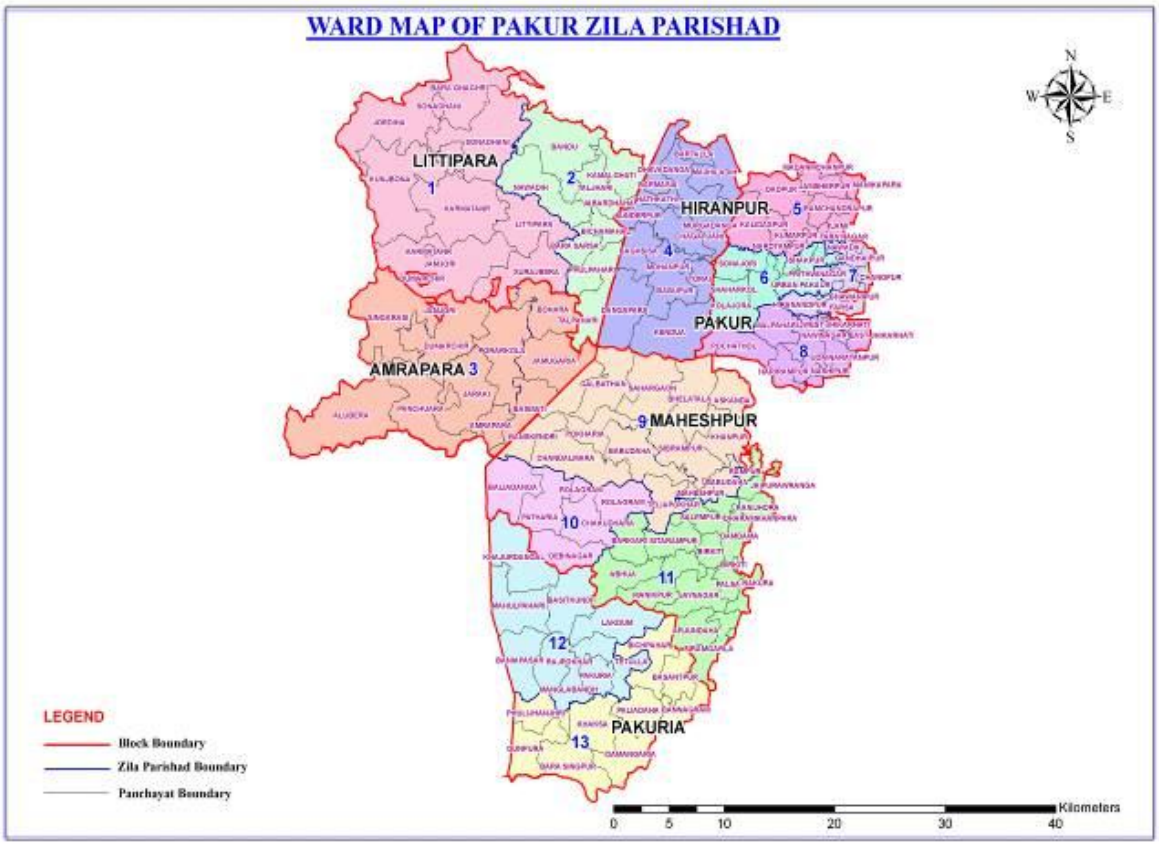


Figure - VII



TableNo.1 A: General features of Rainfall, Tempr. & Relative Humidity of the district Pakur (To be prepared by Distt. Nodal Officer)

• SL. No	Month wise data Name of the block / Taluk ./ Mandal	Geogra-phical Area K.msq	No. of Gram Pancha-yats	No. of revenue Villages	Information					
					Average Rainfall and rainy days (in mm)					
					2006		2007		2008	
					Avg in mm	No. of Days	Avg. in mm	No. of days	Avg. in mm	No. of days
1	Pakur	221.71	36	155	1911.2	83	1693.6	80	1590.8	85
2	Hiranpur	169.6	14	118	1870.4	74	1582.4	76	1173.4	71
3	Amrapara	273.29	18	166	2655.8	83	2451.6	82	2059.8	85
4	Littipara	413.05	17	304	3211.0	72	1823.0	75	1321.8	73
5	Maheshpur	448.93	33	345	1982.2	76	2329.8	71	1611.6	82
6	Pakuria	279.01	18	148	2604.4	74	1166.2	38	1568.6	92

d be collected

Block wise area & demographic pattern of Pakur District As Per 2001 census.

Sl. No.	Block	Area (in Ha.)	Total Population	S.C. Population	S.T. Population	Total No. of Panchyat	Total Villages (Cheragi)
1.	Pakur	22234	232936	7466	36052	36	155
2.	Hiranpur	16939	68111	2988	28210	14	118
3.	Littipara	41107	87447	2306	62679	17	270
4.	Amrapara	27203	53324	1314	43514	10	121
5.	Maheshpur	42125	170585	5047	84944	33	316
6.	Pakuria	28515	89261	3798	57439	18	148

Block wise Information on Villages & Households of Pakur District As Per 2001 census.

Sl. No.	Block	No. Of Villages (Cheragi)	No. Of Villages (Becheragi)	Total No. of Households	Total Population	MALE	FEMALE
1.	Pakur	155	34	39920	232936	118823	114113
2.	Hiranpur	118	15	12805	68111	34786	33325
3.	Littipara	270	34	17798	87447	44783	42644
4.	Amrapara	121	02	11200	53324	27540	25784
5.	Maheshpur	316	29	33126	170585	87173	83412
6.	Pakuria	148	08	18138	89261	45440	43821

Geographical Location of Pakur Blocks

Sl. No.	Name of block	Latitude	Longitude	MSL
1.	PAKUR	$87^{O}49'37"E$	$24^{O}38'14"N$	38 M
2.	HIRANPUR	$87^{O}4$	$24^{O}42'24"N$	40 M
3.	LITTIPARA	$87^{O}4$	$24^{O}41'17"N$	50 M
4.	AMRAPARA	$87^{O}4$	$24^{O}30'36"N$	63 M
5.	MAHESHPUR	$87^{O}4$	$24^{O}28'38"N$	31 M
6.	PAKURIA	$87^{O}4$	$24^{O}19'49"N$	66 M

1. Celebration of District :- 28 January 1994
2. Location and Border :- East – West Bengal (Murshidabad)

   West – Godda District

   North - Sahebganj

   South – Birbhum (West Bengal)

   East and North Site – Malda

   West and South Site – Dumka (S.P)

Table No. 3.01 Information of Land use pattern in the Pakur.
(unit in ha)

Sl. N0.	Name of the Block	Geographical Area	Cultivatable Area	Cultivated Area	Cultivated Waste	Current Fallow
1.	Pakur	22234	11699	11819	656	5938
2.	Hiranpur	16939	8763	8990	749	3998
3.	Littipara	41108	10340	10672	2080	13571
4.	Amrapara	27204	6618	6784	809	8418
5.	Maheshpur	42126	15774	16269	2585	13645
6.	Pakuria	28585	13294	13464	1024	9053
Total:-		178196	66488	68000	7903	59623

Sl. No.	Name of the Block	Forest Reserved	Pasture	Land put to non agri.Use	Land Under misc. plantation	Barren & unculturable land (waste land)
1.	Pakur	81	611	2732	57	460
2.	Hiranpur	435	603	1444	37	910
3.	Littipara	8377	1094	3096	1242	1308
4.	Amrapara	6030	975	1469	804	2081
5.	Maheshpur	176	1909	5369	202	2466
6.	Pakuria	00	1692	2018	69	1435
Total:-		15099	6884	16128	2411	8660

Table 3.02
INFORMATION ON LIVESSTOCK STATUS IN THE PAKUR :- 2003 Census

Sl. No.	Block	Milch Cows	Milch Buffaloes	Draught animal	Sheep	Goat	Poultry Birds	Piggery
1.	Pakur	15505	4004	12600	1620	33201	150209	8384
2.	Hiranpur	12030	3043	11003	1792	11096	50852	7036
3.	Littipara	20090	5513	14300	1571	17307	73066	12575
4.	Amrapara	22102	2526	7069	2237	15236	53239	12913
5.	Pakuria	32908	5220	7033	4018	17132	226890	10937
6.	Maheshpur	61526	1024	7025	5830	40737	97462	17061

Table No. 3.03 PAKUR DISTRICT: GEOGRAPHICAL FIGURE

Sl. No.	Name of Block	Total Area	Forest Land	Non-agriculture land	Non-agriculture land (use)	Barren cultivable land	Pasture Land	Plantations Land	Barren Land		Net cultivated land
									1 year	More than 1 year	
1	2	3	4	5	6	7	8	9	10	11	12
1.	PAKUR	22234.37	81.27	460.09	2732.29	655.61	611.51	56.31	3786.31	2031.48	11819.50
2.	HIRANPUR	16939020	435.39	910.42	1444.51	749.16	602.97	36.20	2272.43	1498.03	8990.09
3.	LITTIPARA	41107.59	8376.85	1307.72	3095.94	2080.48	1093.98	1242.05	7034.05	6204.20	10672.32
4.	AMRAPARA	27203.83	6030.28	2081.48	1469.53	808.71	975.07	802.59	5901.18	2349.46	6784.45
5.	MAHESHPUR	42125.69	175.67	2465.95	5369.07	2585.24	1909.29	200.84	7132.12	6017.05	16269.38
6.	PAKURIA	28585.15	0.00	1434.90	2018.34	1023.96	1691.86	68.46	5263.07	3620.30	13464.26
	Grand Total	178195.83	15099.46	8660.56	16129.68	7903.16	6884.68	2406.45	31389.16	21720.52	68000.00

Table : 3.04

Crop wise and season wise area (in hact.) of Pakur

Sl. No.	Name of crops	Kharif	Rabbi	Garma	Gross Cropped Area
1.	***Paddy***	46,200.00	-	360.00	46,560.00
2.	Makai	8,350,.00	1,000.00	150.00	9,500.00
3.	Wheat	-	4,500.00	-	4,500.00
4.	Dalhan	8,300.00	10,200.00	70.00	18,570.00
5.	Telhan	0,750.00	6,000.00	-	6,750.00
6.	Vegetable	3,800.00	1,000.00	115.00	4,915.00
7.	Mota Crops	600.00	-	-	600.00
8.	Potato	-	1,500.00	-	1,500.00
9.	Onion	-	-	130.00	130.00
	Grand Total	68,000.00	24,200.00	825.00	93,025.00

Table No. 3.05 **Pakur District Irrigation facilities and Area coverage**

Sl. No.	Sources Name	No.	Irrigation Capacity (In Hact.)	Condition
1.	Well/Bandh	855	380.00	Seasonal
2.	Pond	3022	9500.00	Seasonal
3.	River/Joria	118	500.00	Seasonal
4.	Cross Bandh	210	950.00	Para Seasonal
5.	Sayphon	02	80.00	Default
Total			11410.00	

Table No.: 3.06

BLOCKWISE TOTAL POPULATION SC AND ST YEAR 2001

DIST. - PAKUR

Sl. No.	Name of Block		Total Population			SC			ST			%	
			Total	Male	Female	Total	Male	Female	Total	Male	Female	SC/ST	Literacy
1.	PAKUR	Rural	196907	99843	97064	5414	2764	2650	33684	16810	16874	SC – 3.20	16
		Town	36029	18980	17049	2052	1069	983	2368	1179	1189	ST – 15.48	
		Total	232936	118823	114113	7466	3833	3633	36052	17989	18063		
2.	HIRANPUR	Rural	68111	34786	33325	2988	1508	1480	28210	14134	14076	SC – 4.38 ST – 41.42	30.4
3.	LITTIPARA	Rural	87447	44783	42664	2306	1192	1114	62679	31800	30879	SC – 2.64 ST – 71.67	19.09
4.	AMRAPARA	Rural	53324	27540	25784	1314	687	627	43514	22162	21352	SC – 2.46 ST – 81.60	29.88
5.	MAHESHPUR	Rural	170585	87173	83412	5047	2582	2465	84944	42675	42269	SC – 2.96 ST – 49.80	24.8
6.	PAKURIA	Rural	89261	45440	43821	3798	1922	1876	57439	29017	28422	SC – 4.25 ST – 64.35	29.18
District's Total		Rural	665635	339565	326070	20867	10655	10212	310470	156598	153872	SC –	
		Town	36029	18980	17049	2052	1069	983	2368	1179	1189	ST -	
District Total			701664	358545	343119	22919	11724	11195	312838	157777	155061	SC – 3.26 ST – 44.58	

Table No.3.07: Demographic Information for the Pakur District (To be collected by District nodal officer)

S.No.	Name of the Block	Main Workers		Cultivator		Agri Labour		House Hold worker		Other Workers	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
1	Pakur	48184	25134	7139	739	10087	859	1221	9505	29737	14031
2	Hiranpur	15258	2844	6052	1050	4381	1052	682	331	4143	411
3	Littipara	20338	6998	13054	4708	3523	1388	1024	406	2737	496
4	Amrapara	13134	6485	9063	4842	1451	1072	490	238	2130	333
5	Maheshpur	37140	9144	18521	3481	12180	4537	1015	404	5424	722
6	Pakuria	19414	5362	11505	2726	5078	2006	634	160	2197	470

Table No.3.08: Demographic Information for the Pakur District

S.No.	Name of the Block	Marginal Workers		Cultivator		Agri Labour		House Hold worker		Other Workers		Nan Workers	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
1	Pakur	8063	15566	1088	1133	28760	2099	468	7836	3647	4498	62576	73413
2	Hiranpur	2829	4974	725	1253	1808	3342	34	226	262	153	16699	25507
3	Littipara	20338	6998	13054	4708	3523	1388	1024	406	2737	496	20757	**2758**
4	Amrapara	2106	5157	564	2394	1200	2164	85	269	257	330	12300	14142
5	Maheshpur	10297	19517	2632	6561	6923	11795	147	734	595	427	49736	54751
6	Pakuria	6801	12734	2093	4304	4270	7770	61	161	377	499	19225	25725

Table No. 3.09: Production and Productivity of important commodities

CROP AND YIELD OF PAKUR DISTRICT

YEAR – 1999-2007

Year	Name of Crops							
	Paddy	Cereal	Pulses	Oil seed				
	Capacity		Capacity		Capacity		Capacity	
1999-2000	68.000	68.635	5.000	4.365	4.000	3.681	0.350	0.161
2000-01	74.000	37.093	5.500	5.556	4.100	5.422	0.350	0.152
2001-02	74.000	48.609	5.500	5.556	4.100	6.270	0.350	0.485
2002-03	55.000	60.173	6.000	5.754	5.100	4.678	0.670	0.256
2003-04	55.000	28.595	6.000	5.877	5.100	3.133	0.670	0.270
2004-05	53.000	25.310	6.090	4.810	6.330	4.770	0.765	0.280
2005-06	53.000	46.900	6.090	4.935	6.330	3.880	0.765	0.105
2006-07	48.000	47.500	8.350	5.860	8.605	5.910	1.462	0.591
2007-08	46.200	-	8.350	-	8.300	-	0.762	-

Table No. 3.10: Production and Productivity of important commodities under Kharif Crop

KHARIF YEAR – 2005-06 IN BLOCKWISE AND

Sl. No.	Name of Block	Target	Achievements	Percentage	Ttarget	Achievement (soil)	Achievement (Jhita)	Total	Percentage of area	Target	Achievement	Percentage	MAKAI								
													H.Y.D			Hybrid			Total		
		H.Y.V. PADDY			HYBRID PADDY								Target	Achievement	percentage	Target	Achievement	percentage	Target	Ahivement	percentage
1.	PAKUR	6000	5700	95%	3000	2850	-	2850	95%	9000	8550	95%	500	320	64%	500	460	92	1000	780	78%
2.	HIRANPUR	3500	2975	85%	1500	1275	-	1275	85%	5000	4250	85%	310	215	69%	280	260	93	590	475	80%
3.	LITTIPARA	4000	3400	85%	2000	1360	340	1700	85%	6000	5100	85%	700	385	55%	700	610	87	1400	995	71%
4.	AMRAPARA	3500	2625	75%	2500	1805	70	1875	75%	6000	4500	75%	350	215	61%	350	340	97	700	555	79%
5.	MAHESHPUR	14000	12600	90%	4000	3440	160	3600	90%	18000	16200	90%	750	735	98%	750	670	89	1500	1405	94%
6.	PAKURIA	6000	5750	96%	3000	2550	-	2550	85%	9000	8300	92%	450	380	84%	450	345	77	900	725	81%
Grand Total		37000	33050	89%	16000	13280	570	13850	87%	53000	469000	88%	3060	2250	74%	3030	2685	89%	6090	4935	81%

		Jawar			Bajra			Mahua			Arhar			Urad			Mung			Kulti			Other Pulses			Total		
		Target	Achievement	Percentage	Target	Achievement	Percentage	Target	Achievement	Percentage	Target	Achievement	Percentage	Target	Achievement	Percentage	Target	Achievement	Percentage	Target	Achievement	Percentage	Target	Achievement	Percentage	Target	Achievement	Percentage
1.	PAKUR	1	-	-	1	-	-	15	-	-	410	380	93%	160	115	72%	15	5	33%	140	30	21%	130	85	65%	855	615	72%
2.	HIRANPUR	1	-	-	1	-	-	15	-	-	470	335	71%	190	135	71%	15	5	33%	165	5	3%	160	120	75%	1000	600	60%
3.	LITTIPARA	1	1	100%	2	1	50%	20	-	-	570	390	68%	230	140	61%	15	-	0%	195	7	4%	190	130	68%	1200	667	56%
4.	AMRAPARA	1	1	100%	2	2	100%	20	-	-	520	360	69%	200	130	65%	15	5	33%	170	10	0%	170	135	79%	1075	640	60%
5.	MAHESHPUR	2	-	-	1	-		15	-	-	560	430	77%	230	160	70%	25	10	40%	190	45	24%	195	140	72%	1200	785	65%
6.	PAKURIA	2	-	-	1	1	100%	15	-	-	470	340	72%	190	57	30%	15	6	40%	160	35	22%	165	135	-	1000	57	6%
Grand Total		8	2	25%	8	4	50%	100	-	-	3000	2235	75%	1200	737	61%	100	31	31%	1020	132	13%	1010	745	74%	6330	3884	61%

Table No. 3.11 : Production and Productivity of important commodities under Kharif Crop

OIL SEED 2006-07

S.N.	Name of Block	Mungphali			Til			Sunflower			Surguja			Arandi			Soyabin			Total		
		Target	Achievement	Percentage	Target	Achievement	Percentage	Target	Achievement	Percentage	Target	Achievement	Percentage	Target	Achievement	Percentage	Target	Achievement	Percentage	Target	Achievement	Percentage
1.	PAKUR	30	2	6	100	30	30	7	-	-	25	25	100	4	-	-	50	-	-	224	31	14
2.	HIRANPUR	25	4	16	100	20	20	7	-	-	25	20	80	4	-	-	50	-	-	219	30	13.7
3.	LITTIPARA	25	8	32	85	15	18	8	-	-	25	35	140	4	-	-	50	-	-	219	83	38
4.	AMRAPARA	25	10	40	85	10	12	8	-	-	25	25	100	4	-	-	50	-	-	219	105	48
5.	MAHESHPUR	30	45	150	130	25	19	10	-	-	30	45	150	4	3	75	52	-	-	286	278	97
6.	PAKURIA	30	04	13	100	5	5	10	-	-	40	43	107	5	1	20	50	-	-	295	64	22
Grand Total		165	73		600	105		50			170	193		25	4		302			1462	591	

Table No. 3.12 : Production and Productivity of important commodities under Rabi Crop

RABI CROP YEAR – 2005-06 BLOCKWISE

Target in Hectare

S.No.	Name of Block	Wheat		Makai		Gram		Masoor		Peas		Other pulse seed		Total pulses seed		mustard		Tisi		Kusum		sunflower		Total oil seed		Potato		Other vegetable		Total vegetable	
		Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement	Target	Target	Target	Achievement
1.	PAKUR	720	715	180	02	415	385	450	395	90	7	395	375	1350	1162	630	622	360	230	15	2	15	-	1020	854	325	321	180	175	505	496
2.	HIRANPUR	520	453	130	22	300	285	325	315	65	55	285	205	975	860	455	405	260	250	15	-	15	-	745	655	235	240	130	135	365	375
3.	LITTIPARA	600	530	150	24	345	390	375	340	75	60	330	290	1125	980	525	460	300	280	15	-	15	-	855	740	270	260	150	140	420	400
4.	AMRAPARA	400	355	100	15	230	220	250	360	50	50	220	220	750	850	350	400	200	210	10	-	10	-	570	610	180	200	100	105	280	305
5.	MAHESHPUR	960	940	240	185	550	485	600	575	120	115	530	545	1800	1720	840	955	480	385	25	35	25	-	1370	1375	430	545	240	380	670	925
6.	PAKURIA	800	610	200	04	460	380	500	475	100	15	440	410	1500	1280	700	680	400	340	20	-	20	-	1140	1020	360	280	200	170	560	450
Grand Total		4000	3603	1000	252	2300	2045	2500	2460	500	302	2200	2045	7500	6852	3500	3522	2000	1695	100	37	100	-	5700	5254	1800	1846	10000	1105	2800	2951

Table No. 3.13 : Production and Productivity of important commodities under Kharif Crop

KHARIF YEAR 2007-08

Sl. No.	Name of Block	Paddy							Maize							Jawar		Bazara	
		HYV		Hybrid		Total			HYV		Hybrid		Total						
		Target	Coverage	Target	Coverage	Target	Coverage	Percentage	Target	Coverage	Target	Coverage	Target	Coverage	Percentage	Target	Coverage	Target	Coverage
1.	PAKUR	5740	5910	2560	2650	8300	8560	103%	900	885	600	605	1500	1490	99%	15	12	01	0.5
2.	HIRANPUR	4470	4600	2010	2110	6480	6710	103%	700	790	470	450	1170	1140	97%	15	16	01	1.0
3.	LITTIPARA	4780	4930	2150	2240	6970	7170	103%	750	740	500	510	1250	1250	100%	15	16	02	0.5
4.	AMRAPARA	7020	7210	3150	3240	10170	10450	102%	1100	1085	730	725	1830	1810	99%	20	22	01	0.5
5.	MAHESHPUR	3830	3960	1720	1970	5550	5750	104%	600	590	420	440	1020	1030	101%	15	12	02	0.5
6.	PAKURIA	6060	6160	2710	2880	8770	9040	103%	950	940	630	620	1580	1560	99%	20	21	01	0.5
Total		31900	32770	14300	14910	46200	47680	103%	5000	4930	3350	3350	8350	8280	99%	100	99	08	3.5

Table No. 3.14 : Production and Productivity of important commodities under Kharif Crop

KHARIF YEAR 2007-08

Sl. No.	Name of Block	Ragi		Pigeon Pea		Urad		Moong		Kulthi		Other		Total		Mugnph-ali		Til		Soybean		Sarguja		Arandi		Total		Vegetable		Total	
		Target	Coverage	Target	Coverage	Target	Coverage	Target	Coverage	Target	Coverage	Target	Coverage	Target	Coverage	Target	Coverage	Target	Coverage	Target	Coverage	Target	Coverage	Target	Coverage	Target	Coverage	Target	Coverage	Target	Coverage
1.	PAKUR	85	50	720	725	280	280	85	95	180	140	230	235	1495	1475	30	20	65	72	20	-	03	-	25	25	03	03	126	120	608	595
2.	HIRANPUR	80	77	560	555	230	190	80	70	150	120	190	185	1210	1120	25	15	65	38	20	-	03	-	20	20	03	03	120	76	608	600
3.	LITTIPARA	85	75	600	595	240	210	85	65	150	130	200	190	1275	1190	25	17	65	30	20	-	03	-	24	20	03	03	120	70	608	605
4.	AMRAPARA	85	45	880	860	250	285	85	80	210	180	260	255	1605	1660	30	55	70	40	25	-	04	-	25	25	04	04	138	24	670	675
5.	MAHESHPUR	80	60	480	465	210	190	80	70	130	120	180	175	1080	1020	25	08	65	35	20	-	03	-	20	25	03	03	120	71	608	590
6.	PAKURIA	85	50	760	730	290	270	85	80	180	160	240	235	1555	1475	30	35	70	35	25	-	04	-	25	25	04	04	138	99	99658	660
Total		500	357	4000	3930	1500	1425	500	460	1000	850	1300	1275	8300	7940	165	150	400	250	130	-	20	-	135	140	20	20	762	560	3760	3725

Table No. 3.15 : Production and Productivity of important commodities under Rabi Crop

RABI YEAR 2007-08

Sl. No.	Name of Block	Wheat		Maize		Gram		Masoor		Peas		Other Pulses		Total	
		Target	Coverage	Target	Coverage	Target	Coverage	Target	Coverage	Target	Coverage	Target	Coverage	Target	Coverage
1.	PAKUR	770	785	160	160	920	935	350	360	120	115	360	375	1750	1785
2.	HIRANPUR	660	670	180	180	700	680	425	405	107	100	320	415	1552	1600
3.	LITTIPARA	640	550	120	060	700	600	375	350	95	80	330	300	1500	1330
4.	AMRAPARA	580	555	130	120	700	525	325	335	91	90	288	290	1404	1240
5.	MAHESHPUR	990	1090	220	165	1100	980	550	490	154	105	434	690	2288	2265
6.	PAKURIA	860	860	190	070	880	800	475	470	133	120	418	420	1909	1810
Total		4500	4510	1000	755	5000	4520	2500	2410	700	610	2200	2490	10400	10030

Table No. 3.16 : Production and Productivity of important commodities under Rabi Crop

RABBI YEAR 2007-08

Sl. No.	Name of Block	Mustard		Tisi		Sun flower		Kusum		Total Oilseed		Potato		Other Vegetable		Total Vegetable		Remarks
		Target	Coverage	Target	Coverage	Target	Coverage	Target	Coverage	Target	Coverage	Target	Coverage	Target	Coverage	Target	Coverage	
1.	PAKUR	590	650	370	380	28	08	39	15	1027	1050	325	380	180	225	505	605	
2.	HIRANPUR	495	550	327	325	34	05	32	-	888	880	235	340	130	235	365	575	
3.	LITTIPARA	525	520	341	340	30	-	34	-	930	860	270	250	150	130	420	380	
4.	AMRAPARA	455	470	290	280	26	-	29	-	800	750	180	200	100	105	280	305	
5.	MAHESHPUR	770	800	495	450	44	10	50	35	1359	1295	430	560	240	265	670	825	
6.	PAKURIA	660	655	427	400	38	05	43	-	1173	1060	360	370	200	260	560	630	
Total		3500	3645	2250	2175	200	25	227	50	6177	589	1800	2100	1000	1220	2800	3320	

TableNo.3.17: Production and Productivity of important commodities enterprise-wise for the district Pakur

S.No.	Name of the Commodity	2007-08		
		A	P	Y
1.	Paddy	47500	958020	20.17
2.	Maize	5860	70320	12.00
3.	Arhar	1990	13930	7.00
4.	Urd	1009	4540	4.50
5	Moong	226	800	3.54
6.	Kulthi	1415	7070	5.00
7.	Groundnut	73	730	10.00
8.	Sesamum	321	1280	4.00
9.	Niger	175	210	1.20
10.	Wheat	4567	89970	19.70
11.	Rabi Maize	1215	25300	20.00
12.	Gram	5000	72500	14.50
13.	Lentil	2480	17360	7.00
14.	Pea	500	6000	12.00
15.	Mustard	3580	16110	4.5
16.	Linseed	2220	6660	3.00
17.	Saff flower	80	320	4.00
18.	Potato	1910	162350	85.00
19.	Vegetables	1045	62700	60.00
20.	Other Pulses (Rabi)	2220	13320	6.00
21.	Other Pulses (Kharif)	1217	5080	4.00

Sources (KVK Maheshpur)Pakur

A – Area in ‘00’ ha.
P - Production ‘00’ m.tons.
Y - Yield (Productivity) in Qtts/ha.

TableNo.3.18 : Production and Productivity of Livestock, Poultry, Fisheries etc. in the district Pakur (Yr. 2007-08)

Name of the Commodity	Population	Production	Productivity
Cattle			
Crossbred	650	5330 Lt/Day	479/Year
Indigenous	339233	70460	157252
Buffalo	42411	64830	4538
Sheep			
Crossbred	97	145kg/A(W)	140/A
Indigenous	17125	8562kg/A(W)	14533/A
Goats	136542	764635kg(m)	12625/y
Pigs			
Crossbred	39	2340kg/A	300/y

Indigenous	69039	1035585kg/y	113127/y
Rabbits	34	71kg/A(m)	52/y
Poultry			
Desi	202238	1410135E/day	607158/y
Improved	2045	840/day(e)	11000/y
Ducks	62114	31262e/day 221713kg/day	21975/y
Turkey	95	2372kg(m)/day	150/y

Sources (KVK Maheshpur)Pakur

TableNo.3.19 : Production and Productivity of Sericulture enterprise-wise for the district Pakur

S.No.	Name of the Commodity	1993			1998			2003			2008		
		A	P	Y	A	P	Y	A	P	Y	A	P	Y
1.	D.F.L.S.Production (Tesserege)	-	4815	-	-	5167	-	-	24670	-	-	209051 Dfls	-
2.	Ccoon Production No.	-	105930	-	-	128000	-	-	548598	-	-	5775305	-
3.	Plantation	12	-	-	-	-	-	-	-	-	½ ha	-	-
4.	Training	-	-	-	-	-	-	-	-		-	-	325
5	No. of Kit Palak	-	103	-	-	-	132	-	-	180	-	-	1006

A – Area in '00' ha.
P - Production '00' m.tons.
Y - Yield (Productivity) in Qtts/ha.

TableNo.3.20 : Production and Productivity of Fish (Gvot.Pond only) for the district Pakur

S.No.	Name of the Block	No of Pond	P
1.	**Pakur**	**129**	**800**
2.	**Hiranpur**	**69**	**100**
3.	**Littipara**	**47**	**100**
4.	**Amraparas**	**8**	**200**
5	**Maheshpur**	**305**	**700**
6	**Pakuria**	**159**	**500**

A – Area in '00' ha.
P - Production '00' m.tons.
Y - Yield (Productivity) in Qtts/ha.

Table No. 3.21 : Production and Productivity of important commodities under Kharif Crop

KHARIF YEAR 2003-04

DISTRICT – PAKUR

Sl. No.	Type of Plants	Name of Plants	Area (In Ha.)	Productivity (Kilogram/Ha.)	Production (In Metric Ton)
1.	Food	Paddy	27290	1760	48030.4
		Maize	5877	941	5530.2
		Jwar	5	520	2.6
		Bajra	4	460	1.8
2.	Dalhan	Arhar	1680	564	947.5
		Urad	487	437	212.8
		Moong	98	314	30.8
		Kulthi	639	357	228.1
		Dalhan	913	470	429.1
		Total	3817	-	1848.3
3.	Telhan	Moongfali	22	615	13.5
		Til	238	215	51.2
		Sarguja	81	160	13.0
		Sunflower	12	215	2.6
		Andi	3	350	1.0
		Total	356	-	81.3
4.	Vegetable	Vegetable	1178	12150	14312.7
		Sugarcane	5	54500	272.5
		Pat	15	-	-
		Gudli	3	-	-

Table No. 3.22: Production and Productivity of important commodities under Rabi Crop

RABI YEAR 2003-04

Sl. No.	Type of Plants	Name of Plants	Area (In Ha.)	Probuctivity (Kilogram/Hact.)	Production (In Metric Ton)
1.	Wheat Food Makai	Wheat Corn	3890 710	1610 945	6263 671
2.	Dalhan	Gram	2080	1023	2128
		Masoor	2255	596	1344
		Matar	455	670	305
		Dalhan	1990	450	895
		Total Dalhan	6780	-	-
3.	Telhan	Rai/Mustard	3190	365	1164
		Tisi	1825	330	602
		Kusum	91	410	37
		Sunflower	90	300	27
		Total Telhan	5196	-	-
4.	Vegetable	Potato	1450	8670	12571
		Vegetable	785	11771	9240
		Total vegetable	2235	-	-

Table No. 3.23 : Production and Productivity of important commodities under Kharif Crop

KHARIF YEAR 2004-05

Sl. No.	Type of Plants	Name of Plants	Area (In Ha.)	Productivity (Kilogram/Hact.)	Production (In Metric Ton)
1.	Food	Paddy	25310	1413	35763.0
		Corn	4810	941	4526.2
		Jwar	15	520	7.8
		Bajra	20	460	9.2
2.	Dalhan	Arhar	2349	564	1324.8
		Urad	937	437	409.5
		Moong	53	314	16.6
		Kulthi	685	357	244.5
		Dalhan	746	470	350.6
		Total dalhan	4770	-	23460
3.	Telhan	Moongfali	35	615	21.5
		Til	245	215	52.7
		Total telhan	280	-	74.2
4.	Vegetable	Vegetable	1030	12150	12514.5
5.		Sugarcane	24	39500	948.0
		jute	70	7369	515.8

Table No. 3.24 : Production and Productivity of important commodities under Rabi Crop.

RABI YEAR 2004-05

Sl. No.	Type of Plants	Name of Plants	Area (In Ha.)	Productivity (Kilogram/Hact.)	Production (In Metric Ton)
1.	Food	Wheat	3235	1550	5014
		Corn	522	1000	522
2.	Dalhan	Gram	1927	1000	1927
		Masoor	1705	550	938
		Matar	380	600	228
		Dalhan	1915	350	670
		Total Dalhan	5927	-	-
3.	Telhan	Rai/Mustard	2985	400	1194
		Tisi	1620	250	405
		Kusum	22	400	9
		Total Telhan	4627	-	-
4.	Vegetable	Potato	1442	8500	12257
		Vegetable	885	8000	7080
		Total vegetable	2327	-	-

Table No. 3.25 : Production and Productivity of important commodities under Kharif Crop

KHARIF YEAR 2006-07

Sl. No.	Type of Plants	Name of Plants	Area (In Ha.)	Productivity (Kilogram/Hact.)	Production (In Metric Ton)
1.	Food	Paddy	47500	2017	958020
		Corn	5860	1200	70320
2.	Dalhan	Arhar	1990	700	13930
		Urad	1009	450	4540
		Moong	226	354	800
		Kulthi	1415	500	7070
		Dalhan	1271	400	5080
		Total dalhan	5911		
3.	Telhan	Moongfali	73	1000	730
		Til	321	400	1280
		Sarguja	175	120	210
4.	Vegetable				

Table No. 3.26 : Production and Productivity of important commodities under Rabi Crop

RABI YEAR 2006-07

Sl. No.	Type of Plants	Name of Plants	(In Hect.)	Production (Kilogram/Hact.)	Production (In Metric Ton)
1.	Food	Wheat	4567	89970	1970
		Corn	1215	24300	2000
2.	Dalhan	Gram	5000	72500	1450
		Masoor	2480	17360	700
		Matar	500	6000	1200
		Other Dalhan	2220	13320	600
3.	Telhan	Rai/Mustard	3580	16110	450
		Tisi	2220	6660	300
		Kusum	80	320	400
4.	Vegetable	Potato	1910	162350	8500
		Other Vegetable	1045	62700	6000

Table No. 3.27 : Production and Productivity of important commodities

Comparative Production Chart of Pakur District Blockwise

Year 2004 to 2007

Sl. No.	Name of Block	Year	Paddy		Wheat		Corn	
			Target	Production in mt	Target	Production in mt	Target	Production in mt
1.	PAKUR	2004-05	4710	58922	1030	15965	837	11998
		2005-06	8550	144410	715	10010	782	7395
		2006-07	7032	141835	825	16253	1110	14760
2.	HIRANPUR	2004-05	2320	32782	360	5580	610	82227
		2005-06	4250	71783	453	6342	479	4919
		2006-07	7540	152081	632	12450	955	12820
3.	LITTIPARA	2004-05	2910	41118	170	2635	1070	14768
		2005-06	5100	86139	530	7420	1019	9863
		2006-07	6895	139072	660	13002	1415	18460
4.	AMRAPARA	2004-05	2360	38347	135	2093	650	8937
		2005-06	4500	76005	355	4970	570	5534
		2006-07	5594	112831	565	11131	820	11120
5.	MAHESHPUR	2004-05	8340	117844	1210	18755	1300	17708
		2005-06	16200	273618	940	13160	1590	16949
		2006-07	10739	216606	1010	19897	1590	21400
6.	PAKURIA	2004-05	5210	73617	330	5115	865	11727
		2005-06	8300	140187	610	8540	729	6917
		2006-07	9700	195649	875	17238	1185	16060
Total			119710	2107846	9660	190556	17576	219562

Table No. 3.28: Production and Productivity of important commodities under Kharif Crop

KHARIF YEAR 2007-08

Sl. No.	Name of Crop	Coverage Area		Production		Yield Qs/Ha.
		Target (area)	Achievement in ha	Target (area)	Achievement in ha	
1.	Paddy	31900	32770	55825	98310	30.0
		14300	14910	18233	20874	14.0
		46200	47680	74058	119184	-
2	Corn	5000	4930	8000	9860	20.0
		3350	3350	3199	2680	8.0
		8350	8250	11199	12540	-
3.	Dalhan	4000	3930	2400	2554	6.5
		1500	1425	900	570	4.0
		500	460	300	253	5.5
		1000	850	400	120	3.0
		1300	1275	520	637	5.0
		8300	7940	4520	4134	-
4.	Telhan	165	150	148.5	180	12
		400	250	80	50	02
		135	140	27	56	4
		20	-	04	-	-
		20	20	10	12	6
		130	-	26	-	-
		762	560	305.5	298	-
5.	Mota Crops	100	99	50	54.5	5.5
		500	357	350	214	6
		08	3.5	-	-	-

Table No. 3.29 : Production and Productivity of important commodities Rabi

(2007 – 08)

Sl. No.	Name of Plant	Coverage Area		Production		Yield Qs/Ha.
		Target (area)	Achievement in ha	Target (area)	Achievement in ha	
1.	Wheat	4500	4510	9000	699.0	15.50
2.	Corn	1000	755	2500	1510.0	20.0
3.	Gram	5000	4520	7500	6780.0	15.0
	Masoor	2500	2410	2000	1807.0	7.5
	Matar	700	610	1000	769.0	12.6
	Dalhan	2200	2490	2200	2042.0	8.2
	Total dalhan	10400	10030	12750	11398.0	-
4.	Rai/Mustard	3500	3645	1750	1713.0	4.7
	Tisi	2250	2175	1125	696.0	3.2
	Kusum	227	50	227	20.0	4.0
	Sunflower	200	25	160	12.5	5.0
	Total telhan	6177	5895	3262	2441.5	-
5.	Potato	1800	2000	-	16800.0	80.0
6.	Vegetable	1000	1220	-	7320.0	60.0

Table No. 3.30: Information on Infrastructure facilities

Infrastructure available in department of Agriculture produce market committee, Pakur(2008 – 09)

SI.No.	Name of Infrastructure	Number / Area	Utility / Capicity	Present position
1.	Administrative Building (APMC), GokulPur	(One)/ 280 Sqm.	Non Agricultural use	Non Agricultural use
2.	Administrative Building	01/00	Office	Good
3.	Secretory Residence	01/00	Non Agricultural use	Non Agricultural use
4.	Sandray Shop	26/00	Non Agricultural use	Non Agricultural use
5.	Godown	03/2500 MT	Non Agricultural use	Non Agricultural use
6.	Bank Building	01/ NA	Occupied by MI	Good
7.	Covered Plateform	06/ NA	Non Agricultural use	Non Agricultural use
8.	Plumber and electrician	02/ NA	Staff Resi.	Good
9.	Check Post	01/ NA	Vacante	Good
10.	Covered Plateform (Hiranpur)	05/ NA	Sale & Purchase	Good
11.	Godown (Hiranpur)	01/ NA	Sale & Purchase	Good
12.	Sandray Shop (Hiranpur)	40/NA	Sale & Purchase	Good
13.	Covered Plateform (Tori)	03/NA	Sale & Purchase	Good
14.	Covered Plateform (Danga para)	06/ NA	Sale & Purchase	Good
15.	Open Plateform (Danga para)	01/NA	Sale & Purchase	Good
16.	Covered Plateform (Bartalla Hat)	03/ NA	Sale & Purchase	Good
17.	Open Plateform (Bartalla Hat)	04/ NA	Sale & Purchase	Good
18.	Covered Plateform (Littipara Hat Bazar)	03/ NA	Sale & Purchase	Good
19.	Open Plateform (Littipara Hat Bazar)	01/ NA	Sale & Purchase	Good
20.	Covered Plateform (Dharampur Hat)	06/ NA	Sale & Purchase	Good
21.	Open Plateform (Dharampur Hat)	02/ NA	Sale & Purchase	Good
22.	Covered Plateform (Amrapara Hat)	02/ NA	Sale & Purchase	Good
23.	Open Plateform (Amrapara Hat)	01/ NA	Sale & Purchase	Good
24.	Covered Plateform (Paderkola Hat)	11/ NA	Sale & Purchase	Good
25.	Covered Plateform (Paklo Hat)	01/ NA	Sale & Purchase	Good
26.	Covered Plateform (Dumarchir Hat)	02/ NA	Sale & Purchase	Good
27.	Open Plateform (Dumarchir Hat)	01/NA	Sale & Purchase	Good
28.	Covered Plateform (Maheshpur Cattle Hat)	15/NA	Sale & Purchase	Good
29.	Covered Plateform (Devinagar Hat)	03/NA	Sale & Purchase	Good
30.	Covered Plateform (Baliadanga Hat)	06/NA	Sale & Purchase	Good
31	Covered Plateform (Shahargram Hat)	08/NA	Sale & Purchase	Good
32.	Covered Plateform (KairaChattar Hat)	04/NA	Sale & Purchase	Good

Table No. 3.31: Information on Infrastructure facilities

List of Government Agricultural Farms with cultivable land in Pakur

Name of Govt Farms (Seed production Research)	Geographical Area (in hectare)				
	Total Area	Cultivated Land			
		Don	Tanr	Total	% cultivable land to total
Maheshpur	9.93	5.00	1.48	6.48	65.26
Chitali	9.80	3.00	2.00	5.00	51.02
Total	19.73	8.00	3.48	11.48	58.19

List of State Govt. Nurseries

Active		**In Active**		**Total**
No. of Nurseries	**Area**	**No. of Nurseries**	**Area**	
3	**3.75**	**4**	**3.20**	**6.95**

Table No.3.32 : Information on Infrastructure facilities under Animal Husbandry Department Pakur

S.No	Type of Infrastructure	Utility	No/Area	Capacity	Present status
1	District Animal Husbandry Office, Pakur	Office Purpose	One	30	Good
2	Veterinary Dispensary Pakur	Animal Treatment & A.I. Work	2		Good
3	Class One Veterinary Dispensary	Animal Treatment & A.I. Work	4		Rented
4	Class One Veterinary Dispensary	Animal Treatment & A.I. Work	4		Govt. Building

NOTE: Infrastructure facilities such as office building (rented and owner), seed farms (with location), agro-processing, Nurseries (with location), storage godowns veterinary hospitals/polyclinics, A.I. centers, research stations, training Institutes, testing laboratories, demonstration farm etc.

- This information should mention location
- Also supplement with map showing locations..

Table No.3.33 : Information on Infrastructure facilities under Minor Irrigation Division Department Pakur

S.No	Type of Infrastructure	Utility	No/Area	Capacity	Present status
1	Office Building	Office Purpose	Two		Good

NOTE: Infrastructure facilities such as office building (rented and owner), seed farms (with location), agro-processing, Nurseries (with location), storage godowns veterinary hospitals/polyclinics, A.I. centers, research stations, training Institutes, testing laboratories, demonstration farm etc.

- This information should mention location
- Also supplement with map showing locations..

Table No.3.34 : Information on Infrastructure facilities under Industries Department, Pakur

S.No	Type of Infrastructure	Utility	No/Area	Capacity	Present status
1	Office Building	Office Purpose	One/50'x30'		Good
2	Grainage	Grain age Purpose	four /80'x60'each		

NOTE: Infrastructure facilities such as office building (rented and owner), seed farms (with location), agro-processing, Nurseries (with location), storage godowns veterinary hospitals/polyclinics, A.I. centers, research stations, training Institutes, testing laboratories, demonstration farm etc.

- This information should mention location
- Also supplement with map showing locations..

Table No.3.35 : Information on Infrastructure facilities under Fishery Department, Pakur

S.No	Type of Infrastructure	Utility	No/Area	Capacity	Present status
1	Office Building (Holl)	Office Purpose	One		Old

NOTE: Infrastructure facilities such as office building (rented and owner), seed farms (with location), agro-processing, Nurseries (with location), storage godowns veterinary hospitals/polyclinics, A.I. centers, research stations, training Institutes, testing laboratories, demonstration farm etc.

- This information should mention location
- Also supplement with map showing locations..

Table No.3.36 : Information on Infrastructure facilities at Hiriapur Block, Pakur

S.No	Type of Infrastructure	Utility	No/Area	Capacity	Present status
1	Block SGSY Training center	Training of Farmer	2 Ha	50 Trainer	Good
2	Veterinary Hospital	Treatment			

NOTE: Infrastructure facilities such as office building (rented and owner), seed farms (with location), agro-processing, Nurseries (with location), storage godowns veterinary hospitals/polyclinics, A.I. centers, research stations, training Institutes, testing laboratories, demonstration farm etc.

- This information should mention location
- Also supplement with map showing locations..

Table No.3.37 : Information on Infrastructure facilities at Littipara Block, Pakur

S.No	Type of Infrastructure	Utility	No/Area	Capacity	Present status
1	Block Ag office	Office work			Good
2	Veterinary Hospital	Treatment			Good
3	Ag Farm , Mali shed , thrashing floor, godown				Good
4	Sericulture	Office of Training Hall	2		

NOTE: Infrastructure facilities such as office building (rented and owner), seed farms (with location), agro-processing, Nurseries (with location), storage godowns veterinary hospitals/polyclinics, A.I. centers, research stations, training Institutes, testing laboratories, demonstration farm etc.

- This information should mention location
- Also supplement with map showing locations..

Table No.3.38: Information on Infrastructure facilities at Pakuria Block, Pakur

S.No	Type of Infrastructure	Utility	No/Area	Capacity	Present status
1	Storage Godown	Grain age			Good
2	Veterinary Hospital	Treatment			Good
3	Nursery (Horticulture)				Good

NOTE: Infrastructure facilities such as office building (rented and owner), seed farms (with location), agro-processing, Nurseries (with location), storage godowns veterinary hospitals/polyclinics, A.I. centers, research stations, training Institutes, testing laboratories, demonstration farm etc.

- This information should mention location
- Also supplement with map showing locations..

Table No.3.39 : Information on Infrastructure facilities at Dairy Department, Pakur

S.No	Type of Infrastructure	Utility	No/Area	Capacity	Present status
1	Office Building	Office Purpose	One		Good

NOTE: Infrastructure facilities such as office building (rented and owner), seed farms (with location), agro-processing, Nurseries (with location), storage godowns veterinary hospitals/polyclinics, A.I. centers, research stations, training Institutes, testing laboratories, demonstration farm etc.

- This information should mention location
- Also supplement with map showing locations

Table : 3.40: INFORMATION ON OCCURRENCE OF DROUGHT / FLOODS

S.No.	Name of the Block	Occurrence of drought/flood	Year in which effected (Last 10 Years)	Severity M/S/VS	% Cropped Area affected	Livestock mortality (No. of animals)	% of farm families affected
1.	Pakur	Flood	2000	M	20%	Nil	70%
2.	Hiranpur	Non Prone Area for flood, Because of upland.					
3.	Littipara	Non Prone Area for flood, Because of upland.					
4.	Amrapara	Non Prone Area for flood, Because of upland.					
5.	Maheshpur	Non Prone Area for flood, Because of upland.					
6.	Pakuria	Flood	2000	VS	85%	Nil	80%

- Data should be collected for 10 years.
- Indicate % for mild, severe and very severe.
- M = Mild, S = Severe, VS = Very Severe (As per GOI / States parameter)

Table No. 3.41 : Information on Infrastructure facilities at Hiranpur Block

S.No.	Type of Infrastructure	Utility	No./Area	Capacity	Present Status
1.	Block SGSY by Training Center	Training of Farmers	02	50 Trainier	Good
2.	Veterinary Hospital	Treatment	01	-	Good
3.	NGOs	SHG (Grouping)	03	90	Good

Table No. 3.42 : Information on Infrastructure facilities at Maheshpur Block

S.No.	Type of Infrastructure	Utility	No./Area	Capacity	Present Status
1.	Storage godown (FCI)	Stotoge of Grain	01	300 MT	Good
2.	Veterinary Hospital	Treatment	01	-	Good
3.	A.I. Center	A.I. work	02	2000 / year	Good
4.	Nurseries (NGO)	Plantation	01/10 Ha.	50000 / year	Good
5.	K.V.K. (B.A.U.)	Demonstration/Traninig/Extension	01/10 Ha.	NA	Good
6.	Cooperative godown	Stotoge of Grain	04	1000 MT	Good
7.	P.P. Office com Training Center	Training & Office	01	500 / year	Good

TABLE : 3.43: INFORMATION ON PROBLEM SOILS IN THE DISTRICT PAKUR

S.No.	Problem Soil	Area in ha	Extent of severity		
			Very Severe	Severe	Mild
1	Saline	_	_	_	_
2	Alkaline	4600	3000	1000	600
3	Acidic	1604	150000	58100	87300
4	Soil erosion	7900	-	400	7500
5	Iron Toxicity	37000	14000	12000	11000
6	Micro-nutrients deficiency	49000	31000	18000	-
7	Water logged condition	400	-	100	300
8	Others	3700	3000	700	-

Table No.3.44 : Information on rainfed and irrigated area in the district Pakur

Sl. No.	Name of the block	Rainfed area (ha)	%	Irrigated area (source wise)									Lift			Wells / Borewells			Tank			Pond			Others		
				Major			Medium			Minor																		
				%	P	A	%	P	A	%	P	A	%	P	A	%	P	A	%	P	A	%	P	A	%	P	A
1	Pakur																11	5					6	4		80	58
2	Amrapara																12	6					12	6		340	242
3	Maheshpur																5	2					15	8		20	14
4	Pakuria																8	4					14	7		51	38
5	Littipara																2	1					10	6		51	38
6	Hiranpur																-	-					12	7		9	6
Total																	38	18					6	4		500	358

a. % - share of the total area under irrigation

b. P - Potential area of the project

c. A – Actual area irrigated

d. Conversion of tanks to percolation tanks if any?

Table No.3.45 : Information on irrigation projects nearing completion Of Pakur District

Sl. No.	Type of the project *	Name of the project	Blocks covered	Area irrigated (ha)	
				Projected	Actual
1	Medium Project	Gumani Barrage Scheme	Hiranpur	3858	3200
2	Medium Project	Gumani Barrage Scheme	Pakur	1200	800
3	Minor Irrigation	Khatamara Minor Irrigation	Pakur	20	15
4	Minor Irrigation	Hirbandh Minor Irrigation	Pakur	20	4
5	Minor Irrigation	Dhansuri Minor Irrigation	Pakur	20	-
6	Minor Irrigation	Rajbandh Minor Irrigation	Pakur	20	-
7	Minor Irrigation	ChottaMohlan Minor Irrigation	Pakur	15	15
8	Minor Irrigation	Khoroktola Minor Irrigation	Pakur	15	11
9	Minor Irrigation	Sita garh Minor Irrigation	Pakur	15	15
10	Minor Irrigation	Jagatpur Minor Irrigation	Pakur	15	Cancelled
11	Minor Irrigation	Jharnanala Minor Irrigation	Hiranpur	20	16
12	Minor Irrigation	Vilidanga Minor Irrigation	Hiranpur	20	15
13	Minor Irrigation	Duggi Barmasiya Minor Irrigation	Hiranpur	20	12
15	Minor Irrigation	Fatahpur Minor Irrigation	Hiranpur	20	16
16	Minor Irrigation	Daldali Minor Irrigation	Hiranpur	20	18
17	Minor Irrigation	Pokhariya Minor Irrigation	Hiranpur	20	15
18	Minor Irrigation	Tatoliya Minor Irrigation	Hiranpur	20	15
19	Minor Irrigation	Tuggadih Minor Irrigation	Hiranpur	40	31
20	Minor Irrigation	Bichpahari Minor Irrigation	Pakuria	25	16
21	Minor Irrigation	Salgapara Minor Irrigation	Pakuria	30	22
22	Minor Irrigation	Monidanga Minor Irrigation	Pakuria	30	28
23	Minor Irrigation	Diggi Minor Irrigation	Pakuria	35	25

24	Minor Irrigation	BannoGram Minor Irrigation	Pakuria	30	25
25	Minor Irrigation	Dumnabandh Minor Irrigation	Maheshpur	30	24
26	Minor Irrigation	Taliya Pokhar Minor Irrigation	Maheshpur	30	26
27	Minor Irrigation	Bara Pokhar Minor Irrigation	Littipara	40	26
28	Minor Irrigation	Kariyodih Minor Irrigation	Littipara	40	29
29	Minor Irrigation	Darajmath Minor Irrigation	Littipara	32	24
30	Minor Irrigation	Davadih Minor Irrigation	Littipara	32	24
31	Minor Irrigation	Talpahari Minor Irrigation	Littipara	32	24
32	Minor Irrigation	Amirjhalo Minor Irrigation	Amrapara	35	18
33	Minor Irrigation	Fatihpur Minor Irrigation	Amrapara	26	18
34	Minor Irrigation	Dumarchir Minor Irrigation	Amrapara	33	18
35	Minor Irrigation	Padarkola (I) Minor Irrigation	Amrapara	30	18
36	Minor Irrigation	Padarkola (II) Minor Irrigation	Amrapara	30	19
37	Minor Irrigation	Padarkola (III) Minor Irrigation	Amrapara	30	12
38	Minor Irrigation	Kulkipara Minor Irrigation	Amrapara	40	23
39	Minor Irrigation	Barapharpur Minor Irrigation	Amrapara	40	23
40	Cross Bandh	Kalajhor Minor Irrigation	Amrapara	20	8
41	Cross Bandh	Talpahari Minor Irrigation	Littipara	24	15
42	Cross Bandh	Pathnala Minor Irrigation	Littipara	20	8
43	Cross Bandh	Datoinala Minor Irrigation	Maheshpur	15	8
44	Cross Bandh	Bandunala Minor Irrigation	Maheshpur	25	8
45	Cross Bandh	Rajbandh Minor Irrigation	Pakuria	25	5
46	Cross Bandh	Bagsisa Minor Irrigation	Pakur	20	5
47	Lift Irrigation	Baliya Patra Minor Irrigation	Maheshpur	100	Cancel
48	Lift Irrigation	Gowal para Minor Irrigation	Maheshpur	100	Cancel
49	Lift Irrigation	Katnojhari Minor Irrigation	Maheshpur	60	Cancel

50	Lift Irrigation	Rolagram Minor Irrigation	Maheshpur	120	Cancel
51	Lift Irrigation	Gatchora Minor Irrigation	Maheshpur	120	Cancel
52	Lift Irrigation	Lakhipur Minor Irrigation	Maheshpur	120	Cancel
53	Lift Irrigation	Baliyadaha Minor Irrigation	Maheshpur	60	Cancel
54	Lift Irrigation	Kathsala Minor Irrigation	Maheshpur	60	Cancel
55	Lift Irrigation	Englishpara Minor Irrigation	Maheshpur	120	Cancel
56	Lift Irrigation	Baliyadanga Minor Irrigation	Maheshpur	60	Cancel
57	Lift Irrigation	Barmasiya Minor Irrigation	Maheshpur	60	Cancel
58	Lift Irrigation	Dhovarna Minor Irrigation	Maheshpur	60	Cancel
59	Lift Irrigation	Nurai Minor Irrigation	Maheshpur	120	Cancel
60	Lift Irrigation	Pathlpali Minor Irrigation	Maheshpur	120	Cancel
61	Lift Irrigation	Gugdishpur Minor Irrigation	Maheshpur	120	Cancel
62	Lift Irrigation	Vimpur Minor Irrigation	Maheshpur	120	Cancel
63	Lift Irrigation	Rolagram Minor Irrigation	Maheshpur	120	Cancel
64	Lift Irrigation	Babupur Minor Irrigation	Maheshpur	120	Cancel
65	Lift Irrigation	Nargitola Minor Irrigation	Maheshpur	120	Cancel
66	Lift Irrigation	Annapura Minor Irrigation	Maheshpur	120	Cancel
67	Lift Irrigation	Ganpura Minor Irrigation	Maheshpur	120	Cancel
68	Lift Irrigation	Banakura Minor Irrigation	Maheshpur	120	Cancel
69	Lift Irrigation	Barasimpur Minor Irrigation	Pakuria	120	Cancel
70	Lift Irrigation	Barmasiya Minor Irrigation	Pakuria	120	Cancel
71	Lift Irrigation	Chotapaharpur Minor Irrigation	Amrapara	120	Cancel
72	Lift Irrigation	Amrapara Minor Irrigation	Amrapara	120	Cancel
73	Lift Irrigation	Rangapachwara Minor Irrigation	Amrapara	120	Cancel
74	Lift Irrigation	Barmaciya (II) Minor Irrigation	Amrapara	120	Cancel
75	Lift Irrigation	Chota kulki para Minor Irrigation	Littipara	120	Cancel

76	Lift Irrigation	Aalubara Minor Irrigation	Amrapara	120	Cancel
77	Lift Irrigation	Chota Gugri Minor Irrigation	Littipara	120	Cancel
78	Lift Irrigation	Bara Gugri Minor Irrigation	Littipara	120	Cancel
79	Lift Irrigation	Bipathpur Minor Irrigation	Pakur	60	Cancel

*** Project such as major, medium, minor, and project nearing completion**

TableNo.3.46 : Information on research and extension development activity in the district (2003-04)

Fishery & Dairy Department

Sl. No.	Sector(Central / State / district)	Name of the Scheme	Requirement of the scheme		Allocation of the year		No. Of Farmer
			Extn.	Research	Extn.	Research	
1		Training of Fish Farmer					179
2		Training of Dairy Farmer					100

- Separately for each organization
- Constraints as recorded by the department

EXTENTION PROGRAMME OF BANK IN PAKUR

Banks are organizing conducive formal meeting among the farmers to pro page the KCC scheme, SHZ finance, with the assistance of line department.

Every bank/branch of bank has been directed to adopt one village of own service see ton commonly called as "Apna goan"

As per directive of RBL, Banks are doing the job of 100 % financial inclusion all eligible household in banking segment.

Extensive/Viable awareness programme are conducted by the banks at villege/Kisan mela among the farmers about the advantages of Raslriya Krishe Bima Yojna offered by Agriculture insurance company of India and Personal Accident insurance scheme by genial insurance companies at present doing well.

Special credit camps are frequently organized by bank to boost up the coop loan portfolio.

FARMER CLUB an inveighed programme by NABARD an establishing at Block by Bank.

Table No.3.47 : List of credit institutes in operation for Agriculture and allied sector in the district pakur

LEAD BANK SCHEME

BANKWISE ACHIEVEMENT UNDER A.C.P. 2008-09

POSITION AS ON 30.11.2008

(Amount in 000s)

SI No	Bank	AGL			MSME			OPS			TPS			NPS			Total		
		Target	Ach.	%Ach.	Target	Ach.	%Ach.	Target	Ach.	%Ach.	Target	Ach.	%Ach.	Target	Ach.	%Ach.	Target	Ach.	%Ach.
1	A.B.	57915	3994	6.89	10698	2761	25.80	36984	5312	14.36	105597	12067	11.42	94713	400	0.42	200310	12467	6.22
2	B.O.B.	38610	3020	7.82	7132	3065	42.97	24656	6180	25.06	70398	12265	17.42	63142	440	0.69	133540	12705	9.51
3	B.O.I	77220	10101	13.08	14264	335	2.34	49312	2902	5.88	140796	13338	9.47	126284	2328	1.84	267080	15666	5.86
4	S.B.I.	347490	30006	8.63	64188	525	0.81	221904	19063	8.59	633582	49594	7.82	568278	93597	16.47	1201860	143191	11.91
5	S. Bank	19305	3365	17.43	3566	1749	49.04	12328	7388	59.92	35199	12502	35.51	31571	300	0.95	66770	12802	19.17
6	V.G.B.	212383	20976	9.87	10705	0	0	36998	12898	34.86	260086	33874	13.02	94726	18047	19.05	354812	51921	14.63
	G. Total	752923	71462	9.49	110553	8435	7.62	382182	53743	14.06	1245658	133640	10.72	978714	115112	11.76	2224372	248752	11.18

Table No. 3.48 : List of credit institutes in operation for Agriculture and allied sector in the district pakur

LEAD BANK SCHEME : PAKUR DISTRICT

BANKWISE POSITION OF SCC, ACC, GCC AND NO FRILLS ACCOUNTS AS ON 30.11.08

Amount (In '000s)

	•	ACC		GCC		SCC		SJSRY		NO FRILLS 01.04.08 TO 30.11.08		CUMMULATIVE	
S. NO.	**NAME** OF THE BAN.'.	NO.	AMT.	**NO.**	**AMT.**	**NO.**	**AMT.**	**NO.**	**AMT.**	**NO.**	**AMT.**	**NO.**	**AMT.**
01	**Allahabad** Bank	0	0	0	0	0	0	**0**	**0**	**4207**	**23**	**4383**	**119**
02	**Bank** of Baroda	0	0	0	0	**4**	**80**	**0**	**0**	**1192**	**16**	**2828**	**287**
03	**Bank** of India	0	0	0	**0**	0	0	**0**	**0**	**571**	**13**	**2376**	**252**
04	State Bank or India	0	0	4	**97**	**1**	**25**	**11**	**275**	**11643**	**87**	**17042**	**435**
05	Syndicate **Bank**	0	0	0	0	0	**0**	**0**	**0**	**1784**	**30**	**2133**	**207**
06	V. Gramin *Bank*	0	0	5	**125**	80	**2014**	**0**	**0**	**4535**	**258**	**11351**	**129**
	G. TOTAL	0	0	9	222	**85**	**2119**	**11**	275	**23932**	**427**	**40113**	**1429**

Table No. 3.49 : List of credit institutes in operation for Agriculture and allied sector in the district pakur

BANK OF INDIA

SELF HELF GROUP

Branch wise Position as on 30.11.2008

Rs. in thousand

SI. No	Branch	1st Gra./Revolving Fund					AMT		% ACH		2nd Gra./Proj. Fin.					AMT		% ACH	
		TAR.		NO OF APPL.							TAR.		NO OF APPL						
		PHY	FIN.	REC D	SAN.	DISB	SAN	DISB	PHY.	**FIN.**	PHY	**FIN.**	REC D	SAN.	DISB	SAN	DISB	PHY	FIN.
1	Birkitti	8	200	4	4	4	100	100	50.00	50.00	5	1250	4	4	4	1128	828	80.00	66.24
2	Kariodih	15	363	5	5	5	125	125	33.33	34.44	10	2484	3	3	0	821	0	0.00	0.00
3	Pakur	13	325	0	0	0	0	0	0.00	0.00	8	1830	2	2	2	532	532	25.00	29.07
4	Sonarpar	11	275	5	5	5	125	125	45.45	45.45	12	3000	6	6	6	1500	600	50.00	20.00
	G.Total	47	**1163**	**14**	**14**	**14**	**350**	**350**	**29.79**	**30.09**	**35**	**8564**	**15**	**15**	12	3981	**1960**	34.29	**22.89**

Table No.3.50 : List of credit institutes in operation for Agriculture and allied sector in the district pakur

VANANCHAL GRAMIN BANK

SELF HELF GROUP

Branch wise Position as on 30.11.2008

Rs. in thousand

;i. Nc	Branch	1st Gra./Revolving Fund					AMT		% ACH		2nd Gra./Proj. Fin.					AMT		% ACH	
		TAR,		NOOFAPPL.							TAR.		NOOFAPPL.						
		PHY	FIN.	RECD.	SAN.	DISB	SAN	DISB	PHY.	FIN.	PHY	FIN.	RECD.	SAN.	DISB	SAN	DISB	PHY	FIN.
1	AMRAPARA	10	250	1	1	1	25	25	10.00	10.00	8	1901	0	0	0	0	0	0.00	0.00
2	BARKIYARI	8	200	6	6	6	150	150	75.00	75.00	3	750	0	0	0	0	0	0.00	0.00
3	HIRANPUR	5	125	0	0	0	0	0	0.00	0.00	5	1245	5	5	5	865	865	69.48	69.48
4	MAHESHPUR	9	225	5	5	5	125	125	55.56	55.56	5	1290	3	1	1	2S6	266	20.62	20.62
5	NAGARNABI	11	275	3	3	3	75	75	27.27	27.27	5	1390	10	10	10	2000	2000	200.00	143.88
6	PAKUR	16	400	1	1	1	25	25	6.25	6.25	14	3360	0	0	0	0	0	0.00	0.00
7	PAKURIA	13	325	0	0	0	0	0	0.00	0.00	9	2214	3	3	3	785	785	33.33	35.46
8	PADERKOLA	10	250	5	5	5	125	125	50.00	50.00	8	2019	3	3	3	693	693	37.50	34.32
9	RAJDAHA	12	300	15	15	15	375	375	125.00	125.00	7	1783	2	2	2	502	502	28.57	28.15
10	RAHASPUR	8	200	1	1	1	25	25	12.50	12.50	2	570	0	0	0	0	**0**	0.00	0.00
11	TORAI	8	200	1	1	1	25	25	12.50	12.50	5	1274	0	0	0	0	**0**	0.00	0.00
	G.Total	**110**	**.2750**	38	38	38	950	**950**	**34.55**	**34.55**	71	**17796**	26	24	24	5111	**5111**	33.80	28.72

Table No. 3.51 : List of credit institutes in operation for Agriculture and allied sector in the district pakur

STATE BANK OF INDIA
SELF HELP GROUP
Branch wise Position as on 30.11.2008

Rs. in thousand

SI. No.	Branch	1st Gra./Revolving Fund					AMT		% ACH		2nd Gra./Proj.		Fin.			AMT		% ACH	
		TAR.		NOOFAPPL.							TAR.		NO OF APPL						
		PHY	FIN.	RECD.	SAN.	DISB	SAN	DISB	PHY.	FIN.	PHY	FIN.	RECD.	SAN.	DISB	SAN	DISB	PHY	FIN.
1	Amrapara	12	300	0	0	0	0	0	0.00	0.00	5	1418	0	0	0	0	**0**	0.00	0.00
2	Bannogram	7	175	3	3	3	75	75	27.27	27.27	3	750	3	3	'3	750	750	100.00	100.00
3	Baliadangal	11	275	3	3	3	75	75	27.27	27.27	8	2051	2	2	1	467	70	12.50	3.41
4	Chanchki	10	250	4	4	4	100	100	40.00	40.00	2	500	0	0	0	0	**0**	0.00	0.00
5	Devinagar	18	450	0	0	0	0	0	0.00	0.00	11	2801	3	3	3	S60	245	27.27	8.74
6	Dumaria	12	300	3	3	3	75	75	25.00	25.00	5	1245	0	0	0	0	**0**	0.00	0.00
7	Dangapara	10	238	0	0	0	0	0	0.00	0.00	5	1272	0	0	0	0	**0**	0.00	0.00
8	Dharampur	10	250	1	1	1	18	18	10.00	7.20	6	1510	3	3	3	693	0	0.00	0.00
g	Hiranpur	9	225	4	4	4	100	100	44.44	44.44	8	2037	7	7	7	1400	450	87.50	22.09
10	Khaksa	15	375	3	3	3	75	75	20.00	20.00	8	2051	0	0	0	0	**0**	0.00	0.00
11	Littipara	12	300	0	0	0	0	0	0.00	0.00	8	2002	0	0	0	0	**0**	0.00	0.00
12	Maheshpur	12	300	3	3	3	75	75	25.00	25.00	11	2793	1	1	1	175	175	9.09	6.26
13	Maharo	9-	225	2	2	2	50	50	22.22	22.22	5	1272	3	3	3	662	662	60.00	52.04
14	Pakur	15	375	4	4	4	100	100	26.66	26.66	18	5449	0	0	0	0	**0**	0.00	0.00
15	Pakur Bazar	13	325	0	0	0	0	0	0.00	0.00	3	781	0	0	0	0	0	0.00	0.00
16	Parulia	11	275	0	0	0	0	0	0.00	0.00	8	2051	0	0	0	0	**0**	0.00	0.00
17	Singarsi	0	0	0	0	0	0	0	0.00	0.00	0	0	0	0	0	0	**0**	0.00	0.00
18	Simlong	10	250	0	0	0	0	0	0.00	0.00	8	1992	0	0	0	0	0	0.00	0.00
19	Sonajori	12	300	0	0	0	0	0	0.00	0.00	13	3301	3	0	0	0	0	0.00	0.00
	G.Total	208	5188	30	30	30	**743**	**743**	**14.42**	**14.32**	**135**	**35276**	25	22	**21**	5007	**2352**	15.55	**6.66**

Table No. 3.52 : List of credit institutes in operation for Agriculture and allied sector in the district pakur

LEAD BANK SCHEME :: PAKUR DISTRICT

PMEGP :: 2008-09

ACHIEVEMENT AS ON 30.11.08

Amount (In '000s)

SI. No.	Name of the Bank	TAR		No. of Application			AMT.		% Ach.		Application	
		No	Margin Money	REC	SAN	DIS	SAN	< DIS	PHY	FIN	Pend	Retd.
01	**Allahabad Bank**	**03**	360	0	**0**	**0**	0	0	0	0	**0**	0
02	**Bank of Baroda**	**02**	240	0	0	0	0	0	0	0	**0**	0
03	**Bank of India**	**04**	480	0	**0**	0	0	0	0	0	**0**	0
04	**State Bank of India**	**18**	2160	0	0	**0**	0	0	0	0	**0**	0
05	**Syndicate Bank**	**01**	120	0	0	0	0	0	0	0	**0**	0
06	**Van. Gr. Bank**	**11**	1320	0	0	0	0	0	0	0	**0**	0
Grand Total -		**39**	**4680**	**0**	**0**	**0**	**0**	**0**	0	**0**	**0**	**0**

Table No. 3.53 : List of credit institutes in operation for Agriculture and allied sector in the district pakur

LEAD BANK SCHEME :: PAKUR DISTRICT

BANKWISE **ACHIEVEMENT UNDER** A.C.P. 2008-09

POSITION AS ON 30.11.2008

(Amount In 000s)

SI No	Bank	AGL			MSME			OPS			TPS			NPS			Total		
		Target	Ach.	%Ach	Target	Ach.	%Ach	Target	Ach.	%Ach	Target	Ach.	%Ach	Target	Ach.	%Ach	Target	Ach.	%Ach
1	A.B.	57915	3994	6.89	10698	2761	25.80	36984	5312	14.36	105597	12067	11.42	94713	400	0.42	200310	12467	6.22
2	B.O.B.	38610	3020	7.82	7132	3065	42.97	24656	6180	25.06	70398	12265	17.42	63142	440	0.69	133540	12705	9.51
3	B.O.I	77220	10101	13.08	14264	335	2.34	49312	2902	5.88	140796	13338	9.47	126284	2328	1.84	267080	15666	5.86
4	S.B.I.	347490	30006	8.63	64188	525	0.81	221904	19063	8.59	633582	49594	7.82	568278	93597	16.47	1201860	143191	11.91
5	S. Bank	19305	3365	17.43	3566	1749	49.04	12328	7388	59.92	35199	12502	35.51	31571	300	0.95	66770	12802	19.17
6	V.G.B.	212383	20976	9.87	10705	0	0	36998	12898	34.86	260086	33874	13.02	94726	18047	19.05	354812	51921	14.63
	G. Total	752923	71462 ...	9.49	110553	8435	7.62	382182	53743	14.06	1245658	133640	10.72	978714	115112	11.76	2224372	248752	11.18

Table No. 3.54 : List of credit institutes in operation for Agriculture and allied sector in the district pakur

LEAD BANK SCHEME :: PAKUR DISTRICT BANKWISE ACHIEVEMENT UNDER SHGS SCHEME:: 2008-09

POSITION AS ON 30.11.2008

(Amount In '000s)

SI. No.	NAME OF THE BANK	1SI GR. / REVOLVING FUND									2NU GR. / PRO FIN								
		TAR		NO. OF APPL			AMT		% ACH		TAR		NO. OF APPL			AMT		% ACH	
		PHY	FIN.	REC.	SAN.	DISB	SAN	DISB	PHY.	FIN.	PHY.	FIN.	REC.	SAN	DISB	SAN	DISB	PH	FIN.
01	Allahabad Bank	21	525	06	4	4	100	100	19.05	19.05	8	1938	03	02	02	538	538	25.00	27.76
02	Bank of Baroda	23	575	10	10	8	250	200	34.78	34.78	16	3660	07	06	04	1937	431	25.00	11.77
03	Bank of India	47	1163	14	14	14	350	350	29.79	30.09	35	8564	15	15	12	3981	1960	34.29	22.89
04	State Bank of India	208	5188	30	30	30	743	743	14.42	14.32	135	35276	25	22'	21	5007	2352	15.55	6.66
05	Syndicate Bank	08	200	0	0	0	0	0	0	0	07	1650	0	0	0	0	0	00	0
06	Vananchal Gramin Bank	110	2750	38	38	38	950	950	34.55	34.55	71	17796	26	24	24	5111	5111	33.80	28.72
	G. Total -	417	10401	98	96	94	2393	2343	22.54	22.52	272	68884	76	69	63	16574	10392	23.16	15.08

Table No. 3.55 : List of credit institutes in operation for Agriculture and allied sector in the district pakur

LEAD BANK SCHEME :: PAKUR DISTRICT

BANKWISE ACHIEVEMENT UNDER KCC SCHEME :: 2008-09

POSITION AS ON 30.11.2008

Amount (In '000s

SI. No.	Name of the Bank	TAR		No. of Application			AMT.		% Ach.		Application	
		PHY	FIN	REC	SAN	DIS	SAN	DIS	PHY	FIN	Pend	Retd.
01	**Allahabad Bank**	1000	30000	151	146	144	2244	2215	14.40	7.38	7	0
02	**Bank of Baroda**	600	18000	58	51	22	1615	458	3.66	8.97	36	**0**
03	**Bank of India**	1400	42000	313	313	313	8525	8525	22.36	20.30	0	0
04	**State Bank of India**	5900	177000	1381	1381	1381	16283	15539	23.40	8.77	0	0
05	**Syndicate Bank**	350	10500	39	**39**	39	1115	**1115**	11.14	10.61	0	0
06	**Van. Gr. Bank**	3450	103500	2421	2421	2421	19305	18695	70.17	18.06	0	0
Grand Total -		**12700**	**381000**	**4363**	**4351**	**4320**	**49087**	**46547**	**34.01**	**12.21**	43	**0**

Table No. 3.56 : List of credit institutes in operation for Agriculture and allied sector in the district pakur

ALLAHABAD BANK **BRANCH WISE CD RATIO AS ON 30.11.2008**

Rs. in thousand

SI. No.	Branch	Dep.	Adv.	CD Ratio
1	Pakur	93617	32018	• 34.20
2	Rolagram	19665	12459	63.36
3	Sahargram	16600	13900	83.73
	G.Total	**129882**	**58377**	**44.95**

Table No. 3.57 : List of credit institutes in operation for Agriculture and allied sector in the district pakur

BANK OF INDIA

BRANCH WISE CD RATIO AS ON 30.11.2008

Rs. in thousand

SI. No.	Branch	Dep.	Adv.	CD Ratio
1	Birkitti	43462	9253	21.29
2	Kariodih	39484	6278	15.90
3	Pakur	306278	42521	13.88
4	Sonarpara	44507	24560	55.18
	G.Total	**433731**	82612	**19.05**

Table No. 3.58: List of credit institutes in operation for Agriculture and allied sector in the district pakur

STATE BANK OF INDIA **BRANCH WISE CD RATIO AS ON 30.11.2008**

Rs. in thousand

SI. No.	Branch	**Dep.**	Adv.	CD Ratio
1	Amrapara	118544	64861	54.71
2	Bannogram	38296	9340	24.39
3	Baliadangal	15818	12579	79.52
4	Chanchki	41317	14994	36.29
5	Devinagar	35004	15335	43.81
6	Dumaria	20860	9063	43.45
7	Dangapara	31921	16332	51.16
8	Dharampur	16043	10335	64.42
9	Hiranpur	136590	51457	37.67
10	Khaksa	41811	26323	62.96
11	Littipara	98541	39544	40.13
12	Maheshpur	169692	86641	51.06
13	Maharo	33528	21862	65.21
1--	Pakur	1108200	197247	17.80
15	Pakur Bazar	321652	120715	37.53
16	Pakuria	37468	8960	23.91
17	Singarsi	50345	21220	42.15
18	Simlong	20229	10017	49.52
19	Sonajori	38046	14384	37.81
	G.Total	2373905	751209	31.64

Table No. 3.59 : List of credit institutes in operation for Agriculture and allied sector in the district pakur

VANANCHAL GRAMIN BANK

BRANCH WISE CD RATIO AS ON 30.11.2008

Rs. in thousand

SI. No.	Branch	Dep.	Adv.	CD Ratio
1	Amrapara	50335	25245	50.15
2	Barakiyari	20051	8574	42.76
3	Hiranpur	54544	15403	28.24
4	Maheshpur	47155	23998	50.89
5	Nagarnabi	32446	11341	34.95
6	Pakur	151348	21383	14.13
7	Pakuria	61791	13500	21.85
8	Paderkola	13723	7213	52.56
9	Rajdaha	9968	11104	111,40
10	Rahashpur	19660	7345	37.36
11	Torai	19361	10073	52.03
	G.Total	**480382**	**155179**	**32.30**

Table No.3.60: Information on Input and Service Providers in the district Pakur

Name of Enterprise: Agriculture / Horticulture / Animal husbandry / Sericulture / Fisheries etc

Name of the Block	Seed		Fertilizers				Pesticides		Animal Feed & poultry feed		Veterinary medicines		Fish feeds		Fish Hatcheries		No. of horticulture nurseries		Fodder		Repair Centres		Others	
	N	Q	No. of units	Quantity			N	Q	N	Q	N	Q	N	Q	N	Q	N	Q	** Commodities	Q	N	Q	N	Q
				*N	*P	*K																		
PAKUR	1	1.5	10	20.5	10.5	6.5	2	-	-	-	4	13	-	-	-	-	1	-	-	-	-	-	-	-
LITTIPARA	-	-	6	16.5	8.5	4.5	-	-	-	-	3	13	-	-	-	-	1	-	-	-	-	-	-	
HIRANPUR	3	2.2	12	22.5	11.0	5.5	2	-	-	-	2	13	-	-	-	-	1	-	-	-	-	-	-	-
AMRAPARA	3	1.5	10	20.5	10.0	4.5	2	-	-	-	3	13	-	-	-	-	-	-	-	-	-	-	-	-
MAHESHPUR	1	1.5	12	25.5	17.0	8.0	3	-	-	-	2	13	-	-	-	-	-	-	-	-	-	-	-	-
PAKURIA	-	6.7	8	18.0	9.5	4.0	2	-	-	-	2	13	-	-	-	-	1	-	-	-	-	-	-	-

N = No. Of outlets **** Name of the fodder commodities**

Q = Quantity in metric tons

***N = Nitrogen, P = Phosphorous, and Potash**

Table No.3.61 : Information on Input and Service Providers in the district Pakur

Name of Enterprise: Fisheries

Name of the Block	Seed		Fertilizers				Pesticides		Animal Feed & poultry feed		Veterinary medicines		Fish feeds		Fish Hatcheries		No. of horticulture nurseries		Fodder		Repair Centres		Others	
	N	Q	No. of units	Quantity			N	Q	N	Q	N	Q	N	Q	N	Q	N	Q	** Commodities	Q	N	Q	N	Q
				*N	*P	*K																		
PAKUR													MK.	4000 Mt										
HIRANPUR														3000 Mt										
AMRAPARA														2000 Mt										
MAHESHPUR														1000 Mt			2	10000						
PAKURIA														6000 Mt										

N= No. Of outlets **** Name of the fodder commodities**

Q = Quantity in metric tons

***N= Nitrogen, P= Phosphorous, and Potash**

Contd… Table: 3.61 – Extension Service Providers

Name of the block	Service Providers													
	Public (Government)		Private											
	Extension Services		Agri-clinics		Para-professionals		Input dealers		Agri-business centers		NGOs		Farmers Field Schools	
	No.	No. of farmers covered	No.	No. of farmers covered	No.	No. of farmers covered	No.	No. of farmers covered	No.	No. of farmers covered	No.	No. of farmers covered	No.	No. of farmers covered
PAKUR									1					
HIRANPUR									1					
AMRAPARA									1		3	100		
MAHESHPUR			6	1500					1		3	15000		
PAKURIA														

** Please collect the data separately for Male and Female wherever is possible*

Table No.3.62: List of Farmers groups and organisations working in Pakur district

S.No.	Name of the Commodity Interest Groups / Farmers Interest Groups	Location	Area of operation	Commodity / Enterprise	Activities undertaken
1.	Shiwshakti SHG	Barmati	Barmati		Veg. cultivation
2.	Sahel SHG	Amrapara Santali	Amrapara		Paddy Processing
3.	Barwari SHG	Patrapara			Piggery
4.	Triweri SHG	Basmati	Basmati		Paddy Processing
5.	Yugwasi SHG	Patrapara			Piggery
6.	Nirmal SHG	Basmati Jamtola	Basmati		Paddy Processing
7.	Ganesh SHG	Paklo			Paddy Processing
8.	Jai Guru SHG	Basmati	Basmati		Veg. cultivation
9.	Maa Tara SHG	Basmati	Basmati		Veg. cultivation
10.	Islamia SHG	Bodo patiar			Piggery
11.	Yamuna SHG	Basmati	Basmati		Paddy Processing
12.	Parwati SHG	Basmati	Basmati		Paddy Processing
13.	Sarswati SHG	Basmati	Basmati		Veg. cultivation
14.	Sri. Ganesh SHG	Amrapara Santali	Amrapara		Paddy Processing
15.	Ganga SHG	Basmati	Basmati		Paddy Processing
16.	Laxmi SHG	Pocho Bera	Basmati		Paddy Processing
17.	Laxmi SHG	Harinduba	Amrapara		Piggery
18.	Maa SHG	Chota Paharpur	Jaraki		Piggery
19.	FIG, Ramtola	Hiranpur	Under Village	Rice, Wheat, Maize, Vegetable	
20.	FIG, Domadangal	"	"	"	
21.	FIG, Dophari	"	"	"	
22.	FIG, Ghagharjani	"	"	"	
23.	FIG Ramnathpur	"	"	"	

*** Please collect the data separately for Male and Female wherever is possible**

Table No.3.63 : List of Private Organization/NGOs & their activities

Name of NGOs	Specialization	Activities Engaged	Working Block
ADWA DUMKA	Watershed Dev., Microfinance, NHM	SHG Promotion, Non-Formal education, Dynamic Training to SHG, Skill Development	HIRANPUR
VIUZ. SAHIBGANJ	Watershed Management, Entrepreneurship Dev, Women Empowerment, Agriculture Development	IWDP watershed Dev., EDP on Upland Agril. Dev.	LITTIPARA, PAKUR
HARIJAN, AADIVASI, KHADI GRAM, UDDOGH SANG, DAUGAR	SHG, Agriculture Watershed, Horticulture, Education, Health	SHG Formation, Watershed Development, Irrigation, Horticulture, Income Generation Programme, Entrepreneurship Dev.	MAHESHPUR
JHARKHAND UDDOGHIGH PARSIKHAN SANSTHAN DAUGAR	SHG Promotion(537 SHG) Watershed Development Sustainable Agriculture Entrepreneurship Development Programme	SHG Promotion and Linkage with Bank, Facilitation in RSVY, Implementation of watershed programme, Entrepreneurship training, Fishery Dev. Prog.	AMRAPARA
TAIGAR SOCIETY FOR RULAR DEVELOPMENT MAHESHPUR,PAKUR	Agriculture, Horticulture, Floriculture, Bee Keeping, Natural Resource Management, Women Empowerment	Farmer Promotion, Training for Entrepreneurship development, Undertaking Women Empowerment Health and family care progrmme Non- Formal education,	MAHESHPUR
GAN GAGRAN PAKURIA, PAKUR	Watershed Dev., Microfinance, NHM	SHG Promotion, Dynamic Training to SHG, Skill Development	PAKURIA

Table No.3.64
Health Facility of Pakur

	Pakur	Hiranpur	Littipara	Amrapara	Maheshpur	Pakuria
Maternity Home	1	0	0	0	0	0
Family Welfare Centre	0	0	0	0	0	0
T.B. Centre	1 TU	0	0	0	1 TU	0
Other Centre	0	0	0	0	0	0
Sub. M.P.	NA	NA	NA	NA	NA	NA
R.M.P.	NA	NA	NA	NA	NA	NA
Nursing Home (PVT)	2	1 Charitable Hospital	0	0	1 Charitable Hospital	0
Allopathic Dispensary	1	1	1	1	1	1
PHC	1	1	1	1	1	1
APHC	3	0	2	1	2	1i
Child Welfare Centre.	0	0	0	0	0	0
Ref. Hospital	1	0	0	0	0	0
Ayurvadic Dispensary	3	1	1	2	3	1
Homeopathic Dispensary	1	1	1	1	1	1
Uninani	2	1	0	0	0	0
Delivery Institute	1	1	1	1	1	1

Table: No.3.65 : Information and Communication system prevailing in the district Pakur

S.No	Type of Communication facility	Sector		Address with Tel. No. Fax.No.	Type of Services rendered	Area of operation
		Public No.	Private No.			
	Post Offices / Couries.	79+1	10		Letter Parcel/M.O.	Whole India
	Telephone exchanges	1				With in pakur
	Telephone booths (public)		200			
	Computer Service providing Centers (Important)		16			
	Computer training center (Important)		16			
	Internet centers		4			
	T.V. Station	Nil	Nil			
	Radio Station	Nil	Nil			
	News Papers	Nil	Nil			
	Periodicals	Nil	Nil			
	Radio clubs	Nil	Nil			
	TV Clubs	Nil	Nil			
	KCC	Nil	Nil			
	Cable Vs without Cable TV	Nil	Nil			
	Any other com. facility	Nil	Nil			
	Cinema Hall		3			

*** Information may be collected from district information officer**

IV Ongoing Extension and Development Schemes in the District Pakur

Extension Work done by Forest Department of Pakur During 2008-2009

PLAN SCHEME

Name of Activity	Target		Achievement	
	Physical	Financial Rs.	Physical	Financial
Greenness of Hilly Region	105 Ha.	22,51,100.00		
Grant from XII F.C.	100 Ha.	19,93,900.00		
Upliftment of Forest Management	3 Nos.	23,41,500.00		
Integrated Forest and village development scheme	01	2,50,000.00		
Integrated village security scheme	-	5,22,100.00		
Micro forest product value addition scheme	110 Ha.	5,71,700.00		
Greenness of hilly region and road side	75 Ha.	7,63,500.00		
Rehabilitation of degraded forest	140 Ha.	4,27,000.00		
Social conservation and a forestation scheme	50 Ha.	1,97,000.00		
Fast growing silviculture scheme	40 Ha.	1,95,200.00		
Rehabilitation of degraded forest	141 Ha.	3,04,500.00		

Extension Work done by Animal Husbandry Department of Pakur During 2008-2009

NON PLAN SCHEME

Name of Activity	Target 2008-2009	Achievement 2008-2009
Treatment	200 ×10 = 2000/Month	31857
Castration	200 ×10 = 2000/Year	3851
Vaccination	-	HS&BQ-35138, HS-3050, BQ-500, F.M-3900, Rabis-98

PLAN SCHEME During 2008-2009

Name of Scheme	Type of Activity	Contribution		Target Physical		Unit Cost / Unit	Target Financial 2008-2009	
		Central	State	Target No.	Achievement		Amount	Achievement
R.K.V.Y.	Goat Distribution	100	-	35Unit	Nil	60000	1048000	Nil
R.K.V.Y.	Back Yard Poultry Farming	100	-	200	Nil	8000	1040000	Nil

Extension Work done by Co-operative Department of Pakur During 2008-2009

NON PLAN SCHEME

Name of Activity	Target 2008-2009	Achievement 2008-2009
Fixed Plan	100.00 Lack	213.0 Lack
Manure Profession	1000 M.T.	575.700 M.T.
N.C.I.Y.	28,000 Non defaulter Farmer	24,114 Non defaulter Farmer
Return of and it Fee	0.33	0.32
Selection of Management committee of		

Extension Work done by Horticulture Department of Pakur During 2008-2009

Name of Scheme	Type of Activity	Contribution		Target Physical		Unit Cost / Unit	Target Financial 2008-2009	
		Central	State	Target No.	Achievement		Amount	Achievement
N.H.M. Pakur	Periennial (Fruit)	19.125	3.375	200 ha	-	11,250= 00 / ha	22.50	21.60

Extension Work done by Agriculture (M.M.K.Y.) Department of Pakur During 2008-2009

Name of Scheme	Type of Activity	Contribution		Target Physical		Unit Cost / Unit	Target Financial 2008-2009	
		Central	State	Target No.	Achievement		Amount	Achievement
M.M.K.Y. Pakur	Renovation of Pond	100%	-	Two Block	-	-	58.18 lakh	31.50 lakh
R.K.V.Y. Pakur	Progressive	50%	25%	Six Block	-	-	116.90	

V IDENTIFICATION, DESCRIPTION AND ANALYSIS OF EXISTING FARMING SYSTEM UNDER EACH AES

The planning commission. Govt of India, has divide the whole Country into 15 agro climatic Zones. Jharkhand state falls under VII th Agro Climatic zone. This state is also divided into three agro climatic regions I.E. IV th, V th and IV th. Among the three Pakur district comes under the eastrn plateau zone (Agro-Climatic Sub-Zone IV) Agro climatic region. Based on the variation in topography, Soil types and its problem, source of irrigation, cropping pattrn, forest area. District has been divided into three agro-ecological situation (AESs) for the purpose of SREP preparation. One representative village of each AES was selected for participatory data collection through multidisciplinary AES teams. Three AES are named as under.

AES-I	Rainfed, undlated land, Red, laterite & clay loam.	Pakur & Hiranpur,
AES- II	Irrigated & Rainfed, Sandy lom to clan loam.	Maheshpur & Pakuria,
AES- III	Rainfed, Hilly, Forest, Red, laterite gravel sril an clay loam.	Amrapar & Littipara,

Table – 5.01 : AES and Village selected for participatory data collection.

AES number	Name of AES	Name of Block	Name of representative Village
AES-I	**Rainfed, undlated land, Red, laterite & clay loam.**	**Pakur**	**Jikarhati**
AES- II	**Irrigated, Sandy lom to clan loam.**	**Maheshpur**	**Baliapatra**
AES- III	**Rainfed, Hilly, Forest, Red, laterite gravel soil & clay loam.**	**Amrapara**	**Padarkola**

Table : 5.02 : Distribution of AES in District

Sl. No.	Name of Block	% Distribution of AES		
		AES – I	AES – II	AES - III
1.	Pakur	100%	–	–
2.	Hiranpur	100%	-	-
3.	Maheshpur	-	100%	-
4.	Pakuria	-	100%	-
5.	Littipara	-	-	100%
6.	Amrapara	-	-	100%

Table : 5.03 : Detail about the number of families under each kind of resource situation in different AES

Sl. No.	Categories	AES – I		AES - II		AES - III	
		Nos	%	Nos	%	Nos	%
1.	Resource Rich	12	4.33	05	2.86	06	2.14
2.	Resource Poor	265	95.67	170	97.14	274	97.86
Total : -		277	100	175	100	280	100

(Representative village level information)

Table : 5.04 : Information on operational land holdings

Sl. No.	Name of the Village	Operational holding (number and area)								
		Large*		Medium*		Small*		Marginal*		Landless
		No. of holdings	Area	No. of holdings	Area	No. of holdings	Area	No. of holdings	Area	Number only
1.	JIGRAHATI			47	106	168	153	565	625	400
2.	BALIAPATRA			11	34	76	82	78	76	13
3.	PADDARKOLA					6	24	374	186	3

* Please indicate the Range
* As per the state's classification
* Sources of information: Village Revenue Officer and Village Panchyat

Table : 5.05 : Demographic Information of the village

Sl.No.	Name of the village	Population (2001)	Male	Female	Children	% of Literacy	Workers No.		Categories No.		
							Agri.	Non.-agri	SC	ST	OBC
1.	JIGRAHATI	**1325**	**663**	**662**	**412**	**20**	**290**	**390**	**-**	**-**	**663**
2.	BALIAPATRA	**807**	**435**	**372**	**282**	**90**	**130**	**35**	**22**	**-**	**741**
3.	PADDARKOLA	**1527**	**795**	**732**	**499**	**30**	**730**	**65**	**209**	**1099**	**219**

* Sources of information: Village Revenue Officer and Village Panchyat

Table : 5.06 : Information on irrigated area in the village

Area in Ha.

Sl. No.	Name of the village	Rainfed area	%	Irrigated area (source wise)													
				Major	%	Medium	%	Minor	%	Lift	%	Wells	%	Others	%	Total	%
1.	JIGRAHATI	262	85%					50	15%								
2.	BALIAPATRA	90	93%											13	7%		
3.	PADDARKOLA	133	63 %					50	25%					27	12%		

* Sources of information: Village Revenue Officer and Village Panchayat, Irrigation Department, at block level

(Representative village level information)

Table : 5.07 : Information on irrigation projects nearing completion

Sl. No.	Type of the project *	Name of the project	Area irrigated (ha)	
			Projected	Actual
1.	JIGRAHATI	_	_	_
2.	BALIAPATRA	_	_	_
3.	PADDARKOLA	PADDARKOLA I PADDARKOLA II PADDARKOLA III	30 30 30	12 19 12

*** Project such as major, medium, minor, and projects nearing completion**

* Sources of information: Village Revenue Officer and Village Panchayat, irrigation department, at block level.

(Representative village level information)

Table : 5.08 : Information on Land use pattern in Hectare

Sl. No.	Name of the village	Geographical Area	Cultivable Area	Cultivated Area	Cultivable waste	Current Fallow
1.	JIGRAHATI	292	270	262	3.0	5.0
2.	BALIAPATRA	109	80	66	13	9
3.	PADDARKOLA	753.36	364.37	210.00	55.50	

Cont.

Forest	Pasture	Land put to non agri. Use	Land under misc. plantation	Barren & unculturable land (waste land)
_	5.0	15	7	
		5	2	3
39.83	74.59	3.25	12.25	83.36

* Sources of information: Village Revenue Officer and Village Panchyat

(Representative village level information)

Table : 5.09 : Information on Soils for the villages of Pakur

Classification of Soil with area under problem soils (Area in hectares)

Sl. No.	Name of the village(s)	Black		Red Soil		Laterite / lateritic Soils		Alluvial Soils		Forest & Hill soils		Deserts		Salt Effected Soils	
		Area	%	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
	Jigrahati			411	40%	360	35%	257	25%	77	12	-	-	-	-
	Baliapatra			78	80%	08	20%	-	-	86	13	-	-	-	-
	Padarkola			474.39	63%	173	23%	105	14%	153	21	-	-	-	-

* Sources of information: Agriculture Department at village / block level

Note : Information on soil types such as heavy, medium, light, deep shallow may be given wherever necessary.

TABLE : 5.10: DETAILS ABOUT PREDOMINANT EXISTING FARMING SYSTEMS (EFS) IN THE REPRESENTATIVE VILLAGE OF AN AES.

District :- PAKUR. **Agro-ecological situation : I**

Resource Situation : Rich.

Sl. No.	Existing farming system	No. & % of families associated	
		Number	Percentage
1	Agri. + Hort. +A.H.	07	58
2	Agri. + A.H.	05	42
	Total	12	100

District :- PAKUR **Agro-ecological situation : I**

Resource Situation : Poor.

Sl. No.	Existing farming system	No. & % of families associated	
		Number	Percentage
1	Agri. + Hort. + A.H.	130	49
2	Agri. + Hort.	40	15
3	Agri. + A.H.	95	36
	Total	265	100

District : PAKUR **Agro-ecological situation : II**

Resource Situation : Rich.

Sl. No.	Existing farming system	No. & % of families associated	
		Number	Percentage
1	Agri. + Hort. +A.H.	03	60
2	Agri. + Hort.	02	40
	Total	5	100

District :-PAKUR **Agro-ecological situation : II**

Resource Situation : Poor.

Sl. No.	Existing farming system	No. & % of families associated	
		Number	Percentage
1	Agri. + Hort. +A.H.	45	26
2	Agri. + Hort.	125	74
	Total	170	100

District :- PAKUR **Agro-ecological situation : III**

Resource Situation : Rich.

Sl. No.	Existing farming system	No. & % of families associated	
		Number	Percentage
1	Agri. + Hort. +A.H.	02	33
2	Agri. + A.H.	04	67
	Total	06	100

District :- PAKUR **Agro-ecological situation : III**

Resource Situation : Poor.

SI. No.	Existing farming system	No. & % of families associated	
		Number	Percentage
1	Agri. + Hort. +A.H.	171	62
2	Agri. . +A.H.	103	38
	Total	274	100

Table : 5.11. Major Enterprises associated with each Existing Farming System

Resource Rich

TYPE OF ENTERPRISES / COMMODITIES	% of families associated with dominant enterprises											
	AES – I				AES – II				AES - III			
	EFS – 1		EFS - 2		EFS – 1		EFS – 2		EFS - 1		EFS - 2	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Agricultural Crops Irrigated												
Wheat	03	43	02	40	03	100	02	100	-	-	-	-
Mustrard	04	57	03	60	02	66	1	50	-	-	-	-
Agricultural Crops Rainfed												
Paddy	07	100	5	100	03	100	02	100	02	100	04	100
Maize	04	56	5	100	03	100	02	100	02	100	03	75
Pigeon Pea	-	-	-	-	-	-	02	100	-	-	02	50
Niger	02	28	02	40	02	67	-	-	1	50	1	25
Horticultural Crops Irrigated												
Tomato	02	28	-	-	01	33	01	50	2	100	-	-
Brinjal	03	43	-	-	01	33	02	100	01	50	-	-
Potato	02	28	-	-	02	67	02	100	-	-	-	-
Horticultural Crops Rainfed												
Orchard	01	14	-	-	-	-	-	-	01	50	-	-
Cucurbites	06	86	-	-	-	-	-	-	02	100	2	50
Animal Husbandry												
Cow	03	43	02	40	02	67	-	-	01	50	03	75
Buffalow	04	57	02	40	03	100	-	-	02	100	02	50
Poultry	-	-	-	-	01	33	-	-	-	-	-	-
Goat	-	-	-	-	-	-	-	-	-	-	-	-

Note :

AES I

EFS1 Agriculture + Horticulture + Animal Husbandry
EFS2 Agriculture + Animal Husbandry

AES II

EFS1 Agriculture + Horticulture + Animal Husbandry
EFS2 Agriculture + Horticulture

AES III

EFS1 Agriculture + Horticulture + Animal Husbandry
EFS2 Agriculture + Animal Husbandry

Table : 5.12. Major Enterprises associated with each Existing Farming System

Resource Poor

TYPE OF ENTERPRISES/COMMODITIES	% of families associated with dominant enterprises													
	AES – I						AES – II				AES - III			
	EFS – 1		EFS - 2		EFS - 3		EFS – 1		EFS – 2		EFS - 1		EFS - 2	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Agricultural Crops Irrigated														
Wheat	15	11	-	-	-	-	12	27	25	20	-	-	-	-
Mustrard	13	10	15	38	12	13	13	29	32	26	-	-	-	-
Agricultural Crops Rainfed														
Paddy	130	100	40	100	95	100	45	100	125	100	171	100	103	100
Maize	40	30	20	50	12	13	18	40	45	36	101	59	55	53
Pigeon Pea	60	40	25	63	35	37	21	47	35	28	47	27	36	35
Niger	22	17	20	50	-	-	17	38	39	31	47	27	18	17
Horticultural Crops Irrigated														
Tomato	20	15	10	25	-	-	19	42	15	10	-	-	-	-
Brinjal	20	15	12	30	-	-	11	24	12	10	-	-	-	-
Potato	27	21	12	30	-	-	18	40	22	18	-	-	-	-
Horticultural Crops Rainfed														
Orchard	15	12	-	-	-	-	06	13	-	-	-	-		
Cucurbites	55	42	22	55	-	-	16	36	35	28	88	51	-	-
Animal Husbandry														
Cow	52	41	-	-	28	29	15	33	-	-	55	32	19	18
Buafflow	20	16	-	-	15	16	06	13	-	-	17	10	16	15
Poultry	65	50	-	-	70	74	35	77	-	-	105	61	65	63
Goat	105	81	-	-	66	69	36	80	-	-	133	78	79	77

Note :

AES I

EFS 1 Agriculture + Horticulture + Animal Husbandry
EFS 2 Agriculture + Horticulture
EFS 3 Agriculture + Animal Husbandry

AES II

EFS1 Agriculture + Horticulture + Animal Husbandry
EFS2 Agriculture + Horticulture

AES III

EFS1 Agriculture + Horticulture + Animal Husbandry
EFS2 Agriculture + Animal Husbandry

Table 5.13 : Contribution of different enterprises towards annual income under each farming system

Resource Rich

TYPE OF ENTERPRISES/ COMMODITIES	Units	Contribution of different enterprises in terms of P/S/T/Q and net income in Rs.											
		AES – I				AES – II				AES - III			
		EFS – 1		EFS – 2		EFS – 1		EFS – 2		EFS – 1		EFS – 2	
Agricultural Crops Irrigated													
Wheat	ha	4500	S	5500	P	6000	S	5500	S	-		-	
Mustrard	ha	3000		3200		3500		3300		-		-	
Agricultural Crops Rainfed													
Paddy	ha	2600		2800		3000		2800		2600		2700	
Maize	ha	2800	S	2800	P	3000	S	2900	S	2800	S	2900	P
Pigeon Pea	ha	-		-		3400		3600		-		3000	
Niger	ha	1800		2000		-		-		1600		1800	
Total		**14,700**		**16,300**		**18,900**		**18,100**		**7,000**		**10,400**	
Horticultural Crops Irrigated													
Tomato	ha	18,000		-		20,000		20,000		16,000		-	-
Brinjal	ha	16,000	P	-	-	18,000	P	18,000	P	15,000	P	-	
Potato	ha	15,000		-		16,000		16,000		-		-	
Horticultural Crops Rainfed													
Orchard	ha	15,000	P	-	-	-	P	-	P	16,000	P	-	-
Cucurbites	ha	14,000		-		16,000		-		14,000		-	
Total		**78,000**		**-**		**70,000**		**54,000**		**61,000**		**-**	
Animal Husbandry													
Cow	Nos	2200		2500		2800		-		2400		2600	
Buffalow	Nos	1400		1600		1500		-		1300		1500	
Poultry	Nos	-	T	-	S	2200	T	-	-	-	T	-	S
Goat	Nos	-		-		-		-		-		-	
Total		**3600**		**4100**		**6500**		**-**		**3700**		**4100**	
Grand Total		**96,300**		**20,400**		**95,400**		**72,100**		**71,700**		**14,500**	
B:C ratio		**1.68:1**		**1.43:1**		**1.70:1**		**1.65:1**		**1.62:1**		**1.38:1**	

Table 5.14 : Contribution of different enterprises towards annual income under each farming system

Resource Poor

TYPE OF ENTERPRISES/ COMMODITIES	Units	Contribution of different enterprises in terms of P/S/T/Q and net income in Rs.													
		AES – I						AES – II				AES - III			
		EFS – 1		EFS – 2		EFS - 3		EFS – 1		EFS – 2		EFS – 1		EFS – 2	
Agricultural Crops Irrigated															
Wheat	ha	2200	S	-	S	-	P	2600	S	2400	S	-	-	-	-
Mustrard	ha	2600		2400		2000		3000		2800		-		-	
Agricultural Crops Rainfed															
Paddy	ha	2000	S	2200	S	2400	P	2800	S	2500	S	1800	T	2000	S
Maize	ha	1500		1800		2000		1800		2100		1600		1800	
Pigeon Pea	ha	2200		2500		2600		2600		2400		2400		2000	
Niger	ha	1500		1600		-		1800		1600		1700		1500	
Total		**12,000**		**10,500**		**9000**		**14,600**		**13,800**		**7500**		**7300**	
Horticultural Crops Irrigated															
Tomato	ha	12,000	P	14,000	P	-	-	16,000	P	16,000	P	-	-	-	-
Brinjal	ha	10,000		12,000		-		14,000		16,000		-		-	
Potato	ha	12,000		13,000		-		15,000		16,000		-		-	
Horticultural Crops Rainfed															
Orchard	ha	10,000	P	-	P	-	-	12,000	P	-	P	-	P	-	-
Cucurbites	ha	10,000		12,000		-		11,000		13,000		12,000		-	
Total		**54,000**		**51,000**		**-**		**68,000**		**61,000**		**12,000**		**-**	
Animal Husbandry															
Cow	Nos	1500	T	-	-	1800	S	1600	T	-	-	1800	S	2000	P
Bufflow	Nos	1100		-		1400		1200		-		1400		1500	
Poultry/Duckery (Ten birds)	Nos	1500		-		1600		1600		-		1500		1700	
Goat	Nos	5000		-		4800		4500		-		4000		3800	
Total		**9100**		**-**		**9600**		**8900**		**-**		**8700**		**9,000**	
Grand Total		**75,100**		**61,500**		**18,600**		**91,500**		**74,800**		**28,200**		**16,300**	
B:C ratio		**1.60:1**		**1.69:1**		**1.48:1**		**1.72:1**		**1.72:1**		**1.64:1**		**1.50:1**	

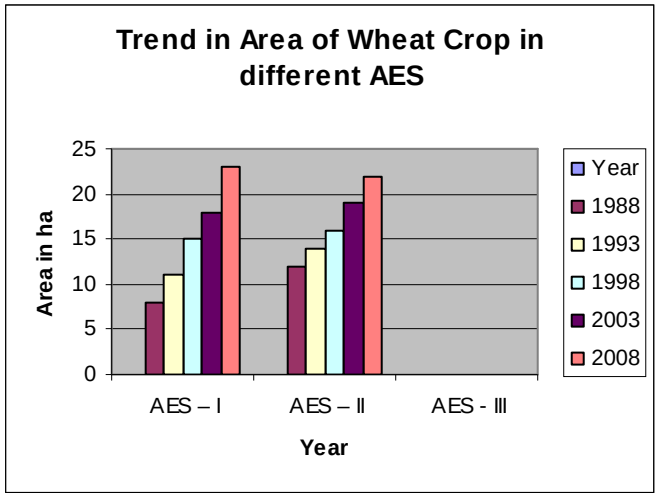
AES – I : Agriculture – Horticulture - Animal Husbandry, Agriculture - Horticulture and Agriculture - Animal Husbandry are observed here. In AES – I, Maize, Mustrard, Paddy, Potato Crops are predominantly grown in rainfed condition. In Vegetables – Tomato, Brinjal, cucurbits are grown predominantly. The by product of these crops are fed by there animals – Cow, Bufflow, in another farming system the situation is the same.

AES – II : Within this Agro-Ago system, Agriculture – Horticulture - Animal Husbandry and agriculture – Horticulture are observed here. In Agriculture – Horticulture farming system, the crops like Wheat, Mustrard are grown predominantly in irrigated condition. Vegetables like Tomato, Brinjal, Patato & Cucubite are grown.

AES – III : Agriculture – Horticulture - Animal Husbandry and Agriculture - Animal Husbandry are observed here. In Agriculture – Horticulture - Animal Husbandry faming system crops like Paddy, Maize, Pigeon Pea and Niger are grown predominantly in rainfed condition. More than 50% Area of rice is coveld by local rice variety. Cow and Bufflow are used as both draft and milch purposes.

Table : 5.15 : Trend in Area, Productivity in Different AES of major commodities in Representative village
Name of Enterprise :-Agriculture Name of Commodity : Wheat

Year	AES – I		AES – II		AES - III	
	Area (in ha)	Productivity in Q./ha	Area (in ha)	Productivity in Q./ha	Area (in ha)	Productivity inQ./ha
1988	08	10.00	12	14.00	-	-
1993	11	12.50	14	16.50	-	-
1998	15	16.00	16	19.00	-	-
2003	18	18.00	19	21.00	-	-
2008	23	20.00	22	22.00	-	-



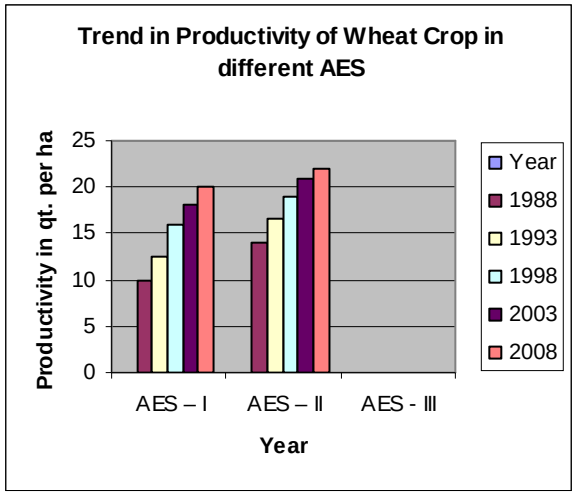
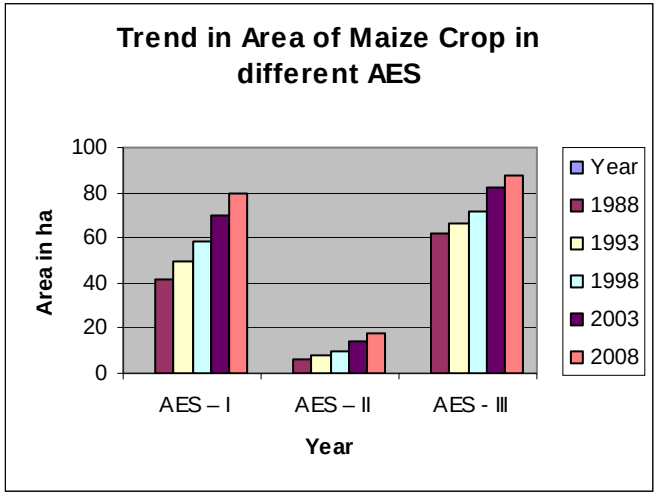


Table : 5.16 :Trend in Area, Productivity in Different AES of major commodities in Representative village

Name of Enterprise :-Agriculture Name of Commodity : Maize

Year	AES – I		AES – II		AES - III	
	Area (in ha)	Productivity in Q./ha	Area (in ha)	Productivity in Q./ha	Area (in ha)	Productivity in Q./ha
1988	42	10.50	06	14.50	62	15.00
1993	50	12.50	08	18.20	66	16.50
1998	58	17.50	10	19.50	72	19.50
2003	70	18.25	14	22.50	82	20.50
2008	80	20.00	18	23.50	88	22.00



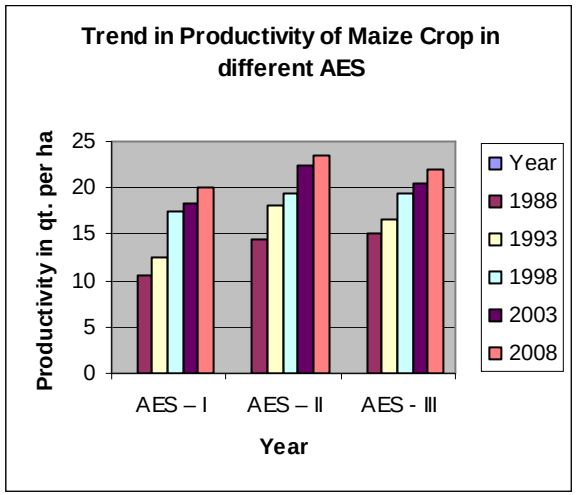
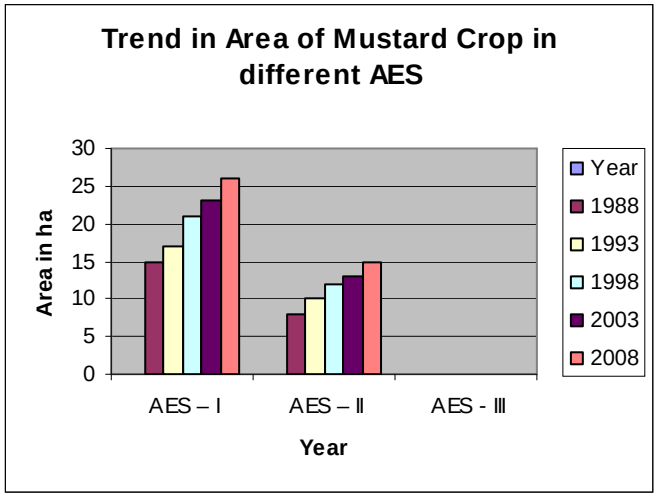


Table : 5.17 :Trend in Area, Productivity in Different AES of major commodities in Representative village

Name of Enterprise :-Agriculture Name of Commodity : Mustard

Year	AES – I		AES – II		AES - III	
	Area (in ha)	Productivity in Q./ha	Area (in ha)	Productivity in Q./ha	Area (in ha)	Productivity in Q./ha
1988	15	1.80	08	2.20	-	-
1993	17	2.00	10	2.40	-	-
1998	21	2.30	12	2.50	-	-
2003	23	2.40	13	2.80	-	-
2008	26	2.50	15	3.00	-	-



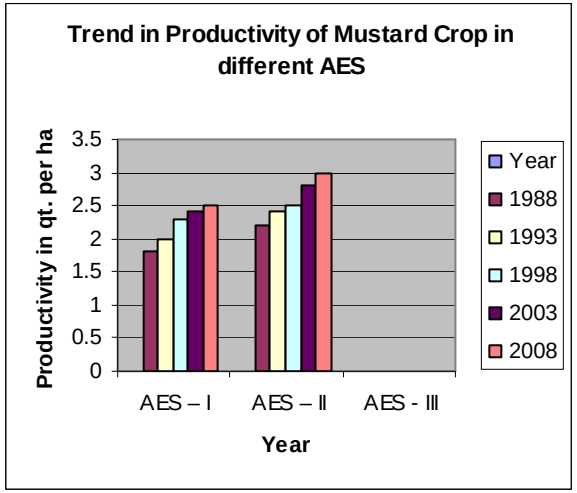
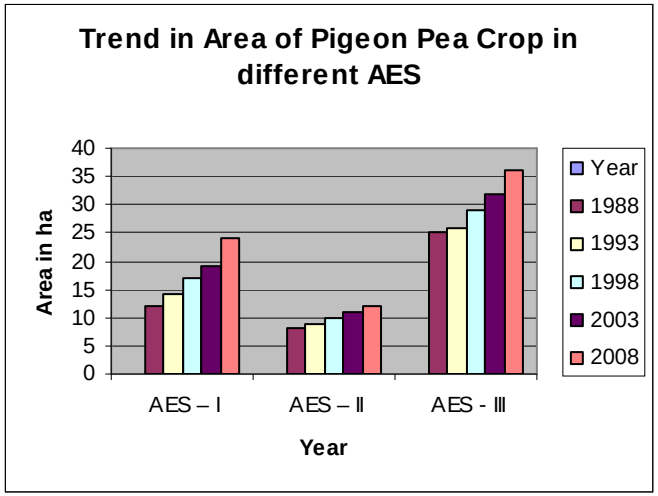


Table : 5.18 :Trend in Area, Productivity in Different AES of major commodities in Representative village

Name of Enterprise :-Agriculture Name of Commodity : Pigeon Pea

Year	AES – I		AES – II		AES - III	
	Area (in ha)	Productivity in Q./ha	Area (in ha)	Productivity in Q./ha	Area (in ha)	Productivity in Q./ha
1988	12	1.90	8	2.00	25	1.80
1993	14	2.10	9	2.00	26	1.90
1998	17	2.50	10	2.60	29	2.10
2003	19	2.80	11	2.80	32	2.25
2008	24	3.10	12	3.20	36	2.40



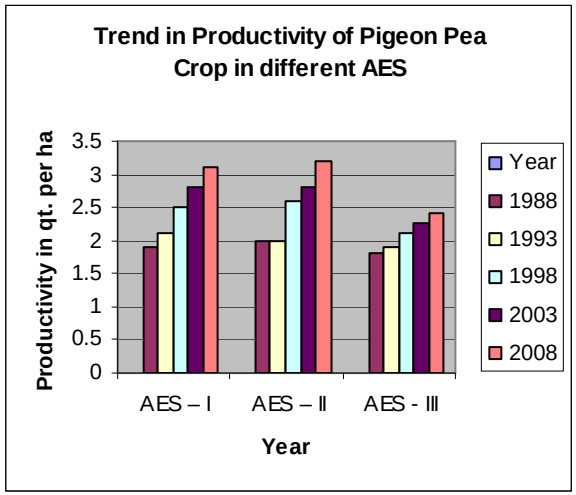
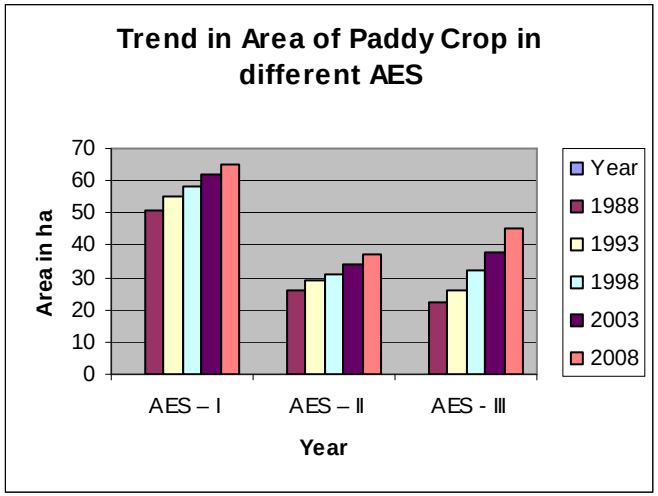


Table : 5.19 :Trend in Area, Productivity in Different AES of major commodities in Representative village

Name of Enterprise :-Agriculture Name of Commodity : Paddy

Year	AES – I		AES – II		AES - III	
	Area (in ha)	Productivity in Q./ha	Area (in ha)	Productivity in Q./ha	Area (in ha)	Productivity in Q./ha
1988	51	18.00	26	19.00	22	15.60
1993	55	19.00	29	20.50	26	17.50
1998	58	22.00	31	22.00	32	19.00
2003	62	24.00	34	25.00	38	22.00
2008	65	27.00	37	28.50	45	24.50



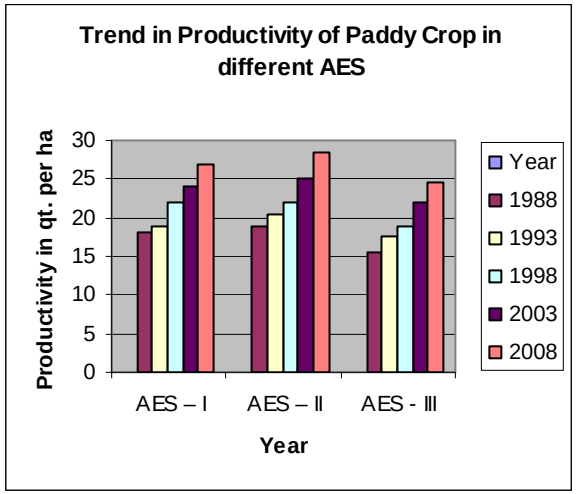
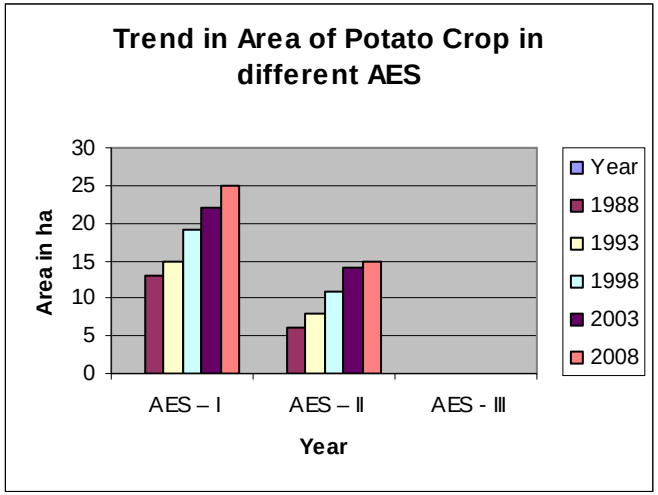


Table : 5.20 :Trend in Area, Productivity in Different AES of major commodities in Representative village

Name of Enterprise :- Agriculture **Name of Commodity :- Potato**

Year	AES – I		AES – II		AES - III	
	Area (in ha)	Productivity in Q./ha	Area (in ha)	Productivity in Q./ha	Area (in ha)	Productivity in Q./ha
1988	13	130	06	120	-	-
1993	15	145	08	150	-	-
1998	19	155	11	160	-	-
2003	22	165	14	180	-	-
2008	25	185	15	190	-	-



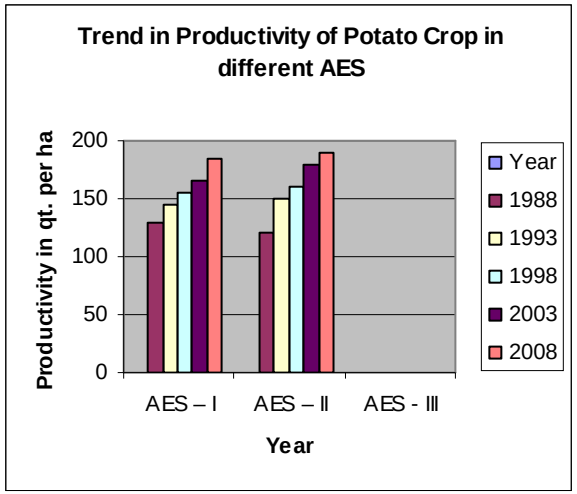
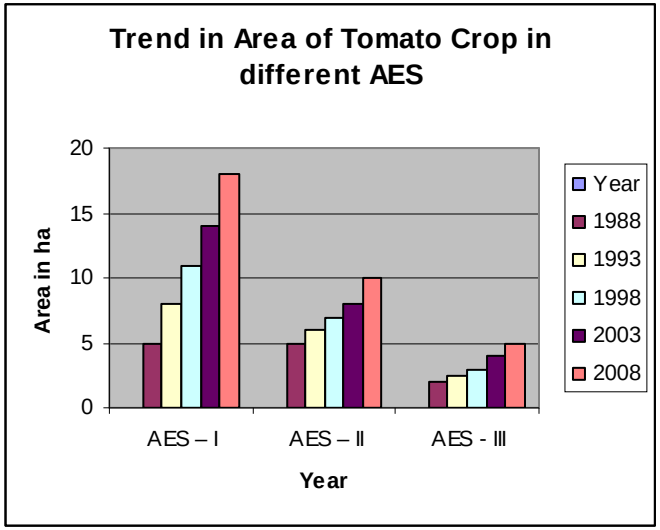


Table : 5.21 :Trend in Area, Productivity in Different AES of major commodities in Representative village

Name of Enterprise :-Agricuture **Name of Commodity :-Tomato**

Year	AES – I		AES – II		AES - III	
	Area (in ha)	Productivity inQ./ha	Area (in ha)	Productivity in Q./ha	Area (in ha)	Productivity inQ./ha
1988	05	120	05	140	02	110
1993	08	135	06	150	2.5	125
1998	11	145	07	165	03	135
2003	14	160	08	175	04	150
2008	18	180	10	185	05	170



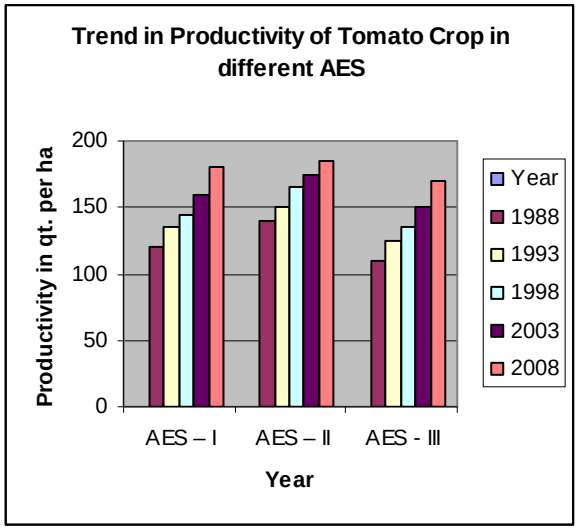
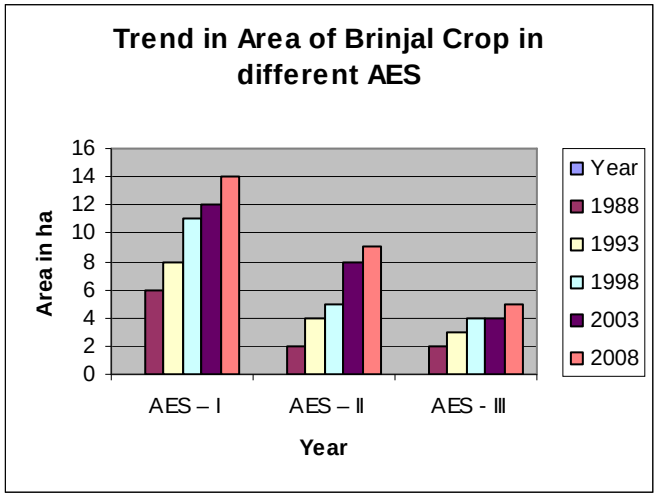


Table : 5.22 :Trend in Area, Productivity in Different AES of major commodities in Representative village

Name of Enterprise :- Horticulture Name of Commodity : - Brinjal

Year	AES – I		AES – II		AES - III	
	Area (in ha)	Productivity in Q./ha	Area (in ha)	Productivity in Q./ha	Area (in ha)	Productivity in Q./ha
1988	06	130	02	115	02	110
1993	08	146	04	135	03	130
1998	11	176	05	158	04	143
2003	12	197	08	188	04	175
2008	14	205	09	210	05	195



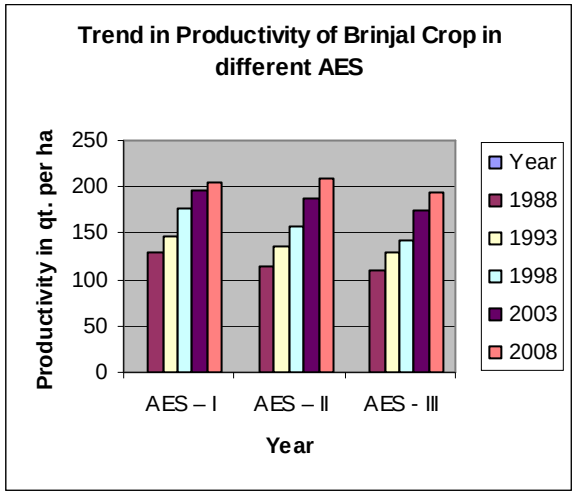
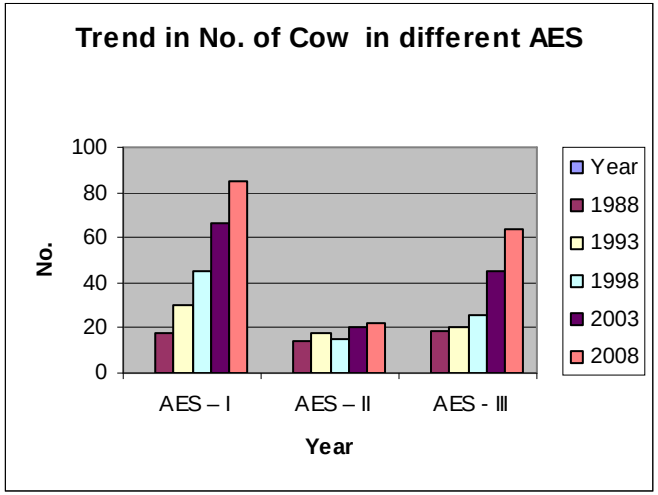


Table : 5.23 :Trend in Area, Productivity in Different AES of major commodities in Representative village
Name of Enterprise : Animal Husbandry Name of Commodity :- Cow

Year	AES – I		AES – II		AES - III	
	No.	Milk in liter perday	No.	Milk in liter perday	No.	Milk in liter perday
1988	18	56	14	70	19	57
1993	30	108	18	80	20	62
1998	45	148	15	72	26	78
2003	66	204	20	95	45	128
2008	85	260	22	105	64	186



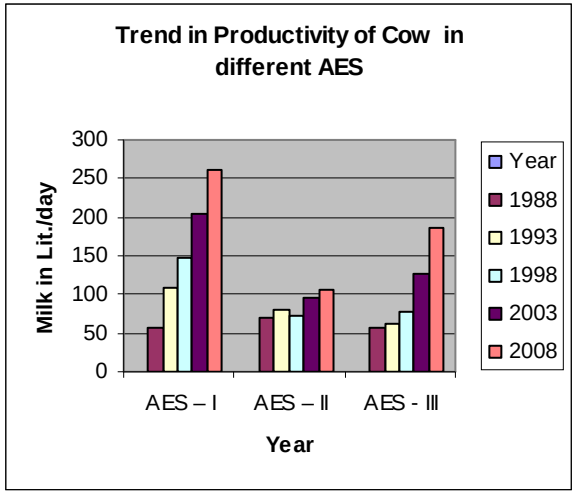
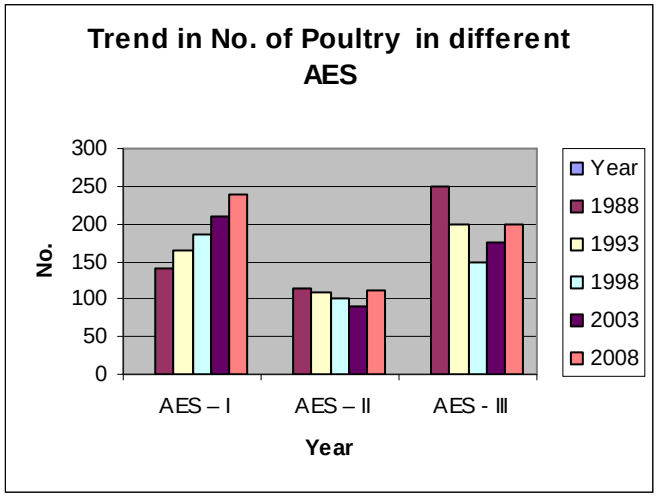


Table : 5.24 :Trend in Area, Productivity in Different AES of major commodities in Representative village
Name of Enterprise : Animal Husbandry Name of Commodity : Poultry / Duckery (Egg)

Year	AES – I		AES – II		AES - III	
	No.	Productivity (eggs/ month)	No.	Productivity (eggs/ month)	No.	Productivity (eggs/ month)
1988	140	950	115	850	250	1500
1993	165	1030	110	800	200	1400
1998	185	1100	100	750	150	800
2003	210	1170	90	700	175	1100
2008	240	1350	112	820	200	1300



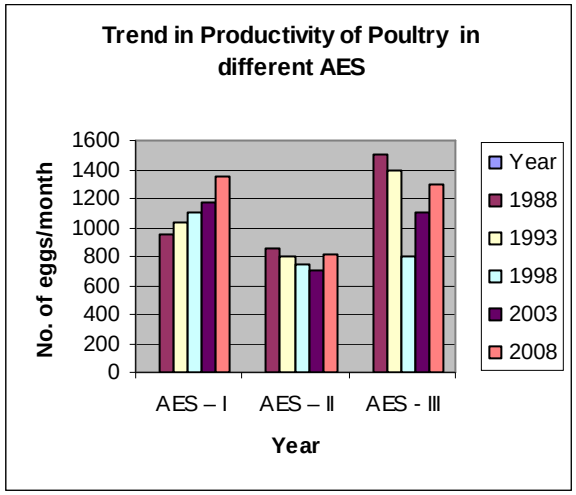


Table : 5.25 :SWOT Analysis of Existing Farming Systems in Different EFS

SOWT Analysis of EFS- I

SWOT Analysis		SWOT analysis of the MAFS	
Strength	**Weakness**	**Strength**	**Weakness**
➢ Introduction of improved breed of animal. ➢ Agriculture produce utilized as feed for animal. ➢ Animal dung utilized as compost in agriculture field. ➢ Cost of production reduce. ➢ Multiple crop income generate.	➢ Diversification - introduction of improved varieties and breed low. ➢ Pay less attention to other crops. ➢ Insuranse of crop/animal are not motivated. ➢ Vatirinary facility low. ➢ IPM / INM of vegetable crop less.	➢ Diversification introduction of improved varieties and breed ➢ Animal dung utilized as compost in field	➢ Animal enterprises become primary source of income ➢ Farmers not taken proper care on crops enterprises. ➢ Insurance are not taken up in case of disease / epidemic.
Opportunities	**Threats**	**Opportunities**	**Threats**
➢ Agriculture produce better utilized as animal feed ➢ Farmers make more profitable through next animal enterprises. ➢ Scope for diversification/intensification ➢ Scope vermi compost production	➢ Small animal create problem for field crop / Grazing ➢ Agriculture become tertiary enterprises. ➢ Animal lifter are common.	➢ Introduction of small animal for resource poor farmers ➢ Interaction of improved varieties of crops and improved breed of animal become more profitable and ecologically sustainable.	➢ Agriculture become secondary after introduction of improved breed of animal ➢ Due to introduction of improved breed of animal disease attack will be more. ➢ Grazing by animals. ➢ Zonosis disease may spread if proper care not taken.

Table : 5.26 : SOWT Analysis of EFS-II

SWOT Analysis		**SWOT analysis of the MAFS**	
Strength	**Weakness**	**Strength**	**Weakness**
➢ Increasing cropping intensity ➢ More profitable for both categories of farmers i.e. resource rich and resource poor ➢ Assured irrigated crops perform better. ➢ Adequate availability of fodder for animal.	➢ Poor quality of vegetable seed sown by the farmers ➢ Cold storage facility not available. ➢ IPM / INM not available.	➢ Diversification of traditional vegetable to cash crop vegetable ➢ Off season vegetable production. ➢ Assured irrigated crops perform better. ➢ Adequate availability of fodder for animal.	➢ Very difficult to manage three enterprises ➢ Cold storage facility poor. ➢ Post harvest care less. ➢ No value addition so highly risk.
Opportunities	**Threats**	**Opportunities**	**Threats**
➢ Scope for diversification ➢ Introduction of cash crop. ➢ Scope for introduction of offseason vegetable. ➢ Introduction of flower culture ➢ Introduction of biological control of insect pest	➢ Non Judicious use of insecticides and pesticides in vegetable ➢ Use of chemical fertilizer may decrease fertility of soil. ➢ Insect pest become resistant to insecticides	➢ Off season vegetable ➢ Organic vegetable production	➢ Improved breed of pig become problem of society. ➢ Small animal damage field crops. ➢ Non Judicious use of insecticides affect Bio-physical and chemical soil health.

Table : 5.27 :SOWT Analysis of EFS-III

SWOT Analysis		**SWOT Analysis of the MAFS**	
Strength	**Weakness**	**Strength**	**Weakness**
➢ Increasing cropping intensity ➢ More profitable for both categories of farmers i.e. resource rich and resource poor ➢ Assured irrigated crops perform batter ➢ Adequate availability of fodder for animal	➢ Poor quality of vegetable seed sown by the farmers. ➢ IPM / INM not available.	➢ Diversification of traditional vegetable to cash crop vegetable ➢ Off season vegetable production. ➢ Improved breed of milch animal introduce for response rich farmers	➢ Very difficult to manage three enterprises ➢ Improved breed of pig, Goat is not properly manage by resource poor farmers.
Opportunities	**Threats**	**Opportunities**	**Threats**
➢ Scope for diversification ➢ Introduction of cash crop. ➢ Scope for introduction of off season vegetable. ➢ Introduction of Inter fish farming ➢ Improved breed of misxed animal introduce ➢ Introduction of biological control of insect pest	➢ Judicious use of insecticides and pesticides in vegetable ➢ Judicious use of chemical fertilizer ➢ Insect pest become resistant to insecticides	➢ Off season vegetable ➢ Inorganic vegetable production ➢ Introduction of improved breed of milch animal for resource rich farmers and small animal for resource poor farmers	➢ Improved breed of pig become problem of society. ➢ Small animal damage field crops. ➢ Judicious use of insecticide effect on Bio-physical and soil health.

Table 5.28 : Analysis of Specific Problems associated with each Existing Farming System and its Solutions and Strategies as perceived by the Farmers

Agro ecological situation – I **Resource Rich Farmers**

TYPE OF ENTERPRISES/ COMMODITIES	EFS - I					EFS - II				
	Specific problem*	No. of families affected (%)	Solution as proposed by farmer **	Reasons for non adoption #	Proposed Strategies ##	Specific problem*	No. of families affected (%)	Solution as proposed by farmer **	Reasons for non adoption #	Proposed Strategies ##
Agricultural Crops Irrigated										
Wheat	2,6,9,10,25	**43**	2,3,4,5,7,11,16,17	2,4,5,6,7	1,2,3,4,5,7, 10,13	2,6,9,10,25	**40**	2,3,4,5,7,11,16,17	2,4,5,6,7	1,2,3,4,5,7, 10,13
Mustrard	2,6,9,10,25	**57**	2,3,4,5,7,11,16,17	2,4,5,6,7	1,2,3,4,5,7, 10,13	2,6,9,10,25	**60**	2,3,4,5,7,11,16,17	2,4,5,6,7	1,2,3,4,5,7, 10,13
Agricultural Crops Rainfed										
Paddy	1,2,4,5,6,7,8,10,13, 16,20,21	**100**	1,2,3,4,5,7,10,11,1 2,17,18	1,2,4,5,6,7,8,9,10,12	1,2,3,4,5,6,7,8, 9,10,13	1,2,4,5,6,7,81,10, 13,16,20,21	**100**	1,2,3,4,5,7,10,11,12, 17,18	1,2,4,5,6,7,8,9,10,12	1,2,3,4,5,6,7, 8,9,10,13
Maize	1,2,3,5,6,7,8,10, 13,14,18,19,20	**56**	1,2,3,4,5,6,7,10, 11,12,15,16,17,18	2,4,5,6,7,8,9,12	1,2,3,4,5,6,7,8, 9,10,13	1,2,3,5,6,7,8,10, 13,14,18,19,20	**100**	1,2,3,4,5,6,7,10, 11,12,15,16,17,18	2,4,5,6,7,8,9,12	1,2,3,4,5,6,7, 8,9,10,13
Pigeon Pea	-	**-**	-	-	-	-	**-**	-	-	-
Niger	1,2,3,5,6,7,8,10, 13,14,18,19,20	**28**	1,2,3,4,5,6,7,10, 11,12,15,16,17,18	2,4,5,6,7,8,9,12	1,2,3,4,5,6,7,8, 9,10,13	1,2,3,5,6,7,8,10, 13,14,18,19,20	**40**	1,2,3,4,5,6,7,10, 11,12,15,16,17,18	2,4,5,6,7,8,9,12	1,2,3,4,5,6,7, 8,9,10,13
Horticultural Crops Irrigated										
Tomato	2,3,5,6,7,8,9,10, 11,13,16,18,19, 20	**28**	1,2,3,4,5,6,7,8,10,1 1,12,15,16,17,18	2,3,4,5,6,8,9,11, 12	1,2,3,4,5,6,7,8, 9,10,13	-	**-**	-	-	-
Brinjal	2,3,5,6,7,8,9,10, 11,13,16,18,19, 20	**43**	2,4,5,6,7,8,10,11,1 5,16,18	2,4,5,6,8,9,10,11,12,	1,2,3,4,5,6,7,8, 9,10,13,14	-	**-**	-	-	-
Potato	2,3,5,6,7,8,9,10, 11,13,16,18,19, 20	**28**	2,4,5,6,7,8,10,11,1 2,15,16,18	2,4,5,6,8,9,10,11,12,	1,2,3,4,5,6,7,8, 9,10,13,14	-	**-**	-	-	-
Horticultural Crops Rainfed										
Orchard	2,3,10,11,16,17, 20	14	1,2,3,6,7,8,11,12,1 7	1,2,3,4,5,6,8,9,11,12	1,2,3,4,5,9,10, 13,14	-	**-**	-	-	-
Cucurbites	2,3,5,6,7,8,9,10, 11,13,16,18,19	86	2,4,5,6,7,8,10,11,1 5,16,18	2,4,5,6,8,9,10,11,12,	1,2,3,4,5,6,7,8, 9,10,13,14	-	**-**	-	-	-
Animal Husbandry										
Cow	12,13,15,16,23,	43	8,9,13,14,15,16, 17,19	1,2,3,6,8,11,12	1,2,3,4,11,13, 14,15	12,13,15,16,23,	**40**	8,9,13,14,15,16, 17,19	1,2,3,6,8,11,12	1,2,3,4,11,13, 14,15
Buffalow	12,13,15,16,23,	57	8,9,13,14,15,16, 17,19	1,2,3,6,8,11,12	1,2,3,4,11,13, 14,15	12,13,15,16,23,	**40**	8,9,13,14,15,16, 17,19	1,2,3,6,8,11,12	1,2,3,4,11,13, 14,15
Poultry/Duckery (Ten birds)	-	-	-	-	-	-	**-**	-	-	-
Goat	-	-	-	-	-	-	**-**	-	-	-

Specific Problem*		Proposed Solution**		Reason for non adoption #	Proposed stratagies ##
1. Erratic distribution of rainfall 2. Non adoption of recommended varieties 3. Use of traditional low yielding crop varieties 4. Broadcast Method of sowing 5. Low input use 6. Use of unbalance fertilizer. 7. Reluctance of seed treatment. 8. Low use of organics 9. Low availability of water 10. Lack of Pest & Disease management 11. Marketing Problems 12. Lack of improved breeds 13. Lack of awareness 14. Non availability of perennial water sources	15. Inadequate availability of fodder 16. lack of finance 17. Small land holding 18. Non adoption of crop rotation 19. Non adoption of intercropping in uplands 20. lack of knowledge on secondary (Ca,s) and micronutrients use (B, Zn, Mo) 21. No knowledge of benefits of liming in acidic soils 22. More care of vegetable crops compared to rice because of cast income 23. Poor management of animals 24.Increase in current fallow in upland. 25. Lack of awareness.	1. Application of lime in acid soils 2. Managing rain water for use in agricultural crops 3. Improved crop production technologies 4. Line sowing/transplanting of crops 5. Use of high yielding crop varieties 6. Promotion of INM in vegetables/ pulses/oilseeds 7. Balanced use of plant nutrients 8. Market information 9. Use of improved breeds of animals 10. Crop rotation 11. Control of diseases and pests in crops	12. Developing improved post harvest techniques 13. Controlling animal diseases 14. Better nutrition of animals 15. Training and exposure visits 16. Demonstrations 17. Dissemination of knowl-edge through mass media 18. Use of phosphate, calcium and lime with biofertilisers for crops 19. Preventive vaccination 20. Using low water requiring crops such as coarse cereals	1. Small holdings 2. Lack of capitals 3. Lack of labour 4. Lack of awareness 5. Poor transfer of technology to farmers 6. Non-availability of inputs 7. Insecure profit. 8. Lack of knowledge/motivation 9. Poor market information's 10. Non-profitable agriculture 11. Poor transport 12. Poor access to Inproved technology	1. Training and exposure visit 2. Demonstrations 3. Providing financial assistance/crop insuranc 4. Providing market opportunities 5. Gearing quality input supply in rural areas 6. Inter cropping in uplands 7. Control of pests and diseases in crops 8. Greater use of vermicompost and other org. ics to build up soil fertility 9. Using lime to neutralise soil acidity especially in upla 10. More emphasis on judicious use of soil and v 11. Using improved breeds of cattle 12. Training on Lac/sericulture 13. Farmer scientist interaction 14. Linkage to financial institution 15. Improvement of Indigenous breeds

Table 5.29 : Analysis of Specific Problems associated with each Existing Farming System and its Solutions and Strategies as perceived by the Farmers

Agro ecological situation – II **Resource Rich Farmers**

TYPE OF ENTERPRISES/ COMMODITIES	EFS - I					EFS - II				
	Specific problem*	No. of families affected (%)	Solution as proposed by farmer **	Reasons for non adoption #	Proposed Strategies ##	Specific problem*	No. of families affected (%)	Solution as proposed by farmer **	Reasons for non adoption #	Proposed Strategies ##
Agricultural Crops Irrigated										
Wheat	2,6,9,10,25	100	2,3,4,5,7,11,16,17	2,4,5,6,7	1,2,3,4,5,7, 10,13	2,6,9,10,25	100	2,3,4,5,7,11,16,17	2,4,5,6,7	1,2,3,4,5,7, 10,13
Mustrard	2,6,9,10,25	67	2,3,4,5,7,11,16,17	2,4,5,6,7	1,2,3,4,5,7, 10,13	2,6,9,10,25	50	2,3,4,5,7,11,16,17	2,4,5,6,7	1,2,3,4,5,7, 10,13
Agricultural Crops Rainfed										
Paddy	1,2,4,5,6,7,81,10,13,16,20, 21	100	1,2,3,4,5,7,10, 11,12,17,18	1,2,4,5,6,7,8,9, 10,12	1,2,3,4,5,6,7,8,9,10,13	1,2,4,5,6,7,81,10, 13,16,20,21	100	1,2,3,4,5,7,10,11,12, 17,18	1,2,4,5,6,7,8,9, 10,12	1,2,3,4,5,6,7,8,9,10,13
Maize	1,2,3,5,6,7,8,10, 13,14,18,19,20	100	1,2,3,4,5,6,7,10, 11,12,15,16,17,18	2,4,5,6,7,8,9,12	1,2,3,4,5,6,7,8,9,10,13	1,2,3,5,6,7,8,10, 13,14,18,19,20	100	1,2,3,4,5,6,7,10, 11,12,15,16,17,18	2,4,5,6,7,8,9,12	1,2,3,4,5,6,7,8,9,10,13
Pigeon Pea	1,2,3,4,7,10,19,	67	1,2,3,4,5,6,7	1,2,4,5,6,7,8	1,2,3,7,9	1,2,3,4,7,10,19,	100	1,2,3,4,5,6,7	1,2,4,5,6,7,8	1,2,3,7,9
Niger	-	-	-	-	-	-	-	-	-	-
Horticultural Crops Irrigated										
Tomato	2,3,5,6,7,8,9,10, 11,13,16,18,19, 20	33	1,2,3,4,5,6,7,8, 10,11,12,15,16,17, 18	2,3,4,5,6,8,9,11, 12	1,2,3,4,5,6,7,8,9,10,13	2,3,5,6,7,8,9,10, 11,13,16,18,19	50	1,2,3,4,5,6,7,8,10,11, 12,15,16,17,18	2,3,4,5,6,8,9,11, 12	1,2,3,4,5,6,7,8,9,10,13
Brinjal	2,3,5,6,7,8,9,10, 11,13,16,18,19, 20	33	2,4,5,6,7,8,10, 11,15,16,18	2,4,5,6,8,9,10, 11,12,	1,2,3,4,5,6,7,8,9,10,13 ,14	2,3,5,6,7,8,9,10, 11,13,16,18,19	100	2,4,5,6,7,8,10,11,15, 16,18	2,4,5,6,8,9,10, 11,12,	1,2,3,4,5,6,7,8,9,10,13,14
Potato	2,3,5,6,7,8,9,10, 11,13,16,18,19, 20	67	2,4,5,6,7,8,10, 11,12,15,16,18	2,4,5,6,8,9,10, 11,12,	1,2,3,4,5,6,7,8,9,10,13 ,14	2,3,5,6,7,8,9,10, 11,13,16,18,19	100	2,4,5,6,7,8,10,11,12, 15,16,18	2,4,5,6,8,9,10, 11,12,	1,2,3,4,5,6,7,8,9,10,13,14
Horticultural Crops Rainfed										
Orchard	-	-	-	-	-	-	-	-	-	-
Cucurbites	-	-	-	-	-	-	-	-	-	-
Animal Husbandry										
Cow	12,13,15,16,23,	67	8,9,13,14,15,16, 17,19	1,2,3,6,8,11,12	1,2,3,4,11,13,14,15	-	-	-	-	-
Bufflalow	12,13,15,16,23,	100	8,9,13,14,15,16, 17,19	1,2,3,6,8,11,12	1,2,3,4,11,13,14,15	-	-	-	-	-
Poultry/Duckery (Ten birds)	10,12,13,16	33	9,13,14,15,17, 19	2,4,5,6,9,12	1,2,3,4,13,14	-	-	-	-	-
Goat	-	-	-	-	-	-	-	-	-	-

Specific Problem*		Proposed Solution**		Reason for non adoption #	Proposed stratagies ##
1. Erratic distribution of rainfall 2. Non adoption of recommended varieties 3. Use of traditional low yielding crop varieties 4. Broadcast Method of sowing 5. Low input use 6. Use of unbalance fertilizer. 7. Reluctance of seed treatment. 8. Low use of organics 9. Low availability of water 10. Lack of Pest & Disease management 11. Marketing Problems 12. Lack of improved breeds 13. Lack of awareness 14. Non availability of perennial water sources 15. Inadequate availability of fodder 16. lack of finance	17. Small land holding 18. Non adoption of crop rotation 19. Non adoption of intercropping in uplands 20. lack of knowledge on secondary (Ca,s) and micronutrients use (B, Zn, Mo) 21. No knowledge of benefits of liming in acidic soils 22. More care of vegetable crops compared to rice because of cast income 23. Poor management of animals. 24.Increase in current fallow in upland. 25. Lack of awareness.	1. Application of lime in acid soils 2. Managing rain water for use in agricultural crops 3. Improved crop production technologies 4. Line sowing/transplanting of crops 5. Use of high yielding crop varieties 6. Promotion of INM in vegetables/ pulses/oilseeds 7. Balanced use of plant nutrients 8. Market information 9. Use of improved breeds of animals 10. Crop rotation 11. Control of diseases and pests in crops	12. Developing improved post harvest techniques 13. Controlling animal diseases 14. Better nutrition of animals 15. Training and exposure visits 16. Demonstrations 17. Dissemination of knowl-edge through mass media 18. Use of phosphate, calcium and lime with biofertilisers for crops 19. Preventive vaccination 20. Using low water requiring crops such as coarse cereals	1. Small holdings 2. Lack of capitals 3. Lack of labour 4. Lack of awareness 5. Poor transfer of technology to farmers 6. Non-availability of inputs 7. Inability to take risks under rainfed conditions 8. Lack of knowledge/motivation 9. Poor market information's 10. Non-profitable agriculture 11. Poor transport 12. Poor access to Inproved technology	1. Training and exposure visit 2. Demonstrations 3. Providing financial assistance/crop insuranc 4. Providing market opportunities 5. Gearing quality input supply in rural areas 6. Inter cropping in uplands 7. Control of pests and diseases in crops 8. Greater use of vermicompost and other org. ics to build up soil fertility 9. Using lime to neutralise soil acidity especially in upla 10. More emphasis on judicious use of soil and v 11. Using improved breeds of cattle 12. Training on Lac/sericulture 13. Farmer scientist interaction 14. Linkage to financial institution 15. Improvement of Indigenous breeds

Table 5.30 : Analysis of Specific Problems associated with each Existing Farming System and its Solutions and Strategies as perceived by the Farmers

Agro ecological situation – III **Resource Rich Farmers**

TYPE OF ENTERPRISES/ COMMODITIES	EFS - I					EFS - II				
	Specific problem*	No. of families affected (%)	Solution as proposed by farmer **	Reasons for non adoption #	Proposed Strategies ##	Specific problem*	No. of families affected (%)	Solution as proposed by farmer **	Reasons for non adoption #	Proposed Strategies ##
Agricultural Crops Irrigated										
Wheat	-	-	-	-	-	-	-	-	-	-
Mustrard	-	-	-	-	-	-	-	-	-	-
Agricultural Crops Rainfed										
Paddy	1,2,4,5,6,7,81,10,13,16,20, 21	100	1,2,3,4,5,7,10,11,12, 17,18	1,2,4,5,6,7,8,9,10,12	1,2,3,4,5,6, 7,8,9,10,13	1,2,4,5,6,7,81,10,13,16 ,20,21	100	1,2,3,4,5,7,10,11,12, 17,18	1,2,4,5,6,7,8,9,10, 12	1,2,3,4,5,6,7,8,9,10 ,13
Maize	1,2,3,5,6,7,8,10, 13,14,18,19,20	100	1,2,3,4,5,6,7,10, 11,12,15,16,17,18	2,4,5,6,7,8,9,12	1,2,3,4,5,6, 7,8,9,10,13	1,2,3,5,6,7,8,10, 13,14,18,19,20	75	1,2,3,4,5,6,7,10, 11,12,15,16,17,18	2,4,5,6,7,8,9,12	1,2,3,4,5,6,7,8,9,10 ,13
Pigeon Pea	-	-	-	-	-	1,2,3,4,7,10,19,	50	1,2,3,4,5,6,7	1,2,4,5,6,7,8	1,2,3,7,9
Niger	1,2,3,5,6,7,8,10, 13,14,18,19,20	50	1,2,3,4,5,6,7,10, 11,12,15,16,17,18	2,4,5,6,7,8,9,12	1,2,3,4,5,6, 7,8,9,10,13	1,2,3,5,6,7,8,10, 13,14,18,19,20	25	1,2,3,4,5,6,7,10, 11,12,15,16,17,18	2,4,5,6,7,8,9,12	1,2,3,4,5,6,7,8,9,10 ,13
Horticultural Crops Irrigated										
Tomato	2,3,5,6,7,8,9,10, 11,13,16,18,19,20	100	1,2,3,4,5,6,7,8,10,11, 12,15,16,17,18	2,3,4,5,6,8,9,11, 12	1,2,3,4,5,6, 7,8,9,10,13	-	-	-	-	-
Brinjal	2,3,5,6,7,8,9,10, 11,13,16,18,19,20	50	2,4,5,6,7,8,10,11,15, 16,18	2,4,5,6,8,9,10,11,12,	1,2,3,4,5,6, 7,8,9,10,13, 14	-	-	-	-	-
Potato	-	-	-	-	-	-	-	-	-	-
Horticultural Crops Rainfed										
Orchard	2,3,10,11,16,17, 20	50	1,2,3,6,7,8,11,12,17	1,2,3,4,5,6,8,9,11,12	1,2,3,4,5,9, 10,13, 14	-	-	-	-	-
Cucurbites	2,3,5,6,7,8,9,10, 11,13,16,18,19	100	2,4,5,6,7,8,10,11,15, 16,18	2,4,5,6,8,9,10,11,12,	1,2,3,4,5,6, 7,8,9,10,13, 14	2,3,5,6,7,8,9,10, 11,13,16,18,19	50	2,4,5,6,7,8,10,11,15, 16,18	2,4,5,6,8,9,10,11, 12,	1,2,3,4,5,6,7,8,9,10 ,13,14
Animal Husbandry										
Cow	12,13,15,16,23,	50	8,9,13,14,15,16, 17,19	1,2,3,6,8,11,12	1,2,3,4,11,1 3,14,15	12,13,15,16,23,	75	8,9,13,14,15,16, 17,19	1,2,3,6,8,11,12	1,2,3,4,11,13,14,15
Buffalow	12,13,15,16,23,	100	8,9,13,14,15,16, 17,19	1,2,3,6,8,11,12	1,2,3,4,11,1 3,14,15	12,13,15,16,23,	50	8,9,13,14,15,16, 17,19	1,2,3,6,8,11,12	1,2,3,4,11,13,14,15
Poultry/Duckery (Ten birds)	-	-	-	-	-	-	-	-	-	-
Goat	-	-	-	-	-	-	-	-	-	-

Specific Problem*		Proposed Solution**		Reason for non adoption #	Proposed stratagies ##
1. Erratic distribution of rainfall 2. Non adoption of recommended varieties 3. Use of traditional low yielding crop varieties 4. Broadcast Method of sowing 5. Low input use 6. Use of unbalance fertilizer. 7. Reluctance of seed treatment. 8. Low use of organics 9. Low availability of water 10. Lack of Pest & Disease management 11. Marketing Problems 12. Lack of improved breeds 13. Lack of awareness 14. Non availability of perennial water sources	15. Inadequate availability of fodder 16. lack of finance 17. Small land holding 18. Non adoption of crop rotation 19. Non adoption of intercropping in uplands 20. lack of knowledge on secondary (Ca,s) and micronutrients use (B, Zn, Mo) 21. No knowledge of benefits of liming in acidic soils 22. More care of vegetable crops compared to rice because of cast income 23. Poor management of animals. 24.Increase in current fallow in upland. 25. Lack of awareness.	1. Application of lime in acid soils 2. Managing rain water for use in agricultural crops 3. Improved crop production technologies 4. Line sowing/transplanting of crops 5. Use of high yielding crop varieties 6. Promotion of INM in vegetables/ pulses/oilseeds 7. Balanced use of plant nutrients 8. Market information 9. Use of improved breeds of animals 10. Crop rotation 11. Control of diseases and pests in crops	12. Developing improved post harvest techniques 13. Controlling animal diseases 14. Better nutrition of animals 15. Training and exposure visits 16. Demonstrations 17. Dissemination of knowl-edge through mass media 18. Use of phosphate, calcium and lime with biofertilisers for crops 19. Preventive vaccination 20. Using low water requiring crops such as coarse cereals	1. Small holdings 2. Lack of capitals 3. Lack of labour 4. Lack of awareness 5. Poor transfer of technology to farmers 6. Non-availability of inputs 7. Inability to take risks under rainfed conditions 8. Lack of knowledge/motivation 9. Poor market information's 10. Non-profitable agriculture 11. Poor transport 12. Poor access to nproved technology	1. Training and exposure visit 2. Demonstrations 3. Providing financial assistance/crop insuranc 4. Providing market opportunities 5. Gearing quality input supply in rural areas 6. Inter cropping in uplands 7. Control of pests and diseases in crops 8. Greater use of vermicompost and other org. ics to build up soil fertility 9. Using lime to neutralise soil acidity especially in upla 10. More emphasis on judicious use of soil and v 11. Using improved breeds of cattle 12. Training on Lac/sericulture 13. Farmer scientist interaction 14. Linkage to financial institution 15. Improvement of Indigenous breeds

Table 5.31 : Analysis of Specific Problems associated with each Existing Farming System and its Solutions and Strategies as perceived by the Farmers

Agro ecological situation – I **Resource Poor Farmers**

TYPE OF ENTERPRISES / COMMODITIES	EFS – 1					EFS – 2					EFS - 3				
	Specific problem*	No. of families (%)affected	Solution as proposed by farmer	Reasons for non adoption	Proposed Strategies	Specific problem*	No. of families (%) affected (	Solution as proposed by farmer	Reasons for non adoption #	Proposed Strategies ##	Specific problem*	No. of families (%)affected	Solution as proposed by farmer	Reasons for non adoption #	Proposed Strategies ##
Agricultural Crops Irrigated															
Wheat	2,6,9,10,16,25	11	2,3,4,5,7,11,16, 17	2,4,5,6,7	1,2,3,4,5,7, 10,13	-	-	-	-	-	-	-	-	-	-
Mustrard	2,6,9,10,16,25	10	2,3,4,5,7,11,16, 17	2,4,5,6,7	1,2,3,4,5,7, 10,13	2,6,9,10,25	38	2,3,4,5,7,11,16, 17	2,4,5,6,7	1,2,3,4,5,7, 10,13	2,6,9,10,16,25	13	2,3,4,5,7,11,16 ,17	2,4,5,6,7	1,2,3,4,5,7 , 10,13
Agricultural Crops Rainfed															
Paddy	1,2,4,5,6,7,81,10, 13,16,20,21	100	1,2,3,4,5,7,10, 11,12,17,18	1,2,4,5,6,7,8,9,10, 12	1,2,3,4,5,6,7 ,8,9,10,13	1,2,4,5,6,7,81, 10,13,16,20,21	100	1,2,3,4,5,7,10, 11,12,17,18	1,2,4,5,6,7, 8,9,10,12	1,2,3,4,5,6, 7,8,9,10,13	1,2,3,4,5,7,10, 11,12,17,18	100	1,2,3,4,5,7,10, 11,12,17,18	1,2,4,5,6,7, 8,9,10,12	1,2,3,4,5,6 ,7,8,9,10, 13
Maize	1,2,3,5,6,7,8,10, 13,14,18,19,20	30	1,2,3,4,5,6,7,10, 11,12,15, 16,17,18	2,4,5,6,7,8,9,12	1,2,3,4,5,6,7 ,8,9,10, 13	1,2,3,5,6,7,8, 10,13,14,18,19 ,20	50	1,2,3,4,5,6,7,10 ,11,12,15,16,17 ,18	2,4,5,6,7,8, 9,12	1,2,3,4,5,6, 7,8,9,10,13	1,2,3,4,5,6,7, 10,11,12,15, 16,17,18	13	1,2,3,4,5,6,7, 10,11,12,15,16 ,17,18	2,4,5,6,7,8, 9,12	1,2,3,4,5,6 ,7,8,9,10, 13
Pigeon Pea	1,2,3,4,7, 10,16,19,	40	1,2,3,4,5,6,7	1,2,4,5,6,7,8	1,2,3,7,9	2,6,9,10,16,25	63	1,2,3,4,5,6,7	1,2,4,5,6,7, 8	1,2,3,7,9	1,2,3,4,7,10,19 ,	37	1,2,3,4,5,6,7	1,2,4,5,6,7, 8	1,2,3,7,9
Niger	1,2,3,4,7, 10,16,19,	17	1,2,3,4,5,6,7	1,2,4,5,6,7,8	1,2,3,7,9	1,2,3,4,7, 10,16,19,	50	1,2,3,4,5,6,7	1,2,4,5,6,7, 8	1,2,3,7,9	-	-	-	-	-
Horticultural Crops Irrigated															
Tomato	2,3,5,6,7,8,9,10, 11,13,16,18,19	15	1,2,3,4,5,6,7,8, 10,11,12,15,16, 17,18	2,3,4,5,6,8,9,11, 12	1,2,3,4,5,6,7 ,8,9,10,13	2,3,5,6,7,8,9, 10,11,13,16,18 ,19	25	1,2,3,4,5,6,7,8, 10,11,12,15,16, 17,18	2,3,4,5,6,8, 9,11, 12	1,2,3,4,5,6, 7,8,9,10,13	-	-	-	-	-
Brinjal	2,3,5,6,7,8,9,10, 11,13,16,18,19	15	2,4,5,6,7,8,10, 11,15,16,18	2,4,5,6,8,9,10,11, 12,	1,2,3,4,5,6,7 ,8,9,10,13,1 4	2,3,5,6,7,8,9, 10,11,13,16,18 ,19	30	2,4,5,6,7,8,10, 11,15,16,18	2,4,5,6,8,9, 10,11,12,	1,2,3,4,5,6, 7,8,9,10,13 ,14	-	-	-	-	-
Potato	2,3,5,6,7,8,9,10, 11,13,16,18,19	21	2,4,5,6,7,8,10, 11,12,15,16,18	2,4,5,6,8,9,10,11, 12,	1,2,3,4,5,6,7 ,8,9,10,13, 14	2,3,5,6,7,8,9, 10,11,13,16,18 ,19	30	2,4,5,6,7,8,10, 11,12,15,16,18	2,4,5,6,8,9, 10,11,12,	1,2,3,4,5,6, 7,8,9,10,13 ,14	-	-	-	-	-
Horticultural Crops Rainfed															
Orchard	2,3,10,11,16,17, 20	12	1,2,3,6,7,8,11, 12,17	1,2,3,4,5,6,8,9,11, 12	1,2,3,4,5,9, 10,13,14	-	-	-	-	-	-	-	-	-	-
Cucurbites	2,3,5,6,7,8,9,10, 11,13,16,18,19	42	2,4,5,6,7,8,10, 11,15,16,18	2,4,5,6,8,9,10,11, 12,	1,2,3,4,5,6,7 ,8,9,10,13, 14	2,3,5,6,7,8,9, 10,11,13,16,18 ,19	55	2,4,5,6,7,8,10, 11,15,16,18	2,4,5,6,8,9, 10,11, 12,	1,2,3,4,5,6, 7,8,9,10,13 ,14	-	-	-	-	-
Animal Husbandry															
Cow	12,13,15,16,23	41	8,9,13,14,15,16, 17,19	1,2,3,6,8,11,12	1,2,3,4,11, 13,14,15	-	-	-	-	-	12,13,15,16,23 ,	29	8,9,13,14,15, 16, 17,19	1,2,3,6,8,11 ,12	1,2,3,4,11, 13,14,15
Bufflow	12,13,15,16,23,	16	8,9,13,14,15,16, 17,19	1,2,3,6,8,11,12	1,2,3,4,11, 13,14,15	-	-	-	-	-	12,13,15,16,23 ,	16	8,9,13,14,15, 16, 17,19	1,2,3,6,8,11 ,12	1,2,3,4,11, 13,14,15
Poultry	10,12,13,16	50	9,13,14,15,17, 19	2,4,5,6,9,12	1,2,3,4,13, 14	-	-	-	-	-	10,12,13,16	74	9,13,14,15,17, 19	2,4,5,6,9,12	1,2,3,4,13, 14
Goat	12,15,23	81	9,13,14, 15,17,19	2,5,12	1,2,3,4,11, 14,15	-	-	-	-	-	12,15,23	69	9,13,14, 15,17,19	2,5,12	1,2,3,4,11, 14,15

Specific Problem*		Proposed Solution**		Reason for non adoption #	Proposed stratagies ##
1. Erratic distribution of rainfall 2. Non adoption of recommended varieties 3. Use of traditional low yielding crop varieties 4. Broadcast Method of sowing 5. Low input use 6. Use of unbalance fertilizer. 7. Reluctance of seed treatment. 8. Low use of organics 9. Low availability of water 10. Lack of Pest & Disease management 11. Marketing Problems 12. Lack of improved breeds 13. Lack of awareness 14. Non availability of perennial water sources 15. Inadequate availability of fodder 16. lack of finance	17. Small land holding 18. Non adoption of crop rotation 19. Non adoption of intercropping in uplands 20. lack of knowledge on secondary (Ca,s) and micronutrients use (B, Zn, Mo) 21. No knowledge of benefits of liming in acidic soils 22. More care of vegetable crops compared to rice because of cast income 23. Poor management of animals. 24.Increase in current fallow in upland. 25. Lack of awareness.	**1. Application of lime in acid soils** **2. Managing rain water for use in agricultural crops** **3. Improved crop production technologies** **4. Line sowing/transplanting of crops** **5. Use of high yielding crop varieties** **6. Promotion of INM in vegetables/ pulses/oilseeds** **7. Balanced use of plant nutrients** **8. Market information** **9. Use of improved breeds of animals** **10. Crop rotation** **11. Control of diseases and pests in crops**	**12. Developing improved post harvest techniques** **13. Controlling animal diseases** **14. Better nutrition of animals** **15. Training and exposure visits** **16. Demonstrations** **17. Dissemination of knowl-edge through mass media** **18. Use of phosphate, calcium and lime with biofertilisers for crops** **19. Preventive vaccination** **20. Using low water requiring crops such as coarse cereals**	**1. Small holdings** **2. Lack of capitals** **3. Lack of labour** **4. Lack of awareness** **5. Poor transfer of technology to farmers** **6. Non-availability of inputs** **7. Inability to take risks under rainfed conditions** **8. Lack of knowledge/motivation** **9. Poor market information's** **10. Non-profitable agriculture** **11. Poor transport** 12. Poor access to nproved technology	**1. Training and exposure visit** **2. Demonstrations** **3. Providing financial assistance/crop insuranc** **4. Providing market opportunities** **5. Gearing quality input supply in rural areas** **6. Inter cropping in uplands** **7. Control of pests and diseases in crops** **8. Greater use of vermicompost and other org. ics to build up soil fertility** **9. Using lime to neutralise soil acidity especially in upla** **10. More emphasis on judicious use of soil and v** **11. Using improved breeds of cattle** **12. Training on Lac/sericulture** **13. Farmer scientist interaction** **14. Linkage to financial institution** 15. Improvement of Indigenous breeds

Table 5.32 : Analysis of Specific Problems associated with each Existing Farming System and its Solutions and Strategies as perceived by the Farmers

Agro ecological situation – II **Resource Poor Farmers**

TYPE OF ENTERPRISES/ COMMODITIES	EFS - I					EFS - II				
	Specific problem*	No. of families affected (%)	Solution as proposed by farmer **	Reasons for non adoption #	Proposed Strategies ##	Specific problem*	No. of families affected (%)	Solution as proposed by farmer **	Reasons for non adoption #	Proposed Strategies ##
Agricultural Crops	**Irrigated**									
Wheat	2,6,9,10,25	27	2,3,4,5,7,11,16,17	2,4,5,6,7	1,2,3,4,5,7, 10,13	2,6,9,10,25	20	2,3,4,5,7,11,16,17	2,4,5,6,7	1,2,3,4,5,7, 10,13
Mustrard	2,6,9,10,25	29	2,3,4,5,7,11,16,17	2,4,5,6,7	1,2,3,4,5,7, 10,13	2,6,9,10,25	26	2,3,4,5,7,11,16,17	2,4,5,6,7	1,2,3,4,5,7, 10,13
Agricultural Crops	**Rainfed**									
Paddy	1,2,4,5,6,7,81,10,13,16,20, 21	100	1,2,3,4,5,7,10,11,12,17,18	1,2,4,5,6,7,8,9,10,12	1,2,3,4,5,6,7,8,9,10,13	1,2,4,5,6,7,81,10,13, 16,20,21	100	1,2,3,4,5,7,10,11, 12,17,18	1,2,4,5,6,7,8,9 ,10,12	1,2,3,4,5,6,7 ,8,9,10,13
Maize	1,2,3,5,6,7,8,10, 13,14,18,19,20	40	1,2,3,4,5,6,7,10, 11,12,15,16,17,18	2,4,5,6,7,8,9,12	1,2,3,4,5,6,7,8,9,10,13	1,2,3,5,6,7,8,10, 13,14,18,19,20	36	1,2,3,4,5,6,7,10, 11,12,15,16,17,18	2,4,5,6,7,8,9, 12	1,2,3,4,5,6,7 ,8,9,10,13
Pigeon Pea	2,6,9,10,16,25	47	1,2,3,4,5,6,7	1,2,4,5,6,7,8	1,2,3,7,9	2,6,9,10,16,25	28	1,2,3,4,5,6,7	1,2,4,5,6,7,8	1,2,3,7,9
Niger	1,2,3,5,6,7,8,10, 13,14,18,19,20	38	1,2,3,4,5,6,7	1,2,4,5,6,7,8	1,2,3,7,9	1,2,3,5,6,7,8,10, 13,14,18,19,20	31	1,2,3,4,5,6,7	1,2,4,5,6,7,8	1,2,3,7,9
Horticultural Crops	**Irrigated**									
Tomato	2,3,5,6,7,8,9,10, 11,13,16,18,19	42	1,2,3,4,5,6,7,8,10,11,12,15,16,17, 18	2,3,4,5,6,8,9,11, 12	1,2,3,4,5,6,7,8,9,10,13	2,3,5,6,7,8,9,10, 11,13,16,18,19	10	1,2,3,4,5,6,7,8,10, 11,12,15,16,17,18	2,3,4,5,6,8,9, 11, 12	1,2,3,4,5,6,7 ,8,9,10,13
Brinjal	2,3,5,6,7,8,9,10, 11,13,16,18,19	24	2,4,5,6,7,8,10,11,15,16,18	2,4,5,6,8,9,10,11,12,	1,2,3,4,5,6,7,8,9,10,13, 14	2,3,5,6,7,8,9,10, 11,13,16,18,19	10	2,4,5,6,7,8,10,11, 15,16,18	2,4,5,6,8,9,10, 11,12,	1,2,3,4,5,6,7 ,8,9,10,13, 14
Potato	2,3,5,6,7,8,9,10, 11,13,16,18,19	40	2,4,5,6,7,8,10,11,12,15,16,18	2,4,5,6,8,9,10,11,12,	1,2,3,4,5,6,7,8,9,10,13, 14	2,3,5,6,7,8,9,10, 11,13,16,18,19	18	2,4,5,6,7,8,10,11, 12,15,16,18	2,4,5,6,8,9,10, 11,12,	1,2,3,4,5,6,7 ,8,9,10,13, 14
Horticultural Crops	**Rainfed**									
Orchard	2,3,10,11,16,17, 20	13	1,2,3,6,7,8,11,12,17	1,2,3,4,5,6,8,9,11,12	1,2,3,4,5,9,10,13,14	-	-	-	-	-
Cucurbites	2,3,5,6,7,8,9,10, 11,13,16,18,19	36	2,4,5,6,7,8,10,11,15,16,18	2,4,5,6,8,9,10,11,12,	1,2,3,4,5,6,7,8,9,10,13, 14	2,3,5,6,7,8,9,10, 11,13,16,18,19	28	2,4,5,6,7,8,10,11, 15,16,18	2,4,5,6,8,9,10, 11,12,	1,2,3,4,5,6,7 ,8,9,10,13, 14
Animal Husbandry										
Cow	12,13,15,16,23	33	8,9,13,14,15,16, 17,19	1,2,3,6,8,11,12	1,2,3,4,11,13,14,15	-	-	-	-	-
Bufflow	12,13,15,16,23,	30	8,9,13,14,15,16, 17,19	1,2,3,6,8,11,12	1,2,3,4,11,13,14,15	-	-	-	-	-
Poultry/Duckery (Ten birds)	10,12,13,16	77	9,13,14,15,17,19	2,4,5,6,9,12	1,2,3,4,13,14	-	-	-	-	-
Goat	12,15,23	80	9,13,14, 15,17,19	2,5,12	1,2,3,4,11,14,15	-	-	-	-	-

Specific Problem*		Proposed Solution**		Reason for non adoption #	Proposed stratagies ##
1. Erratic distribution of rainfall 2. Non adoption of recommended varieties 3. Use of traditional low yielding crop varieties 4. Broadcast Method of sowing 5. Low input use 6. Use of unbalance fertilizer. 7. Reluctance of seed treatment. 8. Low use of organics 9. Low availability of water 10. Lack of Pest & Disease management 11. Marketing Problems 12. Lack of improved breeds 13. Lack of awareness 14. Non availability of perennial water sources 15. Inadequate availability of fodder 16. lack of finance	17. Small land holding 18. Non adoption of crop rotation 19. Non adoption of intercropping in uplands 20. lack of knowledge on secondary (Ca,s) and micronutrients use (B, Zn, Mo) 21. No knowledge of benefits of liming in acidic soils 22. More care of vegetable crops compared to rice because of cast income 23. Poor management of animals. 24.Increase in current fallow in upland. 25. Lack of awareness.	1. Application of lime in acid soils 2. Managing rain water for use in agricultural crops 3. Improved crop production technologies 4. Line sowing/transplanting of crops 5. Use of high yielding crop varieties 6. Promotion of INM in vegetables/ pulses/oilseeds 7. Balanced use of plant nutrients 8. Market information 9. Use of improved breeds of animals 10. Crop rotation 11. Control of diseases and pests in crops	12. Developing improved post harvest techniques 13. Controlling animal diseases 14. Better nutrition of animals 15. Training and exposure visits 16. Demonstrations 17. Dissemination of knowl-edge through mass media 18. Use of phosphate, calcium and lime with biofertilisers for crops 19. Preventive vaccination 20. Using low water requiring crops such as coarse cereals	1. Small holdings 2. Lack of capitals 3. Lack of labour 4. Lack of awareness 5. Poor transfer of technology to farmers 6. Non-availability of inputs 7. Inability to take risks under rainfed conditions 8. Lack of knowledge/motivation 9. Poor market information's 10. Non-profitable agriculture 11. Poor transport 12. Poor access to nproved technology	1. Training and exposure visit 2. Demonstrations 3. Providing financial assistance/crop insuranc 4. Providing market opportunities 5. Gearing quality input supply in rural areas 6. Inter cropping in uplands 7. Control of pests and diseases in crops 8. Greater use of vermicompost and other org. ics to build up soil fertility 9. Using lime to neutralise soil acidity especially in upla 10. More emphasis on judicious use of soil and v 11. Using improved breeds of cattle 12. Training on Lac/sericulture 13. Farmer scientist interaction 14. Linkage to financial institution 15. Improvement of Indigenous breeds

Table 5.33 : Analysis of Specific Problems associated with each Existing Farming System and its Solutions and Strategies as perceived by the Farmers
Agro ecological situation – III **Resource Poor Farmers**

TYPE OF ENTERPRISES/ COMMODITIES	EFS - I					EFS - II				
	Specific problem*	No. of families affected (%)	Solution as proposed by farmer **	Reasons for non adoption #	Proposed Strategies ##	Specific problem*	No. of families affected (%)	Solution as proposed by farmer **	Reasons for non adoption #	Proposed Strategies ##
Agricultural Crops	**Irrigated**									
Wheat	-	-	-	-	-	-	-	-	-	-
Mustrard	-	-	-	-	-	-	-	-	-	-
Agricultural Crops	**Rainfed**									
Paddy	1,2,4,5,6,7,81,10,13 ,16,20,21	100	1,2,4,5,6,7,8,9, 10,12	1,2,4,5,6,7,8,9,10, 12	1,2,4,5,6,7,8 ,9,10,12	1,2,4,5,6,7,81,10, 13,16,20,21	100	1,2,4,5,6,7,8,9,10, 12	1,2,4,5,6,7,8,9,10, 12	1,2,4,5,6,7, 8,9,10, 12
Maize	1,2,3,5,6,7,8,10, 13,14,18,19,20	59	2,4,5,6,7,8,9,12	2,4,5,6,7,8,9,12	2,4,5,6,7,8,9 ,12	1,2,3,5,6,7,8,10, 13,14,18,19,20	53	2,4,5,6,7,8,9,12	2,4,5,6,7,8,9,12	2,4,5,6,7,8, 9, 12
Pigeon Pea	2,6,9,10,16,25	27	1,2,4,5,6,7,8	1,2,4,5,6,7,8	1,2,4,5,6,7,8	2,6,9,10,16,25	35	1,2,4,5,6,7,8	1,2,4,5,6,7,8	1,2,4,5,6,7, 8
Niger	2,6,9,10,16,25	27	1,2,4,5,6,7,8	1,2,4,5,6,7,8	1,2,4,5,6,7,8	2,6,9,10,16,25	17	1,2,4,5,6,7,8	1,2,4,5,6,7,8	1,2,4,5,6,7, 8
Horticultural Crops	**Irrigated**									
Tomato	-	-	-	-	-	-	-	-	-	-
Brinjal	-	-	-	-	-	-	-	-	-	-
Potato	-	-	-	-	-	-	-	-	-	-
Horticultural Crops	**Rainfed**									
Orchard	-	-	-	-	-	-	-	-	-	-
Cucurbites	2,3,5,6,7,8,9,10, 11,13,16,18,19	51	2,4,5,6,7,8,10,11,15,1 6,18	2,4,5,6,8,9,10,11,12,	1,2,3,4,5,6,7,8,9, 10,13,14	-	-	-	-	-
Animal Husbandry										
Cow	12,13,15,16,23	32	8,9,13,14,15,16, 17,19	1,2,3,6,8,11,12	1,2,3,4,11, 13,14,15	12,13,15,16,23	18	8,9,13,14,15,16, 17,19	1,2,3,6,8,11,12	1,2,3,4,11, 13,14,15
Buffalow	12,13,15,16,23,	10	8,9,13,14,15,16, 17,19	1,2,3,6,8,11,12	1,2,3,4,11, 13,14,15	12,13,15,16,23,	15	8,9,13,14,15,16, 17,19	1,2,3,6,8,11,12	1,2,3,4,11, 13,14,15
Poultry/Duckery (Ten birds)	10,12,13,16	61	9,13,14,15,17 ,19	2,4,5,6,9,12	1,2,3,4,13, 14	10,12,13,16	63	9,13,14,15,17,19	2,4,5,6,9,12	1,2,3,4,13, 14
Goat	12,15,23	78	9,13,14, 15,17,19	2,5,12	1,2,3,4,11, 14,15	12,15,23	77	9,13,14, 15,17,19	2,5,12	1,2,3,4,11, 14,15

Specific Problem*		Proposed Solution**		Reason for non adoption #	Proposed stratagies ##
1. Erratic distribution of rainfall 2. Non adoption of recommended varieties 3. Use of traditional low yielding crop varieties 4. Broadcast Method of sowing 5. Low input use 6. Use of unbalance fertilizer. 7. Reluctance of seed treatment. 8. Low use of organics 9. Low availability of water 10. Lack of Pest & Disease management 11. Marketing Problems 12. Lack of improved breeds 13. Lack of awareness 14. Non availability of perennial water sources 15. Inadequate availability of fodder 16. lack of finance	17. Small land holding 18. Non adoption of crop rotation 19. Non adoption of intercropping in uplands 20. lack of knowledge on secondary (Ca,s) and micronutrients use (B, Zn, Mo) 21. No knowledge of benefits of liming in acidic soils 22. More care of vegetable crops compared to rice because of cast income 23. Poor management of animals. 24.Increase in current fallow in upland. 25. Lack of awareness.	1. Application of lime in acid soils 2. Managing rain water for use in agricultural crops 3. Improved crop production technologies 4. Line sowing/transplanting of crops 5. Use of high yielding crop varieties 6. Promotion of INM in vegetables/ pulses/oilseeds 7. Balanced use of plant nutrients 8. Market information 9. Use of improved breeds of animals 10. Crop rotation 11. Control of diseases and pests in crops	12. Developing improved post harvest techniques 13. Controlling animal diseases 14. Better nutrition of animals 15. Training and exposure visits 16. Demonstrations 17. Dissemination of knowl-edge through mass media 18. Use of phosphate, calcium and lime with biofertilisers for crops 19. Preventive vaccination 20. Using low water requiring crops such as coarse cereals	1. Small holdings 2. Lack of capitals 3. Lack of labour 4. Lack of awareness 5. Poor transfer of technology to farmers 6. Non-availability of inputs 7. Inability to take risks under rainfed conditions 8. Lack of knowledge/motivation 9. Poor market information's 10. Non-profitable agriculture 11. Poor transport 12. Poor access to nproved technology	1. Training and exposure visit 2. Demonstrations 3. Providing financial assistance/crop insuranc 4. Providing market opportunities 5. Gearing quality input supply in rural areas 6. Inter cropping in uplands 7. Control of pests and diseases in crops 8. Greater use of vermicompost and other org. ics to build up soil fertility 9. Using lime to neutralise soil acidity especially in upla 10. More emphasis on judicious use of soil and v 11. Using improved breeds of cattle 12. Training on Lac/sericulture 13. Farmer scientist interaction 14. Linkage to financial institution 15. Improvement of Indigenous breeds

Table 5.34 : Proposed farming systems and Mutually Agreed Upon Farming System In terms of Net income (in rupees) and the Interventions (Diversification & Intensification)**

Agro-ecological situationa-1 **Resource Rich Farmers**

Type of enterprises / commodities	EFS-1					EFS-2				
	EFS-I Op-I	Op-II	Op-III	Mut. Ag. Upon	Interventions*	Op-I	Op-II	Op-III	Mut. Ag. Upon	Interventions
Agricultural Crops Irrigated										
Wheat	4500	-	9000	9000	A-1,2,3,7	5500	-	10,500	10,500	A-1,2,3,7
Mustrard	3000	-	5500	5500	A-1,2,3,7	3200	-	6500	6500	A-1,2,3,7
Agricultural Crops Rainfed										
Paddy	2600	-	7500	7500	A-1,2,3,7, B-4,	2800	-	9500	9500	A-1,2,3,7, B-4,
Maize	2800	-	6600	6600	A-1,4,8, B-1	2800	-	6800	6800	A-1,4,8, B-1
Pigeon Pea	-	-	-	-	-	-	-	-	-	
Niger	1800	-	3000	3000	A-1,4,5	2000	-	3000	3000	A-1,4,5
Horticultural Crops Irrigated										
Tomato	18,000	-	27,000	27,000	A-1,2,4,7	-	-	-	-	-
Brinjal	16,000	-	25,000	25,000	A-1,2,4,7	-	-	-	-	-
Potato	15,000	-	23,000	23,000	A-1,2,4,7	-	-	-	-	-
Horticultural Crops Rainfed										
Orchard	15,000	-	20,000	20,000	A-1,2,4,7, B-3	-	-	-	-	-
Cucurbites	14,000	-	17,000	17,000	A-1,2,4,7	-	-	-	-	-
Animal Husbandry										
Cow	2200	-	2600	2600	A-8,9	2500	-	3600	3600	A-8,9
Buffalow	1400	-	1800	1800	A-8,9	1600	-	2200	2200	A-8,9
Poultry/Duckery (Ten birds)		-	-	-	-	-	-	-	-	-
Goat	-	-	-	-	-	-	-	-	-	-
Total	**96,300**	**-**	**1,48,000**	**1,48,000**	**-**	**20,400**	**-**	**42,100**	**42,100**	**-**

Intervention :A Intensification
1. Improved management practices. 2. Change of variety form local to improve one. 3. Judicious use of Inputs like seed, fertilizers, water etc. 4. Adoption of Short duration varieties fertilizer responsive crop varieties. 5. Inter cropping with Pigeon pea, Black gram/Green gram. 6. Inter cropping/mixed cropping with Ginger turmeric/ Black gram/Green gram/Lobia. 7. Access to better market. 8. Change of breed form local to improved breed/up-gradation of local breed. 9. Adoption of breeds with high lactation period in case of milch animals. 10. Adoption of high weight breeds having tolerance, in goatry/Piggery etc.

B. Diversification
1. Adoption of inter/mixed cropping system in case of mono cropping. 2. Para cropping (Paddy with pea/gram/lentil). 3. Adoption of muiti-tier cropping system in case of horticulture crops. 4. Paddy-cum-fish culture. 5. Cultivation of oil seeds/pulses to utilize residual moisture. 6.Cultication of rainfed wheat after short duration paddy.

Table 5.35 : Proposed farming systems and Mutually Agreed Upon Farming System In terms of Net income (in rupees) and the Interventions (Diversification & Intensification)**

Agro-ecological situationa-II **Resource Rich Farmers**

Type of enterprises / commodities	EFS-1					EFS-2				
	EFS-I Op-I	Op-II	Op-III	Mut. Ag. Upon	Interventions*	Op-I	Op-II	Op-III	Mut. Ag. Upon	Interventions
Agricultural Crops Irrigated										
Wheat	6000	-	13,000	13,000	A-1,2,3,7	5500	-	11,000	11,000	A-1,2,3,7
Mustrard	3500	-	8000	8000	A-1,2,3,7	3300	-	7000	7000	A-1,2,3,7
Agricultural Crops Rainfed										
Paddy	3000	-	11,000	11,000	A-1,2,3,7, B-4,	2800	-	10,000	10,000	A-1,2,3,7, B-4,
Maize	3000	-	7500	7500	A-1,4,8, B-1	2900	-	7500	7500	A-1,4,8, B-1
Pigeon Pea	3400	-	8500	8500	A-1,3,4,5, B-1,5	3600	-	9500	9500	A-1,3,4,5, B-1,5
Niger	-	-	-	-	-	-	-	-	-	-
Horticultural Crops Irrigated										
Tomato	20,000	-	30,000	30,000	A-1,2,4,7	20,000	-	34,000	34,000	A-1,2,4,7
Brinjal	18,000	-	27,000	27,000	A-1,2,4,7	18,000	-	28,000	28,000	A-1,2,4,7
Potato	16,000	-	25,000	25,000	A-1,2,4,7	16,000	-	25,000	25,000	A-1,2,4,7
Horticultural Crops Rainfed										
Orchard	-	-	-	-	-	-	-	-	-	-
Cucurbites	16,000	-	22,500	22,500	A-1,2,4,7	-	-	-	-	-
Animal Husbandry										
Cow	2800	-	3300	3300	A-8,9	-	-	-	-	-
Buffalow	1500	-	1800	1800	A-8,9	-	-	-	-	-
Poultry/Duckery (Ten birds)	2200	-	2700	2700	A-1,7,8,	-	-	-	-	-
Goat	-	-	-	-	-	-	-	-	-	-
Total	**95,400**	**-**	**1,60,300**	**1,60,300**	**-**	**72,100**	**-**	**1,32,000**	**1,32,000**	**-**

Intervention :A Intensification
1. Improved management practices. 2. Change of variety form local to improve one. 3. Judicious use of Inputs like seed, fertilizers, water etc. 4. Adoption of Short duration varieties fertilizer responsive crop varieties. 5. Inter cropping with Pigeon pea, Black gram/Green gram. 6. Inter cropping/mixed cropping with Ginger turmeric/ Black gram/Green gram/Lobia. 7. Access to better market. 8. Change of breed form local to improved breed/up-gradation of local breed. 9. Adoption of breeds with high lactation period in case of milch animals. 10. Adoption of high weight breeds having tolerance, in goatry/Piggery etc.

B. Diversification
1. Adoption of inter/mixed cropping system in case of mono cropping. 2. Para cropping (Paddy with pea/gram/lentil). 3. Adoption of muiti-tier cropping system in case of horticulture crops. 4. Paddy-cum-fish culture. 5. Cultivation of oil seeds/pulses to utilize residual moisture. 6.Cultication of rainfed wheat after short duration paddy.

Table 5.36 : Proposed farming systems and Mutually Agreed Upon Farming System In terms of Net income (in rupees) and the Interventions (Diversification & Intensification)**

Agro-ecological situationa-III **Resource Rich Farmers**

Type of enterprises / commodities	EFS-1					EFS-2				
	EFS-I Op-I	Op-II	Op-III	Mut. Ag. Upon	Interventions*	Op-I	Op-II	Op-III	Mut. Ag. Upon	Interventions
Agricultural Crops Irrigated										
Wheat	-	-	-	-	-	-	-	-	-	-
Mustrard	-	-	-	-	-	-	-	-	-	-
Agricultural Crops Rainfed										
Paddy	2600	-	8000	8000	A-1,2,3,7, B-4,	2700	-	9500	9500	A-1,2,3,7, B-4,
Maize	2800	-	7000	7000	A-1,4,8, B-1	2900	-	7000	7000	A-1,4,8, B-1
Pigeon Pea	-	-	-	-	-	3000	-	5800	5800	A-1,3,4,5, B-1,5
Niger	1600	-	3200	3200	A-1,4,5	1800	-	3200	3200	A-1,4,5
Horticultural Crops Irrigated										
Tomato	16,000	-	26,000	26,000	A-1,2,4,7	-	-	-	-	-
Brinjal	15,000	-	24,000	24,000	A-1,2,4,7	-	-	-	-	-
Potato	-	-	-	-	-	-	-	-	-	-
Horticultural Crops Rainfed										
Orchard	16,000	-	22,000	22,000	A-1,2,4,7, B-3	-	-	-	-	-
Cucurbites	14,000	-	19,500	19,500	A-1,2,4,7	-	-	-	-	-
Animal Husbandry										
Cow	2400	-	3000	3000	A-8,9	2600	-	3500	3500	A-8,9
Buffalow	1300	-	1800	1800	A-8,9	1500	-	2000	2000	A-8,9
Poultry/Duckery (Ten birds)	-	-	-	-	-	-	-	-	-	-
Goat	-	-	-	-	-	-	-	-	-	-
Total	**71,700**	**-**	**1,14,500**	**1,14,500**	**-**	**14,500**	**-**	**31,100**	**31,100**	**-**

Intervention :A Intensification

1. Improved management practices. 2. Change of variety form local to improve one. 3. Judicious use of Inputs like seed, fertilizers, water etc. 4. Adoption of Short duration varieties fertilizer responsive crop varieties. 5. Inter cropping with Pigeon pea, Black gram/Green gram. 6. Inter cropping/mixed cropping with Ginger turmeric/ Black gram/Green gram/Lobia. 7. Access to better market. 8. Change of breed form local to improved breed/up-gradation of local breed. 9. Adoption of breeds with high lactation period in case of milch animals. 10. Adoption of high weight breeds having tolerance, in goatry/Piggery etc.

B. Diversification

1. Adoption of inter/mixed cropping system in case of mono cropping. 2. Para cropping (Paddy with pea/gram/lentil). 3. Adoption of muiti-tier cropping system in case of horticulture crops. 4. Paddy-cum-fish culture. 5. Cultivation of oil seeds/pulses to utilize residual moisture. 6.Cultication of rainfed wheat after short duration paddy.

Table 5.37 : Proposed farming systems and Mutually Agreed Upon Farming System In terms of Net income (in rupees) and the Interventions** (Diversification & Intensification)

Agro-ecological situationa-I **Resource Poor Farmers**

Type of enterprises / commodities)	EFS-1					EFS-2					EFS-3				
	EFS-I Op-I	Op-II	Op-III	Mut. Ag. Upon	Interven tions*	Op-I	Op-II	Op-III	Mut. Ag. Upon	Interven tion s	Op-I	Op-II	Op-III	Mut. Ag. Upon	Interve ntions
Agricultural Crops Irrigated															
Wheat	2200	-	8500	8500	A-1,2,3,7	-	-	-	-	-	-	-	-	-	-
Mustrard	2600	-	6000	6000	A-1,2,3,7	2400	-	6000	6000	A-1,2,3,7	2000	-	6500	6500	A-1,2,3,7
Agricultural Crops Rainfed															
Paddy	2000	-	7000	7000	A- 1,2,3, 7, B-4,	2200	-	7500	7500	A-1,2,3, 7, B-4,	2400	-	7500	7500	A-1,2,3, 7, B-4,
Maize	1500	-	4800	4800	A-1,4,8, B-1	1800	-	5200	5200	A-1,4,8, B-1	2000	-	5800	5800	A-1,4,8, B-1
Pigeon Pea	2200	-	5800	5800	A-1,3,4, 5, B-1,5	2500	-	6000	6000	A-1,3,4, 5, B-1,5	2600	-	6000	6000	A-1,3,4, 5, B-1,5
Niger	1500	-	2500	2500	A-1,4,5	1600	-	2600	2600	A-1,4,5	-	-	-	-	-
Horticultural Crops Irrigated															
Tomato	12,000	-	22,000	22,000	A-1,2,4,7	14,000	-	24,000	24,000	A-1,2,4,7	-	-	-	-	-
Brinjal	10,000	-	20,000	20,000	A-1,2,4,7	12,000	-	21,000	21,000	A-1,2,4,7	-	-	-	-	-
Potato	12,000	-	16,000	16,000	A-1,2,4,7	13,000	-	18,000	18,000	A-1,2,4,7	-	-	-	-	-
Horticultural Crops Rainfed															
Orchard	10,000	-	18,000	18,000	A-1,2,4, 7, B-3	-	-	-	-	-	-	-	-	-	-
Cucurbites	10,000	-	15,000	15,000	A-1,2,4,7	12,000		16,000	16,000	A-1,2,4,7	-	-	-	-	-
Animal Husbandry															
Cow	1500	-	2400	2400	A-8,9	-	-	-	-	-	1800	-	2800	2800	A-8,9
Buffalow	1100	-	1800	1800	A-8,9	-	-	-	-	-	1400	-	2200	2200	A-8,9
Poultry/Duckery (Ten birds)	1500	-	2300	2300	A-1,7,8,	-	-	-	-	-	1600	-	2600	2600	A-1,7,8,
Goat	5000	-	8000	8000	A-1,7,8, 10	-	-	-	-	-	4800	-	8000	8000	A-1,7,8, 10
Total	75,100	-	1,40,100	1,40,100	-	61,500	-	1,06,300	1,06,300		18,600	-	41,400	41,400	-

Intervention :A Intensification

1. Improved management practices. 2. Change of variety form local to improve one. 3. Judicious use of Inputs like seed, fertilizers, water etc. 4. Adoption of Short duration varieties fertilizer responsive crop varieties. 5. Inter cropping with Pigeon pea, Black gram/Green gram. 6. Inter cropping/mixed cropping with Ginger turmeric/ Black gram/Green gram/Lobia. 7. Access to better market. 8. Change of breed form local to improved breed/up-gradation of local breed. 9. Adoption of breeds with high lactation period in case of milch animals. 10. Adoption of high weight breeds having tolerance, in goatry/Piggery etc.

B. Diversification

1. Adoption of inter/mixed cropping system in case of mono cropping. 2. Para cropping (Paddy with pea/gram/lentil). 3. Adoption of muiti-tier cropping system in case of horticulture crops. 4. Paddy-cum-fish culture. 5. Cultivation of oil seeds/pulses to utilize residual moisture. 6.Cultication of rainfed wheat after short duration paddy.

Table 5.38 : Proposed farming systems and Mutually Agreed Upon Farming System In terms of Net income (in rupees) and the Interventions (Diversification & Intensification)**

Agro-ecological situationa-II **Resource Poor Farmers**

Type of enterprises / commodities	EFS-1					EFS-2				
	EFS-I Op-I	Op-II	Op-III	Mut. Ag. Upon	Interventions*	Op-I	Op-II	Op-III	Mut. Ag. Upon	Interventions
Agricultural Crops Irrigated										
Wheat	2600	-	9500	9500	A-1,2,3,7	2400	-	9500	9500	A-1,2,3,7
Mustrard	3000	-	6500	6500	A-1,2,3,7	2800	-	6500	6500	A-1,2,3,7
Agricultural Crops Rainfed										
Paddy	2800	-	9000	9000	A-1,2,3,7, B-4,	2500	-	9000	9000	A-1,2,3,7, B-4,
Maize	1800	-	6000	6000	A-1,4,8, B-1	2100	-	6500	6500	A-1,4,8, B-1
Pigeon Pea	2600	-	8000	8000	A-1,3,4,5, B-1,5	2400	-	8000	8000	A-1,3,4,5, B-1,5
Niger	1800	-	2800	2800	A-1,4,5	1600	-	3000	3000	A-1,4,5
Horticultural Crops Irrigated										
Tomato	16,000	-	24,000	24,000	A-1,2,4,7	16,000	-	24,000	24,000	A-1,2,4,7
Brinjal	14,000	-	21,000	21,000	A-1,2,4,7	16,000	-	21,000	21,000	A-1,2,4,7
Potato	15,000	-	20,000	20,000	A-1,2,4,7	16,000	-	20,000	20,000	A-1,2,4,7
Horticultural Crops Rainfed										
Orchard	12,000	-	20,000	20,000	A-1,2,4,7, B-3	-	-	-	-	-
Cucurbites	11,000	-	17,000	17,000	A-1,2,4,7	13,000		17,000	17,000	A-1,2,4,7
Animal Husbandry										
Cow	1600	-	3000	3000	A-8,9	-	-	-	-	-
Buffalow	1200	-	2200	2200	A-8,9	-	-	-	-	-
Poultry/Duckery (Ten birds)	1600	-	2600	2600	A-1,7,8,	-	-	-	-	-
Goat	4500	-	7000	7000	A-1,7,8,10	-	-	-	-	-
Total	**91,500**	**-**	**1,58,600**	**1,58,600**	**-**	**74,800**	**-**	**1,24,500**	**1,24,500**	**-**

Intervention :A Intensification

1. Improved management practices. 2. Change of variety form local to improve one. 3. Judicious use of Inputs like seed, fertilizers, water etc. 4. Adoption of Short duration varieties fertilizer responsive crop varieties. 5. Inter cropping with Pigeon pea, Black gram/Green gram. 6. Inter cropping/mixed cropping with Ginger turmeric/ Black gram/Green gram/Lobia. 7. Access to better market. 8. Change of breed form local to improved breed/up-gradation of local breed. 9. Adoption of breeds with high lactation period in case of milch animals. 10. Adoption of high weight breeds having tolerance, in goatry/Piggery etc.

B. Diversification

1. Adoption of inter/mixed cropping system in case of mono cropping. 2. Para cropping (Paddy with pea/gram/lentil). 3. Adoption of muiti-tier cropping system in case of horticulture crops. 4. Paddy-cum-fish culture. 5. Cultivation of oil seeds/pulses to utilize residual moisture. 6.Cultivation of rainfed wheat after short duration paddy.

Table 5.39 : Proposed farming systems and Mutually Agreed Upon Farming System In terms of Net income (in rupees) and the Interventions (Diversification & Intensification)**

Agro-ecological situationa-III **Resource Poor Farmers**

Type of enterprises / commodities	EFS-1					EFS-2				
	EFS-I Op-I	Op-II	Op-III	Mut. Ag. Upon	Interventions*	Op-I	Op-II	Op-III	Mut. Ag. Upon	Interventions
Agricultural Crops Irrigated										
Wheat	-	-	-	-	-	-	-	-	-	-
Mustrard	-	-	-	-	-	-	-	-	-	-
Agricultural Crops Rainfed										
Paddy	1800	-	7500	7500	A-1,2,3,7, B-4,	2000	-	8000	8000	A-1,2,3,7, B-4,
Maize	1600	-	5200	5200	A-1,4,8, B-1	1800	-	5200	5200	A-1,4,8, B-1
Pigeon Pea	2400	-	6000	6000	A-1,3,4,5, B-1,5	2000	-	6000	6000	A-1,3,4,5, B-1,5
Niger	1700	-	2500	2500	A-1,4,5	1500	-	2500	2500	A-1,4,5
Horticultural Crops Irrigated										
Tomato	-	-	-	-	-	-	-	-	-	-
Brinjal	-	-	-	-	-	-	-	-	-	-
Potato	-	-	-	-	-	-	-	-	-	-
Horticultural Crops Rainfed										
Orchard	-	-	-	-	-	-	-	-	-	-
Cucurbites	12,000	-	17,000	17,000	A-1,2,4,7	-	-	-	-	-
Animal Husbandry										
Cow	1800	-	2600	2600	A-8,9	2000	-	2800	2800	A-8,9
Buffalow	1400	-	2000	2000	A-8,9	1500	-	2200	2200	A-8,9
Poultry/Duckery (Ten birds)	1500	-	2400	2400	A-1,7,8,	1700	-	2600	2600	A-1,7,8,
Goat	4000	-	7000	7000	A-1,7,8,10	3800	-	7500	7500	A-1,7,8,10
Total	**28,200**	**-**	**52,200**	**52,200**	**-**	**16,300**	**-**	**34,200**	**34,200**	**-**

Intervention :A Intensification
1. Improved management practices. 2. Change of variety form local to improve one. 3. Judicious use of Inputs like seed, fertilizers, water etc. 4. Adoption of Short duration varieties fertilizer responsive crop varieties. 5. Inter cropping with Pigeon pea, Black gram/Green gram. 6. Inter cropping/mixed cropping with Ginger turmeric/ Black gram/Green gram/Lobia. 7. Access to better market. 8. Change of breed form local to improved breed/up-gradation of local breed. 9. Adoption of breeds with high lactation period in case of milch animals. 10. Adoption of high weight breeds having tolerance, in goatry/Piggery etc.

B. Diversification
1. Adoption of inter/mixed cropping system in case of mono cropping. 2. Para cropping (Paddy with pea/gram/lentil). 3. Adoption of muiti-tier cropping system in case of horticulture crops. 4. Paddy-cum-fish culture. 5. Cultivation of oil seeds/pulses to utilize residual moisture. 6.Cultication of rainfed wheat after short duration paddy.

Table : 5.40 : Gap in adoption and proposed strategies for promoting the Modified Farming System

Agro-ecological situationa-I **Resource Rich**

Type of enterprises / commodities	EFS-1						EFS-II					
	Contribution in terms of net income		Interven-tions to be carried out	Gaps in adoption F/P/N	Reasons for gap	Pro. Strategies	Contribution in terms of net income		Interventions to be carried out	Gaps in adoption F/P/N	Reasons for gap	Pro. Strategies
	Op-I	MAU					Op-I	MAU				
Agricultural Crops Irrigated												
Wheat	4500	9000	A-1,2,3,7	P	1,2,3,10,11,12	1,2,3,4,5,7, 10,12	5500	10,500	A-1,2,3,7	P	1,2,3,10,11,12	1,2,3,4,5,7, 10,12
Mustrard	3000	5500	A-1,2,3,7, B-5	P	1,2,3,6,8,10	1,2,3,4,5,7, 10,12	3200	6500	A-1,2,3,7, B-5	P	1,2,3,6,8,10	1,2,3,4,5,7, 10,12
Agricultural Crops Rainfed												
Paddy	2600	7500	A-1,2,3,7, B-4,	P	1,2,3,4,5,6,12	1,2,3,4,5,7,8, 9,10,12	2800	9500	A-1,2,3,7, B-4,	P	1,2,3,4,5,6,12	1,2,3,4,5,7,8,9, 10,12
Maize	2800	6600	A-1,2,4, B-1	P	1,2,3,4,5,6,12	1,2,3,4,5,7,8, 9,10,12	2800	6800	A-1,2,4, B-1	P	1,2,3,4,5,6,12	1,2,3,4,5,7,8,9, 10,12
Pigeon Pea	-	-	-	-	-	-	-	-	-	-	-	-
Niger	1800	3000	A-1,4,5	F	2,3,5,8,10	1,2,3,4,5,7,8, 9,10,12	2000	3000	A-1,4,5	F	2,3,5,8,10	1,2,3,4,5,7,8,9, 10,12
Horticultural Crops Irrigated												
Tomato	18,000	27,000	A-1,2,4,7	P	1,2,3,4,7,9,10, 12	1,2,3,4,5,7,8, 9,10,12	-	-	-	-	-	-
Brinjal	16,000	25,000	A-1,2,4,7	P	1,2,3,4,7,9,10, 12	1,2,3,4,5,7,8, 9,10,12	-	-	-	-	-	-
Potato	15,000	23,000	A-1,2,4,7	P	1,2,3,4,7,9,10, 12	1,2,3,4,5,7,8, 9,10,12	-	-	-	-	-	-
Horticultural Crops Rainfed												
Orchard	15,000	20,000	A-1,2,4,7, B-3	P	1,2,3,4,7,9,10, 12	1,2,3,4,5,9, 10,12	-	-	-	-	-	-
Cucurbites	14,000	17,000	A-1,2,4,7	P	1,2,3,4,7,9,10, 12	1,2,3,4,5,9, 10,12	-	-	-	-	-	-
Animal Husbandry												
Cow	2200	2600	A-8,9	F	1,2,3,7,9	1,2,3,4,11, 12	2500	3600	A-8,9	F	1,2,6,7,9	1,2,3,4,11, 12
Buffalow	1400	1800	A-8,9	F	1,2,3,7,9	1,2,3,4,11, 12	1600	2200	A-8,9	F	1,2,6,7,9	1,2,3,4,11, 12
Poultry/Duckery (Ten birds)		-	-	-	-	-	-	-	-	-	-	-
Goat	-	-	-	-	-	-	-	-	-	-	-	-
Total	96,300	1,48,000	-	-	-	-	20,400	42,100	-	-	-	-

Intervention :A Intensification :-1. Improved management practices. 2. Change of variety form local to improve one. 3. Judicious use of Inputs like seed, fertilizers, water etc. 4. Adoption of Short duration varieties fertilizer responsive crop varieties. 5. Inter cropping with Pigeon pea, Black gram/Green gram. 6. Inter cropping/mixed cropping with Ginger turmeric/ Black gram/Green gram/Lobia. 7. Access to better market. 8. Change of breed form local to improved breed/upgradation of local breed. 9. Adoption of breeds with high lactation period in case of milch animals. 10. Adoption of high weight breeds having tolerance, in goatry/Piggery etc.

B. Diversification :-1. Adoption of inter/mixed cropping system in case of mono cropping. 2. Para crpping (Paddy with pea/gram/lentil). 3. Adoption of muiti-tier cropping system in case of horticulture crops. 4. Paddy-cum-fish culture. 5. Cultivation of oil seeds/pulses to utilize residual moisture. 6.Cultication of rainfed wheat after short duration paddy.

Reasons for gap-1. lack of capitals. 2. Lack of awareness. 3.Poor transfer of technology to farmers. 4. Non-availability of inputs. 5. Inability to take risks under rainfed conditions. 6. Lack of knowledge/motivation .7. Poor market information's. 8. Uncertainty to get profit. 9. Poor transport.10. Poor excess to improved technologies.11. Reluctance/Negligence by financial institute.12. lack of irrigation Facility.

Prop. Strategies :- 1. Training and exposures visit. 2. Demonstrations. 3. providing financial assistance/crop insurance/ Linkage to financial institution.. 4. providing market opportunities. 5. Gearing quality input supply in rural areas. 6. Inter cropping in uplands. 7. Follow up IPM & INM. 8. Promotion to green manuring to increase organic matter in soil. 9. Use of lime in acidic soil. 10 More emphasis on judicious use of soil and water. 11. Use improved breeds of cattle. 12. Farmer scientist interaction

Table : 5.41 : Gap in adoption and proposed strategies for promoting the Modified Farming System

Agro-ecological situationa-II **Resource Rich**

Type of enterprises / commodities	EFS-1						EFS-II					
	Contribution in terms of net income		Interven-tions to be carried out	Gaps in adoption F/P/N	Reasons for gap	Pro. Strategies	Contribution in terms of net income		Interventions to be carried out	Gaps in adoption F/P/N	Reasons for gap	Pro. Strategies
	Op-I	MAU					Op-I	MAU				
Agricultural Crops Irrigated												
Wheat	6000	13,000	A-1,2,3,7	P	1,2,3,10,11, 12	1,2,3,4,5,7, 10,12	5500	11,000	A-1,2,3,7	P	1,2,3,10,11,12	1,2,3,4,5,7, 10,12
Mustrard	3500	8000	A-1,2,3,7	P	1,2,3,6,8,10	1,2,3,4,5,7, 10,12	3300	7000	A-1,2,3,7	P	1,2,3,6,8,10	1,2,3,4,5,7, 10,12
Agricultural Crops Rainfed												
Paddy	3000	11,000	A-1,2,3,7, B-4,	P	1,2,3,4,5,6, 12	1,2,3,4,5,7,8, 9,10,12	2800	10,000	A-1,2,3,7, B-4,	P	1,2,3,4,5,6,12	1,2,3,4,5,7,8,9, 10,12
Maize	3000	7500	A-1,4,8, B-1	P	1,2,3,4,5,6, 12	1,2,3,4,5,7,8, 9,10,12	2900	7500	A-1,4,8, B-1	P	1,2,3,4,5,6,12	1,2,3,4,5,7,8,9, 10,12
Pigeon Pea	3400	8500	A-1,3,4,5, B-1,5	F	2,3,5,6,10	1,2,3,5,6,7, 10,12	3600	9500	A-1,3,4,5, B-1,5	F	2,3,5,6,10	1,2,3,5,6,7,10, 12
Niger	-	-	-	-	-	-	-	-	-			
Horticultural Crops Irrigated												
Tomato	20,000	30,000	A-1,2,4,7	P	1,2,3,4,7,9, 10,12	1,2,3,4,5,7,8, 9,10,12	20,000	34,000	A-1,2,4,7	P	1,2,3,4,7,9,10, 12	1,2,3,4,5,7,8,9, 10,12
Brinjal	18,000	27,000	A-1,2,4,7	P	1,2,3,4,7,9, 10,12	1,2,3,4,5,7,8, 9,10,12	18,000	28,000	A-1,2,4,7	P	1,2,3,4,7,9,10, 12	1,2,3,4,5,7,8,9, 10,12
Potato	16,000	25,000	A-1,2,4,7	P	1,2,3,4,7,9, 10,12	1,2,3,4,5,7,8, 9,10,12	16,000	25,000	A-1,2,4,7	P	1,2,3,4,7,9,10, 12	1,2,3,4,5,7,8,9, 10,12
Horticultural Crops Rainfed												
Orchard	-	-	-	-	-	-	-	-	-	-	-	-
Cucurbites	16,000	17,500	A-1,2,4,7	P	1,2,3,4,7,9, 10,12	1,2,3,4,5,9, 10,12	-	-	-	-	-	-
Animal Husbandry												
Cow	2800	3300	A-8,9	F	1,2,3,7,9	1,2,3,4,11, 12	-	-	-	-	-	-
Buffalow	1500	1800	A-8,9	F	1,2,3,7,9	1,2,3,4,11, 12	-	-	-	-	-	-
Poultry/Duckery (Ten birds)	2200	2700	A-1,7,8,	P	2,3,4,6,7,9, 10	1,4,11,12	-	-	-	-	-	-
Goat	-	-	-	-	-	-	-	-	-	-	-	-
Total	**95,400**	**1,55,300**	-	-	-	-	**72,100**	**1,32,000**	-	-	-	-

Intervention :A Intensification :-1. Improved management practices. 2. Change of variety form local to improve one. 3. Judicious use of Inputs like seed, fertilizers, water etc. 4. Adoption of Short duration varieties fertilizer responsive crop varieties. 5. Inter cropping with Pigeon pea, Black gram/Green gram. 6. Inter cropping/mixed cropping with Ginger turmeric/ Black gram/Green gram/Lobia. 7. Access to better market. 8. Change of breed form local to improved breed/upgradation of local breed. 9. Adoption of breeds with high lactation period in case of milch animals. 10. Adoption of high weight breeds having tolerance, in goatry/Piggery etc.

B. Diversification :-1. Adoption of inter/mixed cropping system in case of mono cropping. 2. Para crpping (Paddy with pea/gram/lentil). 3. Adoption of muiti-tier cropping system in case of horticulture crops. 4. Paddy-cum-fish culture. 5. Cultivation of oil seeds/pulses to utilize residual moisture. 6.Cultication of rainfed wheat after short duration paddy.

Reasons for gap-1. lack of capitals. 2. Lack of awareness. 3.Poor transfer of technology to farmers. 4. Non-availability of inputs. 5. Inability to take risks under rainfed conditions. 6. Lack of knowledge/motivation .7. Poor market information's. 8. Uncertainty to get profit. 9. Poor transport.10. Poor excess to improved technologies.11. Reluctance/Negligence by financial institute.12. lack of irrigation Facility.

Table : 5.42 : Gap in adoption and proposed strategies for promoting the Modified Farming System

Agro-ecological situationa-III **Resource Rich**

Type of enterprises / commodities	EFS-1						EFS-II					
	Contribution in terms of net income		Interven-tions to be carried out	Gaps in adoption F/P/N	Reasons for gap	Pro. Strategies	Contribution in terms of net income		Interventions to be carried out	Gaps in adoption F/P/N	Reasons for gap	Pro. Strategies
	Op-I	MAU					Op-I	MAU				
Agricultural Crops Irrigated												
Wheat	-	-	-	-	-	-	-	-	-	-	-	-
Mustrard	-	-	-	-	-	-	-	-	-	-	-	-
Agricultural Crops Rainfed												
Paddy	2600	8000	A-1,2,3,7, B-4,	P	1,2,3,4,5,6, 12	1,2,3,4,5,7,8, 9,10,12	2700	9500	A-1,2,3,7, B-4,	P	1,2,3,4,5,6,12	1,2,3,4,5,7,8,9, 10,13
Maize	2800	7000	A-1,4,8, B-1	P	1,2,3,4,5,6, 12	1,2,3,4,5,7,8, 9,10,12	2900	5600	A-1,4,8, B-1	P	1,2,3,4,5,6,12	1,2,3,4,5,7,8,9, 10,13
Pigeon Pea	-	-	-	-	-	-	3000	5800	A-1,3,4,5, B-1,5	F	2,3,5,6,10	1,2,3,5,6,7,10, 12
Niger	1600	3200	A-1,4,5	F	2,3,5,8,10	1,2,3,4,5,7,8, 9,10,12	1800	2700	A-1,4,5	F	2,3,5,8,10	1,2,3,4,5,7,8,9, 10,12
Horticultural Crops Irrigated												
Tomato	16,000	26,000	A-1,2,4,7	P	1,2,3,4,7,9, 10,12	1,2,3,4,5,7,8, 9,10,12	-	-	-	-	-	-
Brinjal	15,000	24,000	A-1,2,4,7	P	1,2,3,4,7,9, 10,12	1,2,3,4,5,7,8, 9,10,12	-	-	-	-	-	-
Potato	-	-	-	-	-	-	-	-	-	-	-	-
Horticultural Crops Rainfed												
Orchard	16,000	22,000	A-1,2,4,7, B-3	P	1,2,3,4,7,9, 10,12	1,2,3,4,7,9 10,12	-	-	-	-	-	-
Cucurbites	14,000	19,500	A-1,2,4,7	P	1,2,3,4,7,9, 10,12	1,2,3,4,7,9, 10,12	-	-	-	-	-	-
Animal Husbandry												
Cow	2400	3000	A-8,9	F	1,2,3,7,9	1,2,3,4,11, 12	2600	3500	A-8,9	F	1,2,3,7,9	1,2,3,4,11, 12
Buffalow	1300	1800	A-8,9	F	1,2,3,7,9	1,2,3,4,11, 12	1500	2000	A-8,9	F	1,2,3,7,9	1,2,3,4,11, 12
Poultry/Duckery (Ten birds)	-	-	-	-	-	-	-	-	-	-	-	-
Goat	-	-	-	-	-	-	-	-	-	-	-	-
Total	**71,700**	**1,14,500**	-	-	-	-	**14,500**	**29,100**	-	-	-	-

Intervention :A Intensification :-1. Improved management practices. 2. Change of variety form local to improve one. 3. Judicious use of Inputs like seed, fertilizers, water etc. 4. Adoption of Short duration varieties fertilizer responsive crop varieties. 5. Inter cropping with Pigeon pea, Black gram/Green gram. 6. Inter cropping/mixed cropping with Ginger turmeric/ Black gram/Green gram/Lobia. 7. Access to better market. 8. Change of breed form local to improved breed/upgradation of local breed. 9. Adoption of breeds with high lactation period in case of milch animals. 10. Adoption of high weight breeds having tolerance, in goatry/Piggery etc.

B. Diversification :-1. Adoption of inter/mixed cropping system in case of mono cropping. 2. Para crpping (Paddy with pea/gram/lentil). 3. Adoption of muiti-tier cropping system in case of horticulture crops. 4. Paddy-cum-fish culture. 5. Cultivation of oil seeds/pulses to utilize residual moisture. 6.Cultication of rainfed wheat after short duration paddy.**Reasons for gap-**1. lack of capitals. 2. Lack of awareness. 3.Poor transfer of technology to farmers. 4. Non-availability of inputs. 5. Inability to take risks under rainfed conditions. 6. Lack of knowledge/motivation .7. Poor market information's. 8. Uncertainty to get profit. 9. Poor

Table : 5.43: Gap in adoption and proposed strategies for promoting the Modified Farming System

Agro-ecological situationa-I **Resource Poor**

Type of enterprises / commoditie	EFS-I						EFS-II						EFS-III					
	Contribution in terms of net income		Interven-tions to be carried out	Gaps in adoption F/P/N	Reasons for gaps	Pro. Strategies	Contribution in terms of net income		Interventions to be carried out	Gaps in adoption F/P/N	Reasons for gap	Pro. Strategies	Contribution in terms of net income		Interven-tions to be carried out	Gaps in adoption F/P/N	Reasons for gap	Pro. Strategies
	Op-I	MAU					Op-I	MAU					Op-I	MAU				
Agricultural Crops Irrigated																		
Wheat	2200	8500	A-1,2,3,7	F	1,2,3,4,5,6,10,12	1,2,3,4,5, 7,9,10,12	-	-	-	-	-	-	-	-	-	-	-	-
Mustrard	2600	6000	A-1,2,3,7	P	1,2,3,4,5,6,10,12	1,2,3,4,5, 7,9,10,12	2400	6000	A-1,2,3,7	P	1,2,3,4,5, 6,10,12	1,2,3,4,5, 7,9,10, 12	2000	6500	A-1,2,3,7	F	1,2,3,4,5, 6,10,12	1,2,3,4,5 ,7,9, 10, 12
Agricultural Crops Rainfed																		
Paddy	2000	7000	A-1,2,3,7, B-4,	F	1,2,3,5,6,8,10,11,12	1,2,3,4,5,7,8 ,9,10,12	2200	7500	A-1,2,3,7, B-4,	F	1,2,3,5,6, 8,10,11,12	1,2,3,4,5, 7,8,9,10, 12	2400	7500	A-1,2,3,7, B-4,	F	1,2,3,5,6, 8,10,11,12	1,2,3,4,5 ,7,8,9,10 ,12
Maize	1500	4800	A-1,4,8, B-1	P	1,2,3,5,6,8,10,11,12	1,2,3,4,5,7,8 ,9,10,12	1800	5200	A-1,4,8, B-1	P	1,2,3,5,6, 8,10,11,12	1,2,3,4,5, 7,8,9,10, 12	2000	5800	A-1,4,8, B-1	P	1,2,3,5,6, 8,10,11,12	1,2,3,4,5 ,7,8,9,10 ,12
Pigeon Pea	2200	5800	A-1,3,4,5, B-1,5	F	1,2,3,5,6,8,10,11,12	1,2,3,7,10	2500	6000	A-1,3,4,5, B-1,5	F	1,2,3,5,6, 8,10,11,12	1,2,3,7, 10	2600	6000	A-1,3,4,5, B-1,5	F	1,2,3,5,6, 8,10,11,12	1,2,3,7, 10
Niger	1500	2500	A-1,4,5	F	1,2,3,5,6,8,10,11,12	1,2,3,7,10	1600	2600	A-1,4,5	F	1,2,3,5,6, 8,10,11,12	1,2,3,7, 10	-	-	-	-	-	-
Horticultural Crops Irrigated																		
Tomato	12,000	22,000	A-1,2,4,7	P	1,2,3,4,6,7,9,10,12	1,2,3,4,5,6,7 ,8,10,12	14,000	24,000	A-1,2,4,7	P	1,2,3,4,6, 7,9,10, 12	1,2,3,4,5, 6,7,8,10, 12	-	-	-	-	-	-
Brinjal	10,000	20,000	A-1,2,4,7	P	1,2,3,4,6,7,9,10,12	1,2,3,4,5,6,7 ,8,10,12	12,000	21,000	A-1,2,4,7	P	1,2,3,4,6, 7,9,10, 12	1,2,3,4,5, 6,7,8,10, 12	-	-	-	-	-	-
Potato	12,000	16,000	A-1,2,4,7	P	1,2,3,4,6,7,9,10,12	1,2,3,4,5,6,7 ,8,10,12	13,000	18,000	A-1,2,4,7	P	1,2,3,4,6, 7,9,10, 12	1,2,3,4,5, 6,7,8,10, 12	-	-	-	-	-	-
Horticultural Crops Rainfed																		
Orchard	10,000	18,000	A-1,2,4,7, B-3	P	1,2,3,4,6,7,9,10,12	1,2,3,4,5,6,7 ,8,10,12	-	-	-	-	-	-	-	-	-	-	-	-
Cucurbites	10,000	15,000	A-1,2,4,7	P	1,2,3,4,6,7,9,10,12	1,2,3,4,5,6,7 ,8,10,12	12,000		A-1,2,4,7	P	1,2,3,4,6, 7,9,10, 12	1,2,3,4,5, 6,7,8,10, 12	-	-	-	-	-	-
Animal Husbandry																		
Cow	1500	2400	A-8,9	F	1,2,3,6,9, 10,11	1,3,4,11, 12	-	-	-	-	-	-	1800	2800	A-8,9	F	1,2,3,6,9, 10,11	1,3,4, 11,12
Bufflow	1100	1800	A-8,9	F	1,2,3,6,9, 10,11	1,3,4,11, 12	-	-	-	-	-	-	1400	2200	A-8,9	F	1,2,3,6,9, 10,11	1,3,4, 11,12
Poultry/ Duckery (Ten birds)	1500	2300	A-1,7,8,	F	1,2,3,6,9, 10,11	1,3,4,11, 12	-	-	-	-	-	-	1600	2600	A-1,7,8,	F	1,2,3,6,9, 10,11	1,3,4, 11,12
Goat	5000	8000	A-1,7,8,10	F	1,2,3,6,9, 10,11	1,3,4,11, 12	-	-	-	-	-	-	4800	8000	A-1,7,8,10	F	1,2,3,6,9, 10,11	1,3,4, 11,12
Total	**75,100**	**140100**	**-**	**-**	**-**	**-**	**61,500**	**106300**	**-**	**-**	**-**	**-**	**18,600**	**41,400**	**-**	**-**	**-**	**-**

Table : 5.44 : Gap in adoption and proposed strategies for promoting the Modified Farming System

Agro-ecological situationa-II **Resource Poor**

Type of enterprises / commodities	EFS-I						EFS-II					
	Contribution in terms of net income		Interven-tions to be carried out	Gaps in adoption F/P/N	Reasons for gap	Pro. Strategies	Contribution in terms of net income		Interventions to be carried out	Gaps in adoption F/P/N	Reasons for gap	Pro. Strategies
	Op-I	MAU					Op-I	MAU				
Agricultural Crops Irrigated												
Wheat	2600	9500	A-1,2,3,7	F	1,2,3,4,5,6, 10,12	1,2,3,4,5, 7,9,10,12	2400	9500	A-1,2,3,7	F	1,2,3,4,5,6,10, 12	1,2,3,4,5, 7,9,10,12
Mustrard	3000	6500	A-1,2,3,7	P	1,2,3,4,5,6, 10,12	1,2,3,4,5, 7,9,10,12	2800	6500	A-1,2,3,7	P	1,2,3,4,5,6,10, 12	1,2,3,4,5, 7,9,10,12
Agricultural Crops Rainfed												
Paddy	2800	9000	A-1,2,3,7, B-4,	P	1,2,3,5,6,8, 10,11,12	1,2,3,4,5,7, 8,9,10,12	2500	9000	A-1,2,3,7, B-4,	P	1,2,3,5,6,8,10, 11,12	1,2,3,4,5,7,8,9,10, 12
Maize	1800	6000	A-1,4,8, B-1	F	1,2,3,5,6,8, 10,11,12	1,2,3,4,5,7, 8,9,10,12	2100	6500	A-1,4,8, B-1	F	1,2,3,5,6,8,10, 11,12	1,2,3,4,5,7,8,9,10, 12
Pigeon Pea	2600	8000	A-1,3,4,5, B-1,5	F	1,2,3,5,6,8, 10,11,12	1,2,3,7,10	2400	8000	A-1,3,4,5, B-1,5	F	1,2,3,5,6,8,10, 11,12	1,2,3,7,10
Niger	1800	2800	A-1,4,5	F	1,2,3,5,6,8, 10,11,12	1,2,3,7,10	1600	3000	A-1,4,5	F	1,2,3,5,6,8,10, 11,12	1,2,3,7,10
Horticultural Crops Irrigated												
Tomato	16,000	24,000	A-1,2,4,7	P	1,2,3,4,6,7, 9,10,12	1,2,3,4,5,6, 7,8,10,12	16,000	24,000	A-1,2,4,7	P	1,2,3,4,6,7,9,1 0,12	1,2,3,4,5,6,7,8,10, 12
Brinjal	14,000	21,000	A-1,2,4,7	P	1,2,3,4,6,7, 9,10,12	1,2,3,4,5,6, 7,8,10,12	16,000	21,000	A-1,2,4,7	P	1,2,3,4,6,7,9,1 0,12	1,2,3,4,5,6,7,8,10, 12
Potato	15,000	20,000	A-1,2,4,7	P	1,2,3,4,6,7, 9,10,12	1,2,3,4,5,6, 7,8,10,12	16,000	20,000	A-1,2,4,7	P	1,2,3,4,6,7,9,1 0,12	1,2,3,4,5,6,7,8,10, 12
Horticultural Crops Rainfed												
Orchard	12,000	20,000	A-1,2,4,7, B-3	P	1,2,3,4,6,7, 9,10,12	1,2,3,4,5,6, 7,8,10,12	-	-	-	-	-	-
Cucurbites	11,000	17,000	A-1,2,4,7	P	1,2,3,4,6,7, 9,10,12	1,2,3,4,5,6, 7,8,10,12	13,000	17,000	A-1,2,4,7	P	1,2,3,4,6,7,9,1 0,12	1,2,3,4,5,6,7,8,10, 12
Animal Husbandry												
Cow	1600	3000	A-8,9	F	1,2,3,6,9, 10,11	1,3,4,11, 12	-	-	-	-	-	-
Bufflow	1200	2200	A-8,9	F	1,2,3,6,9, 10,11	1,3,4,11, 12	-	-	-	-	-	-
Poultry/Ducke ry (Ten birds)	1600	2600	A-1,7,8,	F	1,2,3,6,9, 10,11	1,3,4,11, 12	-	-	-	-	-	-
Goat	4300	7000	A-1,7,8,10	F	1,2,3,6,9, 10,11	1,3,4,11, 12	-	-	-	-	-	-
Total	**91,500**	**1,58,600**	**-**	**-**	**-**	**-**	**61,000**	**1,24,500**	**-**	**-**	**-**	**-**

ntervention :A Intensification :-1. Improved management practices. 2. Change of variety form local to improve one. 3. Judicious use of Inputs like seed, fertilizers, water etc. 4. Adoption of Short duration & fertilizer responsive crop varieties. 5. Inter cropping with Pigeon pea, Black gram/Green gram. 6. Inter cropping/mixed cropping with Ginger turmeric/ Black gram/Green gram/Lobia. 7. Access to better market. 8. Change of breed form local to improved breed/upgradation of local breed. 9. Adoption of breeds with high lactation period in case of milch animals. 10. Adoption of high weight breeds having tolerance, in goatry/Piggery etc.

B. Diversification :-1. Adoption of inter/mixed cropping system in case of mono cropping. 2. Para crpping (Paddy with pea/gram/lentil). 3. Adoption of muiti-tier cropping system in case of horticulture crops. 4. Paddy-cum-fish culture. 5. Cultivation of oil seeds/pulses to utilize residual moisture. 6.Cultication of rainfed wheat after short duration paddy.

Reasons for gap-1. lack of capitals. 2. Lack of awareness. 3.Poor transfer of technology to farmers. 4. Non-availability of inputs. 5. Inability to take risks under rainfed conditions. 6. Lack of knowledge/motivation .7. Poor market information's. 8. Uncertainty to get profit. 9. Poor transport.10. Poor excess to improved technologies.11. Reluctance/Negligence by financial institute.12. lack of irrigation Facility. **Prop. Strategies :-** 1. Training and exposures visit. 2. Demonstrations. 3. providing financial assistance/crop insurance/ Linkage to financial institution.. 4. providing market opportunities. 5. Gearing

Table : 5.45 : Gap in adoption and proposed strategies for promoting the Modified Farming System

Agro-ecological situationa-III **Resource Poor**

Type of enterprises / commodities	EFS-1						EFS-II					
	Contribution in terms of net income		Interven-tions to be carried out	Gaps in adoption F/P/N	Reasons for gap	Pro. Strategies	Contribution in terms of net income		Interventions to be carried out	Gaps in adoption F/P/N	Reasons for gap	Pro. Strategies
	Op-I	MAU					Op-I	MAU				
Agricultural Crops Irrigated												
Wheat	-	-	-	-	-		-	-	-	-	-	-
Mustrard	-	-	-	-	-		-	-	-	-	-	-
Agricultural Crops Rainfed												
Paddy	1800	7500	A-1,2,3,7, B-4,	F	1,2,3,5,6,8, 10,11,12	1,2,3,4,5,7, 8,9,10,12	2000	8000	A-1,2,3,7, B-4,	F	1,2,3,5,6,8,10, 11,12	1,2,3,4,5,7,8,9,10, 12
Maize	1600	5200	A-1,4,8, B-1	F	1,2,3,5,6,8, 10,11,12	1,2,3,4,5,7, 8,9,10,12	1800	5200	A-1,4,8, B-1	F	1,2,3,5,6,8,10, 11,12	1,2,3,4,5,7,8,9,10, 12
Pigeon Pea	2400	6000	A-1,3,4,5, B-1,5	F	1,2,3,5,6,8, 10,11,12	1,2,3,7,10	2000	6000	A-1,3,4,5, B-1,5	F	1,2,3,5,6,8,10, 11,12	1,2,3,7,10
Niger	1700	2500	A-1,4,5	F	1,2,3,5,6,8, 10,11,12	1,2,3,7,10	1500	2500	A-1,4,5	F	1,2,3,5,6,8,10, 11,12	1,2,3,7,10
Horticultural Crops Irrigated												
Tomato	-	-	-	-	-	-	-	-	-	-	-	-
Brinjal	-	-	-	-	-	-	-	-	-	-	-	-
Potato	-	-	-	-	-	-	-	-	-	-	-	-
Horticultural Crops Rainfed												
Orchard	-	-	-	-	-	-	-	-	-	-	-	-
Cucurbites	12,000	17,000	A-1,2,4,7	P	1,2,3,4,6,7, 9,10,12	1,2,3,4,5,6, 7,8,10,12	-	-	-	-	-	-
Animal Husbandry												
Cow	1800	2600	A-8,9	F	1,2,3,6,9, 10,11	1,3,4,11, 12	2000	2800	A-8,9	F	1,2,3,6,9, 10,11	1,3,4,11, 12
Bufflow	1400	2000	A-8,9	F	1,2,3,6,9, 10,11	1,3,4,11, 12	1500	2200	A-8,9	F	1,2,3,6,9, 10,11	1,3,4,11, 12
Poultry/ Duckery (Ten birds)	1500	2400	A-1,7,8,	F	1,2,3,6,9, 10,11	1,3,4,11, 12	1700	2600	A-1,7,8,	F	1,2,3,6,9, 10,11	1,3,4,11, 12
Goat	4000	7000	A-1,7,8,10	F	1,2,3,6,9, 10,11	1,3,4,11, 12	3800	7500	A-1,7,8,10	F	1,2,3,6,9, 10,11	1,3,4,11, 12
Total	**28,200**	**52,200**	**-**	**-**	**-**	**-**	**16,300**	**34,200**	**-**	**-**	**-**	**-**

Intervention :A Intensification :-1. Improved management practices. 2. Change of variety form local to improve one. 3. Judicious use of Inputs like seed, fertilizers, water etc. 4. Adoption of Short duration varieties fertilizer responsive crop varieties. 5. Inter cropping with Pigeon pea, Black gram/Green gram. 6. Inter cropping/mixed cropping with Ginger turmeric/ Black gram/Green gram/Lobia. 7. Access to better market. 8. Change of breed form local to improved breed/upgradation of local breed. 9. Adoption of breeds with high lactation period in case of milch animals. 10. Adoption of high weight breeds having tolerance, in goatry/Piggery etc.

B. Diversification :-1. Adoption of inter/mixed cropping system in case of mono cropping. 2. Para crpping (Paddy with pea/gram/lentil). 3. Adoption of muiti-tier cropping system in case of horticulture crops. 4. Paddy-cum-fish culture. 5. Cultivation of oil seeds/pulses to utilize residual moisture. 6.Cultication of rainfed wheat after short duration paddy.

Reasons for gap-1. lack of capitals. 2. Lack of awareness. 3.Poor transfer of technology to farmers. 4. Non-availability of inputs. 5. Inability to take risks under rainfed conditions. 6. Lack of knowledge/motivation .7. Poor market information's. 8. Uncertainty to get profit. 9. Poor transport.10. Poor excess to improved technologies.11. Reluctance/Negligence by financial institute.12. lack of irrigation Facility. **Prop. Strategies :-** 1. Training and exposures visit. 2. Demonstrations. 3. providing financial assistance/crop insurance/ Linkage to financial institution.. 4. providing market opportunities. 5. Gearing quality input supply in rural areas. 6. Inter cropping in uplands. 7. Follow up IPM & INM. 8. Promotion to green manuring to increase organic matter in soil. 9. Use of lime in acidic soil. 10 More emphasis on judicious use of soil and water. 11. Use improved breeds of cattle. 12. Farmer scientist interaction

VI ANALYSIS OF THE FARMING SITUATION OF MAJOR CROPS AND COMMODITIES IN EACH AES AND THE RESEARCH EXTENSION GAPS EMERGED AND STRATEGIES TO BRIDGE THE GAPS

Type of Farming Situation under which important Agricultural Crops/Animal Husbandry Cultivated/Raired.

AES – I, Resource Rich.

Crop/Animal	Farming Situation	EFS-I		EFS-II	
		Area in Ha./Nos.	%	Area in Ha./Nos.	%
Wheat	►Normal sown Well & riverlet irrigated.	4.00	66.70	2.5	62.50
	►Late sown Well & riverlet irrigated.	2.00	33.30	1.5	37.50
Tomato	►Normal sown, Upland Irrigated.	4.00	100	-	-
Brinjal	►Red late rite sandy Soil, Normal sown well/riverlet/pond irrigated.	4.00	100	-	-
Potato	►Red late rite sandy Soil, Early sown Rainfed.	3.00	35.30	-	-
	►Red late rite sandy Soil, Normal sown Irrigated.	5.50	64.70	-	-
Paddy	►Upland direct seeded, Early sown.	1.50	10.70	1.00	9.00
	►Middium Land & Normal Transplanting.	8.00	57.10	6.50	59.00
	►Low Land, Early transplanted.	4.50	32.00	3.50	32.00
Maize	►Early sown, Rainfed/Partially Irrigated.	2.00	30.80	2.00	36.40
	►Normal sown Rainfed.	4.50	69.20	5.50	63.60
Mustard	►Early sown Rainfed.	3.00	66.67	2.50	62.50
	►Normal sown Rainfed.	1.50	33.33	1.50	37.50
Pigeon Pea	►Up Land,Normal sown Rainfed.	-	-	-	-
Niger	►Late sown Rainfed.	1.0	100	1.0	100
Cow	►Own Land Rainfed.	3	100	2	100
Buffaloes	►Own Land Rainfed.	4	100	3	100
Goat	►Own Land Rainfed.	-	-	-	-
Poultry	►Own Land Rainfed.	-	-	-	-

Type of Farming Situation under which important Agricultural Crops/Animal Husbandry Cultivated/Raired.

AES – I, Resource Poor

Crop/Animal	Farming Situation	EFS-I		EFS-II		EFS-III	
		Area in Ha./Nos	%	Area in Ha./Nos	%	Area in Ha./Nos	%
Wheat	►Normal sown Well & riverlet irrigated.	9.00	69.20	-	-	-	-
	►Late sown Well & riverlet irrigated.	4.00	30.80	-	-	-	-
Tomato	►Normal sown, Upland Irrigated.	4.00	100	2.50	100	-	-
Brinjal	►Red late rite sandy Soil, Normal sown well/riverlet/pond irrigated.	3.00	100	2.00	100	-	-
Potato	►Red late rite sandy Soil, Early sown Rainfed.	3.5	39.00	2.00	36.40	-	-
	►Red late rite sandy Soil, Normal sown Irrigated.	5.5	61.00	3.50	63.60	-	-
Paddy	►Upland direct seeded, Early sown.	1.50	7.50	0.50	7.10	1.0	7.90
	►Middium Land & Normal Transplanting.	13.50	67.50	4.50	64.30	8.50	65.20
	►Low Land, Early transplanted.	5.00	25.00	2.00	28.60	3.50	26.90
Maize	►Early sown, Rainfed/Partially Irrigated.	8.00	26.20	5.00	27.00	4.00	29.60
	►Normal sown Rainfed.	22.50	73.80	16.00	73.00	9.50	70.40
Mustard	►Early sown Rainfed.	4.00	72.70	5.00	71.40	3.50	70.00
	►Normal sown Rainfed.	1.50	27.30	2.00	28.60	1.50	30.00
Pigeon Pea	►Up Land,Normal sown Rainfed.	8.50	100	4.50	100	5.50	100
Niger	►Late sown Rainfed.	2.00	100	1.50	100	-	-
Cow	►Own Land Rainfed.	52	100	-	-	28	100
Buffaloes	►Own Land Rainfed.	42	100	-	-	35	100
Goat	►Own Land Rainfed.	115	100	-	-	70	100
Poultry	►Own Land Rainfed.	112	100	-	-	128	100

Type of Farming Situation under which important Agricultural Crops/Animal Husbandry Cultivated/Raired.

AES – II, Resource Rich.

Crop/Animal	Farming Situation	EFS-I		EFS-II	
		Area in Ha./Nos.	%	Area in Ha./Nos.	%
Wheat	►Normal sown Well & riverlet irrigated.	3.00	66.70	2.50	71.40
	►Late sown Well & riverlet irrigated.	1.50	33.30	1.00	28.60
Tomato	►Normal sown, Upland Irrigated.	0.50	100	0.50	100
Brinjal	►Red late rite sandy Soil, Normal sown well/riverlet/pond irrigated.	0.50	100	0.50	100
Potato	►Red late rite sandy Soil, Early sown Rainfed.	0.50	100	0.50	100
	►Red late rite sandy Soil, Normal sown Irrigated.	1.00	100	1.00	100
Paddy	►Upland direct seeded, Early sown.	0.50	7.80	0.50	10.00
	►Middium Land & Normal Transplanting.	4.50	69.20	3.00	60.00
	►Low Land, Early transplanted.	1.50	23.00	1.50	30.00
Maize	►Early sown, Rainfed/Partially Irrigated.	0.50	33.00	0.50	50.00
	►Normal sown Rainfed.	1.00	66.70	0.50	50.00
Mustard	►Early sown Rainfed.	1.50	60.00	1.00	50.00
	►Normal sown Irrigated.	1.00	40.00	1.00	50.00
Pigeon Pea	►Up Land,Normal sown Rainfed.	1.00	100	1.00	100
Niger	►Late sown Rainfed.	-	-	-	-
Cow	►Own Land Rainfed.	02	100	-	-
Buffaloes	►Own Land Rainfed.	04	100	-	-
Goat	►Own Land Rainfed.	06	100	-	-
Poultry	►Own Land Rainfed.	-	-	-	-

Type of Farming Situation under which important Agricultural Crops/Animal Husbandry Cultivated/Raired.

AES – II, Resource Poor.

Crop/Animal	Farming Situation	EFS-I		EFS-II	
		Area in Ha./Nos.	%	Area in Ha./Nos.	%
Wheat	►Normal sown Well & riverlet irrigated.	3.50	70.00	6.50	72.20
	►Late sown Well & riverlet irrigated.	1.50	30.00	2.50	37.80
Tomato	►Normal sown, Upland Irrigated.	5.00	100	4.00	100
Brinjal	►Red late rite sandy Soil, Normal sown well/riverlet/pond irrigated.	4.50	100	3.50	100
Potato	►Red late rite sandy Soil, Early sown Rainfed.	1.50	25.00	2.00	28.60
	►Red late rite sandy Soil, Normal sown Irrigated.	4.50	75.00	5.00	71.40
Paddy	►Upland direct seeded, Early sown.	1.00	12.50	1.50	8.30
	►Middium Land & Normal Transplanting.	5.00	62.50	13.00	72.20
	►Low Land, Early transplanted.	2.00	25.00	3.50	19.50
Maize	►Early sown, Rainfed/Partially Irrigated.	1.50	25.00	2.50	56.30
	►Normal sown Rainfed.	4.50	75.00	7.00	73.70
Mustard	►Early sown Rainfed.	3.00	75.00	4.50	69.20
	►Normal sown Irrigated.	1.00	25.00	2.00	30.80
Pigeon Pea	►Up Land,Normal sown Rainfed.	4.00	100	6.00	100
Niger	►Late sown Rainfed.	1.50	100	2.00	100
Cow	►Own Land Rainfed.	20	100	-	-
Buffaloes	►Own Land Rainfed.	18	100	-	-
Goat	►Own Land Rainfed.	106	100	-	-
Poultry	►Own Land Rainfed.	74	100	-	-

Type of Farming Situation under which important Agricultural Crops/Animal Husbandry Cultivated/Raired.

AES – III, Resource Rich.

Crop/Animal	Farming Situation	EFS-I		EFS-II	
		Area in Ha./Nos.	%	Area in Ha./Nos.	%
Wheat	►Normal sown Well & riverlet irrigated.	-	-	-	-
	►Late sown Well & riverlet irrigated.	-	-	-	-
Tomato	►Normal sown, Upland Irrigated.	1.00	100	-	-
Brinjal	►Red late rite sandy Soil, Normal sown well/riverlet/pond irrigated.	0.50	100	-	-
Potato	►Red late rite sandy Soil, Early sown Rainfed.	-	-	-	-
	►Red late rite sandy Soil, Normal sown Irrigated.	-	-	-	-
Paddy	►Upland direct seeded, Early sown.	0.50	12.50	1.00	14.30
	►Middium Land & Normal Transplanting.	2.50	62.50	4.50	64.30
	►Low Land, Early transplanted.	1.00	25.00	1.50	21.40
Maize	►Early sown, Rainfed/Partially Irrigated.	0.50	20.00	1.00	22.00
	►Normal sown Rainfed.	2.00	80.00	3.50	78.00
Mustard	►Early sown Rainfed.	-	-	-	-
	►Normal sown Rainfed.	-	-	-	-
Pigeon Pea	►Up Land,Normal sown Rainfed.	-	-	1.50	100
Niger	►Late sown Rainfed.	0.20	100	0.20	100
Cow	►Own Land Rainfed.	02	100	03	100
Buffaloes	►Own Land Rainfed.	04	100	04	100
Goat	►Own Land Rainfed.	-	-	-	-
Poultry	►Own Land Rainfed.	-	-	-	-

Type of Farming Situation under which important Agricultural Crops/Animal Husbandry Cultivated/Raired.

AES – III, Resource Poor.

Crop/Animal	Farming Situation	EFS-I		EFS-II	
		Area in Ha./Nos.	%	Area in Ha./Nos.	%
Wheat	►Normal sown Well & riverlet irrigated.	-	-	-	-
	►Late sown Well & riverlet irrigated.	-	-	-	-
Tomato	►Normal sown, Upland Irrigated.	1.00	100	-	-
Brinjal	►Red late rite sandy Soil, Normal sown well/riverlet/pond irrigated.	1.00	100	-	-
Potato	►Red late rite sandy Soil, Early sown Rainfed.	-	-	-	-
	►Red late rite sandy Soil, Normal sown Irrigated.	-	-	-	-
Paddy	►Upland direct seeded, Early sown.	2.00	9.50	1.00	7.70
	►Middium Land & Normal Transplanting.	15.00	71.50	9.50	73.10
	►Low Land, Early transplanted.	4.00	19.00	2.50	19.20
Maize	►Early sown, Rainfed/Partially Irrigated.	9.00	17.50	5.00	16.90
	►Normal sown Rainfed.	42.50	82.50	24.50	83.10
Mustard	►Early sown Rainfed.	-	-	-	-
	►Normal sown Rainfed.	-	-	-	-
Pigeon Pea	►Up Land,Normal sown Rainfed.	11.00	100	8.00	100
Niger	►Late sown Rainfed.	3.00	100	1.50	100
Cow	►Own Land Rainfed.	44	100	15	100
Buffaloes	►Own Land Rainfed.	32	100	14	100
Goat	►Own Land Rainfed.	165	100	85	100
Poultry	►Own Land Rainfed.	84	100	38	100

Table : 6.01: Gap in adoption and Farmer's Strategies for improving the Production & Productivity of the Crop.

Agriculture **CROP : PADDY**

AES - I,II & III **FARMING SITUATION I : - UPLAND RED LATERITE, SANDY SOIL,**

Resource – Rich & Poor **EARLY SOWN RAINFED, DIRECT SEEDED**

ITEMS	Existing Practices	Recommended	GAP IN ADOPTION	Specific Reasons for Gap	Farmer Strategy
Sowing					
Time	15th June - 30th June	15th June - 25th June	P	1,2,3,4,5,6,7	1,2,4,5
Method	Broadcasting	Line sowing & space maintaning	P	1,3,4	1,2,4
Variety	Bround & Black Guda	BAU-102,104,105,106, BVD-109,110, Anjali, Bandana	F	1,2,3,4,5,6,7	1,2,4,5
Seed Rate/ha	100 kg	75-80 kg	P	1,2,3,4,5,6,7	1,2,4,5
Organic Manure & Fertilizer					
Organic Manure/ha	Nil	100 qt	F	1,2,3,4,5,6,7	1,2,4,5
Fertilizer (Nutrient kg/ha)	20:20:00 kg	40:20:20	P	1,2,3,4,5,6,7	1,2,4,5
Basal (N+P+K)	10:20:00 kg	20:20:00	P	1,2,3,4,5,6,7	1,2,4,5
Top Dressing (N)	10 kg	20 kg	P	1,2,3,4,5,6,7	1,2,4,5
Pest Management					
Termite	Nil	Carbofuran 3-G 25 kg/ha	F	1,2,3,4,5,6,7	1,2,4,5
Gall Midge	Nil	Carbofuran 3-G 25 kg/ha	F	1,2,3,4,5,6,7	1,2,4,5
Stem Borer	Nil	Chloprpyriphos 0.1% solution	F	1,2,3,4,5,6,7	1,2,4,5
Gandhi Bug	Nil	Monocrhrotfhos 1.5 lit/ha/ Chloprpyriphos 3% dust 25kg/ha	F	1,2,3,4,5,6,7	1,2,4,5
Disease Management					
Leaf blast	Nil	Seed treatment with Carbendazim 2gm/kg seed, spraying with 0.2% solution of cupper oxichloride	F	1,2,3,4,5,6,7	1,2,4,5
Bacterial Leaf Blight	Nil	Seed treatment with Carbendazim 2gm/kg seed, Streptocyclin	F	1,2,3,4,5,6,7	1,2,4,5
Leaf Spot	Nil	Seed treatment with Carbendazim 2gm/kg seed, spraying with Mencageb 2 kg/ha	F	1,2,3,4,5,6,7	1,2,4,5
False Smut.	Nil	Seed treatment with Carbendazim 2gm/kg seed, spraying with 0.2% solution of cupper oxichloride	F	1,2,3,4,5,6,7	1,2,4,5
Weed Management					
Mechanical	Hand weeding Once.	Hand weeding twice Use of Cono weeder	P	1,2,3,4,5,6,7	1,2,4,5
Chemical	-	Butachlore @ 3 lit/ha	F	1,2,3,4,5,6,7	1,2,4,5
No. of Irrigation	Rainfed	When required	N	-	-
Land Management					
Water Logging	-	2"-3" water to be maintained	P	1,3,4,5	1,2,4
Method of Harvesting	Local sickle	Improved sickle, paddy wriper	P	1,3,4,5	1,2,4,5
Any Other/Threshing	Bullock	Paddy thresher	P	1,3,4,5	1,2,4,5
Average Yield	8-10 qt/ha	28-30 qt/ha	P	1,2,3,4,5,6,7	1,2,4,5
Storage Pest Control	Nil	Al.Phos. tereatement	P	1,2,3,4,5,6,7	1,2,4,5

(*) F=Full P = Partial N = Nil

**** Code for specific reasons for gap in adoption**

1. **Reluctance to new technology.**
2. **Lack of Capital.**
3. **Poor access to improved technologies.**
4. **Lack of awareness.**
5. **Lack of resources.**
6. **Lack of trained resources person.**
7. **Improper management practices.**

***** code for farmer proposed extension**

1. **Training and awareness campaign.**
2. **Demonstration.**
3. **Exposer visit.**
4. **On farm trail/ORF.**
5. **Financial support.**
6. **Availablity of improved implement.**

Table : 6.02: Gap in adoption and Farmer's Strategies for improving the Production & Productivity of the Crop.

Agriculture **CROP : PADDY**

AES - I,II & III **FARMING SITUATION II : - MID LAND, SANDY SOIL/SANDY LOAM**

Resource – Rich & Poor **RAINFED, NORMAL TRANSPLANTING**

ITEMS		Existing Practices	Recommended	GAP IN ADOPTION	Specific Reasons for Gap	Farmer Strategy
Sowing						
Time	Seeding	15th June - 30th June	15th June - 25th June	P	1,2,3,4,5,6,7	1,2,4,5
	Tranplanting	15th July-30th July	15th July-30th July	N	-	-
Method		Haphazard transplanting	Line transplanting	P	1,2,3,4,5,6,7	1,2,4,5
Variety		Local, IR-36,64, Lalat	IR-36,64, Lalat, Abishek, MTU-1010, KRH-2, (HYBRID) PRO-AGRO-6444 (HYBRID)	P	1,2,3,4,5,6,7	1,2,4,5
Seed Rate/ha		50-60 kg	40 kg , 15 kg (HYBRID)	P	1,2,3,4,5,6,7	1,2,4,5
Organic Manure & Fertilizer						
Organic Manure/ha		20-25 qt.	100 qt	P	1,2,3,4,5,6,7	1,2,4,5
Fertilizer (Nutrient kg/ha)		50:30:20 kg	80:40:20 kg , 100:50:50 (HYBRID)	P	1,2,3,4,5,6,7	1,2,4,5
Basal (N+P+K)		25:30:20 kg	40:20:20 kg , 50:50:50 (HYBRID)	P	1,2,3,4,5,6,7	1,2,4,5
Top Dressing (N)		25 kg	40 kg , 50 kg	P	1,2,3,4,5,6,7	1,2,4,5
Pest Management						
Termite		Nil	Carbofuran 3-G 25 kg/ha	F	1,2,3,4,5,6,7	1,2,4,5
Gall Midge		Nil	Carbofuran 3-G 25 kg/ha	F	1,2,3,4,5,6,7	1,2,4,5
Stem Borer		Nil	Chloprpyriphos 0.1% solution	F	1,2,3,4,5,6,7	1,2,4,5
Gandhi Bug		Nil	Monocrhrotfhos 1.5 lit/ha/ Chloprpyriphos 3% dust 25kg/ha	F	1,2,3,4,5,6,7	1,2,4,5
Disease Management						
Leaf blast		Nil	Seed treatment with Carbendazim 2gm/kg seed, spraying with 0.2% solution of cupper oxichloride	F	1,2,3,4,5,6,7	1,2,4,5
Bacterial Leaf Blight		Nil	Seed treatment with Carbendazim 2gm/kg seed, Streptocyclin	F	1,2,3,4,5,6,7	1,2,4,5
Leaf Spot		Nil	Seed treatment with Carbendazim 2gm/kg seed, spraying with Mencageb 2 kg/ha	F	1,2,3,4,5,6,7	1,2,4,5
False Smut.		Nil	Seed treatment with Carbendazim 2gm/kg seed, spraying with 0.2% solution of cupper oxichloride	F	1,2,3,4,5,6,7	1,2,4,5
Weed Management						
Mechanical		Hand weeding Once.	Hand weeding twice Use of Cono weeder	P	1,2,3,4,5,6,7	1,2,4,5
Chemical		-	Butachlore @ 3 lit/ha	F	1,2,3,4,5,6,7	1,2,4,5
No. of Irrigation		Rainfed	When required	N	-	-
Land Management		Nil	Deep summer ploughing	F	1,3,4,7	1,2,6
Water Logging		-	2"-3" water to be maintained	P	1,3,4,5	1,2,4
Method of Harvesting		Local sickle	Improved sickle, paddy wriper	P	1,3,4,5	1,2,4,5
Any Other/Threshing		Bullock	Paddy thresher	P	1,3,4,5	1,2,4,5
Average Yield/ha		25-30 qt/ha	35-40 qt/ha , 55-60 qt/ha (HYBRID)	P	1,2,3,4,5,6,7	1,2,4,5
Storage Pest Control		Nil	Al.Phos. tereatement	P	1,2,3,4,5,6,7	1,2,4,5

(*) F=Full P = Partial N = Nil

**** Code for specific reasons for gap in adoption**

1. Reluctance to new technology.
2. Lack of Capital.
3. Poor access to improved technologies.
4. Lack of awareness.
5. Lack of resources.
6. Lack of trained resources person.
7. Improper management practices.

***** code for farmer proposed extension**

1. Training and awareness campaign.
2. Demonstration.
3. Exposer visit.
4. On farm trail/ORF.
5. Financial support.
6. Availablity of improved implement.

Table : 6.03 : Gap in adoption and Farmer's Strategies for improving the Production & Productivity of the Crop.

Agriculture

CROP : PADDY

AES - I,II & III

FARMING SITUATION II : - LOW LAND, LOAM/ LOAMY CLAY, RAINFED, EARLY TRANSPLANTING

Resource – Rich & Poor

ITEMS		Existing Practices	Recommended	GAP IN ADOPTION	Specific Reasons for Gap	Farmer Strategy
Sowing						
Time	Seeding	10th June - 20th June	05th June - 15th June	P	1,2,3,4,5,6,7	1,2,4,5
	Tranplanting	01th July-25th July	01th July-20th July	p	1,2,3,4,5,6,7	1,2,4,5
Method		Haphazard transplanting	Line transplanting	P	1,2,3,4,5,6,7	1,2,4,5
Variety		Dahiya, MTU-7029, BPT-5204	MTU-1001,7029,BPT-5204, Rajandra Mansuri KRH-2, (HYBRID) PRO-AGRO-6444	P	1,2,3,4,5,6,7	1,2,4,5
Seed Rate/ha		50-60 kg	40 kg , 15 kg (HYBRID)	P	1,2,3,4,5,6,7	1,2,4,5
Organic Manure & Fertilizer						
Organic Manure/ha		20-25 qt.	100 qt	P	1,2,3,4,5,6,7	1,2,4,5
Fertilizer (Nutrient kg/ha)		50:30:20 kg	80:40:20 kg , 100:50:50 (HYBRID)	P	1,2,3,4,5,6,7	1,2,4,5
Basal (N+P+K)		25:30:20 kg	40:20:20 kg , 50:50:50 (HYBRID)	P	1,2,3,4,5,6,7	1,2,4,5
Top Dressing (N)		25 kg	40 kg , 50 kg	P	1,2,3,4,5,6,7	1,2,4,5
Pest Management						
Termite		Nil	Carbofuran 3-G 25 kg/ha	F	1,2,3,4,5,6,7	1,2,4,5
Gall Midge		Nil	Carbofuran 3-G 25 kg/ha	F	1,2,3,4,5,6,7	1,2,4,5
Stem Borer		Nil	Chloprpyriphos 0.1% solution	F	1,2,3,4,5,6,7	1,2,4,5
Gandhi Bug		Nil	Monocrhrotfhos 1.5 lit/ha/ Chloprpyriphos 3% dust 25kg/ha	F	1,2,3,4,5,6,7	1,2,4,5
Disease Management						
Leaf blast		Nil	Seed treatment with Carbendazim 2gm/kg seed, spraying with 0.2% solution of cupper oxichloride	F	1,2,3,4,5,6,7	1,2,4,5
Bacterial Leaf Blight		Nil	Seed treatment with Carbendazim 2gm/kg seed, Streptocyclin	F	1,2,3,4,5,6,7	1,2,4,5
Leaf Spot		Nil	Seed treatment with Carbendazim 2gm/kg seed, spraying with Mencageb 2 kg/ha	F	1,2,3,4,5,6,7	1,2,4,5
False Smut.		Nil	Seed treatment with Carbendazim 2gm/kg seed, spraying with 0.2% solution of cupper oxichloride	F	1,2,3,4,5,6,7	1,2,4,5
Weed Management						
Mechanical		Hand weeding Once.	Hand weeding twice Use of Cono weeder	P	1,2,3,4,5,6,7	1,2,4,5
Chemical		-	Butachlore @ 3 lit/ha	F	1,2,3,4,5,6,7	1,2,4,5
No. of Irrigation		Rainfed	When required	N	-	-
Land Management		Nil	Deep summer ploughing	F	1,3,4,7	1,2,6
Water Logging		-	2"-3" water to be maintained	P	1,3,4,5	1,2,4
Method of Harvesting		Local sickle	Improved sickle, paddy wriper	P	1,3,4,5	1,2,4,5
Any Other/Threshing		Bullock	Paddy thresher	P	1,3,4,5	1,2,4,5
Average Yield/ha		28-30 qt/ha	40-45 qt/ha , 55-60 qt/ha (HYBRID)	P	1,2,3,4,5,6,7	1,2,4,5
Storage Pest Control		Nil	Al.Phos. tereatement	P	1,2,3,4,5,6,7	1,2,4,5

(*) F=Full P = Partial N = Nil

**** Code for specific reasons for gap in adoption**

1. **Reluctance to new technology.**
2. **Lack of Capital.**
3. **Poor access to improved technologies.**
4. **Lack of awareness.**
5. **Lack of resources.**
6. **Lack of trained resources person.**
7. **Improper management practices.**

***** code for farmer proposed extension**

1. **Training and awareness campaign.**
2. **Demonstration.**
3. **Exposer visit.**
4. **On farm trail/ORF.**
5. **Financial support.**
6. **Availablity of improved implement.**

Table : 6.04 : Gap in adoption and Farmer's Strategies for improving the Production & Productivity of the Crop.

Agriculture **CROP : WHEAT**

AES - I & III **FARMING SITUATION II : - MID LAND, SANDY LOAM SOIL,**

Resource – Rich & Poor **NORMAL SOWN IRRIGATED**

ITEMS	Existing Practices	Recommended	Gap in adoption	Specific Reasons for Gap	Farmer Strategy
Sowing					
Time	20th Nov. – 05th Dec.	10th Nov. - 20th Nov.	P	1,2,3,4,5,6,7	1,2,4,5
Variety	HD-2402, PBW-343, Sonalika	PBW-343, HD-2402, HP-1731, K-9107, HD-2733	P	1,2,3,4,5,6,7	1,2,4,5
Seed Rate/ha	125 kg	125 kg	N	-	-
Organic Manure & Fertilizer					
Organic Manure/ha	20-25 qt.	100 qt	P	1,2,3,4,5,6,7	1,2,4,5
Fertilizer (Nutrient kg/ha)	50:30:20 kg	100:50:25 kg	P	1,2,3,4,5,6,7	1,2,4,5
Basal (N+P+K)	25:30:20 kg	50:50:25 kg	P	1,2,3,4,5,6,7	1,2,4,5
Top Dressing (N)	25 kg	50 kg	P	1,2,3,4,5,6,7	1,2,4,5
Pest Management					
Termite	Nil	Soil treat. With Chlorpyriphos dust @ 10kg/ha	F	1,2,3,4,5,6,7	1,2,4,5
Disease Management					
Loose Smut.	Nil	Seed treatment with Carbendazim 2gm/kg seed, spraying with 0.3% solution of cupper oxichloride	F	1,2,3,4,5,6,7	1,2,4,5
Rust	Nil	Seed treatment with Carbendazim 2gm/kg seed, spraying with Mencageb 2 kg/ha	F	1,2,3,4,5,6,7	1,2,4,5
Alternaria blight	Nil	Seed treatment with Carbendazim 2gm/kg seed, spraying with Mencageb 2 kg/ha	F	1,2,3,4,5,6,7	1,2,4,5
Weed Management					
Mechanical	Hand weeding Once.	Hand weeding twice Use of Cono weeder	P	1,2,3,4,5,6,7	1,2,4,5
Chemical	-	Isoproturon @ 1.5 kg/ha	F	1,2,3,4,5,6,7	1,2,4,5
No. of Irrigation	5-6 Irrigation	7 Irrigation	P	1,2,3,4,5,6,7	1,2,4,5
Land Management	Shallow ploughing	Deep ploughing	F	1,3,4,7	1,2,6
Method of Harvesting	Local sickle	Improved sickle	P	1,3,4,5	1,2,4,5
Any Other/Threshing	Bullock	Paddy thresher	P	1,3,4,5	1,2,4,5
Average Yield/ha	20-25 qt/ha	40-45 qt/ha ,	P	1,2,3,4,5,6,7	1,2,4,5
Storage Pest Control	Nil	Al.Phos. tereatement	P	1,2,3,4,5,6,7	1,2,4,5

(*) F=Full P = Partial N = Nil

**** Code for specific reasons for gap in adoption**

1. Reluctance to new technology.
2. Lack of Capital.
3. Poor access to improved technologies.
4. Lack of awareness.
5. Lack of resources.
6. Lack of trained resources person.
7. Improper management practices.

***** code for farmer proposed extension**

1. Training and awareness campaign.
2. Demonstration.
3. Exposer visit.
4. On farm trail/ORF.
5. Financial support.
6. Availablity of improved implement.

Table : 6.05: Gap in adoption and Farmer's Strategies for improving the Production & Productivity of the Crop.

Agriculture **CROP : WHEAT**

AES - I & III **FARMING SITUATION II : - MID LAND, SANDY LOAM SOIL,**

Resource – Rich & Poor **LATE SOWN IRRIGATED**

ITEMS	Existing Practices	Recommended	Gap in adoption	Specific Reasons for Gap	Farmer Strategy
Sowing					
Time	20th Dec. – 10th Jan.	05th Dec. – 25th Dec.	P	1,2,3,4,5,6,7	1,2,4,5
Variety	PBW-343, Sonalika	PBW-373, HD-2402, HP-1744, HUW-234, HD-2643	P	1,2,3,4,5,6,7	1,2,4,5
Seed Rate/ha	125 kg	150 kg	P	1,2,3,4,5,6,7	1,2,4,5
Organic Manure & Fertilizer					
Organic Manure/ha	20-25 qt.	100 qt	P	1,2,3,4,5,6,7	1,2,4,5
Fertilizer (Nutrient kg/ha)	50:25:20 kg	80:40:20 kg	P	1,2,3,4,5,6,7	1,2,4,5
Basal (N+P+K)	25:25:20 kg	40:40:20 kg	P	1,2,3,4,5,6,7	1,2,4,5
Top Dressing (N)	25 kg	40 kg	P	1,2,3,4,5,6,7	1,2,4,5
Pest Management					
Termite	Nil	Soil treat. With Chlorpyriphos dust @ 10kg/ha	F	1,2,3,4,5,6,7	1,2,4,5
Disease Management					
Loose Smut.	Nil	Seed treatment with Carbendazim 2gm/kg seed, spraying with 0.3% solution of cupper oxichloride	F	1,2,3,4,5,6,7	1,2,4,5
Rust	Nil	Seed treatment with Carbendazim 2gm/kg seed, spraying with Mencageb 2 kg/ha	F	1,2,3,4,5,6,7	1,2,4,5
Alternaria blight	Nil	Seed treatment with Carbendazim 2gm/kg seed, spraying with Mencageb 2 kg/ha	F	1,2,3,4,5,6,7	1,2,4,5
Weed Management					
Mechanical	Hand weeding Once.	Hand weeding twice Use of Cono weeder	P	1,2,3,4,5,6,7	1,2,4,5
Chemical	-	Isoproturon @ 1.5 kg/ha	F	1,2,3,4,5,6,7	1,2,4,5
No. of Irrigation	5-6 Irrigation	7 Irrigation	P	1,2,3,4,5,6,7	1,2,4,5
Land Management	Shallow ploughing	Deep ploughing	F	1,3,4,7	1,2,6
Method of Harvesting	Local sickle	Improved sickle	P	1,3,4,5	1,2,4,5
Any Other/Threshing	Bullock	Paddy thresher	P	1,3,4,5	1,2,4,5
Average Yield/ha	15-18 qt/ha	25-30 qt/ha ,	P	1,2,3,4,5,6,7	1,2,4,5
Storage Pest Control	Nil	Al.Phos. tereatement	P	1,2,3,4,5,6,7	1,2,4,5

(*) F=Full P = Partial N = Nil

**** Code for specific reasons for gap in adoption**

1. Reluctance to new technology.
2. Lack of Capital.
3. Poor access to improved technologies.
4. Lack of awareness.
5. Lack of resources.
6. Lack of trained resources person.
7. Improper management practices.

***** code for farmer proposed extension**

1. Training and awareness campaign.
2. Demonstration.
3. Exposer visit.
4. On farm trail/ORF.
5. Financial support.
6. Availablity of improved implement.

Table : 6.06 : Gap in adoption and Farmer's Strategies for improving the Production & Productivity of the Crop.

Agriculture **CROP : WHEAT**

AES - II **FARMING SITUATION II : - MID LAND, SANDY LOAM SOIL,**

Resource – Rich & Poor **NORMAL SOWN IRRIGATED**

ITEMS	Existing Practices	Recommended	Gap in adoption	Specific Reasons for Gap	Farmer Strategy
Sowing					
Time	20th Nov. – 05th Dec.	10th Nov. - 20th Nov.	P	1,2,3,4,5,6,7	1,2,4,5
Variety	HD-2402, PBW-343, Sonalika	PBW-343, HD-2402, HP-1731, K-9107, HD-2733	P	1,2,3,4,5,6,7	1,2,4,5
Seed Rate/ha	125 kg	125 kg	N	-	-
Organic Manure & Fertilizer					
Organic Manure/ha	20-25 qt.	100 qt	P	1,2,3,4,5,6,7	1,2,4,5
Fertilizer (Nutrient kg/ha)	60:30:20 kg	100:50:25 kg	P	1,2,3,4,5,6,7	1,2,4,5
Basal (N+P+K)	30:30:20 kg	50:50:25 kg	P	1,2,3,4,5,6,7	1,2,4,5
Top Dressing (N)	30 kg	50 kg	P	1,2,3,4,5,6,7	1,2,4,5
Pest Management					
Termite	Nil	Soil treat. With Chlorpyriphos dust @ 10kg/ha	F	1,2,3,4,5,6,7	1,2,4,5
Disease Management					
Loose Smut.	Nil	Seed treatment with Carbendazim 2gm/kg seed, spraying with 0.3% solution of cupper oxichloride	F	1,2,3,4,5,6,7	1,2,4,5
Rust	Nil	Seed treatment with Carbendazim 2gm/kg seed, spraying with Mencageb 2 kg/ha	F	1,2,3,4,5,6,7	1,2,4,5
Alternaria blight	Nil	Seed treatment with Carbendazim 2gm/kg seed, spraying with Mencageb 2 kg/ha	F	1,2,3,4,5,6,7	1,2,4,5
Weed Management					
Mechanical	Hand weeding Once.	Hand weeding twice Use of Cono weeder	P	1,2,3,4,5,6,7	1,2,4,5
Chemical	-	Isoproturon @ 1.5 kg/ha	F	1,2,3,4,5,6,7	1,2,4,5
No. of Irrigation	5-6 Irrigation	7 Irrigation	P	1,2,3,4,5,6,7	1,2,4,5
Land Management	Shallow ploughing	Deep ploughing	F	1,3,4,7	1,2,6
Method of Harvesting	Local sickle	Improved sickle	P	1,3,4,5	1,2,4,5
Any Other/Threshing	Bullock	Paddy thresher	P	1,3,4,5	1,2,4,5
Average Yield/ha	25-28 qt/ha	40-45 qt/ha ,	P	1,2,3,4,5,6,7	1,2,4,5
Storage Pest Control	Nil	Al.Phos. tereatement	P	1,2,3,4,5,6,7	1,2,4,5

(*) F=Full P = Partial N = Nil

**** Code for specific reasons for gap in adoption**

1. Reluctance to new technology.
2. Lack of Capital.
3. Poor access to improved technologies.
4. Lack of awareness.
5. Lack of resources.
6. Lack of trained resources person.
7. Improper management practices.

***** code for farmer proposed extension**

1. Training and awareness campaign.
2. Demonstration.
3. Exposer visit.
4. On farm trail/ORF.
5. Financial support.
6. Availablity of improved implement.

Table : 6.07 : Gap in adoption and Farmer's Strategies for improving the Production & Productivity of the Crop.

Agriculture **CROP : WHEAT**

AES – II **FARMING SITUATION II : - MID LAND, SANDY LOAM SOIL,**

Resource – Rich & Poor **LATE SOWN IRRIGATED**

	Existing Practices	Recommended	Gap in adoption	Specific Reasons for Gap	Farmer Strategy
Sowing					
Time	20th Dec. – 10th Jan.	05th Dec. – 25th Dec.	P	1,2,3,4,5,6,7	1,2,4,5
Variety	PBW-343, Sonalika	PBW-373, HD-2402, HP-1744, HUW-234, HD-2643	P	1,2,3,4,5,6,7	1,2,4,5
Seed Rate/ha	125 kg	150 kg	P	1,2,3,4,5,6,7	1,2,4,5
Organic Manure & Fertilizer					
Organic Manure/ha	20-25 qt.	100 qt	P	1,2,3,4,5,6,7	1,2,4,5
Fertilizer (Nutrient kg/ha)	60:30:20 kg	80:40:20 kg	P	1,2,3,4,5,6,7	1,2,4,5
Basal (N+P+K)	30:30:20 kg	40:40:20 kg	P	1,2,3,4,5,6,7	1,2,4,5
Top Dressing (N)	30 kg	40 kg	P	1,2,3,4,5,6,7	1,2,4,5
Pest Management					
Termite	Nil	Soil treat. With Chlorpyriphos dust @ 10kg/ha	F	1,2,3,4,5,6,7	1,2,4,5
Disease Management					
Loose Smut.	Nil	Seed treatment with Carbendazim 2gm/kg seed, spraying with 0.3% solution of cupper oxichloride	F	1,2,3,4,5,6,7	1,2,4,5
Rust	Nil	Seed treatment with Carbendazim 2gm/kg seed, spraying with Mencageb 2 kg/ha	F	1,2,3,4,5,6,7	1,2,4,5
Alternaria blight	Nil	Seed treatment with Carbendazim 2gm/kg seed, spraying with Mencageb 2 kg/ha	F	1,2,3,4,5,6,7	1,2,4,5
Weed Management					
Mechanical	Hand weeding Once.	Hand weeding twice Use of Cono weeder	P	1,2,3,4,5,6,7	1,2,4,5
Chemical	-	Isoproturon @ 1.5 kg/ha	F	1,2,3,4,5,6,7	1,2,4,5
No. of Irrigation	5-6 Irrigation	7 Irrigation	P	1,2,3,4,5,6,7	1,2,4,5
Land Management	Shallow ploughing	Deep ploughing	F	1,3,4,7	1,2,6
Method of Harvesting	Local sickle	Improved sickle	P	1,3,4,5	1,2,4,5
Any Other/Threshing	Bullock	Paddy thresher	P	1,3,4,5	1,2,4,5
Average Yield/ha	20-22 qt/ha	25-30 qt/ha ,	P	1,2,3,4,5,6,7	1,2,4,5
Storage Pest Control	Nil	Al.Phos. tereatement	P	1,2,3,4,5,6,7	1,2,4,5

(*) F=Full P = Partial N = Nil

**** Code for specific reasons for gap in adoption**

1. Reluctance to new technology.
2. Lack of Capital.
3. Poor access to improved technologies.
4. Lack of awareness.
5. Lack of resources.
6. Lack of trained resources person.
7. Improper management practices.

***** code for farmer proposed extension**

1. Training and awareness campaign.
2. Demonstration.
3. Exposer visit.
4. On farm trail/ORF.
5. Financial support.
6. Availablity of improved implement.

Table : 6.08 : Gap in adoption and Farmer's Strategies for improving the Production & Productivity of the Crop.

Agriculture **Crop : Maize**

AES – I & III, Resource Rich & Poor **Farming Situation: Rainfed Normal Sown Up Land Red Laterite Sandy Soil**

ITEMS	Existing practices	Recommended	Gap in adoption	Specific Reasons for gap	Farmer Strategy
Sowing					
Variety	Ganga Safed -2, Ganga-5, Swan-1,	Birsa Maize-1, Birsa Maize-2, Priya, Ganga Safed -2, Ganga-5, Swan-1,	P	1,3,4,6,7	1,2,4,5
Method	Line Sowing	Line Sowing	N	-	1,2,5,6
Seed Rate	20 Kg/ha	18 Kg/ha	P	1,3,4,6,7	1,2,3,4,6
Time	15^{th} June-25^{th} June	15^{th} June -25^{th} June	N	-	-
Organic Manure & Fertilizer					
Organic Manure	50 Qt.	100 Qt	P	1,2,3,4,5	1,2,3,4,5
Fertilizer (Nutrient in Kg/ha.)					
Normal Sown					
Basal (N+P+K) KG/ H	30:40:20	40:60:40	P	1,2,3,4	1,2,3,4,5
Top Dressing (N) KG/H	30	30+30N	P	1,2,3,4	1,2,3,4,5
Total KG/ H	**60:40:20**	**100:60:40**	**-**	**-**	**-**
Method of fertilizer use					
Basal (N+P+K)	50 % + 100% P_2o_5 +100% k_2O Broad Casting	50 % + 100% P_2o_5 +100% k_2O Broad Casting	N	-	1
Top Dressing (N)	25 % + 25% N Broad Casting	25 % + 25% N Broad Casting	N	-	1
Disease & Pest Management					
Pest Management					
Soil Treatment(Termite)	Lindel dust @25%	Indoselafan 4% dust @25kg	P	1,2,3,4	1,2,4,5
Stem/Shoot Borer					
Disease Management					
Helmenthosparium Lef Blight	-	DM-45/Cafbendazin 0.2 % Soulation	F	1,2,3,4	1,2,4,5
Sheath Blight	-	DM-45/Cafbendazin 0.2 % Soulation	F	1,2,3,4	1,2,4,5
Weed Management					
Mechanical	Hand weeding Once	Hand weeding twice and earthing up	P	1,2,3,4	1,2,4,5,6
Chemical	-	Simazine and Atrazine 1.0-1.25kg/ha	F	1,2,4,5	1,2,3,5
Water Management					
No. of Irrigation	Rainfed	Rainfed Life saving irrigation may be needed	P	8	8
Method	-	-	-	-	-
Soil Management					
Acidity	-	3Qt/he. Furough	F	1,2,3,4,5,6	1,2,3,4,5,6
Water Logging	Open bunding	Extra water to be removed through Open bunding	N	-	-
Harvesting & Threshing					
Method of Harvesting	Hand plucking	Hand plucking	N	-	-
Any Other/Threshing	By hand	Maize Seller machine	F	4,5	5,6
Average Yield*					
Grain	30 - 35qu/ha	40-45 qu/ha	P	1,2,3,4,5,7	1,2,3,4,5
Storage Pest Control	-	Aluminium phosphide 1 tablet/matric ton	P	1,2,3,4,5,7	1

Reasons for gap -1.Reluctance to new technology. 2. Lack of capital. 3. Poor excess to improved technologies. 4. Lack of awareness. 5. Lack of resources.6. Lack of trained resources person.7. Improper management practices. 8. Erratice rainfull.	**Prop. Strategies :-** 1.Training and awareness campaign. 2. Demonstration. 3 Exposer visit. 4. On farm trail/ORF. 5. Financial support. 6. Availablity of improved implement.7. Open Bund. 8. Irrigation faclilty .

Table : 6.09 : Gap in adoption and Farmer's Strategies for improving the Production & Productivity of the Crop.

Agriculture **Crop : Maize**

AES – II, Resource Rich **Farming Situation : Rainfed Normal Sown**

Up Land Red Laterite Sandy Soil

ITEMS	Existing practices	Recommended	Gap in adop tion	Specific Reasons for gap	Farmer Strategy
Sowing					
Variety	Ganga Safed -2, Ganga-5, Swan-1,	Birsa Maize-1, Birsa Maize-2, Priya, Ganga Safed -2, Ganga-5, Swan-1,	P	1,3,4,6,7	1,2,4,5
Method	Line Sowing	Line Sowing	N	-	1,2,5,6
Seed Rate	20 Kg/ha	18 Kg/ha	P	1,3,4,6,7	1,2,3,4,6
Time	15th June-25th June	15th June -25th June	N	-	-
Organic Manure & Fertilizer					
Organic Manure	50 Qt.	100 Qt	P	1,2,3,4,5	1,2,3,4,5
Fertilizer (Nutrient in Kg/ha.)					
Normal Sown					
Basal (N+P+K) KG/ H	25:30:20	40:60:40	P	1,2,3,4	1,2,3,4,5
Top Dressing (N) KG/H	30	30+30N	P	1,2,3,4	1,2,3,4,5
Total KG/ H	**50:30:20**	**100:60:40**	**-**	**-**	**-**
Method of fertilizer use					
Basal (N+P+K)	50 % + 100% P_2o_5 +100% k_2O Broad Casting	50 % + 100% P_2o_5 +100% k_2O Broad Casting	N	-	1
Top Dressing (N)	25 % + 25% N Broad Casting	25 % + 25% N Broad Casting	N	-	1
Disease & Pest Management					
Pest Management					
Soil Treatment(Termite)	Lindel dust @25%	Indoselafan 4% dust @25kg	P	1,2,3,4	1,2,4,5
Stem/Shoot Borer					
Disease Management					
Helmenthosparium Lef Blight	-	DM-45/Cafbendazin 0.2 % Soulation	F	1,2,3,4	1,2,4,5
Sheath Blight	-	DM-45/Cafbendazin 0.2 % Soulation	F	1,2,3,4	1,2,4,5
Weed Management					
Mechanical	Hand weeding Once	Hand weeding twice and earthing up	P	1,2,3,4	1,2,4,5,6
Chemical	-	Simazine and Atrazine 1.0-1.25kg/ha	F	1,2,4,5	1,2,3,5
Water Management					
No. of Irrigation	Rainfed	Rainfed Life saving irrigation may be needed	P	8	8
Method	-	-	-	-	-
Soil Management					
Acidity	-	3Qt/he. Furough	F	1,2,3,4,5,6	1,2,3,4,5,6
Water Logging	Open bunding	Extra water to be removed through Open bunding	N	-	-
Harvesting & Threshing					
Method of Harvesting	Hand plucking	Hand plucking	N	-	-
Any Other/Threshing	By hand	Maize Seller machine	F	4,5	5,6
Average Yield*					
Grain	28 - 30qu/ha	40-45 qu/ha	P	1,2,3,4,5,7	1,2,3,4,5
Storage Pest Control	-	Aluminium phosphide 1 tablet/matric ton	P	1,2,3,4,5,7	1

Reasons for gap -1.Reluctance to new technology. 2. Lack of capital. 3. Poor excess to improved technologies. 4. Lack of awareness. 5. Lack of resources.6. Lack of trained resources person.7. Improper management practices. 8. Erratice rainfull.

Prop. Strategies :- 1.Training and awareness campaign. 2. Demonstration. 3 Exposer visit. 4. On farm trail/ORF. 5. Financial support. 6. Availablity of improved implement.7. Open Bund. 8. Irrigation faclilty .

Table : 6.10 : Gap in adoption and Farmer's Strategies for improving the Production & Productivity of the Crop.

Agriculture **Crop : Maize**

AES – II, Resource Poor **Farming Situation : Rainfed Normal Sown Up Land Red Laterite Sandy Soil**

ITEMS	Existing practices	Recommended	Gap in adoption	Specific Reasons for gap	Farmer Strategy
Sowing					
Variety	Ganga Safed -2, Ganga-5, Swan-1,	Birsa Maize-1, Birsa Maize-2, Priya, Ganga Safed -2, Ganga-5, Swan-1,	P	1,3,4,6,7	1,2,4,5
Method	Line Sowing	Line Sowing	N	-	1,2,5,6
Seed Rate	20 Kg/ha	18 Kg/ha	P	1,3,4,6,7	1,2,3,4,6
Time	15^{th} June-25^{th} June	15^{th} June -25^{th} June	N	-	-
Organic Manure & Fertilizer					
Organic Manure	25-30 Qt.	100 Qt	P	1,2,3,4,5	1,2,3,4,5
Fertilizer (Nutrient in Kg/ha.)					
Normal Sown					
Basal (N+P+K) KG/ H	20:20:20	40:60:40	P	1,2,3,4	1,2,3,4,5
Top Dressing (N) KG/H	20	30+30N	P	1,2,3,4	1,2,3,4,5
Total KG/ H	**40:20:20**	**100:60:40**	**-**	**-**	**-**
Method of fertilizer use					
Basal (N+P+K)	50 % + 100% P_2o_5 +100% k_2O Broad Casting	50 % + 100% P_2o_5 +100% k_2O Broad Casting	N	-	1
Top Dressing (N)	25 % + 25% N Broad Casting	25 % + 25% N Broad Casting	N	-	1
Disease & Pest Management					
Pest Management					
Soil Treatment(Termite)	Lindel dust @25%	Indoselafan 4% dust @25kg	P	1,2,3,4	1,2,4,5
Stem/Shoot Borer					
Disease Management					
Helmenthosparium Lef Blight	-	DM-45/Cafbendazin 0.2 % Soulation	F	1,2,3,4	1,2,4,5
Sheath Blight	-	DM-45/Cafbendazin 0.2 % Soulation	F	1,2,3,4	1,2,4,5
Weed Management					
Mechanical	Hand weeding Once	Hand weeding twice and earthing up	P	1,2,3,4	1,2,4,5,6
Chemical	-	Simazine and Atrazine 1.0-1.25kg/ha	F	1,2,4,5	1,2,3,5
Water Management					
No. of Irrigation	Rainfed	Rainfed Life saving irrigation may be needed	P	8	8
Method	-	-	-	-	-
Soil Management					
Acidity	-	3Qt/he. Furough	F	1,2,3,4,5,6	1,2,3,4,5,6
Water Logging	Open bunding	Extra water to be removed through Open bunding	N	-	-
Harvesting & Threshing					
Method of Harvesting	Hand plucking	Hand plucking	N	-	-
Any Other/Threshing	By hand	Maize Seller machine	F	4,5	5,6
Average Yield*					
Grain	22 – 25 qu/ha	40-45 qu/ha	P	1,2,3,4,5,7	1,2,3,4,5
Storage Pest Control	-	Aluminium phosphide 1 tablet/matric ton	P	1,2,3,4,5,7	1

Reasons for gap -1.Reluctance to new technology. 2. Lack of capital. 3. Poor excess to improved technologies. 4. Lack of awareness. 5. Lack of resources.6. Lack of trained resources person.7. Improper management practices. 8. Erratice rainfull.

Prop. Strategies :- 1.Training and awareness campaign. 2. Demonstration. 3 Exposer visit. 4. On farm trail/ORF. 5. Financial support. 6. Availablity of improved implement.7. Open Bund. 8. Irrigation faclilty .

Table : 6.11 : Gap in adoption and Farmer's Strategies for improving the Production & Productivity of the Crop.

Agriculture **Crop : Maize**

AES – II, Resource Rich **Farming Situation(FS-I) : Partily Irrigated/Rainfed Early Sown Up Land Red Laterite Sandy Soil**

ITEMS	Existing practices	Recommended	Gap in adoption	Specific Reasons for gap	Farmer Strategy
Sowing					
Variety	Ganga Safed -2, Ganga-5, Swan-1,	Birsa Maize-1, Birsa Maize-2, Priya, Ganga Safed -2, Ganga-5, Swan-1,	P	1,3,4,6,7	1,2,4,5
Method	Line Sowing	Line Sowing	N	-	1,2,5,6
Seed Rate	20 Kg/ha	18 Kg/ha	P	1,3,4,6,7	1,2,3,4,6
Time	15^{th} June-25^{th} June	15^{th} June -25^{th} June	N	-	-
Organic Manure & Fertilizer					
Organic Manure	50 Qt.	100 Qt	P	1,2,3,4,5	1,2,3,4,5
Fertilizer (Nutrient in Kg/ha.)					
Normal Sown					
Basal (N+P+K) KG/ H	25:30:20	40:60:40	P	1,2,3,4	1,2,3,4,5
Top Dressing (N) KG/H	30	30+30N	P	1,2,3,4	1,2,3,4,5
Total KG/ H	**50:30:20**	**100:60:40**	**-**	**-**	**-**
Method of fertilizer use					
Basal (N+P+K)	50 % + 100% P_2o_5 +100% k_2O Broad Casting	50 % + 100% P_2o_5 +100% k_2O Broad Casting	N	-	1
Top Dressing (N)	25 % + 25% N Broad Casting	25 % + 25% N Broad Casting	N	-	1
Disease & Pest Management					
Pest Management					
Soil Treatment(Termite)	Lindel dust @25%	Indoselafan 4% dust @25kg	P	1,2,3,4	1,2,4,5
Stem/Shoot Borer					
Disease Management					
Helmenthosparium Lef Blight	-	DM-45/Cafbendazin 0.2 % Soulation	F	1,2,3,4	1,2,4,5
Sheath Blight	-	DM-45/Cafbendazin 0.2 % Soulation	F	1,2,3,4	1,2,4,5
Weed Management					
Mechanical	Hand weeding Once	Hand weeding twice and earthing up	P	1,2,3,4	1,2,4,5,6
Chemical	-	Simazine and Atrazine 1.0-1.25kg/ha	F	1,2,4,5	1,2,3,5
Water Management					
No. of Irrigation	Rainfed	Rainfed Life saving irrigation may be needed	P	8	8
Method	-	-	-	-	-
Soil Management					
Acidity	-	3Qt/he. Furough	F	1,2,3,4,5,6	1,2,3,4,5,6
Water Logging	Open bunding	Extra water to be removed through Open bunding	N	-	-
Harvesting & Threshing					
Method of Harvesting	Hand plucking	Hand plucking	N	-	-
Any Other/Threshing	By hand	Maize Seller machine	F	4,5	5,6
Average Yield*					
Grain	30 – 35 qu/ha	40-45 qu/ha	P	1,2,3,4,5,7	1,2,3,4,5
Storage Pest Control	-	Aluminium phosphide 1 tablet/matric ton	P	1,2,3,4,5,7	1

Reasons for gap -1.Reluctance to new technology. 2. Lack of capital. 3. Poor excess to improved technologies. 4. Lack of awareness. 5. Lack of resources.6. Lack of trained resources person.7. Improper management practices. 8. Erratice rainfull.

Prop. Strategies :- 1.Training and awareness campaign. 2. Demonstration. 3 Exposer visit. 4. On farm trail/ORF. 5. Financial support. 6. Availablity of improved implement.7. Open Bund. 8. Irrigation faclilty .

Table : 6.12 : Gap in adoption and Farmer's Strategies for improving the Production & Productivity of the Crop.

Agriculture **AES – I, II, III** **Crop : Maize** **Resource Rich**

Production Practices (items)	Gap in adoption in the different situations in which the crop/commodity in grown		Reasond for gap in adoption as perceived by the farmers	Strategies proposed as perceived by the farmers	Strategies proposed to overcome the gap
	FS- I	FS-II			
Sowing Time	✓	✓	2,4,5	1,2,3,4	10
Method	✓	✓	1,2,4	1,2,4,5	1,2
Variety	✓	✓	1,2,3,4	1,2,3,4	1,2
Seed Rate	✓	✓	4	1,2,4,5	1,2,3,4
Seed Treatment	✓	✓	1,2,3,4	2,5,6	1,2,8,9
Organic Manure	✓	✓	5	5	1,2,8,9
Fertilizer(Mutrient Kg/ha					
Basal (N + P + K)	✓	✓	1,2,3,4,5	1,2,3,4,5	1,2,4,5
Top Dressing (N)	-	-	-	-	-
Total	-	-	-	-	-
Pest Management					
Termiet	✓	✓	1,2,3,4,5	1,2,3,4,5,6	1,2,4,5,8,9
Stem Borer	✓	✓	1,2,3,4,5	1,2,3,4,5,6	1,2,4,5,8,9
Disease Management					
Blast	✓	✓	1,2,3,4,5	1,2,3,4,5,6	1,2,4,5,8,9
Bacterial Blight	-	-	1,2,3,4,5	1,2,3,4,5,6	1,2,4,5,8,9
Weed Management					
Mechanical	-	-	1,2,3,4	1,2,3,4,5,6	5,6
Herbicide	✓	✓	1,2,3,4	1,2,3,4,5,6	5,6
Water Management					
No. of Irrigation	✓	✓	4	5	5,6
Method	-	-	-	-	-
Land Management					
Acidity	✓	✓	4	5	1,2,4,5
Water Logging	-	-	-	-	-
Method of Harvesting					
Any Other/Thresing	✓	✓	2,4,5	1,5	5,6
Average Yield	-	-	-	-	-
Storage Post Control	✓	✓	1,2,3,4	1,5	1,9

Reasons for gap-1.Reluctance to new technology. 2. Lack of capital. 3. Poor excess to improved technologies. 4. Lack of awareness. 5. Lack of resources.6. Lack of trained resources person.7. Improper management practices. 8. Erratice rainfull.

Strategies as perceived by the farmar :- 1. Training and awareness campaign. 2. Demonstration. 3 Exposer visit. 4. On farm trail/ORF. 5. Financial support. 6. Availablity of improved implement.

Prop. Strategies :- 1. Training and awareness campaign. 2. Demonstration. 3 Exposer visit. 4. On farm trail/ORF. 5. Financial support. 6. Availablity of improved implement.7Access to outside market. 8. Farmar scientist intraction.9. Adoptation of IPM/INM recomedetion.10. Irrigation facility.

Table : 6.13 : Gap in adoption and Farmer's Strategies for improving the Production & Productivity of the Crop.

Agriculture **Crop Maize**

AES – I, II, III **Resource Poor**

Production Practices (items)	Gap in adoption in the different situations in which the crop/commodity in grown		Reasond for gap in adoption as perceived by the farmers	Strategies proposed as perceived by the farmers	Strategies proposed to overcome the gap
	FS- I	FS-II			
Sowing Time	✓	✓	2,4,5	1,2,3,4	10
Method	✓	✓	1,2,4	1,2,4,5	1,2
Variety	✓	✓	1,2,3,4	1,2,3,4	1,2
Seed Rate	✓	✓	4	1,2,4,5	1,2,3,4
Seed Treatment	✓	✓	1,2,3,4	2,5,6	1,2,8,9
Organic Manure	✓	✓	5	5	1,2,8,9
Fertilizer(Mutrient Kg/ha					
Basal (N + P + K)	✓	✓	1,2,3,4,5	1,2,3,4,5	1,2,4,5
Top Dressing (N)	-	-	-	-	-
Total	-	-	-	-	-
Pest Management					
Gall Midge	-	-	1,2,3,4,5	1,2,3,4,5,6	1,2,4,5,8,9
Stem Borer	✓	✓	1,2,3,4,5	1,2,3,4,5,6	1,2,4,5,8,9
Gandhi Bug	-	-	1,2,3,4,5	1,2,3,4,5,6	
Disease Management					
Blast	✓	✓	1,2,3,4,5	1,2,3,4,5,6	1,2,4,5,8,9
Bacterial Blight	-	-	1,2,3,4,5	1,2,3,4,5,6	1,2,4,5,8,9
Weed Management					
Mechanical	-	-	1,2,3,4	1,2,3,4,5,6	5,6
Herbicide	✓	✓	1,2,3,4	1,2,3,4,5,6	5,6
Water Management					
No. of Irrigation	✓	✓	4	5	5,6
Method	-	-	-	-	-
Land Management					
Acidity	✓	✓	4	5	1,2,4,5
Water Logging	-	-	-	-	-
Method of Harvesting					
Any Other/Thresing	✓	✓	2,4,5	1,5	5,6
Average Yield	-	-	-	-	-
Storage Post Control	✓	✓	1,2,3,4	1,5	1,9

Table : 6.14 : Gap in adoption and Farmer's Strategies for improving the Production & Productivity of the Crop.

Agriculture **Crop : Pigeon Pea** **Farming Situation : Rainfed Normal Sown/Up Land**

AES – I, II & III Resource Rich **Red Laterite Sandy Soil**

ITEMS	Existing practices	Recommended	Gap in adoption	Specific Reasons for gap	Farmer Strategy
Sowing					
Variety	Local	T-21, BR-65, Brisa Arahara-1, Bahar.	F	1,2,3,4,5	1,2,3,4
Method	Broad Casting	Lime Sowing	F	1,2,3,4,5	1,2,3,4
Seed Rate	15-20 kg/ha	20 kg/ha	P	1,2,3,4,5	1,2,3,4
Time	15^{th} June – 30^{th} June	15^{th} June – 30^{th} June	N	-	-
Organic Manure & Fertilizer					
Organic Manure	-	50 qu.	F	1,2,3,4,5	1,2,3,4
Fertilizer (Nutrient in Kg/ha.)					
Basal (N+P+K) KG/ H	20:20:00	20:40:20	P	1,2,3,4,5	1,2,3,4
Top Dressing (N) KG/H	-	-	P	1,2,3,4,5	1,2,3,4
Total KG/ H	**20:20:00**	**20:40:20**	**-**	-	-
Method of fertilizer use					
Basal (N+P+K)	-	20:40:20	F	1,2,3,4,5	1,2,3,4
Top Dressing (N)	-	-	-	-	-
Disease & Pest Management					
Pest Management					
Termiet	-	Indoselafan 4% dust @25kg	F	1,2,3,4,5	1,2,3,4
Pod Borer	-	Endosulphan 35 EC@1.5-2ml/lit. water	F	1,2,3,4,5	1,2,3,4
Disease Management					
Seed Treatment	-	Captan/Thiram/Carbendazim 2.0/kg seed, Rizhobium treatment	F	1,2,3,4,5	1,2,3,4
Wilt	-	Crop Rotation & Inter Cropping	F	1,2,3,4,5	1,2,3,4
Weed Management					
Mechanical	Hand Weeding	Hand Weeding within one month.	N	-	-
Chemical	-	Fluchlorine 45Ec@ 2 lit./ha	F	1,2,3,4,5	1,2,3,4
Water Management					
No. of Irrigation	Rainfed	Rainfed	N	-	-
Method	-	-	-	-	-
Soil Management					
Acidity	-	3-4 qu/ha	F	1,2,3,4,5	1,2,3,4
Water Logging	Open Bunding	Open Bunding	N	-	-
Harvesting & Threshing					
Method of Harvesting	Cutting by Sickel & Beating	Cutting by Sickel & Beating	N	-	-
Any Other/Threshing	-	-	-	-	-
Average Yield	6 – 8 qt/ha	10 – 12 qu.	P	4,5	1,2,5,6
Storage Pest Control					
Grain	-	Alumunium Phosfid, avoid moisture	F	1,4,5	1,5

Reasons for gap -1.Reluctance to new technology. 2. Lack of capital. 3. Poor excess to improved technologies. 4. Lack of awareness. 5. Lack of resources.6. Lack of trained resources person.7. Improper management practices. 8. Erratice rainfull.

Prop. Strategies:- 1.Training and awareness campaign. 2. Demonstration. 3 Exposer visit. 4. On farm trail/ORF. 5. Financial support. 6. Availablity of improved implement.7. Open Bund. 8. Irrigation faclilty.

Table : 6.15 : Gap in adoption and Farmer's Strategies for improving the Production & Productivity of the Crop.

Agriculture **Crop : Pigeon Pea**

AES – I, II & III Resource Poor **Farming Situation : Rainfed Normal Sown/Up Land Red Laterite Sandy Soil**

ITEMS	Existing practices	Recommended	Gap in adoption	Specific Reasons for gap	Farmer Strategy
Sowing					
Variety	Local	T-21, BR-65, Brisa Arahara-1, Bahar.	F	1,2,3,4,5	1,2,3,4
Method	Broad Casting	Lime Sowing	F	1,2,3,4,5	1,2,3,4
Seed Rate	15 - 20 kg/ha	20 kg/ha	P	1,2,3,4,5	1,2,3,4
Time	15th June – 30th June	15th June – 30th June	N	-	-
Organic Manure & Fertilizer					
Organic Manure	-	50 qu.	F	1,2,3,4,5	1,2,3,4
Fertilizer (Nutrient in Kg/ha.)					
Basal (N+P+K) KG/ H	-	20:40:20	P	1,2,3,4,5	1,2,3,4
Top Dressing (N) KG/H	-	-	P	1,2,3,4,5	1,2,3,4
Total KG/ H	**-**	**20:40:20**	**-**	-	-
Method of fertilizer use					
Basal (N+P+K)	-	20:40:20	F	1,2,3,4,5	1,2,3,4
Top Dressing (N)	-	-	-	-	-
Disease & Pest Management					
Pest Management					
Termiet	-	Indoselafan 4% dust @25kg	F	1,2,3,4,5	1,2,3,4
Pod Borer	-	Endosulphan 35 EC@1.5-2ml/lit. water	F	1,2,3,4,5	1,2,3,4
Disease Management					
Seed Treatment	-	Captan/Thiram/Carbendazim 2.0/kg seed, Rizhobium treatment	F	1,2,3,4,5	1,2,3,4
Wilt	-	Crop Rotation & Inter Cropping	F	1,2,3,4,5	1,2,3,4
Weed Management					
Mechanical	Hand Weeding	Hand Weeding within one month.	N	-	-
Chemical	-	Fluchlorine 45Ec@ 2 lit./ha	F	1,2,3,4,5	1,2,3,4
Water Management					
No. of Irrigation	Rainfed	Rainfed	N	-	-
Method	-	-	-	-	-
Soil Management					
Acidity	-	3-4 qu/ha	F	1,2,3,4,5	1,2,3,4
Water Logging	Open Bunding	Open Bunding	N	-	-
Harvesting & Threshing					
Method of Harvesting	Cutting by Sickel & Beating	Cutting by Sickel & Beating	N	-	-
Any Other/Threshing	-	-	-	-	-
Average Yield	3 - 4 qu.	10 – 12 qu.	P	4,5	1,2,5,6
Storage Pest Control					
Grain	-	Alumunium Phosfid, avoid moisture	F	1,4,5	1,5

Reasons for gap -1.Reluctance to new technology. 2. Lack of capital. 3. Poor excess to improved technologies. 4. Lack of awareness. 5. Lack of resources.6. Lack of trained resources person.7. Improper management practices. 8. Erratice rainfull.

Prop. Strategies:- 1.Training and awareness campaign. 2. Demonstration. 3 Exposer visit. 4. On farm trail/ORF. 5. Financial support. 6. Availablity of improved implement.7. Open Bund. 8. Irrigation faclilty.

Table : 6.16 : Gap in adoption and Farmer's Strategies for improving the Production & Productivity of the Crop.

Agriculture **Crop : Pigeon Pea**

AES – I, II& III Resource Rich

Production Practices (items)	Gap in adoption in the different situations in which the crop/commodity in grown		Reasond for gap in adoption as perceived by the farmers	Strategies proposed as perceived by the farmers	Strategies proposed to overcome the gap
	FS- I	FS-II			
Sowing Time	✓	✓	2,4,5	1,2,3,4	10
Method	✓	✓	1,2,4	1,2,4,5	1,2
Variety	✓	✓	1,2,3,4	1,2,3,4	1,2
Seed Rate	✓	✓	4	1,2,4,5	1,2,3,4
Seed Treatment	✓	✓	1,2,3,4	2,5,6	1,2,8,9
Organic Manure	✓	✓	5	5	1,2,8,9
Fertilizer(Mutrient Kg/ha					
Basal (N + P + K)	✓	✓	1,2,3,4,5	1,2,3,4,5	1,2,4,5
Top Dressing (N)	-	-	-	-	-
Total	-	-	-	-	-
Pest Management					
Termiet	✓	✓	1,2,3,4,5	1,2,3,4,5,6	1,2,4,5,8,9
Pod Borer	✓	✓	1,2,3,4,5	1,2,3,4,5,6	1,2,4,5,8,9
Disease Management					
Seed Treatment	✓	✓	1,2,3,4,5	1,2,3,4,5,6	1,2,4,5,8,9
Wilt	-	-	1,2,3,4,5	1,2,3,4,5,6	1,2,4,5,8,9
Weed Management					
Mechanical	-	-	1,2,3,4	1,2,3,4,5,6	5,6
Herbicide	✓	✓	1,2,3,4	1,2,3,4,5,6	5,6
Water Management					
No. of Irrigation	✓	✓	4	5	5,6
Method	-	-	-	-	-
Land Management					
Acidity	✓	✓	4	5	1,2,4,5
Water Logging	-	-	-	-	-
Method of Harvesting					
Any Other/Thresing	✓	✓	2,4,5	1,5	5,6
Average Yield	-	-	-	-	-
Storage Post Control	✓	✓	1,2,3,4	1,5	1,9

Reasons for gap-1.Reluctance to new technology. 2. Lack of capital. 3. Poor excess to improved technologies. 4. Lack of awareness. 5. Lack of resources.6. Lack of trained resources person.7. Improper management practices. 8. Erratice rainfull.

Strategies as perceived by the farmar :- 1. Training and awareness campaign. 2. Demonstration. 3 Exposer visit. 4. On farm trail/ORF. 5. Financial support. 6. Availablity of improved implement.

Prop. Strategies :- 1. Training and awareness campaign. 2. Demonstration. 3 Exposer visit. 4. On farm trail/ORF. 5. Financial support. 6. Availablity of improved implement.7Access to outside market. 8. Farmar scientist intraction.9. Adoptation of IPM/INM recomedetion.10. Irrigation facility.

Table : 6.17 : Gap in adoption and Farmer's Strategies for improving the Production & Productivity of the Crop.

Agriculture **Crop : Pigeon Pea**

AES – I, II& III Resource Poor

Production Practices (items)	Gap in adoption in the different situations in which the crop/commodity in grown		Reasond for gap in adoption as perceived by the farmers	Strategies proposed as perceived by the farmers	Strategies proposed to overcome the gap
	FS- I	FS-II			
Sowing Time	✓	✓	2,4,5	1,2,3,4	10
Method	✓	✓	1,2,4	1,2,4,5	1,2
Variety	✓	✓	1,2,3,4	1,2,3,4	1,2
Seed Rate	✓	✓	4	1,2,4,5	1,2,3,4
Seed Treatment	✓	✓	1,2,3,4	2,5,6	1,2,8,9
Organic Manure	✓	✓	5	5	1,2,8,9
Fertilizer(Mutrient Kg/ha					
Basal (N + P + K)	✓	✓	1,2,3,4,5	1,2,3,4,5	1,2,4,5
Top Dressing (N)	-	-	-	-	-
Total	-	-	-	-	-
Pest Management					
Termiet	✓	✓	1,2,3,4,5	1,2,3,4,5,6	1,2,4,5,8,9
Pod Borer	✓	✓	1,2,3,4,5	1,2,3,4,5,6	1,2,4,5,8,9
Disease Management					
Seed Treatment	✓	✓	1,2,3,4,5	1,2,3,4,5,6	1,2,4,5,8,9
Wilt	-	-	1,2,3,4,5	1,2,3,4,5,6	1,2,4,5,8,9
Weed Management					
Mechanical	-	-	1,2,3,4	1,2,3,4,5,6	5,6
Herbicide	✓	✓	1,2,3,4	1,2,3,4,5,6	5,6
Water Management					
No. of Irrigation	✓	✓	4	5	5,6
Method	-	-	-	-	-
Land Management					
Acidity	✓	✓	4	5	1,2,4,5
Water Logging	-	-	-	-	-
Method of Harvesting					
Any Other/Thresing	✓	✓	2,4,5	1,5	5,6
Average Yield	-	-	-	-	-
Storage Post Control	✓	✓	1,2,3,4	1,5	1,9

Reasons for gap-1.Reluctance to new technology. 2. Lack of capital. 3. Poor excess to improved technologies. 4. Lack of awareness. 5. Lack of resources.6. Lack of trained resources person.7. Improper management practices. 8. Erratice rainfull.

Strategies as perceived by the farmar :- 1. Training and awareness campaign. 2. Demonstration. 3 Exposer visit. 4. On farm trail/ORF. 5. Financial support. 6. Availablity of improved implement.

Prop. Strategies :- 1. Training and awareness campaign. 2. Demonstration. 3 Exposer visit. 4. On farm trail/ORF. 5. Financial support. 6. Availablity of improved implement.7Access to outside market. 8. Farmar scientist intraction.9. Adoptation of IPM/INM recomedetion.10. Irrigation facility.

Table : 6.18 : Gap in adoption and Farmer's Strategies for improving the Production & Productivity of the Crop.

Agriculture **Crop:Mustard**

Farming Situation : Rainfed Normal Sown/Up Land

AES - I & III Resorce Rich & Poor **Red Laterite Sandy Soil**

ITEMS	Existing practices	Recommended	Gap in adoption	Specific Reasons for gap	Farmer Strategy
Sowing					
Time	01th Oct. – 30th Oct.	01th Oct. – 15th Oct.	P	1,2,3,4	1,2,4
Method	Broadcasting	Line sowing 30 x 10 cm	P	1,2,3,4	1,2,4
Variety	Local Lotney ,Varuna, Pusa Bold	Varuna, Shiwani BR-40, Pusa Bold Karanti	P	1,2,3,4	1,2,4
Seed Rate	08-10 kg/ha	05 kg/ha	P	1,2,3,4	1,2,4
Seed Treatment	-	Thiram 2g/kg seed	F	1,2,3,4,5,6	1,2,4,5
Organic Manure	-	5-10 ton/ha	F	1,2,3,4,5,6	1,2,4,5
Fertilizer (Nutrient kg/ha)	20 kg/n	40:20:20 (Rainfed)		1,2,3,4,5,6	1,2,4,5
Basal (N+P+K)	-	20:20:20	P	1,2,3,4,5,6	1,2,4,5
Top Dressing (N)	20 kg/n	20	P	1,2,3,4,5,6	1,2,4,5
Micro Nutrient	-	Sulphur	F	1,2,3,4,5,6	1,2,4,5
Pest Management				1,2,3,4,5,6	1,2,4,5
Aphids Mites	Roger	Monocrotophos @ 1.2 ml/liter	P	1,2,3,4,5,6	1,2,4,5
Disease Management					
White Rust	-	Mencozeb 2 kg/ha @ 0.2% solution		1,2,3,4,5,6	1,2,4,5
Alternaria Blight	-	Mencozeb 2 kg/ha @ 0.2% solution	F	1,2,3,4,5,6	1,2,4,5
Downy mildew	-	Karathane 0.1 %	F	1,2,3,4,5,6	1,2,4,5
Weed Management					
Mechanical	Hand weeding	Hand weeding	N	1,2,3,4,5,6	1,2,4,5
Herbicide	-	Isopsutron 75% 1.25 kg/ha	F	1,2,3,4,5,6	1,2,4,5
Water Management				1,2,3,4,5,6	1,2,4,5
No. of Irrigation	Normaly Rainfed	2-3	P	1,2,3,4,5,6	1,2,4,5
Method	flooding	flooding	P	1,2,3,4,5,6	1,2,4,5
Land Management				1,2,3,4,5,6	1,2,4,5
Acidity	-	Lining 2:3	F	1,2,3,4,5,6	1,2,4,5
Method of Harvesting	Sickle	Sickle	N	1,2,3,4,5,6	1,2,4,5
Marketing		Organised	F	1,2,3,4,5,6	1,2,4,5
Farm Level Processing	Hand Beating	Hand Beating	F	1,2,3,4,5,6	1,2,4,5
Packing	Gunny Bag	Gunny Bag	F	1,2,3,4,5,6	1,2,4,5
Processing	Milling	Milling	F	1,2,3,4,5,6	1,2,4,5
Storage Pest Control			F	1,2,3,4,5,6	1,2,4,5
Average Yield	2-3 qt/ha	8-10 q/ha	P	1,2,3,4,5,6	1,2,4,5

Reasons for gap -1.Reluctance to new technology. 2. Lack of capital. 3. Poor excess to improved technologies. 4. Lack of awareness. 5. Lack of resources.6. Lack of trained resources person.7. Improper management practices. 8. Erratice rainfull.

Prop. Strategies:- 1.Training and awareness campaign. 2. Demonstration. 3 Exposer visit. 4. On farm trail/ORF. 5. Financial support. 6. Availablity of improved implement.7. Open Bund. 8. Irrigation faclilty.

Table : 6.19 : Gap in adoption and Farmer's Strategies for improving the Production & Productivity of the Crop.

Agriculture **Crop:Mustard**

AES -II **Resorce Rich & Poor** **Farming Situation : IRRIGATED Normal Sown/Up Land Red Laterite Sandy Soil**

ITEMS	Existing practices	Recommended	Gap in adoption	Specific Reasons for gap	Farmer Strategy
Sowing					
Time	01th Oct. – 30th Oct.	01th Oct. – 15th Oct.	P	1,2,3,4	1,2,4
Method	Broadcasting	Line sowing 30 x 10 cm	P	1,2,3,4	1,2,4
Variety	Local Lotney ,Varuna, Pusa Bold	Varuna, Shiwani BR-40, Pusa Bold Karanti	P	1,2,3,4	1,2,4
Seed Rate	08-10 kg/ha	05 kg/ha	P	1,2,3,4	1,2,4
Seed Treatment	-	Thiram 2g/kg seed	F	1,2,3,4,5,6	1,2,4,5
Organic Manure	-	5-10 ton/ha	F	1,2,3,4,5,6	1,2,4,5
Fertilizer (Nutrient kg/ha)	20 kg/n	40:20:20 (Rainfed)		1,2,3,4,5,6	1,2,4,5
Basal (N+P+K)	-	20:20:20	P	1,2,3,4,5,6	1,2,4,5
Top Dressing (N)	20 kg/n	20	P	1,2,3,4,5,6	1,2,4,5
Micro Nutrient	-	Sulphur	F	1,2,3,4,5,6	1,2,4,5
Pest Management				1,2,3,4,5,6	1,2,4,5
Aphids Mites	Roger	Monocrotophos @ 1.2 ml/liter	P	1,2,3,4,5,6	1,2,4,5
Disease Management					
White Rust	-	Mencozeb 2 kg/ha @ 0.2% solution		1,2,3,4,5,6	1,2,4,5
Alternaria Blight	-	Mencozeb 2 kg/ha @ 0.2% solution	F	1,2,3,4,5,6	1,2,4,5
Downy mildew	-	Karathane 0.1 %	F	1,2,3,4,5,6	1,2,4,5
Weed Management					
Mechanical	Hand weeding	Hand weeding	N	1,2,3,4,5,6	1,2,4,5
Herbicide	-	Isopsutron 75% 1.25 kg/ha	F	1,2,3,4,5,6	1,2,4,5
Water Management				1,2,3,4,5,6	1,2,4,5
No. of Irrigation	Normaly Rainfed	2-3	P	1,2,3,4,5,6	1,2,4,5
Method	flooding	flooding	P	1,2,3,4,5,6	1,2,4,5
Land Management				1,2,3,4,5,6	1,2,4,5
Acidity	-	Lining 2:3	F	1,2,3,4,5,6	1,2,4,5
Method of Harvesting	Sickle	Sickle	N	1,2,3,4,5,6	1,2,4,5
Marketing		Organised	F	1,2,3,4,5,6	1,2,4,5
Farm Level Processing	Hand Beating	Hand Beating	F	1,2,3,4,5,6	1,2,4,5
Packing	Gunny Bag	Gunny Bag	F	1,2,3,4,5,6	1,2,4,5
Processing	Milling	Milling	F	1,2,3,4,5,6	1,2,4,5
Storage Pest Control			F	1,2,3,4,5,6	1,2,4,5
Average Yield	2-3 qt/ha	8-10 q/ha	P	1,2,3,4,5,6	1,2,4,5

Reasons for gap -1.Reluctance to new technology. 2. Lack of capital. 3. Poor excess to improved technologies. 4. Lack of awareness. 5. Lack of resources.6. Lack of trained resources person.7. Improper management practices. 8. Erratice rainfull.

Prop. Strategies:- 1.Training and awareness campaign. 2. Demonstration. 3 Exposer visit. 4. On farm trail/ORF. 5. Financial support. 6. Availablity of improved implement.7. Open Bund. 8. Irrigation faclilty.

Table : 6.20 : Gap in adoption and Farmer's Strategies for improving the Production & Productivity of the Crop.

Horticulture **Crop : Potato**

AES – I, II & III Resource Rich **Farming Situation(FS-II) : Irrigated Early Sown, Up Land Red Laterite Sandy Soil**

ITEMS		Existing practices	Recommended	Gap in adop tion	Specific Reasons for gap	Farmer Strategy
Sowing						
Variety	Early Sown	Kufari jyoti, Kufari Chandrmukhi, Lal Gulab,	Kufari jyoti, Kufari Chandrmukhi, Kufari Badshah, K. Kuber	P	1,2,4,5	1,2,5,8
Method		Furrow	Furrow	N	-	-
Seed Rate		20 Qut.	25Qut.	P	1,4	1,2,5
Time	Early Sown	15th Oct to 31st Oct.	**1st Nov to 15th Nov.**	P	1,4	1,2
Organic Manure & Fertilizer						
Organic Manure		100Qut./ha.	200Q	P	1,2,4,6	1,2,3
Fertilizer (Nutrient in Kg/ha.)						
Early						
Basal (N+P+K) KG/ H		40:40:20	60:60:40	P	1,2,3,4	1,2,3,4,5,8
Top Dressing (N) KG/H		40	60	P	1,2,3,4	1,2,3,4,5,8
Total KG/ H		**80:40:20**	**120:60:40**			
Method of fertilizer use						
Basal (N+P+K)		In Furrow	In Furrow	N	-	-
Top Dressing (N)		Earthing up	Earthing up	N	-	-
Disease & Pest Management						
Pest Management						
Tuber Moth		-	Chlorepyriphos 4% Duest @ 25kg/ha.	F	1,2,3,4,5	1,2,3,4,5
Soil Sanitation		-	10 kg Bleaching Powder with 300kg of Karanj Cake	F	1,2,3,4,5	1,2,3,4,5
Disease Management						
Seed Treatment		-	Carbehdazime 0.2% Solution	F	1,2,3,4,5	1,2,3,4,5
Early & Lef Blight		Mencozeb	Mencozeb/Carbehdazime /Ridomil 0.2% Solution	F	1,2,4,5	1,2,4,5
Wilt		-	Mencozeb/Carbehdazime /Ridomil 0.2% Soluti+Streptomycin	F	1,2,4,5	1,2,4,5
Damping off		-	Copper Oxichloride 0.3% Solution at root jone	F	1,2,4,5	1,2,4,5
Weed Management						
Mechanical		Spade/Hoe	Spade/Hoe	N	-	-
Chemical		-	Atrazine 50%/ha	F	1,2,4,5	1,2,4,5
Water Management						
No. of Irrigation		6-8	6-8	N	-	-
Method		Furrow	Furrow	N	-	-
Soil Management						
Acidity		100 kg/ha	300kg/ha	P	1,2,4	1,2,4,5
Water Logging		-	-	-	-	-
Harvesting & Threshing						
Method of Harvesting		Hand Weeding	Hand Weeding	N	-	-
Average Yield*						-
Grain	Early Sown	80 - 100 Qut/ha	200 Qut/ha	P	1,2,4,5,6	1,2,4,5
Storage Pest Control		-	-	F	2,4,5	-

Reasons for gap -1.Reluctance to new technology. 2. Lack of capital. 3. Poor excess to improved technologies. 4. Lack of awareness. 5. Lack of resources.6. Lack of trained resources person.7. Improper management practices. 8. Erratice rainfull.

Prop. Strategies:- 1.Training and awareness campaign. 2. Demonstration. 3 Exposer visit. 4. On farm trail/ORF. 5. Financial support. 6. Availablity of improved implement.7. Open Bund. 8. Irrigation faclilty.

Table : 6.21 : Gap in adoption and Farmer's Strategies for improving the Production & Productivity of the Crop.

Horticulture **Crop : Potato**

AES – I,II & III Resource Poor **Farming Situation : Irrigated Normal Sown/Up Land , Red Laterite Sandy Soil**

ITEMS		Existing practices	Recommended	Gap in adoption	Specific Reasons for gap	Farmer Strategy
Sowing						
Variety	Normal Sown	K. Sunduri,K. Lalima	K. Sunduri,K. Lalima, K. Badsha	P	1,2,4,5	1,2,5,8
Method		Furrow	Furrow	N	-	-
Seed Rate		20 Qut.	25Qut.	P	1,4	1,2,5
Time	Normal Sown	15th Nov. to 30th Nov.	15th Nov. to 30th Nov.	N	-	-
Organic Manure & Fertilizer						
Organic Manure		100Qut./ha.	200Q	P	1,2,4,6	1,2,3
Fertilizer (Nutrient in Kg/ha.)						
Normal Sown						
Basal (N+P+K) KG/ H		40:40:20	60:60:40	P	1,2,3,4	1,2,3,4,5,8
Top Dressing (N) KG/H		40	60	P	1,2,3,4	1,2,3,4,5,8
Total KG/ H		**80:40:20**	**120:60:40**			
Method of fertilizer use						
Basal (N+P+K)		In Furrow	In Furrow	N	-	-
Top Dressing (N)		Earthing up	Earthing up	N	-	-
Disease & Pest Management						
Pest Management						
Tuber Moth		-	Chlorepyriphos 4% Duest @ 25kg/ha.	F	1,2,3,4,5	1,2,3,4,5
Soil Sanitation		-	10 kg Bleaching Powder with 300kg of Karanj Cake	F	1,2,3,4,5	1,2,3,4,5
Disease Management						
Seed Treatment		-	Carbehdazime 0.2% Solution	F	1,2,3,4,5	1,2,3,4,5
Early & Lef Blight		Mencozeb	Mencozeb/Carbehdazime /Ridomil 0.2% Solution	F	1,2,4,5	1,2,4,5
Wilt		-	Mencozeb/Carbehdazime /Ridomil 0.2% Soluti+Streptomycin	F	1,2,4,5	1,2,4,5
Damping off		-	Copper Oxichloride 0.3% Solution at root jone	F	1,2,4,5	1,2,4,5
Weed Management						
Mechanical		Spade/Hoe	Spade/Hoe	N	-	-
Chemical		-	Atrazine 50%/ha	F	1,2,4,5	1,2,4,5
Water Management						
No. of Irrigation		6-8	6-8	N	-	-
Method		Furrow	Furrow	N	-	-
Soil Management						
Acidity		100 kg/ha	300kg/ha	P	1,2,4	1,2,4,5
Water Logging		-	-	-	-	-
Harvesting & Threshing						
Method of Harvesting		Hand Weeding	Hand Weeding	N	-	-
Average Yield*						-
Grain	Normal Sown	110 - 120 Qut/ha	250Qut/ha	P	1,2,4,5,6	1,2,4,5
Storage Pest Control		-	-	F	2,4,5	-

Reasons for gap -1.Reluctance to new technology. 2. Lack of capital. 3. Poor excess to improved technologies. 4. Lack of awareness. 5. Lack of resources.6. Lack of trained resources person.7. Improper management practices. 8. Erratice rainfull.

Prop. Strategies:- 1.Training and awareness campaign. 2. Demonstration. 3 Exposer visit. 4. On farm trail/ORF. 5. Financial support. 6. Availablity of improved implement.7. Open Bund. 8. Irrigation faclilty.

Table : 6.22 : Gap in adoption and Farmer's Strategies for improving the Production & Productivity of the Crop.

Horticulture **Crop : Potato**

AES – I & III Resource Rich

Production Practices (items)	Gap in adoption in the different situations in which the crop/commodity in grown		Reasond for gap in adoption as perceived by the farmers	Strategies proposed as perceived by the farmers	Strategies proposed to overcome the gap
	FS- I	FS-II			
Sowing Time	✓	✓	2,4,5	1,2,3,4	10
Method	✓	✓	1,2,4	1,2,4,5	1,2
Variety	✓	✓	1,2,3,4	1,2,3,4	1,2
Seed Rate	✓	✓	4	1,2,4,5	1,2,3,4
Seed Treatment	✓	✓	1,2,3,4	2,5,6	1,2,8,9
Organic Manure	✓	✓	5	5	1,2,8,9
Fertilizer(Mutrient Kg/ha					
Basal (N + P + K)	✓	✓	1,2,3,4,5	1,2,3,4,5	1,2,4,5
Top Dressing (N)	-	-	-	-	-
Total	-	-	-	-	-
Pest Management					
Tuber Moth	✓	✓	1,2,3,4,5	1,2,3,4,5,6	1,2,4,5,8,9
Soil Sanitation	✓	✓	1,2,3,4,5	1,2,3,4,5,6	1,2,4,5,8,9
Disease Management					
Seed Treatment	✓	✓	1,2,3,4,5	1,2,3,4,5,6	1,2,4,5,8,9
Early & Lef Blight	✓	✓	1,2,3,4,5	1,2,3,4,5,6	1,2,4,5,8,9
Wilt	✓	✓	1,2,3,4,5	1,2,3,4,5,6	1,2,4,5,8,9
Damping off	✓	✓	1,2,3,4,5	1,2,3,4,5,6	1,2,4,5,8,9
Weed Management					
Mechanical	-	-	1,2,3,4	1,2,3,4,5,6	5,6
Chemical	✓	✓	1,2,3,4	1,2,3,4,5,6	5,6
Water Management					
No. of Irrigation	✓	✓	4	5	5,6
Method	-	-	-	-	-
Land Management					
Acidity	✓	✓	4	5	1,2,4,5
Water Logging	-	-	-	-	-
Method of Harvesting					
Any Other/Thresing	✓	✓	2,4,5	1,5	5,6
Average Yield	-	-	-	-	-
Storage Post Control	✓	✓	1,2,3,4	1,5	1,9

Reasons for gap-1.Reluctance to new technology. 2. Lack of capital. 3. Poor excess to improved technologies. 4. Lack of awareness. 5. Lack of resources.6. Lack of trained resources person.7. Improper management practices. 8. Erratice rainfull.

Strategies as perceived by the farmar :- 1. Training and awareness campaign. 2. Demonstration. 3 Exposer visit. 4. On farm trail/ORF. 5. Financial support. 6. Availablity of improved implement.

Prop. Strategies :- 1. Training and awareness campaign. 2. Demonstration. 3 Exposer visit. 4. On farm trail/ORF. 5. Financial support. 6. Availablity of improved implement.7Access to outside market. 8. Farmar scientist intraction.9. Adoptation of IPM/INM recomedetion.10. Irrigation facility.

Table : 6.23 : Gap in adoption and Farmer's Strategies for improving the Production & Productivity of the Crop.

Horticulture **Crop : Tomato**

AES – I,II & III Resource Rich **Farming Situation :- Normal Sown Upland Irrigated Red Laterite Sandy Soil**

ITEMS		Existing practices	Recommended	Gap in adoption	Specific Reasons for gap	Farmer Strategy
Sowing						
Variety		Pusa Rubi, Pant Bahar, Pusa Shda Bahar, Indo -Amerincan hybrid	Pusa Rubi, Pant Bahar, Pusa Shda Bahar, Indo - Amrincan hybrid	P	1,2,3,4,5	1,2,3,4,5
Method		Lime Transplanting	Lime Transplanting	N	-	-
Seed Rate		600-870 gm/ha ha (Hybrid-300gm)	500 gm/ha ha (Hybrid-3000gm)	P	1,2,3,4,5	1,3,4,5
Time		July – August	July – August	N	-	-
Organic Manure & Fertilizer						
Organic Manure		200qt/ha	200qt/ha	N	-	-
Fertilizer (Nutrient in Kg/ha.)						
HYV (OP)						
Basal (N+P+K) KG/ H		30:20:20	80:60:60	P	1,2,4,5,6	1,2,4,5
Top Dressing (N) KG/H		30:00:00	80:00:00	P	1,2,4,5,6	1,2,4,5
Total KG/ H		**60:30:20**	**120:60:60**	**-**	**-**	**-**
Hybrid						
Basal (N+P+K) KG/ H		40:40:20	100:100:75	P	1,2,4,5,6	1,2,4,5
Top Dressing (N) KG/H		40:00:00	100:00:00	P	1,2,4,5,6	1,2,4,5
Total KG/ H		**80:40:20**	**200:100:75**	**-**	**-**	**-**
Method of fertilizer use						
Basal (N+P+K)		Near Root Zone	Near Root Zone	N	-	-
Top Dressing (N)		Near Root Zone	Near Root Zone	N	-	-
Disease & Pest Management						
Pest Management						
Dimoend back moth		Endosulphan, Roger	Siper methrin 0.2 ml., Padan 1gm/Lit. Sol.	P	1,3,4,5	1,2,3,5,6
Fruit Borer		Endosulphan, Roger	Siper methrin 0.2 ml., Padan 1gm/Lit. Sol.	P	1,3,4,5	1,2,3,5,6
Leaf Minor		Endosulphan, Roger	Siper methrin 0.2 ml., Padan 1gm/Lit. Sol.	P	1,3,4,5	1,2,3,5,6
Aphides		Mono crotophos, Metacistox 1.5 Lit/water	Mono crotophos, Metacistox 1.5 Lit/water	N	-	-
Termite		Lindel	Chlorepyriphos Dust @ 10Kg/ha	P	1,3,4,5	1,2,3,5,6
Disease Management						
Damping off		Mencozeb 75% (0.2% Solution)	Bule copper/copper Oxichloride 0.3% Sol.	P	1,3.4,5	1,2,3,5,6
Early & Late Blight		Mencozeb 75% (0.2% Solution)	Carbendazim 2.0gm/Mencozeb 2.0gm/Lit. of water for Spraying	P	1,3.4,5	1,2,3,5,6
Bactirial Blight		-	Use of Resistant Varieties	F	1,3.4,5	1,2,3,5,6
Weed Management		Hand Weeding, Earthing up	Hand Weeding, Earthing up	N	-	-
Water Management						
No. of Irrigation		8 To 10 Times	6 To 8 Times	P	2,5,7	5,6,8
Method		Flooded	Flooded	N	-	-
Soil Management						
Acidity		3 – 4 qut. Lime	3 – 4 qut. Lime	N	-	-
Water Logging		Removal of Water	Removal of Water	N	-	-
Harvesting & Threshing						
Method of Harvesting		Hand Picking	Hand Picking	N	-	-
Average Yield	HYV (OP)	100-125 qu/ha	200-225 qu/ha	P	4,5,7	1,3,5,6
	Hybrid	150-175 qu/ha	400-425 qu/ha	P	4,5,7	1,3,5,6

Reasons for gap -1.Reluctance to new technology. 2. Lack of capital. 3. Poor excess to improved technologies. 4. Lack of awareness. 5. Lack of resources.6. Lack of trained resources person.7. Improper management practices. 8. Erratice rainfull.

Prop. Strategies:- 1.Training and awareness campaign. 2. Demonstration. 3. Exposer visit. 4. On farm trail/ORF. 5. Financial support. 6. Availablity of improved implement.7. Open Bund. 8. Irrigation faclilty.

Table : 6.24 : Gap in adoption and Farmer's Strategies for improving the Production & Productivity of the Crop.

Horticulture **Crop : Tomato**

AES – I,II & III Resource Poor **Farming Situation :- Normal Sown Up Land Irrigated, Red Laterite Sandy Soil**

ITEMS		Existing practices	Recommended	Gap in adoption	Specific Reasons for gap	Farmer Strategy
Sowing						
Variety		Pusa Rubi, Pant Bahar, Pusa Shda Bahar, Indo -Amerincan hybrid	Pusa Rubi, Pant Bahar, Pusa Shda Bahar, Indo - Amrincan hybrid	P	1,2,3,4,5	1,2,3,4,5
Method		Lime Transplanting	Lime Transplanting	N	-	-
Seed Rate		600-870 gm/ha ha (Hybrid-300gm)	500 gm/ha ha (Hybrid-3000gm)	P	1,2,3,4,5	1,3,4,5
Time		July – August	July – August	N	-	-
Organic Manure & Fertilizer						
Organic Manure		200qt/ha	200qt/ha	N	-	-
Fertilizer (Nutrient in Kg/ha.)						
HYV (OP)						
Basal (N+P+K) KG/ H		20:20:20	80:60:60	P	1,2,4,5,6	1,2,4,5
Top Dressing (N) KG/H		20:00:00	80:00:00	P	1,2,4,5,6	1,2,4,5
Total KG/ H		**40:20:20**	**120:60:60**	**-**	**-**	**-**
Hybrid						
Basal (N+P+K) KG/ H		40:40:20	100:100:75	P	1,2,4,5,6	1,2,4,5
Top Dressing (N) KG/H		40:00:00	100:00:00	P	1,2,4,5,6	1,2,4,5
Total KG/ H		**80:40:20**	**200:100:75**	**-**	**-**	**-**
Method of fertilizer use						
Basal (N+P+K)		Near Root Zone	Near Root Zone	N	-	-
Top Dressing (N)		Near Root Zone	Near Root Zone	N	-	-
Disease & Pest Management						
Pest Management						
Dimoend back moth		Endosulphan, Roger	Siper methrin 0.2 ml., Padan 1gm/Lit. Sol.	P	1,3,4,5	1,2,3,5,6
Fruit Borer		Endosulphan, Roger	Siper methrin 0.2 ml., Padan 1gm/Lit. Sol.	P	1,3,4,5	1,2,3,5,6
Leaf Minor		Endosulphan, Roger	Siper methrin 0.2 ml., Padan 1gm/Lit. Sol.	P	1,3,4,5	1,2,3,5,6
Aphides		Mono crotophos, Metacistox 1.5 Lit/water	Mono crotophos, Metacistox 1.5 Lit/water	N	-	-
Termite		Lindel	Chlorepyriphos Dust @ 10Kg/ha	P	1,3,4,5	1,2,3,5,6
Disease Management						
Damping off		Mencozeb 75% (0.2% Solution)	Bule copper/copper Oxichloride 0.3% Sol.	P	1,3.4,5	1,2,3,5,6
Early & Late Blight		Mencozeb 75% (0.2% Solution)	Carbendazim 2.0gm/Mencozeb 2.0gm/Lit. of water for Spraying	P	1,3.4,5	1,2,3,5,6
Bactirial Blight		-	Use of Resistant Varieties	F	1,3.4,5	1,2,3,5,6
Weed Management		Hand Weeding, Earthing up	Hand Weeding, Earthing up	N	-	-
Water Management						
No. of Irrigation		8 To 10 Times	6 To 8 Times	P	2,5,7	5,6,8
Method		Flooded	Flooded	N	-	-
Soil Management						
Acidity		3 – 4 qut. Lime	3 – 4 qut. Lime	N	-	-
Water Logging		Removal of Water	Removal of Water	N	-	-
Harvesting & Threshing						
Method of Harvesting		Hand Picking	Hand Picking	N	-	-
Average Yield	HYV (OP)	90-100 qu/ha	200-225 qu/ha	P	4,5,7	1,3,5,6
	Hybrid	120-125 qu/ha	400-425 qu/ha	P	4,5,7	1,3,5,6

Reasons for gap -1.Reluctance to new technology. 2. Lack of capital. 3. Poor excess to improved technologies. 4. Lack of awareness. 5. Lack of resources.6. Lack of trained resources person.7. Improper management practices. 8. Erratice rainfull.

Prop. Strategies:- 1.Training and awareness campaign. 2. Demonstration. 3. Exposer visit. 4. On farm trail/ORF. 5. Financial support. 6. Availablity of improved implement.7. Open Bund. 8. Irrigation faclilty.

Table : 6.25 : Gap in adoption and Farmer's Strategies for improving the Production & Productivity of the Crop.

Horticulture **Crop : Brinjal**

AES – I,II & III Resource Rich **Farming Situation :- Normal Sown Up Land, Irrigated Red Laterite Sandy Soil**

ITEMS		Existing practices	Recommended	Gap in adoption	Specific Reasons for gap	Farmer Strategy
Sowing						
Variety		Pusa Pearple Long, Pusa Pearple Round, Banaras Jaint, Panjab Barshti	Pusa Pearple Long, Pusa Pearple Round, Swarn Pratibha, Swarn Shyamali	P	1,2,3,4,5	1,2,3,4,5
Method		Lime Transplanting	Lime Transplanting	N	-	-
Seed Rate		500-600 gm/ha (Hybrid-300gm)	400 gm/ha ha (Hybrid-250gm)	P	1,2,3,4,5	1,3,4,5
Time		Sept. – Oct.	Sept. – Oct.	N	-	-
Organic Manure & Fertilizer						
Organic Manure		200qt/ha	200qt/ha	N	-	-
Fertilizer (Nutrient in Kg/ha.)						
HYV (OP)						
Basal (N+P+K) KG/ H		30:30:20	80:60:60	P	1,2,4,5,6	1,2,4,5
Top Dressing (N) KG/H		30:00:00	80:00:00	P	1,2,4,5,6	1,2,4,5
Total KG/ H		**60:30:20**	**120:60:60**	**-**	**-**	**-**
Hybrid						
Basal (N+P+K) KG/ H		80:60:40	100:100:75	P	1,2,4,5,6	1,2,4,5
Top Dressing (N) KG/H		40:00:00	100:00:00	P	1,2,4,5,6	1,2,4,5
Total KG/ H		**120:60:40**	**200:100:75**	**-**	**-**	**-**
Method of fertilizer use						
Basal (N+P+K)		Near Root Zone	Near Root Zone	N	-	-
Top Dressing (N)		Near Root Zone	Near Root Zone	N	-	-
Disease & Pest Management						
Pest Management						
Fruit Borer		Endosulphan, Roger	Siper methrin 0.2 ml., Padan 1gm/Lit. Sol.	P	1,3,4,5	1,2,3,5,6
Leaf Hooper		Endosulphan, Roger	Siper methrin 0.2 ml., Padan 1gm/Lit. Sol.	P	1,3,4,5	1,2,3,5,6
Mite		Endosulphan, Roger	Siper methrin 0.2 ml., Padan 1gm/Lit. Sol.	P	1,3,4,5	1,2,3,5,6
Aphides		Mono crotophos, Metacistox 1.5 Lit/water	Mono crotophos, Metacistox 1.5 Lit/water	N	-	-
Termite		Lindel	Chlorepyriphos Dust @ 10Kg/ha	P	1,3,4,5	1,2,3,5,6
Disease Management						
Damping off		Mencozeb 75% (0.2% Solution)	Bule copper/copper Oxichloride 0.3% Sol.	P	1,3.4,5	1,2,3,5,6
Powdery Mildew		Mencozeb 75% (0.2% Solution)	Carbendazim 2.0gm/Mencozeb 2.0 gm/Lit. of water for Spraying	P	1,3.4,5	1,2,3,5,6
Phomopsis Rott		-	Seed Treatment with Carbendazim & Spraying of 0.2% Solution of Carbendazim 3 - 4 Time	F		
Leaf Sport		-	Seed Treatment with Carbendazim & Spraying of 0.2% Solution of Carbendazim 3 - 4 Time			
Bactirial Blight		-	Use of Resistant Varieties	F	1,3.4,5	1,2,3,5,6
Weed Management		Hand Weeding, Earthing up	Hand Weeding, Earthing up	N	**-**	-
Water Management						
No. of Irrigation		8 To 10 Times	6 To 8 Times	P	2,5,7	5,6,8
Method		Flooded	Flooded	N	-	-
Soil Management						
Acidity		3 – 4 qut. Lime	3 – 4 qut. Lime	N	-	-
Water Logging		Removal of Water	Removal of Water	N	-	-
Harvesting & Threshing						
Method of Harvesting		Hand Picking	Hand Picking	N	-	-
Average Yield	HYV (OP)	140 - 150 qu/ha	200-225 qu/ha	P	4,5,7	1,3,5,6
	Hybrid	200 - 220 qu/ha	400-425 qu/ha	P	4,5,7	1,3,5,6

Reasons for gap -1.Reluctance to new technology. 2. Lack of capital. 3. Poor excess to improved technologies. 4. Lack of awareness. 5. Lack of resources.6. Lack of trained resources person.7. Improper management practices. 8. Erratice rainfull.

Prop. Strategies:- 1.Training and awareness campaign. 2. Demonstration. 3. Exposer visit. 4. On farm trail/ORF. 5. Financial support. 6. Availablity of improved implement.7. Open Bund. 8. Irrigation faclilty.

Table : 6.26 : Gap in adoption and Farmer's Strategies for improving the Production & Productivity of the Crop.

Horticulture **Crop : Brinjal**

AES – I,II & III Resource Poor **Farming Situation :- Normal Sown Upland, Irrigated Red Laterite Sandy Soil**

ITEMS		Existing practices	Recommended	Gap in adoption	Specific Reasons for gap	Farmer Strategy
Sowing						
Variety		Pusa Pearple Long, Pusa Pearple Round, Banaras Jaint, Panjab Barshti	Pusa Pearple Long, Pusa Pearple Round, Swarn Pratibha, Swarn Shyamali	P	1,2,3,4,5	1,2,3,4,5
Method		Lime Transplanting	Lime Transplanting	N	-	-
Seed Rate		500-600 gm/ha (Hybrid-300gm)	400 gm/ha ha (Hybrid-250gm)	P	1,2,3,4,5	1,3,4,5
Time		Sept. – Oct.	Sept. – Oct.	N	-	-
Organic Manure & Fertilizer						
Organic Manure		200qt/ha	200qt/ha	N	-	-
Fertilizer (Nutrient in Kg/ha.)						
HYV (OP)						
Basal (N+P+K) KG/ H		20:20:20	80:60:60	P	1,2,4,5,6	1,2,4,5
Top Dressing (N) KG/H		20:00:00	80:00:00	P	1,2,4,5,6	1,2,4,5
Total KG/ H		**40:20:20**	**120:60:60**	**-**	**-**	**-**
Hybrid						
Basal (N+P+K) KG/ H		40:40:20	100:100:75	P	1,2,4,5,6	1,2,4,5
Top Dressing (N) KG/H		40:00:00	100:00:00	P	1,2,4,5,6	1,2,4,5
Total KG/ H		**80:40:20**	**200:100:75**	**-**	**-**	**-**
Method of fertilizer use						
Basal (N+P+K)		Near Root Zone	Near Root Zone	N	-	-
Top Dressing (N)		Near Root Zone	Near Root Zone	N	-	-
Disease & Pest Management						
Pest Management						
Fruit Borer		Endosulphan, Roger	Siper methrin 0.2 ml., Padan 1gm/Lit. Sol.	P	1,3,4,5	1,2,3,5,6
Leaf Hooper		Endosulphan, Roger	Siper methrin 0.2 ml., Padan 1gm/Lit. Sol.	P	1,3,4,5	1,2,3,5,6
Mite		Endosulphan, Roger	Siper methrin 0.2 ml., Padan 1gm/Lit. Sol.	P	1,3,4,5	1,2,3,5,6
Aphides		Mono crotophos, Metacistox 1.5 Lit/water	Mono crotophos, Metacistox 1.5 Lit/water	N	-	-
Termite		Lindel	Chlorepyriphos Dust @ 10Kg/ha	P	1,3,4,5	1,2,3,5,6
Disease Management						
Damping off		Mencozeb 75% (0.2% Solution)	Bule copper/copper Oxichloride 0.3% Sol.	P	1,3.4,5	1,2,3,5,6
Powdery Mildew		Mencozeb 75% (0.2% Solution)	Carbendazim 2.0gm/Mencozeb 2.0 gm/Lit. of water for Spraying	P	1,3.4,5	1,2,3,5,6
Phomopsis Rott		-	Seed Treatment with Carbendazim & Spraying of 0.2% Solution of Carbendazim 3 - 4 Time	F		
Leaf Sport		-	Seed Treatment with Carbendazim & Spraying of 0.2% Solution of Carbendazim 3 - 4 Time			
Bactirial Blight		-	Use of Resistant Varieties	F	1,3.4,5	1,2,3,5,6
Weed Management		Hand Weeding, Earthing up	Hand Weeding, Earthing up	N	-	-
Water Management						
No. of Irrigation		8 To 10 Times	6 To 8 Times	P	2,5,7	5,6,8
Method		Flooded	Flooded	N	-	-
Soil Management						
Acidity		3 – 4 qut. Lime	3 – 4 qut. Lime	N	-	-
Water Logging		Removal of Water	Removal of Water	N	-	-
Harvesting & Threshing						
Method of Harvesting		Hand Picking	Hand Picking	N	-	-
Average Yield	HYV (OP)	120 – 125 qu/ha	200-225 qu/ha	P	4,5,7	1,3,5,6
	Hybrid	160 - 180 qu/ha	400-425 qu/ha	P	4,5,7	1,3,5,6

Table : 6.27 : Gap in adoption and Farmer Strategies for improving the production and productivity of the A.H.

Livestock **Animal : Cow**

AES - I , II & III **Resource Rich**

ITEMS	Existing practices	Recommended	Gap in adoption	Specific Reasons for gap	Farmer Strategy
Breed Up gradation	-		F	1	1
Artificial Insemination	Not all followed A.I. center	Y	F	1	1
Breed	Local	Jercy, C.B.	P	1	1
Natural Insemination	Followed	Artificial Insemination	N	-	-
Breed	Local	Jercy, C.B.	F	1	1
Location	Atdoor of farmer	Bull Centre	P	1	2
Feed Management (per animal)					
Green Fodder (kg/day)	15-20	25-30 kg	P	2	3
Dry Fodder (kg/day)	10-15	5-8 kg	P	1	1
Concentrates (cow/day)	500-600 g	2-2.5 kg for per kg of milk product	P	1	1
Minerals (g/days)	25-30 gm	50-100g/kg	F	1	1
Vitamins (ml/day)	Nil	50 ml/day	F	1	2
Intercalving Care (per annum)	18-30	12-18 Month	P	2	2
HSBQ (No. of Vaccinations)	One	Twice/year	P	1	1
FMD	Nil	Two/ year	F	1	2
Rinder Pest	Nil	1/lifetime	F	1	2
Anthrax	Nil	Onec/year	F	1	2
Rabies	Nil	Onec/year	F	1	2
Tetanus	Nil	Onec/year	F		
Enterotosamia	Nil	Onec/year	F		
General Management					
Trypansomiasis	Nil	Pm recommended			
Bloat	Nil	Pm recommended			
Milk Fever/Ketosis	Nil	Pm recommended	F	2	2
Deworming		Four/Year			
Mastitis	No management	Recommended	p	1	1
Thilarisis	No management	Recommended			
Washing (times/day)	weekly	Daily	F	1	1
Cleaning (times/day)	Once	Daily	N	-	-
Housing (Pucca/Kaccha)	Kaccha	pacca	P	3	2
Drinking Water	10-15 Lettrs/Day	20-30 Lettrs/Day	P	1	1&3
Average Yield (Milk) Litter/Day					
Exotic	8-10	10-15 lit/day	P	1&2	2&3
Deshi	1-1.5	2-3 lit/day	P	2	3

(*) F=Full P = Partial N = Nil

**** Code for specific reasons for gap in adoption**

1. Lack of awareness
2. Lack of awareness & lack of availability of fodder
3. Availability of fodder & cost facrot
4. Repeated breeding
5. Lack of awareness Disease Prevansis Maragement & practices

***** code for farmer proposed extension**

1. Providing technical awareness/Sesonal vty camp.
2. Providing technical stuff
3. Making availability of fodder by improving quality of grass lands & supply of fodder seeds
4. Availability concentrate for cow at village.

Table : 6.28 : Gap in adoption and Farmer Strategies for improving the production and productivity of the A.H.

Livestock **Animal : Cow**

AES - I, II & III Resource- Poor

ITEMS	Existing practices	Recommended	Gap in adoption	Specific Reasons for gap	Farmer Strategy
Breed Up gradation	-		F	1	1
Artificial Insemination	Not all followed A.I. center	Y	F	1	1
Breed	Local	Jercy, C.B.	P	1	1
Natural Insemination	Followed	Artificial Insemination	N	-	-
Breed	Local	Jercy, C.B.	F	1	1
Location	Atdoor of farmer	Bull Centre	P	1	2
Feed Management (per animal)					
Green Fodder (kg/day)	15-20	25-30 kg	P	2	3
Dry Fodder (kg/day)	10-15	5-8 kg	P	1	1
Concentrates (cow/day)	500-600 g	2-2.5 kg for per kg of milk product	P	1	1
Minerals (g/days)	25-30 gm	50-100g/kg	F	1	1
Vitamins (ml/day)	Nil	50 ml/day	F	1	2
Intercalving Care (per annum)	18-30	12-18 Month	P	2	2
HSBQ (No. of Vaccinations)	One	Twice/year	P	1	1
FMD	Nil	Two/ year	F	1	2
Rinder Pest	Nil	1/lifetime	F	1	2
Anthrax	Nil	Onec/year	F	1	2
Rabies	Nil	Onec/year	F	1	2
Tetanus	Nil	Onec/year	F		
Enterotosamia	Nil	Onec/year	F		
General Management					
Trypansomiasis	Nil	Pm recommended			
Bloat	Nil	Pm recommended			
Milk Fever/Ketosis	Nil	Pm recommended	F	2	2
Deworming		Four/Year			
Mastitis	No management	Recommended	p	1	1
Thilarisis	No management	Recommended			
Washing (times/day)	weekly	Daily	F	1	1
Cleaning (times/day)	Once	Daily	N	-	-
Housing (Pucca/Kaccha)	Kaccha	Pacca	P	3	2
Drinking Water	10-15 Lettrs/Day	20-30 Lettrs/Day	P	1	1&3
Average Yield (Milk) Litter/Day					
Exotic	8-10	10-15 lit/day	P	1&2	2&3
Deshi	1-1.5	2-3 lit/day	P	2	3

(*) F=Full P = Partial N = Nil

**** Code for specific reasons for gap in adoption**

1. Lack of awareness
2. Lack of awareness & lack of availability of fodder
3. Availability of fodder & cost facrot
4. Repeated breeding
5. Lack of awareness Disease Prevansis Maragement & practices

***** code for farmer proposed extension**

1. Providing technical awareness/Sesonal vty camp.
2. Providing technical stuff
3. Making availability of fodder by improving quality of grass lands & supply of fodder seeds
4. Availability concentrate for cow at village.

Table : 6.29 : Gap in adoption and Farmer Strategies for improving the production and productivity of the A.H.

Livestock **Type of Commodity : Poultry / Duckery**

AES - II **Resource Rich**

ITEMS	Existing practices	Recommended	Gap in adoption	Specific Reasons for gap	Farmer Strategy
Breed Up gradation	Local	Inporoved Breed			
Natural Insemination	Followed	Nil	N	3	4
Starter Mash	Nil	50-60 gram/Per day/Per Bird	P	3	4
Grower Mash	Nil	50-60 gram/ Per day/Per Bird	P	3	4
Finisher Mash	Nil	60-70 gram/ Per day/Per Bird	P	3	4
Layer Mash	Nil	80-90 gram/ Per day/Per Bird		3	4
Minerals (mix)	Nil	1 gm/bird/day	F	3	4
Vitamins (mix)	Nil	0.1 ml/bird/day	F	3	4
Health Care (per annum)					
Rani GathDiseases	Nil	Once / Per Year	F	6	3
Gum Boro Diseases	Nil	Once / Per Year	F	6	3
Chiken Infectious Bronchitis	Nil	Once / Per Year	F	6	3
Coccdiosies	Nil	Preventive Diseases Management	F	6	3
Salmonellosis	Nil	Preventive Diseases Management	F	6	3
Marks disease	Nil	Once / Per Year	F	6	3
Litche heart Diseases	Nil	Once / Per Year	F	6	3
Fowl Pox	Nil	Once / Per Year	F	6	3
Deworming	Nil	Four / Per Year	F	6	3
General Management	NIl	**Recommended**			
Housing (Pucca/Kaccha)	Kacha	Pucca	P	2	2
Drinking Water	Adequate	Adequate	N		
Average Yield (egg)	70-80 Eggs/Year	150-200 eggs/year	P	1	1
Broiler Meat	.5-1 Kg	1.2 – 2.0 kg/bird	N	1	1

(*) F=Full **P = Partial** **N = Nil**

**** Code for specific reasons for gap in adoption**

1. Lack of awareness about breeding Upgradation/ General Management
2. Lack of Finance
3. Non availability of Poulty Mash
4. Demand of Poulty Mash
5. Lack of separate rearing house/Layer Hall
6. Lack of awareness about Preventive diseases management

***** code for farmer proposed extension**

1. On farm trails / Demonstration
2. Linkage with credit facilitates as credit thrarist activity in self help group
3. Specific recommended Preventive Diseases Management
4. Training of Poulty Rearing.
5. Encourage to raise new Hatchery House.

Table : 6.30 : Gap in adoption and Farmer Strategies for improving the production and productivity of the A.H. Livestock **Type of Commodity : Poultry / Duckery**

AES - I, II & III **Resource Poor**

ITEMS	EFS-II				
	Existing practices	Recommended	Gap in adoption	Specific Reasons for gap	Farmer Strategy
Breed Up gradation	Local	Inporoved Breed			
Natural Insemination	Followed	Nil	N	3	4
Starter Mash	Nil	50-60 gram/Per day/Per Bird	P	3	4
Grower Mash	Nil	50-60 gram/ Per day/Per Bird	P	3	4
Finisher Mash	Nil	60-70 gram/ Per day/Per Bird	P	3	4
Layer Mash	Nil	80-90 gram/ Per day/Per Bird		3	4
Minerals (mix)	Nil	1 gm/bird/day	F	3	4
Vitamins (mix)	Nil	0.1 ml/bird/day	F	3	4
Health Care (per annum)					
Rani GathDiseases	Nil	Once / Per Year	F	6	3
Gum Boro Diseases	Nil	Once / Per Year	F	6	3
Chiken Infectious Bronchitis	Nil	Once / Per Year	F	6	3
Coccdiosies	Nil	Preventive Diseases Management	F	6	3
Salmonellosis	Nil	Preventive Diseases Management	F	6	3
Marks disease	Nil	Once / Per Year	F	6	3
Litche heart Diseases	Nil	Once / Per Year	F	6	3
Fowl Pox	Nil	Once / Per Year	F	6	3
Deworming	Nil	Four / Per Year	F	6	3
General Management	NIl	**Recommended**			
Housing (Pucca/Kaccha)	Kacha	Pucca	P	2	2
Drinking Water	Adequate	Adequate	N		
Average Yield (egg)	70-80 Eggs/Year	150-200 eggs/year	P	1	1
Broiler Meat	.5-1 Kg	1.2 – 2.0 kg/bird	N	1	1

(*) F=Full **P = Partial** **N = Nil**

**** Code for specific reasons for gap in adoption**

1. Lack of awareness about breeding Upgradation/ General Management
2. Lack of Finance
3. Non availability of Poulty Mash
4. Demand of Poulty Mash
5. Lack of separate rearing house/Layer Hall
6. Lack of awareness about Preventive diseases management

***** code for farmer proposed extension**

1. On farm trails / Demonstration
2. Linkage with credit facilitates as credit thrarist activity in self help group
3. Specific recommended Preventive Diseases Management
4. Training of Poulty Rearing.
5. Encourage to raise new Hatchery House.

VII Proposed Strategies For IPM/INM

Dist.- Pakur **Crop – Paddy**

Table- 7.01: Proposed Strategies for Integrated Pest Management (IPM)
(Pest – Stem Borer, Hispa, Leaf Folder & Diseases like blast, Blight, etc.)

Sl. No.	Particulars	E.P	R.P	G.A	R.G	P.S
1	**Cultural Practices**					
	Summer Ploughing	Practices by a few farmer	Deep repeated Ploughing	P	1,2,4	1,2,3
	Timely sowing	15th June- 30th June	15th June- 30th June	N	-	-
	Transplanting	10th July- 10th Augst.	10th July-30th July	P	1,2,4	1,2,3
	Clean Cultivation	Not in Practices	Removal of rations	F	1,2,4	1,2,3
	Resistance Varieties	IR-36, 64, MTU-7029, Hybrid etc.	IR-36, 64, MTU-7029, Hybrid etc.	P	1,2,4	1,2,3
2	**Mechanical Practices**					
	Pheromone Trap & Lures	Not in Practices	For attracting Male Insect	F	1,2,4	1,2,3
	Light Trap	Not in Practices	For attracting Insect	F	1,2,4	1,2,3
	Sweep net	Not in Practices	For Collecting Insect	F	1,2,4	1,2,3
3	**Botanical/ Biological –Practices**					
	Azadirachtin Products 1500/1000 PPM	Not in Practices	For control of sucking & cutting Insect.	F	1,2,4	1,2,3
	Beanvaria bassiana	Not in Practices	Sucking past & borer	F	1,2,4	1,2,3
	NPV (Larvel parasite)	-	-	-	-	-
	BT					
	Trichograma (Egg- parasite)	Not in Practices	For Control of borers	F	1,2,4	1,2,3
	Metarizium anisoply (Fungal Insect)	Not in Practices	For Control Brown hopper	F	1,2,4	1,2,3
	Trichoderma- Vridi	Not in Practices	For control of fungal diseases	F	1,2,4	1,2,3
	Psuedomonus	Not in Practices	For control of bacterial & Fungal diseases	F	1,2,4	1,2,3
4	**Chemical Practices**					
	Seed treatment	Not as common a Practices	Carbandzime/ captan/Thriam 2 gm/kg seed	P	1,2,4	1,2,3
	Seedling treatment	Not as common a Practices	Carbandzime 0.2 Solution Carbofuran 3G 2.5kg/1000m^2	P	1,2,4	1,2,3
	Conservation of natural enemy (frog)	Not in Practices	Use of bio-Pesticide Avoid Chemical pesticide	F	1,2,4	1,2,3

Reasons for gap	Proposed Strategy	Gap in Adoption
1. Lack of awareness & Knowledge. 2. Lack resources. 3. Lack capital. 4. Improper management.	1. Training & awareness Campaign. 2. Demonstration & On farm trail/ORF. 3. Exposer visit. 4. Soil testing based fertilizer use needed to be strengthened. 5. Financial Support.	N – Nil P – Partial F - Full

Table- 7.02: Proposed Strategies for Integrated Pest Management (IPM)
(Pest – Termite, Shoot Borer, etc.)
Crop – Maize

Sl. No.	Particulars	E.P	R.P	G.A	R.G	P.S
1	**Cultural Practices**					
	Summer Plowing	Practices by a few farmer	Deep repeated Plowing	P	1,2,4	1,2,3
	Timely sowing	15th June- 30th June	15th June- 30th June	N	-	-
	Clean Cultivation	Not in Practices	Removal of rations	F	1,2,4	1,2,3
	Resistance Varieties	GS-5, Sown	Birasa Maize – 1 & 2, GS-5, Sown	P	1,2,4	1,2,3
2	**Mechanical Practices**					
	Pheromone Trap & Lures	Not in Practices	For attracting Male Insect 10-12 Trap/ha.	F	1,2,4	1,2,3
	Light Trap	Not in Practices	For attracting Insect	F	1,2,4	1,2,3
	Sweep net	Not in Practices	For Collecting Insect	F	1,2,4	1,2,3
3	**Botanical/ Biological –Practices**					
	Azadirachtin Products 1500/1000 PPM	Not in Practices	For control of sucking & cutting Insect.	F	1,2,4	1,2,3
	Beanvaria bassiana	Not in Practices	Sucking past & borer	F	1,2,4	1,2,3
	NPV (Larvel parasite)	-	-	-	-	-
	BT					
	Trichograma (Egg- parasite)	Not in Practices	For Control of borers 16 card/ha.	F	1,2,4	1,2,3
	Metarizium anisoply (Fungal Insect)	-	-	-	-	-
	Trichoderma- Vridi	Not in Practices	For control of fungal diseases 5kg/ha as Soil application	F	1,2,4	1,2,3
	Psuedomonus	Not in Practices	For control of bacterial & Fungal diseases 5kg/ha as Soil application	F	1,2,4	1,2,3
4	**Chemical Practices**					
	Seed treatment	Not as common a Practices	Carbandzime/ captan/Thriam 2 gm/kg seed	P	1,2,4	1,2,3
	Soil treatment	Lendel	Lendel/chlorepyriphos 25kg dust against termite	P	1,2,4	1,2,3
	Crop treatment	Not as common a Practices	Carbandzime 0.2 Solution Carbofuran 3G 25kg/ha/Chlorepyriphos1.5Lit/ha.	P	1,2,4	1,2,3
	Conservation of natural enemy (frog)	Not in Practices	Use of bio-Pesticide Avoid Chemical pesticide	F	1,2,4	1,2,3

Reasons for gap	Proposed Strategy	Gap in Adoption
1. Lack of awareness & Knowledge. 2. Lack resources. 3. Lack capital. 4. Improper management.	1. Training & awareness Campaign. 2. Demonstration & On farm trail/ORF. 3. Exposer visit. 4. Soil testing based fertilizer use needed to be strengthened. 5. Financial Support.	N – Nil P – Partial F - Full

Table- 7.03 : Proposed Strategies for Integrated Pest Management (IPM)
(Pest – Termite, Rust, Alternaria blight, etc.)
Crop – Wheat

Sl. No.	Particulars	E.P	R.P	G.A	R.G	P.S
1	**Cultural Practices**					
	Plowing	Shallow repeated Plowing	Deep repeated Plowing	P	1,2,4	1,2,3
	Timely sowing	1st week of Nov- Last week of Dec.	10th Nov- 30th Nov.	P	1,2,4	1,2,3
	Clean Cultivation	Not in Practices	Removal of rations	F	1,2,4	1,2,3
	Resistance Varieties	Sonali, PBW-343, HUW-334HD-2402,	Sonali, PBW-343, HUW-334,HD-2402,HUW-468, NW-1012	P	1,2,4	1,2,3
2	**Mechanical Practices**					
	Pheromone Trap &Lures	-	-	-	-	-
	Light Trap	-	-	-	-	-
	Sweep net	-	-	-	-	-
3	**Botanical/ Biological – Practices**					
	Azadirachtin Products 1500/1000 PPM	Not in Practices	For control of sucking & cutting Insect.	F	1,2,4	1,2,3
	Beanvaria bassiana	-	-	-	-	-
	NPV (Larvel parasite)	-	-	-	-	-
	BT	-	-	-	-	-
	Trichograma (Egg- parasite)	Not in Practices	For Control of borers 16 card/ha.	F	1,2,4	1,2,3
	Metarizium anisoply (Fungal Insect)	-	-	-	-	-
	Trichoderma- Vridi	Not in Practices	For control of fungal diseases 5gm/kg seed treatment	F	1,2,4	1,2,3
	Psuedomonus	-	-	-	-	-
4	**Chemical Practices**					
	Seed treatment	Not as common a Practices	Carbandzime/ captan/Thriam 2 gm/kg seed	P	1,2,4	1,2,3
	Soil treatment	Lendel	Lendel/chlorepyriphos 25kg dust against termite	P	1,2,4	1,2,3
	Crop treatment	Not as common a Practices	Carbandzime 0.2 %Solution/ Mencozeb 0.3% Solution against rust	P	1,2,4	1,2,3
	Conservation of natural enemy (Snakes)	Not in Practices	Use of bio-Pesticide Avoid Chemical pesticide	F	1,2,4	1,2,3

Reasons for gap	Proposed Strategy	Gap in Adoption
1. Lack of awareness & Knowledge. 2. Lack resources. 3. Lack capital. 4. Improper management.	1. Training & awareness Campaign. 2. Demonstration & On farm trail/ORF. 3. Exposer visit. 4. Soil testing based fertilizer use needed to be strengthened. 5. Financial Support.	N – Nil P – Partial F - Full

Table- 7.04: Proposed Strategies for Integrated Pest Management (IPM)
(Pest – Cutworm, Let & early blight, Wilt, etc.)
Crop – Potato

Sl. No.	Particulars	E.P	R.P	G.A	R.G	P.S
1	**Cultural Practices**					
	Deep Plowing	Shallow Plowing	Deep repeated Plowing	P	1,2,4	1,2,3
	Timely sowing	15^{th} Oct- 15^{th} Nov(Early Sowing) 15^{th} Nov- 30^{th} Dec.(Normal Sowing)	15^{th} Oct- 15^{th} Nov(Early Sowing) 15^{th} Nov- 30^{th} Nov.(Normal Sowing).	N	-	-
	Clean Cultivation	Not in Practices	Removal of rations	F	1,2,4	1,2,3
	Resistance Varieties	(1)K.Chandramuhi, ON-2236 (2) K.Sinduri, K. Jyoti	(1)K.Chandramuhi, K. Kuber. (2) K.Sinduri, K. Jyoti, K. Bhar,K.Jawahar	P	1,2,4	1,2,3
2	**Mechanical Practices**					
	Pheromone Trap &Lures	-	-	-	-	-
	Light Trap	-	-	-	-	-
	Sweep net	-	-	-	-	-
3	**Botanical/ Biological –Practices**					
	Azadirachtin Products 1500/1000 PPM	Not in Practices	For control of sucking & cutting Insect.ss	F	1,2,4	1,2,3
	Beanvaria bassiana	Not in Practices	Sucking past & Catterpiller	F	1,2,4	1,2,3
	NPV (Larvel parasite)	-	-	-	-	-
	BT					
	Trichograma (Egg- parasite)	-	-	-	-	-
	Metarizium anisoply (Fungal Insect)	-	-	-	-	-
	Trichoderma- Vridi	Not in Practices	For control of fungal diseases 5kg/ha as Soil application	F	1,2,4	1,2,3
	Psuedomonus	Not in Practices	For control of bacterial & Fungal diseases 5kg/ha as Soil application	F	1,2,4	1,2,3
4	**Chemical Practices**					
	Seed treatment	Not as common a Practices	Carbandzime/ Mencogeb0.3% Solution	P	1,2,4	1,2,3
	Crop treatment	Not as common a Practices	Carbandzime 0.2 Solution Carbofuran 3G 25kg/ha/Chlorepyriphos1.5Lit/ha.	P	1,2,4	1,2,3
	Conservation of natural enemy (Snakes)	Not in Practices	Use of bio-Pesticide Avoid Chemical pesticide	F	1,2,4	1,2,3

Reasons for gap	Proposed Strategy	Gap in Adoption
1. Lack of awareness & Knowledge. 2. Lack resources. 3. Lack capital. 4. Improper management.	1. Training & awareness Campaign. 2. Demonstration & On farm trail/ORF. 3. Exposer visit. 4. Soil testing based fertilizer use needed to be strengthened. 5. Financial Support.	N – Nil P – Partial F - Full

Table-7.05 : Proposed Strategies for Integrated Pest Management (IPM)
(Pest – Dimoend back moth, Borer, Semi Looper, Termite, Aphides, Damping off, Black Rott, Downy mildew, etc.)
Horticultural /Crop – Tomato & Brinjal

Sl. No.	Particulars		E.P	R.P	G.A	R.G	P.S
1	**Cultural Practices**						
	Ploughing		Practices by a few farmer	Deep repeated Ploughing	P	1,2,4	1,2,3
	Timely sowing		May – June July – August	May – June July – August	N	-	-
	Transplanting		July – August August- September	July – August August- September	N	-	-
	Clean Cultivation		Removal of rations on previous crops	Removal of rations on previous crops, Solarisation of seed bed	N	-	-
	Resistance Varieties	Tomato	Pusa Rubi, Pant Bahar, Pusa Shda Bahar, Indo -Amerincan hybrid	Pusa Rubi, Pant Bahar, Pusa Shda Bahar, Indo -Amrincan hybrid	P	1,2,4	1,2,3
		Brinjal	Pusa Pearple Long, Pusa Pearple Round, Banaras Jaint, Panjab Barshti	Pusa Pearple Long, Pusa Pearple Round, Swarn Pratibha, Swarn Shyamali	P	1,2,4	1,2,3
2	**Mechanical Practices**						
	Pheromone Trap & Lures		Not in Practices	For attracting Male Insect	F	1,2,4	1,2,3
	Yellow board		Not in Practices	Against sucking Insect	F	1,2,4	1,2,3
	Light trap		Not in Practices	10/ha	F	1,2,4	1,2,3
3	**Botanical/ Biological –Practices**						
	Azadirachtin Products 1500/1000 PPM		Not in Practices	For control of sucking & cutting Insect.	F	1,2,4	1,2,3
	Beanvaria bassiana		Not in Practices	Sucking past & borer	F	1,2,4	1,2,3
	NPV (Larvel parasite)		-	-	-	-	-
	BT		Not in Practices	Against D.B.M.	F	1,2,4	1,2,3
	Metarizium anisoply (Fungal Insect)		Not in Practices	For Control Brown hopper	F	1,2,4	1,2,3
	Trichoderma- Vridi		Not in Practices	Seed treatment For control of fungal diseases 4gm/kg seed	F	1,2,4	1,2,3
	Psuedomonus		Not in Practices	For control of bacterial & Fungal diseases	F	1,2,4	1,2,3
4	**Chemical Practices**						
	Seed treatment		Not as common a Practices	Carbandzime/ captan/Thriam 2 gm/kg seed	P	1,2,4	1,2,3
	Seedling treatment		Not as common a Practices	Carbandzime 0.2 Solution Carbofuran 3G 2.5kg/1000m^2	P	1,2,4	1,2,3
	Conservation of natural enemy (frog)		Not in Practices	Use of bio-Pesticide Avoid Chemical pesticide	F	1,2,4	1,2,3

Reasons for gap	Proposed Strategy	Gap in Adoption
1. Lack of awareness & Knowledge. 2. Lack resources. 3. Lack capital. 4. Improper management.	1. Training & awareness Campaign. 2. Demonstration & On farm trail/ORF. 3. Exposer visit. 4. Soil testing based fertilizer use needed to be strengthened. 5. Financial Support.	N – Nil P – Partial F - Full

Table- 7.06: Proposed Strategies for Integrated Nutrient Management (INM)
Crop - Paddy

Sl. No	Particulars		E.P	R.P	G.A	R.G	P.S
1	Soil Testing/Soil Health		-	Recommended	F	1,4	1,2
2	**Use of Manures (mt./ha.)**						
	FYM/Compost		Nil	10 tone/ha	F	2,3	5
	Vermicompost		Nil	1 tone/ha	F	2,3	5
3	**Cultivation of Legumes**						
	As rotational Crop		Nil	Crop rotation of pulse crop	F	2	2,3,5
	As inter Crop		-	-	F	2	2,3,5
	As Green manure		Nil	Sunhemp/ Dhaicha	F	2	2,3,5
4	**Use of major Fertilizer. N + P + K Kg./ha.**						
a.	**Basal**	Local	-	-	-	-	-
		H.Y.V.	25:25:0	40:20:20	p	1,2,3	1,2,3,5
		Hybrid	30:20:10	40:50:30	p	1,2,3	1,2,3,5
b.	**Top dressing (kg./ha)**						
	N	Local	-	-	-	-	-
		H.Y.V.	25	40	p	1,2,3	1,2,3,5
		Hybrid	30	N(30+30)+K 20	p	1,2,3	1,2,3,5
5	**Use of Bio fertilizer (kg/ha)**						
	Azolla		Nil	5 Kg/ha	F	1,2,3,4	1,2,3,4,5
6	**Macro/Micronutrients**						
	Lime		-	-	-	-	-
	Zink		-	25 kg/haZink Sulphate	F	1,2,3,4	1,2,3,4,5
	Sulphur		-	Use of Sulphur Containing Fert.	P	1,2,3,4	1,2,3,4,5
	Boran		-	-	-	-	-
	Molibdanum		-	-	-	-	-

Reasons for gap	Proposed Strategy	Gap in Adoption
1. Lack of awareness & Knowledge. 2. Lack resources. 3. Lack capital. 4. Improper management.	1. Training & awareness Campaign. 2. Demonstration & On farm trail/ORF. 3. Exposer visit. 4. Soil testing based fertilizer use needed to be strengthened. 5. Financial Support.	N – Nil P – Partial F - Full

Table- 7.07: Proposed Strategies for Integrated Nutrient Management (INM)
Crop – Maize

Sl. No.	Particulars		E.P	R.P	G.A	R.G	P.S
1	Soil Testing/Soil Health		-	Recommen-ded	F	1,4	1,2
2	**Use of Manures (mt./ha.)**						
	FYM/Compost		Nil	10 tone/ha	F	2,3	5
	Vermicompost		Nil	1 tone/ha	F	2,3	5
3	**Cultivation of Legumes**						
	As rotational Crop		Nil	Crop rotation of pulse/Vegetables/Oil seeds crop	F	2	2,3,5
	As inter Crop		-	Pigion Pea/Black gram/Green gram	F	2	2,3,5
	As Green manure		-	-	-	-	-
4	**Use of major Fertilizer. N + P + K Kg./ha.**						
a.	**Basal**	Local	-	-	-	-	-
		Composite	30:30:10	50:60:40	p	1,2,3	1,2,3,5
		Hybrid	30:30:10	50:60:40	p	1,2,3	1,2,3,5
b.	**Top dressing (kg./ha)**						
	N	Local	-	-	-	-	-
		Composite	30	50	p	1,2,3	1,2,3,5
		Hybrid	30	50	p	1,2,3	1,2,3,5
5	**Use of Bio fertilizer (kg/ha)**						
	Azolla		-	-	-	-	-
	Azospirillium		Nil	5 Kg/ha as soil application	F	1,2,3,4	1,2,3,4,5
	Agatobactor		Nil	5 Kg/ha as soil application	F	1,2,3,4	1,2,3,4,5
	P.S.B.		Nil	5 Kg/ha as soil application	F	1,2,3,4	1,2,3,4,5
	Rhizobium		-	-	-	-	-
6	**Macro/Micronutrients**						
	Lime		Nil	3-4 qut/ha if Furrow	F	1,2,3,4	1,2,3,4,5
	Zink		-	Application of Zink Coated Urea	F	1,2,3,4	1,2,3,4,5
	Sulphur		-	Use of Sulphur Containing Fert.	P	1,2,3,4	1,2,3,4,5
	Boran		-	-	-	-	-
	Molibdanum		-	-	-	-	-

Reasons for gap	Proposed Strategy	Gap in Adoption
1. Lack of awareness & Knowledge. 2. Lack resources. 3. Lack capital. 4. Improper management.	1. Training & awareness Campaign. 2. Demonstration & On farm trail/ORF. 3. Exposer visit. 4. Soil testing based fertilizer use needed to be strengthened. 5. Financial Support.	N – Nil P – Partial F - Full

Table- 7.08: Proposed Strategies for Integrated Nutrient Management (INM)
Crop – Wheat

Sl. No.	Particulars		E.P	R.P	G.A	R.G	P.S
1	Soil Testing/ Soil Health		-	Recommended	F	1,4	1,2
2	**Use of Manures (mt./ha.)**						
	FYM/Compost		Nil	10 tone/ha	F	2,3	5
	Vermicompost		Nil	1 tone/ha	F	2,3	5
3	**Cultivation of Legumes**						
	As rotational Crop		Nil	Crop rotation of Rainy season pulse/Paddy crop	F	2	2,3,5
	As inter Crop		-	Gram	F	2	2,3,5
	As Green manure		-	Pervious	F	2	2,3,5
4	**Use of major Fertilizer. N + P + K Kg./ha.**						
a.	**Basal**	Local	-	-	-	-	-
		H.Y.V.	30:30:10	50:50:25	p	1,2,3	1,2,3,5
		Hybrid	-	-	-	-	-
b.	**Top dressing (kg./ha)**						
	N	Local	-	-	-	-	-
		H.Y.V.	30	50	p	1,2,3	1,2,3,5
		Hybrid	-	-	-	-	-
5	**Use of Bio fertilizer (kg/ha)**						
	Azolla		-	-	-	-	-
	Azospirillium		Nil	5 Kg/ha as soil application	F	1,2,3,4	1,2,3,4,5
	Agatobactor		Nil	5 Kg/ha as soil application	F	1,2,3,4	1,2,3,4,5
	P.S.B.		Nil	5 Kg/ha as soil application	F	1,2,3,4	1,2,3,4,5
	Rhizobium		-	-	-	-	-
6	**Macro/Micronutrients**						
	Lime		-	-	-	-	-
	Zink		-	Application of Zink Coated Urea	F	1,2,3,4	1,2,3,4,5
	Sulphur		-	-	-	-	-
	Boran		-	10 kg/ha	F	1,2,3,4	1,2,3,4,5
	Molibdanum		-	-	-	-	-

Reasons for gap	Proposed Strategy	Gap in Adoption
1. Lack of awareness & Knowledge. 2. Lack resources. 3. Lack capital. 4. Improper management.	1. Training & awareness Campaign. 2. Demonstration & On farm trail/ORF. 3. Exposer visit. 4. Soil testing based fertilizer use needed to be strengthened. 5. Financial Support.	N – Nil P – Partial F - Full

Table- 7.09: Proposed Strategies for Integrated Nutrient Management (INM)
Crop – Potato

Sl. No.	Particulars		E.P	R.P	G.A	R.G	P.S
1	Soil Testing/ Soil Health		-	Recommended	F	1,4	1,2
2	**Use of Manures (mt./ha.)**						
	FYM/Compost		Nil	10 tone/ha	F	2,3	5
	Karanj Cake		Nil	6 qut./ha	F	2,3	5
	Vermicompost		Nil	1 tone/ha	F	2,3	5
3	**Cultivation of Legumes**						
	As rotational Crop		Nil	Crop rotation of pulse/(green gram, Black gram) crop	F	2	2,3,5
	As inter Crop		-	Brasica, Radish	F	2	2,3,5
	As Green manure		-	-	-	-	-
4	**Use of major Fertilizer. N + P + K Kg./ha.**						
a.	**Basal**	Local	-	-	-	-	-
		Improved	40:40:20	60:60:40	p	1,2,3	1,2,3,5
		Hybrid	-	-	-	-	-
b.	**Top dressing (kg./ha)**						
	N	Local	-	-	-	-	-
		Improved	40	60	p	1,2,3	1,2,3,5
		Hybrid	-	-	-	-	-
5	**Use of Bio fertilizer (kg/ha)**						
	Azolla		-	-	-	-	-
	Azospirillium		Nil	5 Kg/ha as soil application	F	1,2,3,4	1,2,3,4,5
	Agatobactor		Nil	5 Kg/ha as soil application	F	1,2,3,4	1,2,3,4,5
	P.S.B.		Nil	5 Kg/ha as soil application	F	1,2,3,4	1,2,3,4,5
	Rhizobium		-	-	-	-	-
6	**Macro/Micronutrients**						
	Lime		Nil	3-4 qut/ha if Furrow	F	1,2,3,4	1,2,3,4,5
	Zink		-	-	-	-	-
	Sulphur		-	Use of Sulphur Containing Fert.	P	1,2,3,4	1,2,3,4,5
	Boran		-	-	-	-	-
	Molibdanum		-	-	-	-	-

Reasons for gap	Proposed Strategy	Gap in Adoption
1. Lack of awareness & Knowledge. 2. Lack resources. 3. Lack capital. 4. Improper management.	1. Training & awareness Campaign. 2. Demonstration & On farm trail/ORF. 3. Exposer visit. 4. Soil testing based fertilizer use needed to be strengthened. 5. Financial Support.	N – Nil P – Partial F - Full

Table- 7.10 : Proposed Strategies for Integrated Nutrient Management (INM)
Horticultural/Crop – Horticultural /Crop – Tomato & Brinjal

Sl. No.	Particulars		E.P	R.P	G.A	R.G	P.S
1	Soil Testing/ Soil Health		-	Recommended	F	1,4	1,2
2	**Use of Manures (mt./ha.)**						
	FYM/Compost		10 tone/ha	20 tone/ha	P	1,2,3	1,2,3,5
	Vermicompost		Nil	2 tone/ha	F	2,3	5
3	**Cultivation of Legumes**						
	As rotational Crop		Nil	Black gram/ Green gram	F	2	2,3,5
	As inter Crop		Nil	Tomato 8:2	F	2	2,3,5
	As Green manure		Nil	Sunhemp/ Dhaicha	F	2	2,3,5
4	**Use of major Fertilizer. N + P + K Kg./ha.**						
a.	**Basal**	Tomato	40:40:20	60:60:60	p	1,2,3	1,2,3,5
		Brinjal	40:40:20	60:60:60	p	1,2,3	1,2,3,5
b.	**Top dressing (kg./ha)**						
	N	Tomato	40	60	p	1,2,3	1,2,3,5
		Brinjal	40	60	p	1,2,3	1,2,3,5
5	**Use of Bio fertilizer (kg/ha)**						
	Azospirillium		Nil	5 Kg/ha as soil application	F	1,2,3,4	1,2,3,4,5
	Agatobactor		Nil	5 Kg/ha as soil application	F	1,2,3,4	1,2,3,4,5
	P.S.B.		Nil	5 Kg/ha as soil application	F	1,2,3,4	1,2,3,4,5
6	**Macro/Micronutrients**						
	Boran		-	10 kg/ ha Time of transplanting	F	1,2,3,4	1,2,3,4,5
	Molibdanum		-	5 kg/ha Time of transplanting	F	1,2,3,4	1,2,3,4,5

Reasons for gap	Proposed Strategy	Gap in Adoption
1. Lack of awareness & Knowledge. 2. Lack resources. 3. Lack capital. 4. Improper management.	1. Training & awareness Campaign. 2. Demonstration & On farm trail/ORF. 3. Exposer visit. 4. Soil testing based fertilizer use needed to be strengthened. 5. Financial Support.	N – Nil P – Partial F - Full

VIII Strategies For Human Resource Development

Sl. No	Department	Strategy for development	Training Need	Cadre of participants	Topics of training	No. of training	Name of the Inst. For training
1	Agriculture	Technology Management	Knowledge skill development	Farmers/ BTT	One day training on INM and fertilizer use on soil test basis.	5	KVK/ATMA S.A.U.
2	Agriculture	Technology Management	Knowledge skill development	Farmers/ BTT	One day training on in situ water harvesting techniques	8	KVK/ATMA/ HARP
3	Agriculture	Technology Management	Capacity building	Farmers	One day training on control of weeds and management of pasture lands/arable lands.	4	KVK/ATMA
4	Horticulture	Technology Management	Knowledge skill development	Farmers	Three day training on commercial cultivation of vegetable, preservation and packaging on vegetables.	4	KVK/ATMA/ HARP
5	Horticulture	Technology Management	Knowledge skill development	Farmers	Three day training on nursery raising of fruit plants, vegetables and flowers	3	KVK/ATMA/ HARP
6	Horticulture	Technology Management	Capacity building	Farmers/ BTT	One day training on scope and potential of green house/poly house technology.	4	KVK/ATMA HARP
7	Horticulture	Technology Management	Capacity building	Farmers	One day training on economic use and maintenance of power tillers.	6	KVK/ATMA/ HARP
8	Horticulture	Technology Management	Capacity building	Farmers	Three day training on production technology of off season and exotic vegetables.	4	KVK/ATMA/ HARP
9	Horticulture	Technology Management	Capacity building	Farmers/ BTT	Three day training on cultivation, preservation, packaging and marketing of rare/exotic vegetables.	5	KVK/ATMA/ HARP
10	Horticulture	Technology Management	Capacity building	Farmers	One day training on commercial floriculture and its marketing.	3	KVK/ATMA/ HARP
11	Horticulture	Technology Management	Capacity building	Farmers	One day training on pruning practices in horticultural crops.	7	KVK/ATMA
12	Horticulture	Technology Management	Capacity building	Farmers	One day training on successful mushroom cultivation	8	KVK/ATMA
13	Animal Husbandry	Technology Management	Capacity building	Block level veterinary officers	One day training to vet. Pharmacistis of AH department on cattle management and artificial insemination.	4	KVK/ATMA
14	Fishery	Technology Management	Capacity building	Field officer	Three day training to field officers of fisheries department regarding fish farming technology.	3	BAU/State department/ SAMETI
15	Line Department	Extension management	Capacity building	District level officers	Study visits/exposure visits to field officers of Animal Husbandry/fishery and other concerned department/Scientists to study project activities in other ATMA districts. (5	6	Outside State

					days visit outside the state)		
Sl. No	**Department**	**Strategy for development**	**Training Need**	**Cadre of participants**	**Topics of training**	**No. of training**	**Name of the Inst. For training**
16	Line Department	Extension management	Capacity building	District level officers	Study visits/exposure visits to field officers of Animal Husbandry/fishery and other concerned department/Scientists to study project activities in other ATMA districts. (5 days visit outside the state)	7	Within State/ZRS/ KVK/SAU SAMETI
17	Line Department	Extension management	Capacity building	NGO members	One day training to NGO executive on advanced agriculture, horticulture, Animal husbandry, fishery and other income generating innovations.	5	SAO/HARP/ SAMETI
18	ATMA	Extension management	Capacity building	ATMA GB member	Orientation of GB about project management (3days)	3	KVK/ATMA/ MANAGE
19	ATMA	Extension management	Capacity building	Officers	Study visit of ATMA Chairman, Project Director/Dy.P.D. and State Consultant in participatory extension management abroad.	2	Outside State
20	ATMA	Extension management	Capacity building	Officers	Orientation of AMC about project implementation and project management.	3	MANAGE/ SAMETI/ SAU
21	ATMA	Extension management	Capacity building	ATMA GB member	Project management and participatory extension method for ATMA and line department Officers.	2	Outside State
22	ATMA	Extension management	Capacity building	BTT	Training for BTT members about extension reforms, preparation of Block Action Plan and Account keeping (6 days)	3	KVK/ATMA/ SAMETI
23	ATMA	Extension management	Capacity building	BTT	Orientation of BTT members about team building modules, formation of FIG, SHG, ITK and success stories (2 days)	4	KVK/ATMA/ SAMETI
24	ATMA	Extension management	Capacity building	FAC	Orientation of FAV member regarding ATMA-Extension Reforms project management	3	KVK/ATMA/ SAMETI
25	ATMA	Extension management	Capacity building	Officers	Interaction of FIG, SHG, NGO with BTT and line department officers/scientists	5	KVK/ATMA/ SAMETI
26	ATMA	Extension management	Capacity building	Officers	Sensitzation of Block and Gram panchayat members (pradhan and Up-pradhan, Mukhiya etx.) about Extension Reforms-ATMA project.	4	KVK/ATMA
27	ATMA	Extension management	Capacity building	Officers	Orientation course of BTT members about farmers training methodology monitoring of the project and extension management. (6 days)	3	KVK/ATMA/ SAMETI
28	ATMA	Extension management	Capacity building	Officers	Training of AMC and other officers of the line department about participatory	4	SAMETI/ MANAGE

					extension management (3 days)		
Sl. No	**Department**	**Strategy for development**	**Training Need**	**Cadre of participants**	**Topics of training**	**No. of training**	**Name of the Inst. For training**
29	ATMA	Extension management	Capacity building	Officers	Exposure visit of AMC and other line department officers to other ATMA districts outside the state.	2	Outside State
30	ATMA	Extension management	Capacity building	Officers	Training of AMC and other officers of line department s about monitoring and evaluation of Extension Reforms. (3 days)	6	Outside State
31	ATMA	Extension management	Capacity building	Officers	Exposure visit of BTT and FAC members to other ATMA districts within and outside state for project management and formation of FIGs, SHG and FO. (5 days)	3	ATMA/ SAMETI
32	ATMA	Extension management	Capacity building	Officers	Orientation of AMC and other officers of line departments about Strategic and participatory Planning. (3 days)	4	ATMA/ SAMETI
33	ATMA	Extension management	Capacity building		Orientation of stakeholders like input distributing agencies regarding role of inputs on the agricultural development. (2 days)	3	KVK/ATMA/ SAMETI
34	ATMA	Extension management	Capacity building	Officers	Orientation of quality control enforce agencies regarding their roles and responsibilities for marking available quality inputs to the farmers. (2 days)	6	KVK/ATMA
35	ATMA	Extension management	Capacity building	FAC	Orientation of FAC members about Extension Reforms. (1 days)	4	KVK/ATMA
36	Stake Holders	Extension management	Capacity building	NGO/FIG	Exposure visit of NGOs, FIGs and other stakeholders the state to acquire latest technology and extension participatory management skills.	2	Outside State
37	ATMA	Extension management	Capacity building	FAC	Exposure visit of FACs and BTTs to other success story sites/ATMA.	2	Other ATMA
38	ATMA	Extension management	Capacity building	Officers	Orientation of training programme for BTT members on extension methodology and communication techniques. (2 days)	4	KVK/ATMA
39	Line Department	Extension management	Capacity building	Officers	Training need assessment.	3	SAMETI
40	Line Department	Extension management	Capacity building	Officers	Farming system approach.	2	SAMETI
41	Stake Holders	Extension management	Capacity building	Officers	Exposures visits for NGOs, successful farmers, non official members of GB.	4	
42	ATMA	Extension management	Capacity building	Officer	Orientation and training to AGB, AMC members and O/C of FAC. (2 year)	3	MANAGE/ SAMETI
43	ATMA	Extension management	Capacity building	Officer	Interaction of AGB and AMC members with FAC member	4	KVK/ATMA

Sl. No	**Department**	**Strategy for development**	**Training Need**	**Cadre of participants**	**Topics of training**	**No. of training**	**Name of the Inst. For training**
44	ATMA	Extension management	Capacity building	Officer	Training of O/C FAC and its members for preparation of Block Action Plan	2	KVK/ATMA
45	NGO	Extension management	Capacity building	NGO	Training of NGOs on community organization. (7 days)	5	KVK/ATMA
46	Stake Holders	Extension management	Capacity building	Private Extension workers	Organizing training for private extension workers (NGOs, FIGs, SHGs. Etc.)	4	KVK/ATMA
47	Stake Holders	Extension management	Capacity building	Private Extension workers	Exposure visits for public and private extension workers to appropriate areas and organizations outside distrct/state.	3	KVK/ATMA
48	ATMA	IT	Capacity building	Officer	Training on use of medial, IT and use of internet of AMC members. (6 days)	2	SAMETI
49	ATMA	IT	Capacity building	Officer	Training on use of medial, IT and use of internet to officers of line department. (4 days)	4	SAMETI
50	ATMA	IT	Capacity building	Officer	Training on use of medial, IT and use of internet of BTT members and officers of line departments. (4 days)	3	SAMETI
51	ATMA	IT	Capacity building	Officer	Training on use of medial, IT internet t0 AGB members and scientists of KVK, ZRS and officers of line departments. (3 days)	2	SAMETI
52	ATMA	IT	Capacity building	Officer	Training on use of medial, IT and use of internet to District Core Team members and officers of line department. (6 days)	4	SAMETI

IX PROPOSED STRATAGIES ACTIVITY PLAN FOR EXTENSION

Based upon the analysis of issues, problem and opportunities, relevant and feasible strategies have been worked out for carrying out extension activities on the district. The strategies have been categorized under major groups as indicated below:

Strategies-

A. Improvement in productivity and income of farmers in the existing enterprises and farming system.
B. Sustainability in productivity/income.
C. Natural resource management.
D. Financial sustainability.
E. Marketing system.

A. Improvement of Productivity.

1: Agricultural Production System.

Crop	Proposed Strategies	Thrust area	Activity	Relevance to AES		
				AES-I	AES-II	AES-III
Paddy (Rainfed)	1.To Increase productivity of upland 2. To increase cropping intensity of upland area.	1. Judicious Use of recommended does of nutrient. 2. Use of IPM for pest control. 3. Use of suitable varieties. 4. Introduction appropriate crops in upland for inter cropping.	Demonstration Training Field-days Finical	✓	✓	✓
Paddy (Rainfed) Low Land	1. Increase production & productivity of rice.	1. Use of high yielding varieties. 2. Recommended management practices. 3. Recommendation of hybrid varieties. 4. Popularization of integrated diseases management (IDM)	Demonstration Training Awareness Field-days	✓	✓	✓
Pigeon Pea	1. Increase production & productivity of Pigeon Pea in rainfed Situation.	1. Use of HYV and short duration and wilt resistant varieties. 2. Seed treatment practices. 3. Use of INM & IPM practices.	Demonstration Training Field-days	✓	✓	✓
Maize	1. Increase production & productivity of Maize.	1. Use of suitable varieties. 2. Improved crop management. 3. Weed management. 4. Crop rotation & Inter cropping with pulses	Demonstration Training Field-days	✓	✓	✓
Oil Seed	1. Increase production & productivity of Oil seed crops.	1. Use of suitable and high yielding varieties. 2. IPM/INM practices. 3. Inter cropping with pulses. 4. Improved crop technology.	Demonstration Training Field-days Exposure-visit	✓	✓	✓
Wheat	1. Increase production & productivity of Wheat	1. Use of suitable and high yielding varieties. 2. Improved crop technology. 3. Inter cropping with pulses. 4. Promotion to Zero tillage technology & rainfed wheat farming.	Demonstration Training Field-days Exposure-visit	✓	✓	✓

2: Horticultural Production System.

Crop	Proposed Strategies	Thrust area	Activity	Relevance to AES		
				AES-I	AES-II	AES-III
Tomato	1. Increase productivity of Tomato. 2. Value addition of tomato.	1. Suitable varieties according to season. 2. Wilt control through soil treatment. 3. IPM/INM practices introduce. 4. Value addition practices introduce.	Training Demonstration Exposure-visit	✓	✓	✓
Potato	1. Increase productivity of Potato .	1. Use of Improved varieties . 2. Improved crop technology. 3. INM/IPM Introduce. 4. Introduction of Improved storage method. 5. Recommendation of rainfed varieties.	Training Demonstration Exposure-visit	✓	✓	✓
Cucurbits	1. Increase productivity of Cucurbits	1. Use of suitable varieties. 2. Use of micronutrient. 3. Improved package of practices. 4. Improved storage facility.	Training Demonstration Exposure-visit	✓	✓	✓
Brinjal	1. Increase productivity of Brinjal.	1. Improved varieties. 2. Wilt resistant varieties. 3. IPM/IDM/INM practices to be used. 4. Soil treatment. 5. Use of micronutrient.	Training Demonstration Exposure-visit	✓	✓	✓

3: Animal Husbandry.

Crop	Proposed Strategies	Thrust area	Activity	Relevance to AES		
				AES-I	AES-II	AES-III
Cow	1. Increase productivity of Cow.	1. Introduction of improved breed. 2. Artificial insemination. 3. Improved feeding, breeding and management practices.	Training Demonstration Exposure-visit Awareness	✓	✓	✓
Buffalo	1. Increase productivity of She Buffalo.	1. Introduction of improved breed. 2. Improvement of breed through AI. 3. Improved feeding, breeding and management practices.	Training Demonstration Exposure-visit Awareness	✓	✓	✓
Goats	1. Increase productivity of Goats.	1. Introduction of improved local sustainable breed. 2. Improved feeding & management practices. 3. Introduction of highly nutritive feed through local available feeding material.	Training Demonstration Exposure-visit Awareness	✓	✓	✓
Poultry	1. Increase productivity of Poultry of free range system.	1. Introduction of improved Poultry breed (RED-Diviayan) 2. Improved feeding & management practices.	Training Demonstration Exposure-visit Awareness	✓	✓	✓

4: Diversification and Intensification.

a. Agriculture:-

Critical gap	Strategic issue	Strategies	AESs
Fallow land in Kharif Season	Pigeon pea based inter cropping with other Pulses, Maize and Ground Nut.	-Demonstration - Exposure visit - Trainings	I, II & III
Reluctance to HYV & Hybrid variety of paddy in AES – I & II	Varietals diversification of HYV & Hybrid variety	-Demonstration - Exposure visit - Trainings	I, II & III
Non availability of improved variety of pulses.	Expansion of area under HYV of oilseed and pulses	-Demonstration - Exposure visit - Trainings	I, II & III

b. Horticulture:-

Critical gap	Strategic issue	Strategies	AESs
Non-adaptation of Floriculture.	Diversification in under Floriculture.	-Demonstration - Exposure visit - Trainings	I, II & III
Non-adaptation of inter cropping in orchard.	Diversification of inter cropping with pulses in orchard.	-Demonstration - Exposure visit - Trainings	I, II & III
Less acrege in orchard crop.	Promotion to orchard crops.	-Demonstration - Exposure visit - Trainings	I, II & III

c. Animal Husbandry:-

Critical gap	Strategic issue	Strategies	AESs
Non improvement local breeds.	Improvement of local breeds through exotic breeds.	-Demonstration - Exposure visit - Trainings	I, II & III
Improper management of animals.	Training for proper management.	-Demonstration - Exposure visit	I, II & III
Lesser adoption of backyard poultry	Intensification off backyard poultry	-Demonstration - Exposure visit - Trainings	I, II & III
Dairy enterprises limited to home consumption.	Intensification of dairy enterprises as a source of income.	-Demonstration - Exposure visit - Trainings	I, II & III

5. Sustainability

a. Agriculture:-

Critical gap	Strategic issue	Strategies	AESs
Improper preparation and inadequate use of compost.	Promoting proper preparation and adequate use of compost.	-Demonstration - Exposure visit - Trainings	I, II & III
Non-adoption of green manuring practices.	Promoting the practice of green manuring.	-Demonstration - Exposure visit - Trainings	I, II & III
Depletion of soil fertility due to inadequate supplementation of major and minor plant nutrients.	Promoting the use of major and minor plant nutrients.	-Demonstration - Exposure visit - Trainings	I, II & III
Non-adoption of proper crop rotation for sustaining the soil fertility.	Popularisation of proper crop rotation.		I, II & III

b. Horticulture:-

Critical gap	Strategic issue	Strategies	AESs
Non-adoption of drip irrigation in orchards	Promoting the use of drip irrigation in orchards	-Demonstration - Exposure visit - Trainings	I, II & III
Non-adoption of mulching practices in orchards.	Promoting the use of mulches in orchard.	-Demonstration - Exposure visit - Trainings	I, II & III
Non-adoption of integrated nutrient management.	Promoting the use of INM.	-Demonstration - Exposure visit - Trainings	I, II & III
Non-availability of trained personnel for budding, grafting and pruning	Skill upgradation of FiG's/Field staff for budding, grafting pruning etc.	-Demonstration - Exposure visit - Trainings	I, II & III
Unawareness about fruit and mushroom preservation.	Promoting improved fruit and mushroom preservation techniques.		I, II & III

6. Natural resource Management

Critical gap	Strategic issue	Strategies	AESs
Unawareness about rainwater harvesting.	Promoting rainwater harvesting structure/measures.	-Demonstration - Exposure visit - Trainings	I, II & III
Degradation of land due to gulley erosions.	Demonstration of contour bunhding, trenching, pugging and plantation on improved grasses.	-Demonstration - Exposure visit - Trainings	I, II & III
Indiscriminate mining in riverbeds, khuds, etc. leading to heavy soil erosion	Protection of riverbeds and khuds etc. through constructing spur and through vegetative cover.	-Demonstration - Exposure visit - Trainings	I, II & III
Non-introduction of Pisciculture in already constructed water harvesting structures.	Popularisation of pisciculture in existing water harvesting structures.		I, II & III

Proposed Research Strategies

In most cases, farmers have either not adopted or partially adopted the technologies recommended by research station/centers because the technologies are not consistent with their farming situations. It is a fact that farmers vary in socio-economic parameters such as farm size, resources, labour, skill, literacy level, managerial ability, land tenure system and risk bearing capacity. The technologies, therefore, have to be evaluated and refined by taking into account the realistic environment of the farmer with their active participation through Farm Adaptive Research. For effective results, this needs to be done in district recommendation domains, characterized by relatively homogenous framing system associated with similar soil and agro-climatic conditions. Moreover, some problems of local significance, being faced by the farmers in particular AES are also required to be dealt by conducting adaptive basic research as the information on the same in not available.

With these facts as the background and with the available Major resources at the disposal of the farmers in the district, commodity wise and AES wise research strategy is proposed in this captor.

1. Farmers participatory Of Farm Research.

Summary Statement of Proposed Research Strategies of AES in Pakur District.

a. Agricultural

Sl.No.	Participatory Research Issues	Relevant to different AES		
		AES-I	AES-II	AES-III
1.	Farm trial on inter cropping with pigeon pea based inter cropping with other pulses, maize and ground nut.	✓	✓	✓
2.	Improvement in paddy varieties resistant to blast and bacterial blight disease.	✓	✓	✓
3.	Trial on use of residual moisture after harvest of early paddy an other crops with pulses and oilseeds.	✓	✓	✓
4.	Assessment of Hybrid varieties of rice, maize.	✓	✓	✓
5.	Suitable study in needed in adoption of drip irrigation in paddy.	✓	✓	✓
6.	Suitable studies on water infiltration rate by taking water shed management practice.	✓	✓	✓
7.	INM in rice wheat based cropping system.	✓	✓	✓
8.	Introduction of pest resistance varieties of pigeon pea.	✓	✓	✓
9.	IPM in Vegetable based cropping systems.	✓	✓	✓
10.	Inclusion of low water requiring crop/crop rotation for rainfed areas.	✓	✓	✓
11.	Micronutrients scheduling for irrigated Rice-Wheat system.	✓	✓	✓
12.	Screening of oilseeds like mustard-toria &castro, which has potential in the district.	✓	✓	✓
13.	Validation of indigenous technical knowledge.	✓	✓	✓
14.	To study the feasibility of Agri.-Horticulture & Horti.-pasture system in old & news orchards.	✓	✓	✓

b. Horticulture.

Sl.No.	Participatory Research Issues	Relevant to different AES		
		AES-I	AES-II	AES-III
1.	Trial on use of Bio-fertilizers in vegetable crop	✓	✓	✓
2.	Use of pheromone traps for control of fruits and shoot borer in Brinjal.	✓	✓	✓
3.	Trial on use of micro nutrient in Cabbage & Cauliflower.	✓	✓	✓
4.	Economic feasibility in improved storage techniques at field level in Potato and Tomato.	✓	✓	✓
6.	Need research for control of rotting disease of ginger and wilt disease of solanacae crops.	✓	✓	✓
7.	Inter cropping in orchards.	✓	✓	✓

c. Animal Husbandry

Sl.No.	Participatory Research Issues	Relevant to different AES		
		AES-I	AES-II	AES-III
1.	Validation of TKS for control of pests and Animal disease.	✓	✓	✓
2.	Selection of ideal fodder varieties of crops for animal production.	✓	✓	✓
3.	Bio mass recycling for soil health maintenance.	✓	✓	✓
4.	Study on improved breed of pig, cow and cock in different micro farming situation.	✓	✓	✓
5.	Studies and delineation of F.M.D. prone area in the district.	✓	✓	✓
6.	Studies on Crossbred cow infertility.	✓	✓	✓
7.	Study of suitability of different fodder crops on agri-situation basis.	✓	✓	✓
8.	Studies on demand and supply on animal products.	✓	✓	✓
9.	Studies on demand and supply on animal products for marketing status improvement.	✓	✓	✓
10.	Economic study of each animal enterprise under different situations of the district.	✓	✓	✓
11.	Studies on nutritious animal and poultry feed production from locally available material as health supplement.	✓	✓	✓

Proposed Marketing Strategies:-
Proposed Strategies For Marketing Support And Value Addition

Sl.No.	Strategy/Intensification and Activities	AES-I	AES-II	AES-III
A	Marketing Support and value Addition			
1.	Promoting private entrepreneurship to establish tomato based industries.	✓	✓	✓
2.	Promoting private entrepreneurship for maize based industries for cattle and poultry feed and other value added products- Research and HRD component.	✓	✓	✓
3.	Promotion on Kisan Ki Mandi- Tech, Know – how, Publicity, Contingency and Dovetailing with District Administration for cost sharing & facilitation 10 centre.	✓	✓	✓
4.	Promotion of Commodity cooperative Marketing – Capacity building.	✓	✓	✓
5.	Promotion of Rural godowns and cold chambers – Dovetailing with Govt. departments.	✓	✓	✓
6.	Strengthening of FCI network, PACs and State Agril. Marketing Board outlets- Dovetailing with Govt.	✓	✓	✓
7.	Networking with COMFED (Sudha brand) outlets for marketing honey etc.	✓	✓	✓
8.	Popularizing very fine rice varieties along witn milling, processing and marketing. HRD, Exposure visit and forward linkage.	✓	✓	✓
9.	Intensification of organic vegetables production HRD, Exposure visit and forward linkage.	✓	✓	✓
10.	Frequent market surveys for consumer preference to tailor demand-linked production (Market study & participatory technology development)	✓	✓	✓
11.	Strengthening market information through IT and FIAC (Internet connectivity &hiring IT facilitators)	✓	✓	✓
12.	Develop and establish market information network from Block, District, State, National to international levels. (Through FIAC)	✓	✓	✓
13.	Studying the present market information network prevailing in the district along with the gaps.	✓	✓	✓
14.	Developing information technology network ant various levels.	✓	✓	✓
15.	Technical and managerial support to FIAC and BTTs.	✓	✓	✓
16.	Exploring possibility of news media-FM radio station (Hiring air time)	✓	✓	✓
17.	Identifying and studying of the existing farmers organizations.	✓	✓	✓
18.	Identification of success stories.	✓	✓	✓
19.	Arranging exposure visits training etc.	✓	✓	✓
20.	Providing techno-managerial support.	✓	✓	✓
21.	Identifying and studying activities of various organizations engaged in marketing operation along with commodities handled.	✓	✓	✓
22.	Finding out the need for marketing the commodities by aromatic plants and vegetables.	✓	✓	✓
23.	Exploring options for contract farming in medicinal and aromatic plants and vegetables.	✓	✓	✓
24	Assessment of export oriented marketable commodity by engaging marketing consultants/agencies for forecasting the production and local consumption statistics for Ranchi district.	✓	✓	✓

X Proposed Strategy For Promoting Marketing

Sl. No.	Critical Gap	Proposed marketing Strategies
1.	Fluctuating market demand & unpredictable market price.	Creating awareness on market led extension
		Encouraging farmer organization / commodity growers groups to create local marketing centers
		Encouraging FO/CGs to serve as market intelligence in association with reputed market organization
		Arranging market survey exposure visits for farmers to different rural and urban consumers
		Arranging buy back arrangements for farmers produce
		Training of farmers in supply chain and facilitate direct linkage with urban market
		Propaganda and publicity on the quality products
		Establishing linkage between industries and products
		Promotion of producer-exporter interface
2.	Lack of Post Harvest technologies.	Motivating farmers to go for value addition, product diversification and other post harvest technologies
3.	Absence of backward and forward linkages.	Establishing single window service backward and forward linkages
		Encouraging cooperatives to support farmers in providing inputs and arranging for assured market.

Proposed Strategy For Promoting Media Support

Sl. No.	Critical Gap	Proposed Marketing Strategies
1.	Fluctuating market demand & unpredictable market price	Establishment of region based exclusive agricultural channels to deliver specific information needs of farmers in local language
		Reengineering radio programmes through incorporation farmers innovation, success stories in local language
2.	Non existence of market intelligence information	Strengthening information communication technology
		Strengthening Kisan call centres, portals of department of agriculture and cooperation and other related agricultural research, extension and marketing organizations.
		Market intelligence through SMS on mobile telephones
3.	Poor and inadequate columns devoted exclusively for agriculture in daily newspapers	Strengthening the agricultural columns in the dailies by earmarking adequate columns and adequate information for the existing farmers needs
4.	Lack of capsule form information to meet the urgent information required in production and marketing	Production of capsule information on region basis through radio, television and dailies
5.	Lack of quality in printed material	Encouraging development departments, NGOs etc. to produce technical literatures like leaflets, folders, booklets etc. in local language
6.	Non existence of farmers club in villages/blocks/district level	Conducting region specific agricultural seminars to provide opportunity for farmers to participate
7.	Lack of opportunity for farmers to interact with Scientists and extension specialists	Organizing farmer – scientist – extension personnel interaction

XI Proposed Research Strategies

In most cases, farmers have either not adopted or partially adopted the technologies recommended by research station/centers because the technologies are not consistent with their farming situations. It is a fact that farmers vary on socio-economic parameters such as farm size, resources, labor, skill, literacy level, managerial ability, land tenure system and risk bearing capacity. The technologies, therefore, have to be evaluated and refined by taking into account the realistic environment of the farmer with their active participation through On Farm Adaptive Research. For effective results, this needs to be done in district recommendation domains, characterized by relatively homogenous farming system associated with similar soil and agro-climatic conditions. Moreover, some problems of local significance, being faced by the farmers in particular AES are also required to be dealt by conducting adaptive basic research as the information on the same in not available.

With these facts as the background and with the available meager resources at the disposal of the farmers in the district, commodity wise and AES wise research strategy is proposed in this copter

Table – 9.9 : Proposed Research Strategies for Agriculture

Crop	Strategy	Proposed activity	Relevance to the AES		
			I	II	III
Paddy	Screening of superior local varieties of paddy from different paddy growing pockets of the district and testing performance.	- On research station demonstration - On farm trails Seed + Fertilizer as per recommendation.	√	√	-
	Testing and verification of HYV of short duration of paddy recommended in the state and adjoining area	- On station research - On farmer Land trails Seed + Fertilizer as per recommendation.	√	√	√
	Testing and demonstration of HYV/ Hybrid paddy recommended in the state and adjoining areas	- On farm trails Seed + Fertilizer as per recommendation.	√	√	√
	Development and verification of fine variety of paddy	- On station research - On farm trails.	√	√	√

Maize	To develop/ verification of Hybrid/ composite variety	- On farm trails Seed + Fertilize as per recommendation - Farmers practice.	√	√	√
Wheat	Testing verification of HYV variety of wheat recommended in the state and adjoining area.	- On farm trails Seed + Fertilize as per recommendation	√	√	√
Pulses	Verification and testing of technology available for growing pulse crops like Arhar, Urd botgh in pure and intercropping situation.	- On farm trails Seed + Fertiliaze as per recommendation	√	√	√
	Identification, verification and testing of local germplasm available in the area	-On farm trials	√	√	√
	Variation and testing of IPM for the control of wilt and pod borer	-On farm trials	√	√	√
Oilseed Crops	Verification and testing of technology available for growing oilseed crop like Niger, Mustard, Rai, Tori, Sunflower, safflower etc.	-On farm trials	√	√	√
	Introduction of Soybean cultivation	- On farm trails Seed + Fertilizer as per recommendation.	√	√	√
Veg- etable	Screening and verification of different variety of Tomato particularly in rainy season.	- On farm trials Only seeds	√	√	√
	Standardization & verification of inproved technology of INM package for potato	- On farm trials	√	√	√
	Introduction of HYV of minorfruit crops like Kathal, Ber, Sharifa, Karonda, Jamun, Aonla etc.	- On farm trial Planting material	√	√	√

Proposed Research Strategy for Miscellaneous Resource

Sl. NO.	Strategy	Proposed activity	Relevance to the AES		
			I	II	III
1.	Amendment of acid soil using locally available material	- On farm trials	√	√	√
2.	Verification and introduction of compost making from locally available biomass	Digging pit + Rock phosphate	√	√	√
3.	Verification and testing fo vermiculture techniques for making organic manure from farm waste	- On farm trials	√	√	√
4.	Introduction of improved bred of Pig (TXD)	- On farm trials piglets	√	√	√
5.	Introduction of Hybrid poultry chicken.	- On farm trials Red Divyayan	√	√	√
6.	Validation of ITKs for crop pest and animal disease	- On station trials - On farm trial	√	√	√
7.	Minimum tillage requirement for upland crops in the context of soil erosion	- On farm trial	√	√	√
8.	Selection of ideal fodder crops for animal production.	- On station trials	√	√	√
9.	Mixed planting using different proportion of timber wood, fuel, food and fodder species.	- On farm trial	√	√	√
10.	Introduction of medicinal plants like ashwagandha, Lemon Grass, Neem wild, Marigold etc.	- On farm trial Planting material	√	√	√

Proposed Strategy for Promoting Supply of Seed and Its Multiplication

Name of Crop : Maize **Village : jigarhatti**
Preferred Variety : **AES - I**

Sl. No.	Source of seed of preferred variety / hybrid	Quantity of seed used (of preferred variety)	Area sown (ha) under the crop with different variety		Quality of seed of preferred variety (G/A/P)
			Preferred Variety	Other Varieties	
A.	Purchase from outside				
	From private Dealer	Swan composit 1 - 12Q Birsa Makai-I - 4Q	Swan composit 1	Birsa Makai-I	G
	From Public Sector	Nil			
B.	Use of self produced seed :	Nil			
	From Own Field	Nil			
	From Others Field	Nil			
C.	Any Other	Nil			
	Total	16			

Proposed Strategy for Promoting Supply of Seed and Its Multiplication

Name of Crop : Maize **Village : Baliapatra**
Preferred Variety : **AES - II**

Sl. No.	Source of seed of preferred variety / hybrid	Quantity of seed used (of preferred variety)	Area sown (ha) under the crop with different variety		Quality of seed of preferred variety (G/A/P)
			Preferred Variety	Other Varieties	
A.	Purchase from outside				
	From private Dealer	Swan composit 1-12Q Birsa Makai-I - 3Q	Swan composit 1	Birsa Makai-I	G
	From Public Sector				
B.	Use of self produced seed :	Nil			
	From Own Field	Nil			
	From Others Field	Nil			
C.	Any Other	Nil			
	Total	15			

Proposed Strategy for Promoting Supply of Seed and Its Multiplication

Name of Crop : Maize **Village : Padarkola**
Preferred Variety : **AES - III**

Sl. No.	Source of seed of preferred variety / hybrid	Quantity of seed used (of preferred variety)	Area sown (ha) under the crop with different variety		Quality of seed of preferred variety (G/A/P)
			Preferred Variety	Other Varieties	
A.	Purchase from outside				
	From private Dealer	Swan composit 1-14Q Birsa Makai-I - 4Q	Swan composit 1	Birsa Makai-I	G
	From Public Sector				
B.	Use of self produced seed :	Nil			
	From Own Field	Nil			
	From Others Field	Nil			
C.	Any Other	Nil			
	Total	18			

Proposed Strategy for Promoting Supply of Seed and Its Multiplication

Name of Crop : Tomato **Village : jigarhatti**
Preferred Variety : **AES - I**

Sl.No.	Source of seed of preferred variety / hybrid	Quantity of seed used (of preferred variety)	Area sown (ha) under the crop with different variety		Quality of seed of preferred variety (G/A/P)
			Preferred Variety	Other Varieties	
A.	Purchase from outside				
	From private Dealer	Pusa Rubi, Pant Bahar, Pusa Shda Bahar, Indo - Amrincan hybrid- 2kg	Pusa Rubi	Pusa Sadabhar	G
	From Public Sector	Nil	Nil	Nil	Nil
B.	Use of self produced seed :	Nil	Nil	Nil	Nil
	From Own Field	Nil	Nil	Nil	Nil
	From Others Field	Nil	Nil	Nil	Nil
C.	Any Other	Nil	Nil	Nil	Nil
	Total	2kg			

Proposed Strategy for Promoting Supply of Seed and Its Multiplication

Name of Crop : Tomato **Village : Baliapatra**
Preferred Variety : **AES - II**

Sl.No.	Source of seed of preferred variety / hybrid	Quantity of seed used (of preferred variety)	Area sown (ha) under the crop with different variety		Quality of seed of preferred variety (G/A/P)
			Preferred Variety	Other Varieties	
A.	Purchase from outside				
	From private Dealer	Pusa Rubi, Pant Bahar, Pusa Shda Bahar, Indo - Amrincan hybrid- 2kg	Pusa Rubi	Pusa Sadabhar	G
	From Public Sector	Nil	Nil	Nil	Nil
B.	Use of self produced seed :	Nil	Nil	Nil	Nil
	From Own Field	Nil	Nil	Nil	Nil
	From Others Field	Nil	Nil	Nil	Nil
C.	Any Other	Nil	Nil	Nil	Nil
	Total	15kg			

Proposed Strategy for Promoting Supply of Seed and Its Multiplication

Name of Crop : Tomato **Village : Patarkola**
Preferred Variety : **AES - III**

Sl. No.	Source of seed of preferred variety / hybrid	Quantity of seed used (of preferred variety)	Area sown (ha) under the crop with different variety		Quality of seed of preferred variety (G/A/P)
			Preferred Variety	Other Varieties	
A.	Purchase from outside				
	From private Dealer	Pusa Rubi, Pant Bahar, Pusa Shda Bahar, Indo -Amrincan hybrid- 2kg	Pusa Rubi	Pusa Sadabhar	G
	From Public Sector	Nil	Nil	Nil	Nil
B.	Use of self produced seed :	Nil	Nil	Nil	Nil
	From Own Field	Nil	Nil	Nil	Nil
	From Others Field	Nil	Nil	Nil	Nil
C.	Any Other	Nil	Nil	Nil	Nil
	Total	16kg			

Proposed Strategy for Promoting Supply of Seed and Its Multiplication

Name of Crop : Brinjal **Village : jigarhatti**
Preferred Variety : **AES - I**

Sl. No.	Source of seed of preferred variety / hybrid	Quantity of seed used (of preferred variety)	Area sown (ha) under the crop with different variety		Quality of seed of preferred variety (G/A/P)
			Preferred Variety	Other Varieties	
A.	Purchase from outside				
	From private Dealer	Pusapurple Long 5kg, Banarashgiant 2kg	Pusapurple Long	Banarashgiant	G
	From Public Sector	Nil	Nil	Nil	Nil
B.	Use of self produced seed :	Nil	Nil	Nil	Nil
	From Own Field	Nil	Nil	Nil	Nil
	From Others Field	Nil	Nil	Nil	Nil
C.	Any Other	Nil	Nil	Nil	Nil
	Total	7kg			

Proposed Strategy for Promoting Supply of Seed and Its Multiplication

Name of Crop : Brinjal **Village : Baliapatra**
Preferred Variety : **AES - II**

Sl. No.	Source of seed of preferred variety / hybrid	Quantity of seed used (of preferred variety)	Area sown (ha) under the crop with different variety		Quality of seed of preferred variety (G/A/P)
			Preferred Variety	Other Varieties	
A.	Purchase from outside				
	From private Dealer	Pusapurple Long 3kg, Banarashgiant 2kg	Pusapurple Long	Banarashgiant	G
	From Public Sector	Nil	Nil	Nil	Nil
B.	Use of self produced seed :	Nil	Nil	Nil	Nil
	From Own Field	Nil	Nil	Nil	Nil
	From Others Field	Nil	Nil	Nil	Nil
C.	Any Other	Nil	Nil	Nil	Nil
	Total	5kg			

Proposed Strategy for Promoting Supply of Seed and Its Multiplication

Name of Crop : Brinjal **Village : Padarkola**
Preferred Variety : **AES - III**

Sl. No.	Source of seed of preferred variety / hybrid	Quantity of seed used (of preferred variety)	Area sown (ha) under the crop with different variety		Quality of seed of preferred variety (G/A/P)
			Preferred Variety	Other Varieties	
A.	Purchase from outside				
	From private Dealer	Pusapurple Long 4kg, Banarashgiant 4kg	Pusapurple Long	Banarashgiant	G
	From Public Sector	Nil	Nil	Nil	Nil
B.	Use of self produced seed :	Nil	Nil	Nil	Nil
	From Own Field	Nil	Nil	Nil	Nil
	From Others Field	Nil	Nil	Nil	Nil
C.	Any Other	Nil	Nil	Nil	Nil
	Total	8kg			

Proposed Strategy for Promoting Supply of Seed and Its Multiplication

Name of Crop :Potato **Village : jigarhatti**
Preferred Variety : **AES - I**

Sl. No.	Source of seed of preferred variety / hybrid	Quantity of seed used (of preferred variety)	Area sown (ha) under the crop with different variety		Quality of seed of preferred variety (G/A/P)
			Preferred Variety	Other Varieties	
A.	Purchase from outside				
	From private Dealer	Kufri Chandrimukhi 200Q Kufri Badsha 200Q Kufri Joyti 200Q	Kufri Yoyti	Kufri Badsha, K: Chandrimukhi	G
	From Public Sector	Nil	Nil	Nil	Nil
B.	Use of self produced seed :	Nil	Nil	Nil	Nil
	From Own Field	Nil	Nil	Nil	Nil
	From Others Field	Nil	Nil	Nil	Nil
C.	Any Other	Nil	Nil	Nil	Nil
	Total	600Q			

Proposed Strategy for Promoting Supply of Seed and Its Multiplication

Name of Crop : Potato **Village : Baliapatra**
Preferred Variety : **AES - II**

Sl. No.	Source of seed of preferred variety / hybrid	Quantity of seed used (of preferred variety)	Area sown (ha) under the crop with different variety		Quality of seed of preferred variety (G/A/P)
			Preferred Variety	Other Varieties	
A.	**Purchase from outside**				
	From private Dealer	**Kufri Chandrimukhi 200Q Kufri Badsha 200Q Kufri Joyti 200Q**	**Kufri Yoyti**	**Kufri Badsha, K: Chandrimukhi**	**G**
	From Public Sector	Nil	**Nil**	**Nil**	**Nil**
B.	**Use of self produced seed :**	Nil	**Nil**	**Nil**	**Nil**
	From Own Field	**Nil**	**Nil**	**Nil**	**Nil**
	From Others Field	**Nil**	**Nil**	**Nil**	**Nil**
C.	**Any Other**	**Nil**	**Nil**	**Nil**	**Nil**
	Total	**700Q**			

Proposed Strategy for Promoting Supply of Seed and Its Multiplication

Name of Crop :Oilseed (Mustard) **Village : jigarhatti**
Preferred Variety : **AES - I**

Sl. No.	Source of seed of preferred variety / hybrid	Quantity of seed used (of preferred variety)	Area sown (ha) under the crop with different variety		Quality of seed of preferred variety (G/A/P)
			Preferred Variety	Other Varieties	
A.	**Purchase from outside**				
	From private Dealer	**T-9 70kg P.T-303 35kg Shiwani 25kg**	**T-9**	**Shiwani**	**G**
	From Public Sector	Nil	**Nil**	**Nil**	**Nil**
B.	**Use of self produced seed :**	Nil	**Nil**	**Nil**	**Nil**
	From Own Field	**Nil**	**Nil**	**Nil**	**Nil**
	From Others Field	**Nil**	**Nil**	**Nil**	**Nil**
C.	**Any Other**	**Nil**	**Nil**	**Nil**	**Nil**
	Total	**130kg**			

Proposed Strategy for Promoting Supply of Seed and Its Multiplication

Name of Crop : Oilseed (Mustard) **Village : Baliapatra**
Preferred Variety : **AES - II**

Sl. No.	Source of seed of preferred variety / hybrid	Quantity of seed used (of preferred variety)	Area sown (ha) under the crop with different variety		Quality of seed of preferred variety (G/A/P)
			Preferred Variety	Other Varieties	
A.	**Purchase from outside**				
	From private Dealer	**T-9 70kg P.T-303 30kg Shiwani 14kg**	**T-9**	**Shiwani**	**G**
	From Public Sector	Nil	**Nil**	**Nil**	**Nil**
B.	**Use of self produced seed :**	Nil	**Nil**	**Nil**	**Nil**
	From Own Field	**Nil**	**Nil**	**Nil**	**Nil**
	From Others Field	**Nil**	**Nil**	**Nil**	**Nil**
C.	**Any Other**	**Nil**	**Nil**	**Nil**	**Nil**
	Total	**114kg**			

Proposed Strategy for Promoting Supply of Seed and Its Multiplication

Name of Crop : Pigeon Pea **Village : Baliapatra**
Preferred Variety : **AES - II**

Sl. No.	Source of seed of preferred variety / hybrid	Quantity of seed used (of preferred variety)	Area sown (ha) under the crop with different variety		Quality of seed of preferred variety (G/A/P)
			Preferred Variety	Other Varieties	
A.	**Purchase from outside**				
	From private Dealer	**B.R -65 140kg Laxmi T-21 100kg**	**B.R -65**	**Laxmi T-21**	**G**
	From Public Sector	Nil	**Nil**	**Nil**	**Nil**
B.	**Use of self produced seed :**	Nil	**Nil**	**Nil**	**Nil**
	From Own Field	Nil	**Nil**	**Nil**	**Nil**
	From Others Field	Nil	**Nil**	**Nil**	**Nil**
C.	**Any Other**	Nil	**Nil**	**Nil**	**Nil**
	Total	**240kg**			

Proposed Strategy for Promoting Supply of Seed and Its Multiplication

Name of Crop : Pigeon Pea **Village : Padarkola**
Preferred Variety : **AES - III**

Sl. No.	Source of seed of preferred variety / hybrid	Quantity of seed used (of preferred variety)	Area sown (ha) under the crop with different variety		Quality of seed of preferred variety (G/A/P)
			Preferred Variety	Other Varieties	
A.	**Purchase from outside**				
	From private Dealer	**B.R -65 400kg Laxmi, T-21 170kg Birsa Arhar – 1,150kg**	**B.R -65**	**Laxmi T-21**	**G**
	From Public Sector	Nil	**Nil**	**Nil**	**Nil**
B.	**Use of self produced seed :**	Nil	**Nil**	**Nil**	**Nil**
	From Own Field	Nil	**Nil**	**Nil**	**Nil**
	From Others Field	Nil	**Nil**	**Nil**	**Nil**
C.	**Any Other**	Nil	**Nil**	**Nil**	**Nil**
	Total	**720kg+**			

XII VISION For the Next Five Years

Base Line Data in respect of interventions likely to be carried out by PIAs (Indicative) Production In Q P/Y (00 omitted)In agri production I Agriculture

SI. N0	Sector Agriculture	2008-2009		2014-2015		Increase Production Q/y	Intervention / Diversification
		Area (HA)	Production Q/y	Area (HA)	Production Q/y		
1.	Paddy	46560	13968	48900	19555	5587	- Diversification of upland paddy area for pulses and vegetable cultivation. - Use of HYV/ Hybrid, drought resistant and blast tolerant varieties. - INM & IPM.
2.	Maize	9500	1900	9975	3990	2090	- Use of good quality Seed. - Popularization of high quality protein maize, pop corn, baby corn etc. - INM & IPM.
3.	Wheat	4500	1350	4725	1890	540	- Use of good quality high yielding varieties. - INM & IPM. - Proper water management.
4.	Pulses	18570	3714	19500	7800	4086	- Use of good quality HYV. - INM & IPM. - Proper Agronomic management.
5.	Oilseed	6750	1350	7090	2836	1486	- Area to be increased by intercropping with maize, upland paddy, groundnut, soybean etc. - INM & IPM - Introduction of high yielding medium duration variety.
6.	Vegetable	4915	1229	5161	2064	835	- Use of good quality HYV Seed - Proper Agronomic management. - INM & IPM
7.	Potato	1500	300	1725	690	390	- Use of good quality HYV. - Proper Agronomic management. - INM & IPM
8.	Pea	700	140	735	147	7	- Use of good quality HYV. - Proper Agronomic management. - INM & IPM
9.	Masoor	2400	360	2520	378	18	- Use of good quality HYV. - Proper Agronomic management. - INM & IPM

							- Used in intercropping
10.	Moong	500	25	575	34.5	9.5	- Use of good quality HYV. - Proper Agronomic management. - INM & IPM - Used in intercropping and catch crop.
11.	Mustard	81	10	90	11.7	1.7	- Use of good quality drought tolerant HYV. - INM & IPM.
12.	Suguja	90	10	100	113	1.13	- Use of HYV. - INM & IPM - Can be grown in waste land marginal land.
13.	Cauliflower	200	500	400	1000	500	- Supply of good quality HYV for off season crop. - Use of micro nutreing - INM & IPM. - Processing and post harvest management to be encouraged.
14.	Cabbage	91	54	100	60	6	- Supply of good quality HYV for off season crop. - Use of micro nutrient - INM & IPM. - Processing and post harvest management to be encouraged.
16.	Potato	14.50	8670(MT)	1800	15605	1560	- Supply of good quality blight resistant variety. - Cold storage facility. - Contact farming with public & private partnership. - INM & IPM.
17.	Tomato	1000	800	1100	880	80	- Supply of high yielding wilt resistant varieties. - Kharif tomato should be promoted. - INM & IPM. - Processing of tomato to be encourages.
18.	Brinjal	1000	600	1100	660	60	- Supply of high yielding wilt resistant varieties. - Kharif tomato should be promoted. - INM & IPM..

II Animal Husbandry

SI. N0	Sector Agriculture	No(2003)	Productivity 20007-08	No(2013)	Productivity 20013-14	Increase	Intervention
1.	Cow/Milch	65660	13132(Litre/Day)	71232	35610 (Litre /Day)	22478 (Litre /Day)	- Introduction of improved breed of cow viz. Jarsi/Cross of local x Holstein Friesian. - Balanced Nutrition & diet of Animals.
2.	Buffalo/ Milch	21330	21333(Litre /Day)	24000	240000(Litre /Day)	26700(Litre /Day)	- Introduction of improved breed of Buffalo. - Balanced Nutrition & diet of Animals.
3.	Pig/Meat(kg)	689061	110249	75000	30000	19000	- Introduction of improved breed Pig T x D breed. - Balanced Nutrition & diet of Animals.
4.	Poulty Birds Meat&Agg	65178	621300(Kg/Day) 78213 (Eggs/Day)	85000	680000 (Kg/Day) 95000 (Eggs/Day)	55000(Kg/Day) 17000 (Eggs/Day)	- Introduction of improved breed of poultry birds viz. Red Divyayan. - Introduction of improved breed of Poultry Duck viz. Khaki Campbal. - Balanced Nutrition & diet of Poultry. - Controlling poultry diseases.
5.	Goat/Meat	134709	1212300	15600	1500000	287700	- Introduction of improved breed of Goat viz. Black Bangal. - Balanced Nutrition & diet of Animals.