

GROUND REALITIES

MONITORING OF THE CHILDREN IN THE J.E./A.E.S. EFFECTED AREAS

A REPORT AFTER THE MONITORING OF CHILDREN IN THREE BLOCKS IN THE VULNERABLE AREAS OF GORAKHPUR DISTRICT.

A Study and monitoring by



Action for Peace Prosperity and Liberty

(A Trust to Serve and Empower the Unprivileged)

PREFACE

Ground Realities (A report on Status, Disability and Rehabilitation of the victims of Japanese Encephalitis/ Acute Encephalitis Syndrome in Eastern Uttar Pradesh)

- **APPL (Action For Peace, Prosperity and Liberty)**, a Trust to Serve and Empower the Unprivileged (**30, Vindhyawasini Nagar, Bank Road, Gorakhpur-273001(U.P.)India**), **web-site: <http://appltrust.Org>**, is a privately funded, not for profit NGO trust devoted to serve and empower the unprivileged section of the society. APPL have been constantly working for and monitoring, since more than last 5 years, the status of victims of Japanese Encephalitis (JE) / A.E.S. in this part of eastern Uttar Pradesh which is one of the most vulnerable areas.
- Out of these studies, three earlier reports have already been published by APPL in the years 2007, 2009 and 2010(for details please refer to APPL's web-site).The current report is the follow-up of earlier studies and fourth one based on our studies/findings for the season 2011.In the current studies APPL have been monitoring the target section of the victims in three selected blocks of Gorakhpur District and 50 selected households in each selected block for the period of past four months. A well informed, motivated and equipped expert-team of APPL was involved in the studies who have very meticulously & scientifically designed the various parameters, scanned each and every aspect to arrive at the Ground realities. A comprehensive schedule has been filled to collect the primary information regarding present scenario in the vulnerable areas. The detailed investigation and information collected from various sources are the ground for our conclusion and recommendations.

- **This report/data of the present study are the sole property of 'ACTION FOR PEACE, PROSPERITY AND LIBERTY (APPL)-Trust'. Use of any data and reference by any individual or organization needs prior written consent and permission of APPL -Trust.**

▪ **ACKNOWLEDGEMENT**

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- **NARENDERA MISHRA**
(Centre For Social Initiatives)

Chapter Plan

- 1.0 Genesis of the study
- 2.0 J.E./A.E.S. and the Ground reality
- 3.0 Findings of the Survey
- 4.0 Recommendations

05

Chapter – 01

Genesis of the study:

- As expected every year since last more than three decades, in this season of 2011, till the end of November, over 2842 (Two thousand eight hundred and forty two) cases of this deadly disease have been reported, with a confirmed mortality of 567 cases, in this eastern part of Uttar Pradesh, Bihar and adjoining areas of Nepal. It is supposed to be due to the deadly combination of Japanese Encephalitis (JE) and Acute Encephalitis Syndrome (AES). This figure seems to be the tip of an ice-berg, as actual data provided to APPL-Trust by the State Government's only nodal super-specialty hospital: B.R.D. Medical College, Gorakhpur is an indication of the cases where patient(s) was taken for treatment to Gorakhpur city and admitted to BRD Medical-college, as referred to by others. The rest of the patients who were under treatment by private doctors/hospitals, other government hospitals, Quacks (jhola chap doctors), Illegal health-centers and private nursing homes at the interiors or never reached to any of them--there are no authentic records. The actual number of cases, as presumed due to obvious reasons, could be a multiple of at least with one hundred. It was, hitherto, presumed that Japanese Encephalitis often strikes every year only when after the monsoon sets-in and only to children between the age group of one year to fifteen years, and out of which about 30%, finally suffer permanently from either one/or both of physical and mental disability. Now the whole scenario about the percentage of disability may be changed. As per the details available from the National Institute Of Virology, out of all the cases being reported to the B.R.D. Medical college only 12-15% are showing J.E+VE. As we all know that in the year 2005 when it was at its peak and more than 2000 patients died all of the cases were taken up and admitted as the cases of Japanese Encephalitis only, locally known as Navki beemari. Then the situation attracted the attention of the state and central government institutions, researchers, national and international agencies and others. APPL is the first and only organization who in the year 2006, for the first time actually started an authentic, detailed scientific study to document and research the status of JE victims and concentrated on the issues of victim's health, socio-economic conditions, financial status, debts, their surroundings, their habits, their living conditions, the reach of government schemes and their accessibility, follow-ups after being

discharged from hospitals, source of drinking water and their reach. For the past two years we have observed more and more cases are being reported throughout the year with the patients of increased age range. This indicates that problem seems to be different. We at APPL Trust have also modified our strategy/tools in the changed scenario with a more detailed, scientific format, continued our work through-out the whole year. We have recorded the information visually and also documented the cases in a story telling mode to arrive at the best outcome. Thus collected ground level data is being assessed, analyzed and discussed/shared with all the stake holders viz. researchers, scientists, medical professionals, N.G.O.'S, academicians, members of civil society and the government officials.

As we all know that this part of the state has been in the cruel claws of killer Japanese Encephalitis for the past more than three decades. The districts of Gorakhpur, Kushinagar, Maharajganj were the worst hit areas. These three adjoining districts connect this part of Uttar Pradesh to Nepal and the state of Bihar. The geographic areas of the three districts are 3483.8 Sq. KMs, 2873.5 Sq. KMs and 2934.1 Sq. KMs and population (census 2001) of these three districts are 3769456, 2235505 and 2173878 respectively. The data shows that the majority of the people in all the three districts reside in rural areas. The data shows that the rural population of the three districts are 3030865, 2126741 and 2063278 respectively, whereas the urban population of the three districts are 738591, 108764 and 110600 respectively. The trend shows that apart from big cities, small towns and the villages all have been equally hit and the existing health-system is not able to cope up with and provide proper and adequate services. The only super specialty hospital in this region at BRD Medical collage at Gorakhpur is still not having proper facilities and running short of required staff, equipments and medicines.

Earlier it was known that this disease erupts in the rainy season and the relation-ship between the paddy fields, pigs/wild birds and the human were the only established phenomena. All the studies and the direction of the scientific researches were drawn keeping this very fact in mind. The year 2005 was the worst hit years in Purvanchal area of U.P. and claimed above 2000 lives with JE. Since then the nature and the period of eruption of the epidemic has changed considerably. Now in last two years and also in 2011

the cases are being reported throughout the year and the age limit now has no bar. The scientists say that only 12-13 cases out of 100 showed positive to Japanese Encephalitis virus and the balance of the cases though with almost similar symptoms showed negative to JE. A new phrase for such cases has been coined and it is called A.E.S. (Acute Encephalitis Syndrome) and assumed that there may be other vectors causing the problem. They have suspected that the contaminated drinking water from shallow hand pumps and other sources may be the common cause the scientists started thinking in that direction. Vaccination and other preventive measures were under taken by the state Government under various schemes, but the graph of the affected patients remained almost the same, although the cases of J.E. are said to be comparatively less than before. The scientists guess that there may be more than 50 probable vectors and real culprits out of them are not known, with certainty. We have constantly been monitoring the ground-situation and continued to collect the data regarding the health, economic-status, reach and effectiveness of the government schemes/services and the general health of the victims/people in some of the affected areas of this region.

1.1 OBJECTIVE OF THE STUDY

The objective of this study is to investigate about conditions, facts and ground realities of the health scenario in general and in three blocks of district of Gorakhpur in particular. A comprehensive schedule has been filled to collect the primary information regarding present status of the health facilities, general health and nutrition and the effect of J.E/A.E.S. in the area. Also we are analyzing the physical, economical and social status of the victims. Their surroundings, family atmosphere, the effect of the illness and disability. It was the motive to find out the trend and probable reason of the eruption of J.E. /A.E.S. The study also aims to find out the reach and effectiveness of the present government institutions to the vulnerable areas. This study has an important objective not to point-out who was at wrong, but to highlight what was wrong and specially to focus on the needs of the society , the ground realities, the loop holes in the existing health system. It also includes to share the findings with the various organizations working on the issue as well as with the concerned Deptts. of the central and state governments.

1.2 METHODOLOGY

For the actual picture of ground realities both primary and the secondary data were collected for this study. Analysis of media reports and gist of conversations with some of the leading journalists, health activists and senior doctors also has been incorporated.

Two hundred samples have been collected for the study on purposive random sample basis. Primary information has been collected from affected villages in the three blocks of the district Gorakhpur, after conversation with victims, their family and the community, on the basis of a 35 point schedule. The main objective was to record the version of the affected people, their families and the community regarding their present physical, mental, social and economical status. Level of awareness, accessibility to medical facilities during and after decease, It is also an objective in this process to examine and record the conditions of their living conditions and food habits. It was aimed to reach the affected at their places and to record the ground realities.

1.3 Limitations of the study

Through the area affected is vast it is our limitation to take up only 200 cases. The random selection criteria were applied. It is also our limitation to rely and depend upon the data provide by the people and government authorities as no other source was available .The sample area and size may be too small, but with our limited resources, we hope that we have been able to bring out the facts and trend of the emergence of J.E./A.E.S.

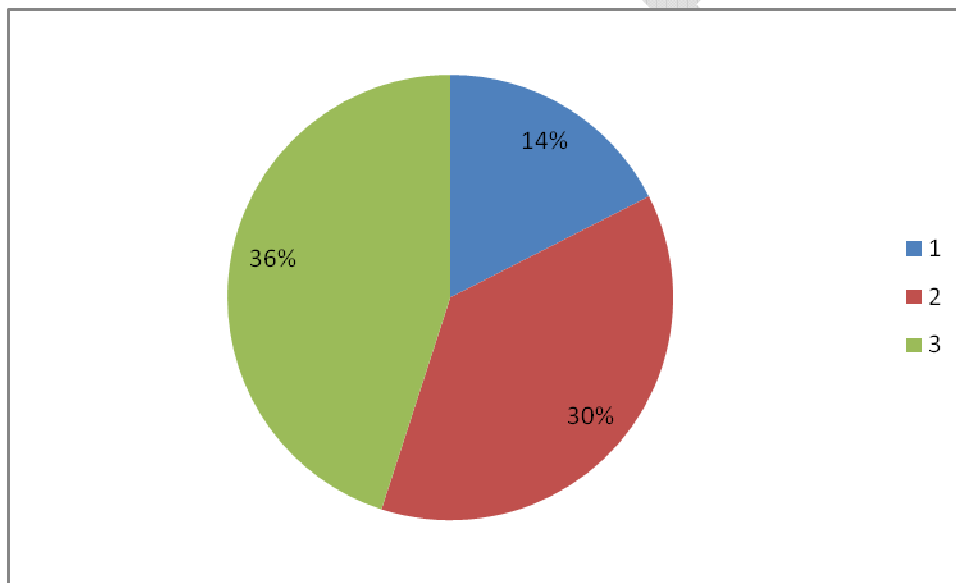
CHAPTER -2

J.E/A.E.S. Observations;

FOOD HABBITIS –

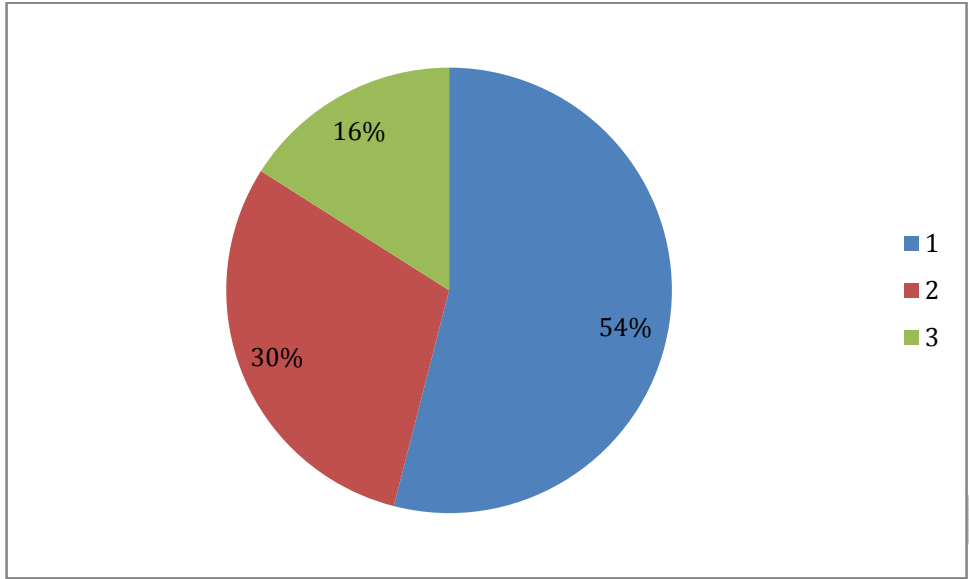
01-A The food habits in the three blocks Chargawan, Bhathat and Algatpur were found as follows. The general food intake of the habitants were taken into consideration ie. wheat, rice, pulses and vegetables. The data shows what is missing in the diet. (sample size 50 households)

Missing component	Block	No. of households	Percentage
Wheat	Chargawan	07	14%
Pulses		15	30%
Pulses and wheat		18	36%



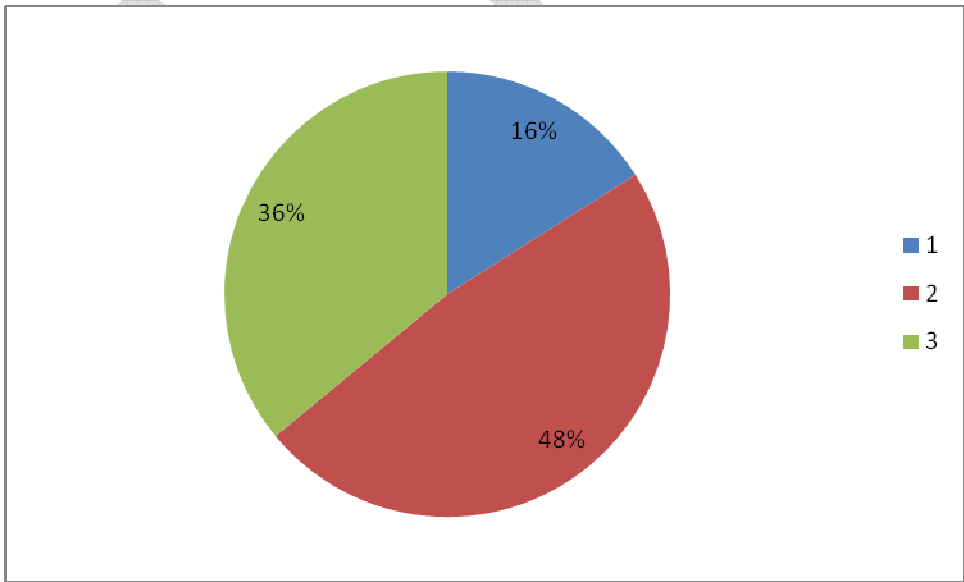
01-B

Missing component	Block	No. of households	Percentage
Wheat	Bhathat	27	54%
Pulses		15	30%
Pulses and wheat		08	16%



01-C

Missing component	Block	No. of households	Percentage
Wheat	Algatpur	08	16%
Pulses		24	48%
Pulses and wheat		18	36%



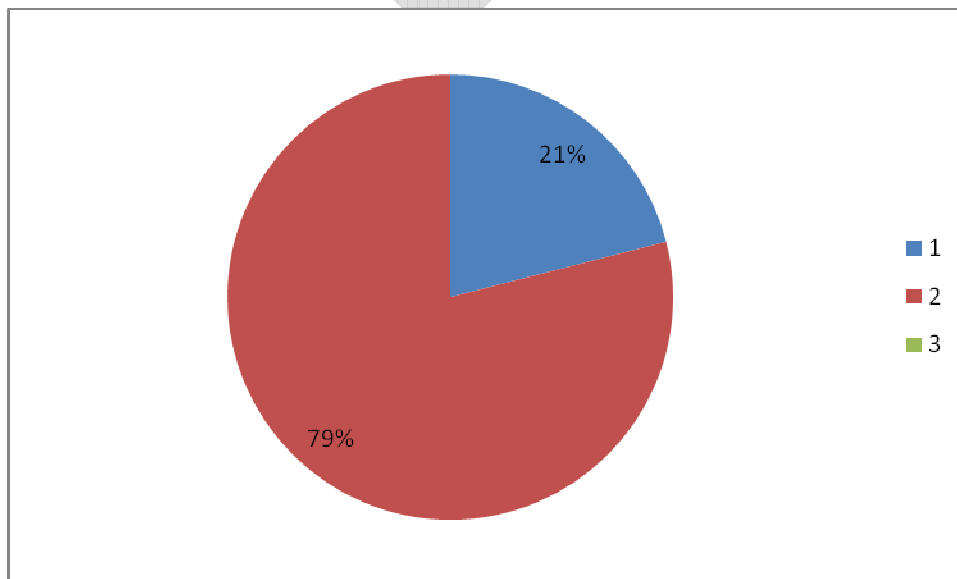
The data shows that the consumption of wheat in 34% of the households in the affected areas is missing whereas it was missing in only 16% of the households in the non effected area. The pulse consumption statistics show almost 30%missing in the affected areas compared to 48% in the non effected area. The wheat and the pulse content missing from the diet in the affected areas is 26% in comparison to 36% in the non affected areas. The absence of wheat and pulses clearly effects the overall nutritional level of the masses.

Consumption other than cereals

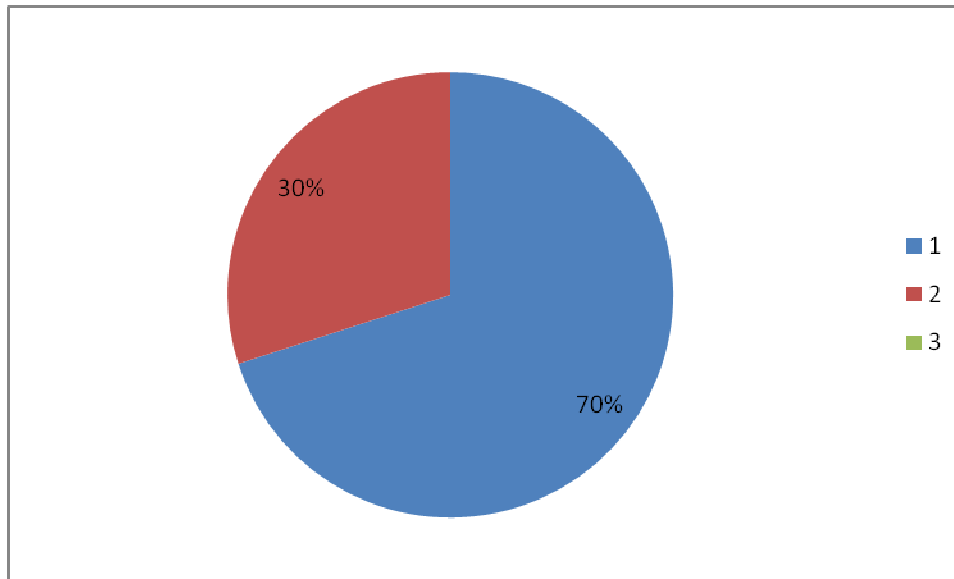
	Chargawan	Bhathat	Algatpur
Milk	10 (20%)	12 (24%)	25 (50%)
Eggs and meat	9 (18%)	10 (20%)	20 (40%)
Fruits	5 (10%)	6 (12%)	5 (10%)
Milk and non veg.	12 (24%)	14 (28%)	35 (70%)

CONSUMPTION OF LIVESTOCK PRODUCTS

In the affected area: **21%**



In the non affected area: 70%



*****Livestock products have a decisive role in maintaining the nutritional level and immunity level.**

As far as the nutrition level is concerned the trend shows that the consumption of the cereals i.e. the main components of the diet vary according to the habitat and living conditions. It is visible that the components other than the cereals add to their nutrition and general health. The consumption of pulses is less in the area where the cases are not being reported but the rate of consumption of milk, eggs and meat is far more high in these areas. This may be because of the abundance of water resources and livestock rearing (refer to point 2-A,B,C AND POINT 7)

02- HABITAT-The observations of the geographical status in the sample area in the three blocks are as follows. The observation was regarding vegetation, water logging, water resources, presence of probable carriers i.e. pigs and birds etc.

02-A

Observed presence	Block	No.of households	Percentage
Road,River,Farms	Chargawan	19	38%

Pond,Road,River Farms		03	06%
Pond,Road,Farms Piggery,waterlogging.		11	22%
Road,Farm,Piggery Waterlogging		02	04%
Road,Farm		13	26%
Pond,Road,Farm Waterlogging		02	04%
Pond,Farm,Piggery		Nil	Nil

02-B

Observed presence	Block	No.of households	Percentage
Road,River,Farms	Bhathat	01	02%
Pond,Road,River Farm		Nil	Nil
Pond,Road,Farms			

Piggery,waterlogging.	Nil	Nil
Road,Farm,Piggery Waterlogging	Nil	Nil
Road,Farm	21	42%
Pond,Road,Farm Waterlogging	28	56%
Pond,Farm,Piggery	Nil	Nil

02-C

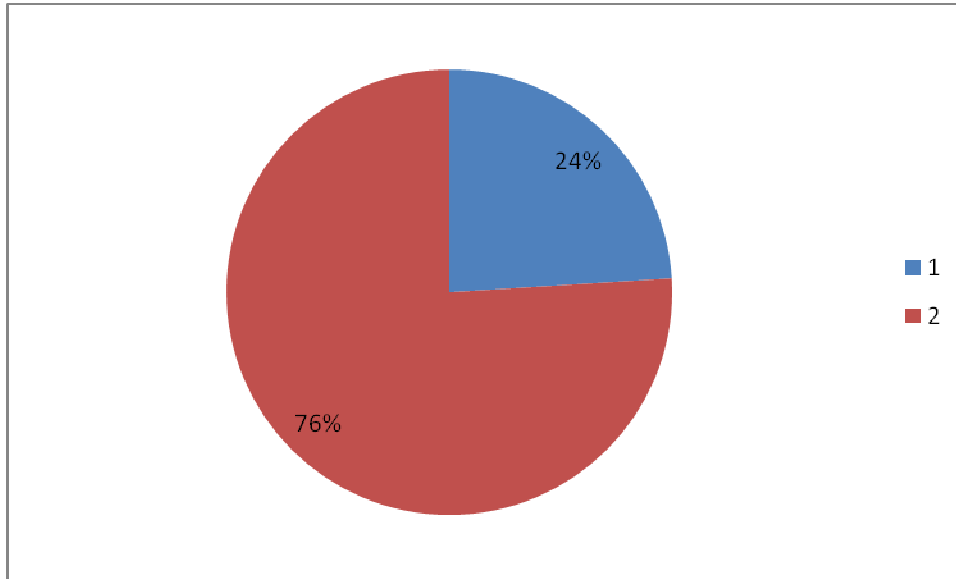
Observed presence	Block	No.of households	Percentage
Road,River,Farms	Algatpur	Nil	Nil
Pond,Road,River Farm		Nil	Nil
Pond,Road,Farms			
Piggery,waterlogging.		Nil	Nil
Road,Farm,Piggery Waterlogging		25	50%

Road,Farm	15	30%
Pond,Road,Farm		
Waterlogging	Nil	Nil
Pond,Farm,Piggery	10	20%

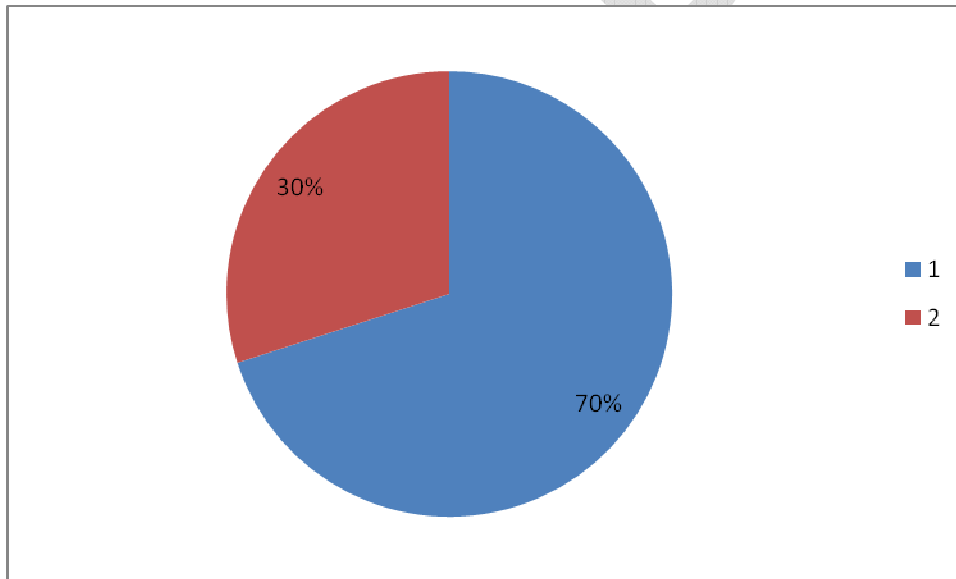
CONCLUSION;

The three blocks Chargawan,Bhathat and Algatpur were taken into consideration for the observation. The number of J.E./A.E.S. cases found in the chargawan and Bhathat blocks were and respectively. There were no cases of J.E./A.E.S. found in the Algatpur block. The data shows that the habitats in the blocks where the cases are being reported were directly related to the triangle of the pigs, farms and water logging which may be the probable ground for the suspected virus to propagate (Average about 24%).While the rest ie.the majority seemed to have no direct relation with the deadly trio (pigs, paddy fields and water logging).The habitats of the Algatpur block where no cases of J.E./A.E.S. were found related to trio of the pigs, farms and water logging (About 70%).which confirms that the theory of the pigs as the intermediate host nor the theory of shallow drinking water as the cause is not applicable there **(refer to point 03)**

****RELATION WITH PIGS,FARMS AND WATERLOGGING IN THE AFFECTED AREAS (24% DIRECTLY RELATED)**



****RELATION WITH PIGS, FARMS AND WATERLOGGING IN THE NON AFFECTED AREAS (70% DIRECTLY RELATED)**



03- DRINKING WATER CONSUMPTION:

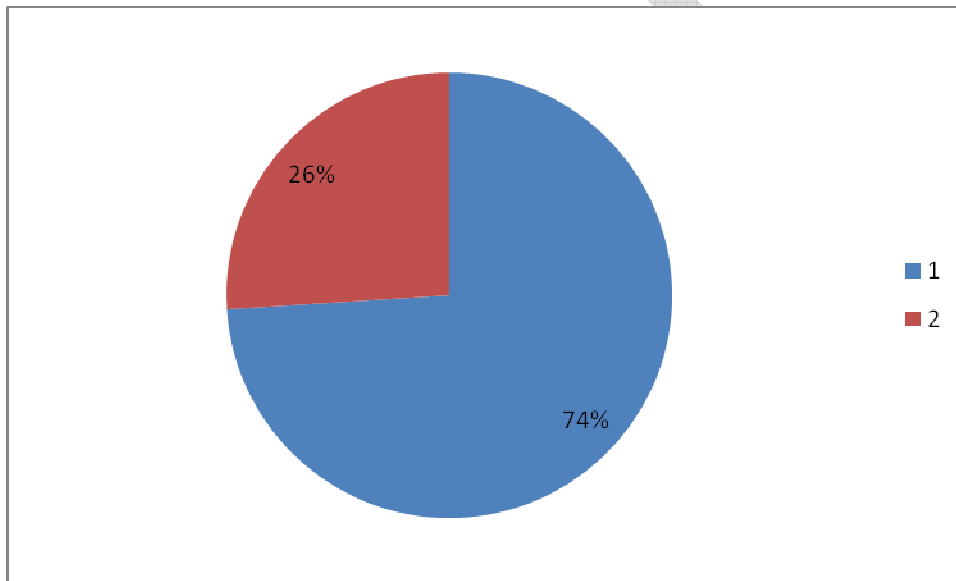
BLOCK	DRINKING WATER CONSUMPTION		
	SHALLOW	DEEP	MIXED
Chargawan	47 (94%)	02 (4%)	01 (2%)

Bhathat 27 (54%) 22 (44%) 01 (2%)

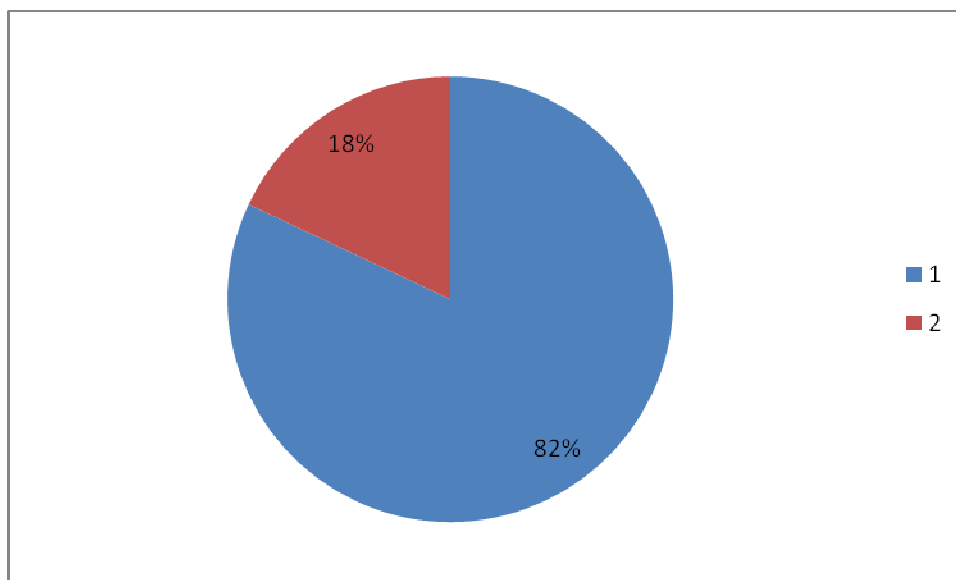
Algatpur 41 (82%) 09 (18%) Nil

The data of the consumption of drinking water from the two effected blocks shows that 74% of the habitats consume shallow drinking water with respect to 82% residing at the Algatpur block where no cases were found. **The theory of shallow drinking water as the probable carrier of the host seems to have a question mark.**

AFFECTED AREAS 74% CONSUMING SHALLOW DRINKING WATER



NON AFFECTED AREAS 82% CONSUMING SHALLOW DRINKING WATER



04-Average no. of children in the family: (sample size 50 households)

BLOCK	AVERAGE NO.OF CHILDREN	MALE	FEMALE
CHARGAWAN	05	114	136
BHATHAT	04	088	088
ALGATPUR	03	086	071

The observation shows that the female child population in the affected areas is slightly more than the male child population, whereas in the non affected area the male child population is more than the female child population.

*****AVERAGE NO.OF CHILDREN IN THE AFFECTED AREAS IS MORE THAN IN THE NON AFFECTED AREAS**

04-REPORTED J.E./A.E.S. Cases (GENDER ANALYSIS)

BLOCK	NO.OF CASES REPORTED	MALE	FEMALE
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Chargawan	08	04	04
Bhathat	07	04	03

The observation shows that 15 no of cases were reported in the two blocks. And 08 and 07 no.of Cases in Chargawan and Bhathat respectively. The trend shows that **53.3%** of them were males in spite of the female child population is more than the male child population. This points out to the fact that either the female child health ratio is better than the other or the cases of female child are not reported.

05-PREFERENCE FOR MEDICAL SERVICES AND CONSULTATION:

05-A

BLOCK: CHARGAWAN	NUMBERS	PERCENTAGE
a- P.H.C.-----	04	08%
b- C.H.C.-----	Nil	Nil
c- MED.COLLEGE-----	02	04%
d- JHOLA CHAAP-----	40	80%
e- PVT.HOSPITAL-----	04	08%

05-B

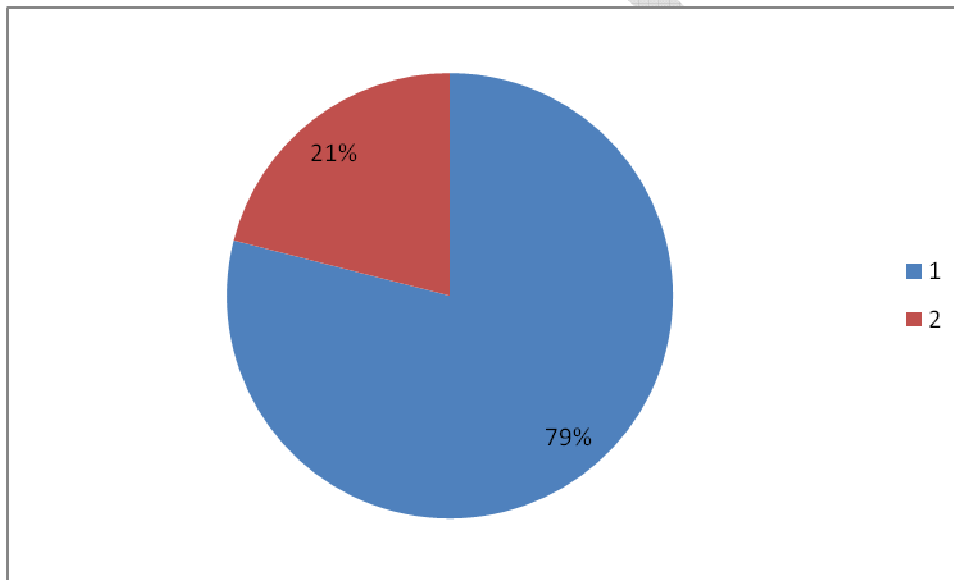
BLOCK: BHATHAT	NUMBERS	PERCENTAGE
a- P.H.C.-----	Nil	Nil
b- C.H.C.-----	01	02%
c- MED.COLLEGE-----	09	18%
d- JHOLA CHAAP-----	39	78%
e-PVT.HOSPITAL-----	01	02%

05-C

BLOCK: ALGATPUR	NUMBERS	PERCENTAGE
a- P.H.C.-----	Nil	Nil
b- C.H.C.-----	Nil	Nil
c- MED.COLLEGE-----	02	04%
d- JHOLA CHAAP-----	45	90%
e- PVT.HOSPITAL-----	03	06%

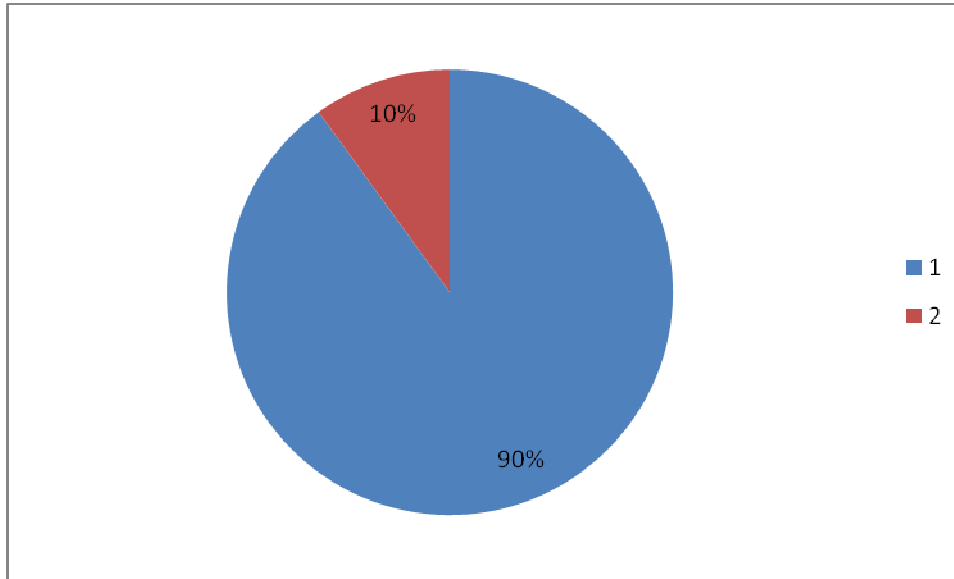
PREFERENCE FOR MEDICAL SERVICES IN THE AFFECTED AREAS:

UNSKILLED/JHOLA CHAAP: 79%,OTHERS 21% (GOVT.HOSPITALS,SPECIALISED PVT.PRACTICIONERS)



PREFERENCE FOR MEDICAL SERVICES IN THE NONAFFECTED AREAS:

UNSKILLED/JHOLA CHAAP: 90%,OTHERS (GOVT.HOSPITALS,SPECIALISED PVT.PRACTICIONERS)



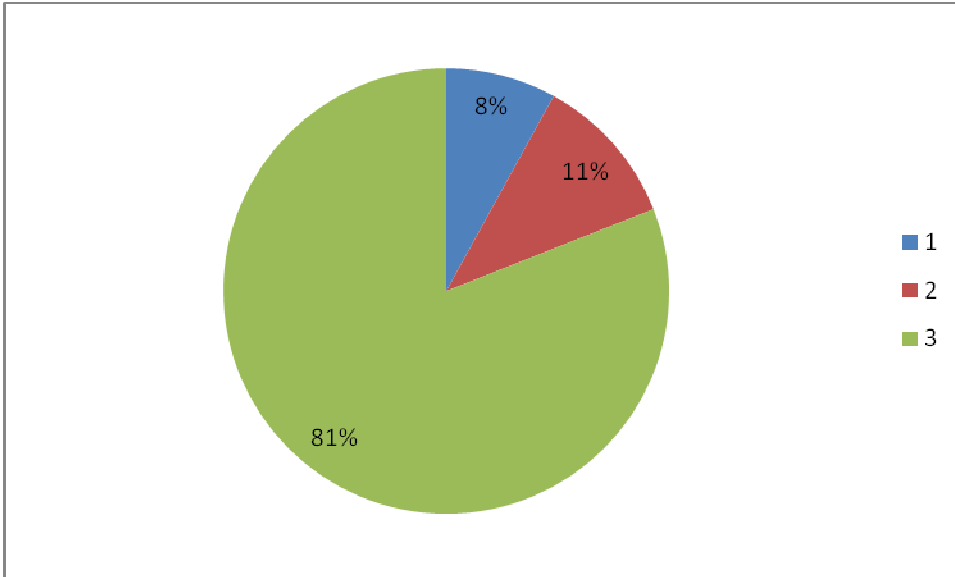
The observation shows that 79% of the residents in the affected areas still prefer the services of jhola chap doctors though the government health facilities are well within their reach (within 05 kms). On the other hand the scenario is almost the same in the Algatpur block where no cases were found, 90% of the residents there prefer the services of jhola chap doctors. The reason being the government health services/facilities are not within their reach (between 15-20 kms).

06-TIME TAKEN TO GO FOR SPECIALISED TREATMENT (in general)

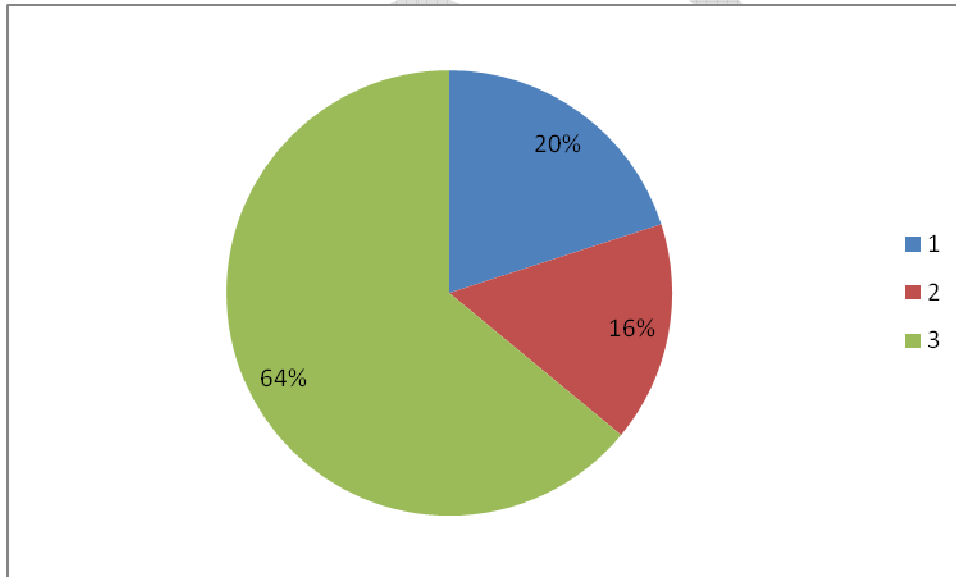
On the basis of health tracking of the children randomly

BLOCK	02-03 DAYS	2-5DAYS	AFTER 7 DAYS
CHARGAWAN	04 (08%)	05 (10%)	41 (82%)
BHATHAT	04 (08%)	06 (12%)	40 (80%)
ALGATPUR	10 (20%)	08(16%)	32 (64%)

TIME TAKEN TO GO FOR SPECIALISED TREATMENT (AFFECTED AREAS)



TIME TAKEN TO GO FOR SPECIALISED TREATMENT (NON AFFECTED AREAS)



The observation shows that the trend of getting/reaching for the specialized treatment has not changed in the past few years in spite of all the efforts of the government and non government agencies. The tools seems to be ineffective. About 73% of the residents claim that they go for a specialized

treatment after 7 days. This definitely adds up to the mortality and disability graph overall. The time period to reach for specialized advise/treatment has not changed for the past few years in spite of all the efforts to get the masses aware.

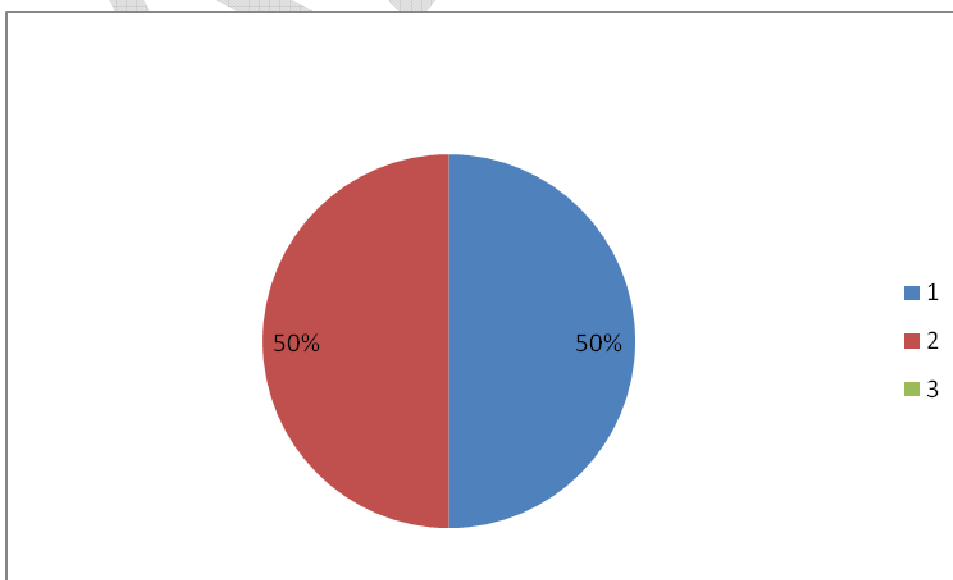
07-LIVESTOCKS AND THEIR STATUS:

The animals like cows, buffalos, goats, hens, sheeps, horses, oxes, ducks, pigs, donkeys etc are an intererall part of the rural society. They contribute concederably to the economy and the health of the rural society. It is claimed that the numberof animals in the villages has decreased to a good extent. Our observations in the three blocks of the district Gorakhpur is as below

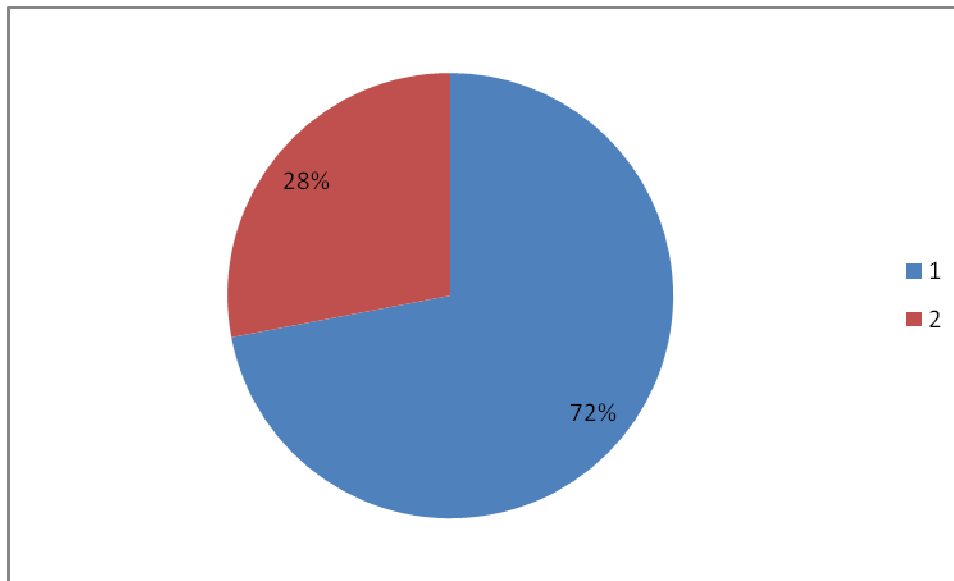
BLOCK	HOUSEHOLDS HAVING PETS	NOT HAVING PETS
CHARGAWAN	20 (40%)	30 (60%)
BHATHAT	30 (60%)	20 (40%)
ALGATPUR	36 (72%)	14 (28%)

FAMILIES HAVING LIVESTOCKS:

AFFECTED AREAS – 50%



NON AFFECTED AREAS - 72%



The above data shows that almost 58% of the households in the area of our intervention had pets in their houses, where as the rest did not. However the households having no pets also physically not very far to the animals. (go to point for the role of the veterinarians and the need of co-ordination between the veterinary and human doctors and scientists). The majority of the rural population has a habit of living with the animals, if the animals are supposed to be the carriers, a comprehensive and long term schedule should be worked out and applied to get effective results. The area not affected shows that 72% of the families have livestock's in some or the other form which has definitely helped in maintaining the nutritional value and livelihood of the masses.

09- VACCINATION STATUS OF THE ANIMALS;

*** DATA OF 50 HOUSEHOLDS IN EACH BLOCH HAVING LIVESTOCKS

BLOCK	VACCINATED	NOT VACCINATED
CHARGAWAN	28 (56%)	22 (44%)
BHATHAT	25 (50%)	25 (50%)

ALGATPUR

31(62%)

19 (38%)

The observation in the three blocks shows that 47% of the animals in the effected two blocks were **not vaccinated**, whereas only 38% animals in the Algatpur block where no cases were found where found not vaccinated. This data clearly indicates the relation and role of animals in the process.

***** VACCINATION OF ANIMALS MAY BRING THE DIFFERENCE**

10- AWARENESS STATUS: (an observation on the basis of dialogue with the residents of the area)

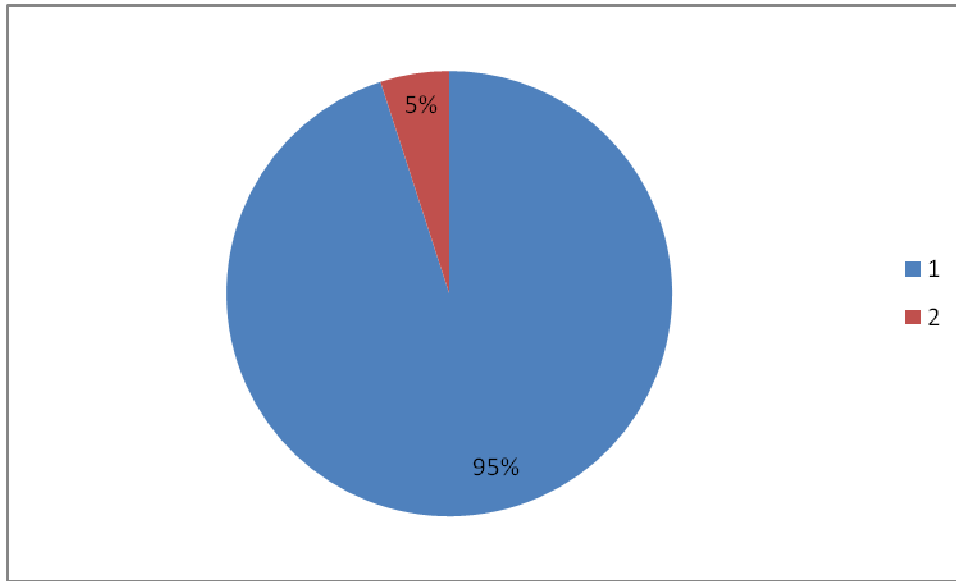
The awareness status among the masses in both the effected and the non effected areas was almost the same. The majority of the residents did not knew about the cause ,prevention and primary symptoms of J.E/A.E.S.The effective and qualitative reach of the health services was not there. The quality of care and the counseling part should be improved .Stress should be laid on the preventive approach to get better results . The message and the tools of the awareness seemed not to be properly propogated. In spite of spending a good sum of money the message is not conveyed properly. The tools applied for the past several years have not paved good results and there is an immediate need of a comprehensive long term planning keeping in view the actual ground realities and re analyzing the effectiveness of different stake holders.

***** AWARENESS STATUS NOT CHANGED INSPITE OF ALL THE EFFORTS**

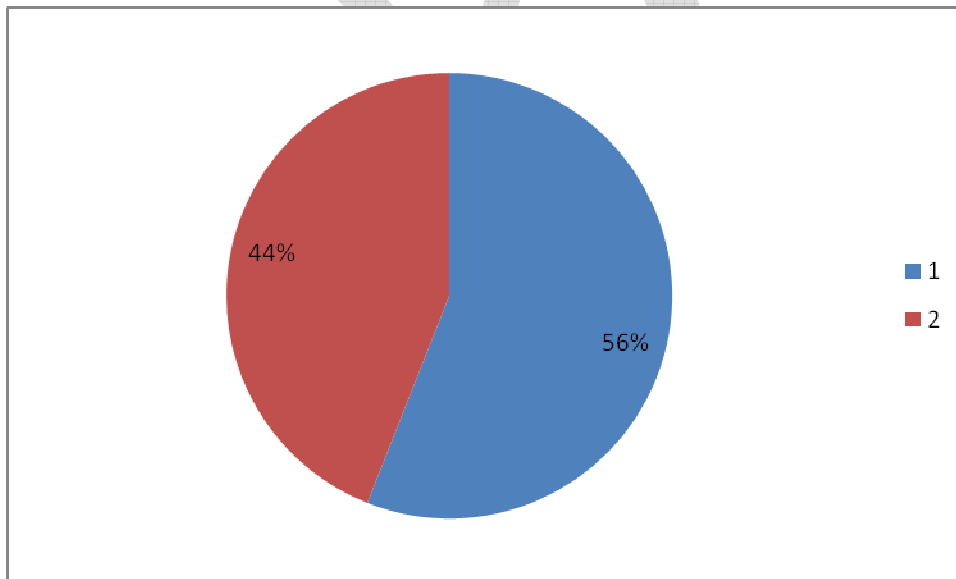
11-FARMING PATTERN;

BLOCK	RICE FARMING	OTHER CROPS	NO FARMING
CHARGAWAN	50 (100%)	Nil	Nil
BHATHAT	45 (90%)	04	01
ALGATPUR	28 (56%)	12 (24%)	10 (20%)

PADDY FARMING IN THE AFFECTED BLOCKS



PADDY FARMING IN THE NONAFFECTED BLOCK



The trend of the observation shows that almost 95% of the farmers/residents in the affected areas undergo rice cultivation, whereas only 56% go for rice farming in the area where no cases were reported. The

trend shows that 20% of them were landless in the area whereas only 2% landless are there in the affected areas. The common thing between the two areas is that the majority of them are small and marginal farmers.

12-DIAGNOSIS AND LINE OF TREATMENT;

Japanese encephalitis previously known as **Japanese B encephalitis** to distinguish it from von_Economo's A encephalitis—is a disease caused by the mosquito-borne Japanese encephalitis virus. The Japanese encephalitis virus is a virus from the family Flaviviridae. Domestic pigs and wild birds (herons) are reservoirs of the virus; transmission to humans may cause severe symptoms. One of the most important vectors of this disease is the mosquito *tritaeniorhynchus*. *Japanese encephalitis* has an incubation period of 5 to 15 days and the vast majority of infections are asymptomatic..

Severe rigors mark the onset of this disease in humans. Fever, headache and malaise are other non-specific symptoms of this disease which may last for a period of between 1 and 6 days. Signs which develop during the acute encephalitic stage include neck rigidity, cachexia, hemiparesis, convulsions and a raised body temperature between 38 and 41 degrees Celsius. Mental retardation developed from this disease usually leads to coma. Mortality of this disease varies but is generally much higher in children. Transplacental spread has been noted. Life-long neurological defects such as deafness, emotional lability and hemiparesis may occur in those who have had central nervous_system involvement. In known cases some effects also include nausea, headache and fever, vomiting and sometimes swelling of the testicles.

The cases here reported are taken up as acute encephalitis syndrome with specific symptoms and the government data shows that only 12-13 cases out of 100 show J.E.+VE after the tests. The primary symptoms are hereby the same. The vectors of A.E.S. are still not known.

MEASURES TAKEN BY THE GOVERNMENT AND THE NON GOVERNMENT AGENCIES:

PREVENTIVE; The preventive measures for eradication of this disease seem to be not enough and scientific. The ground reality shows that all the measures taken up for the awareness building and to minimize the probability of the occurrence are ineffective due to improper implementation and unscientific approach. The approach of the government seems to be more inclined towards the curative rather than preventive. There is no such effective mechanism to monitor the health and nutrition of the suspected

targets in the prevalent areas in terms of encephalitis. The different agencies lack coordination among themselves which affect. the overall output.

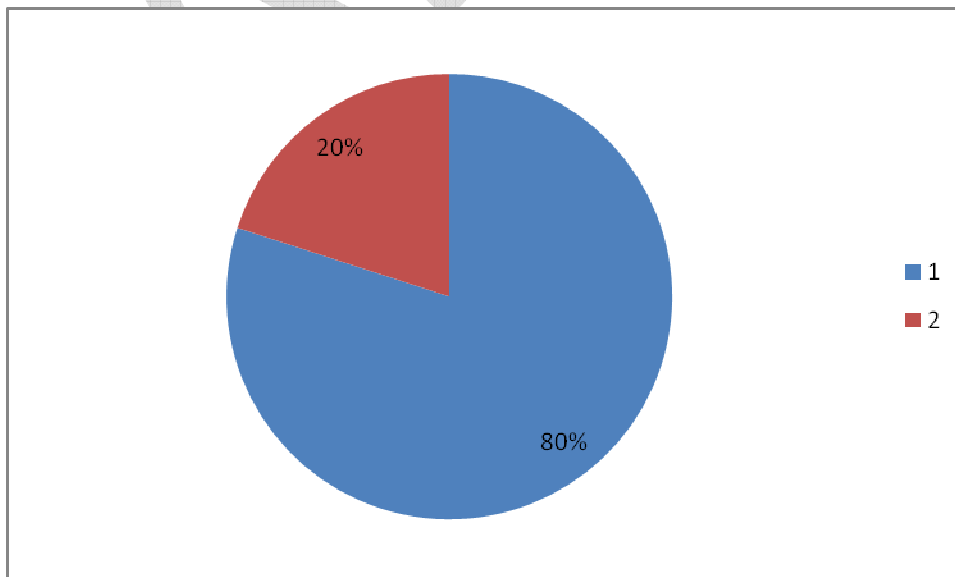
CURETIVE; The planning and the focus of the government health agencies seem to be more inclined towards the curative part. The major part of the efforts and the resources are pooled up for the same. Huge sum of money has been spend on building up the infrastructure which is not in use to its full potential. Though the planning is excellent, the implementing mechanism seems to be irresponsible and insensitive hence effecting the healthy output.

The eastern part of the state is suffering from this epidemic for more than three decades but the fact remains the same that there is only one specialized center for handling the large number of patients flowing from all over the eastern Uttar Pradesh ,adjoining Bihar and Nepal.The government claims that the District Hospitals and the C.H.C's are also equipped but it is not visible. Still there is confusion among the medical fraternity about the use of drugs and line of treatment.

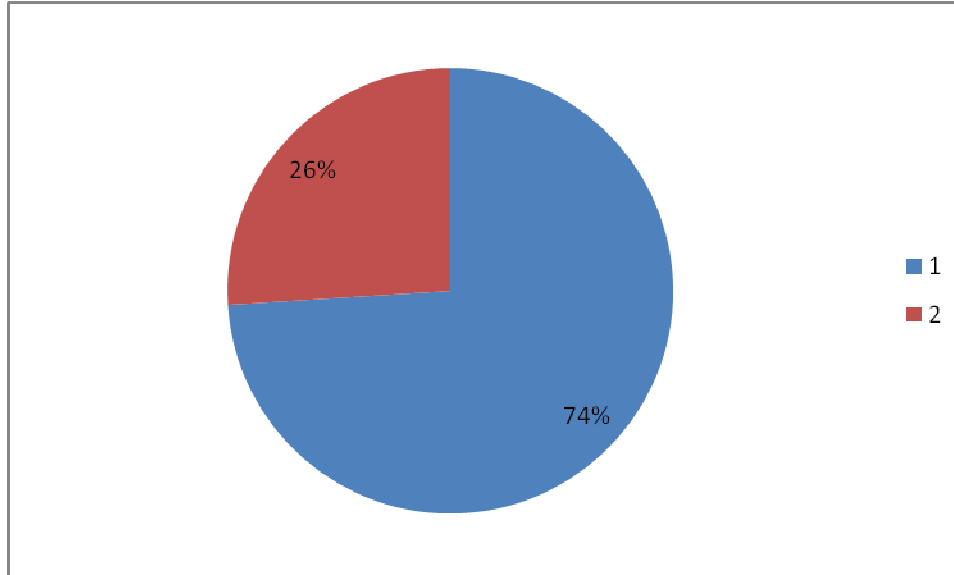
13- VACCINATION STATUS:

Although the government claims above 90% of the children (1-15 years) to be vaccinated in the five most effected districts the cases are regularly been reported from the same. Our observation shows that 68% of them in Chargawan,92% of them in Bhathat and 74% of them in Algatpur blocks were found J.E. Vaccinated.

J.E.VACCINATION IN THE AFFECTED AREAS: 80%



J.E.VACCINATION IN THE NONAFFECTED AREAS: 74%



14- DROP OUT SCENARIO:

The trend for the past few years shows a drastic change in the climatic conditions. This particular disease was considered to have a direct relation with the rainy season and the time period was specific. For the past two years it is visible that the cases are being reported throughout the year, for the same reason it is suspected that something other than the killer trio (human, mosquito and paddy fields) may be the cause or the carrier. It is evitable that only 12-13 cases reported are being found J.E. positive. Others are said to be of Acute Encephalitis Syndrome for which the vectors are unknown.

15- DISABILITY SCENARIO:

For more than three decades this disease has left behind thousands of disabled. The official data shows that almost 30-35% of the affected are left physically and mentally disabled. If we consider the said ratio we find that about 1,25,000 affected are left behind with disability in the past three decades in some or the other form. This segment should be in the most

vulnerable group and special stress on their treatment and rehabilitation should have been designed but the ground realities show that we don't even have the data of the disabled due to J.E.

RECOMMENDATIONS:

- 1- A long term program with a scientific approach to monitor the nutritional level of the vulnerable group and its implications in terms of the epidemic should be designed.
- 2-Coordination between different departments of the government such as health, veterinary, environment and social welfare should be assured. and a collective resource group should access and design a long term comprehensive program and design to fight against the deadly disease.
- 3- Safe and pure drinking water should be made available to everyone
- 4- Preventive measures to be taken in the vulnerable areas should be scientifically redesigned and executed.
- 5- The untrained /jhola chaap doctors should be empowered with knowledge and information's to assure the proper and timely referral of the patients for specialized advise.(As we cannot ignore their presence and the role in the field)
- 6- Planned simultaneous vaccination of humans and animals should be done in order to minimize the risk factor.
- 7- As the livestock's play an important role in insuring the livelihood and nutritional status of the masses. The role of the veterinarians should also be defined and assured in the whole process. It should be kept in mind that the pigs, horses and the wild birds are the known carriers and the others may be probable carriers.
- 8- The tools for awareness should be redesigned with a scientific approach keeping in mind the specific roles of different stakeholders.
- 9- A nodal officer at the district level directly responsible to the effective design and implementation of strategy be placed which will help work an affective surveillance, better coordination network and make the system more accountable.
- 10-*A humane and effective physical, mental and social rehabilitation plan for the new army of disabled should be made after their identification and*

classification. A programme should be initiated to make them assets rather than liability.

11-Money sanctioned and stationed at various levels by the government should be fully utilized in an accountable manner.

.... THE NEW BEGINING

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