



## ICT Approach and its Effectiveness for Sustainable Rural Development

### KEYWORDS

RFID, Tag, Reader, ZigBee, Auto ID, Transmitter and Receiver

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A step

Towards conceptual vision.....

Information Communication Technology (ICT) is a world-wide popular terminology in the present era. It's have global domination in development scenario specially to enrich or strengthen the resource use and uplift the living standard of rural poors. Basically it is an instrument or device to communicate the information beyond human capacity. India is the country of villages it's development depends on proper communication network that would be able to serve the interest of common man as well as to meet the requirement of government and voluntary agencies who involve in development work. In rural environment, many problems raise due to communication gap. Assessing the significant role of ICT, Dr. Manmohan Singh, Prime ministry of India said that "The Technology is quickly bridge to meet the gap between rich and poor. This may change our school, colleges, homes and factories". Ex.P.M.Shri A.B.Vajpayee also added the term "Jay vigyan" in the well known slogan "Jai Jwan, Jai Kishan".

Infect "communication" is the core part of ICT. That is the process of transmitting and sharing the ideas, opinion or facts etc. Information with "common understanding" between two parties known as sender and receiver. Here, subjectivity, purity, accuracy, material's reliability, two way flow, promptness, caring, easy processing or user's familiarity with the system, desired and time being output at reasonable cost, resources situation and socio-psycho force i.e. perception, values, personality, learning or level of understanding, feelings, emotions and environment factors etc. are the landmarks indicators to achieve the determine goals through ICT with assurance survival and effectiveness. Thus ICT is not only a technical term but concern with human being. It is an approach for proper communication to meet expectation of sustainable or integrated rural development. It's structure has complete social relevancy committed to bring faith, prosperity by abolishing the darkness of blind faith, rigid harmful traditional practices at grass-root level. Development friendly ICT system may govern by these word 'SMART' that stand as

S = Simple

M = Moral, Moderate & Mental Revolution

A = Accountability, Accuracy

R = Responsibility, Reliability and Relevancy

T = Transparency and Truthfulness, Timely

### Thrust area of rural development in India concern with ICT

Knowledge updating among common man is an essential element to assure success according to fast changing environment of development world. Some thrust areas have been identifying here in which ICT may contribute.

### A. Economic Area :

India rural economy depends on primary agriculture sector. Here production and natural climatic related technical information require with latest data. The problem exit of proper rural marketing such as input availability at reasonable cost, timely and market the agriculture produce at optimum price. The challenge is to maintain the proper information flow with farmer and concern government or non-government agencies. Secondary sector covers the area of rural cottage & small scale industry. This is facing the problem of sickness due to lacking of proper channelization of the information. The service sector consist the need of human resource data bank that would be match with opportunity sources at grass-root level as well as outside. Developing information communication networking flow, the sustainability may bring through resources mobilization towards efficiently use. This will also be the base for development planning and implementation in backward rural area.

### B. Support facility and development management area :

1. Various development agencies need accurate and reliable data base to plan, organize, coordination and control the efforts made for people welfare. To restrict the manipulation at work is another challenging task for better performance.
2. Actual demand and assumption prediction is prime requires for proper infrastructural improvement.
3. To keep in touch with needy groups and individuals in rural area. To attach them with the various facilities and development programmes is must to bring desired change in their quality of life.
4. Control quickly on antisocial elements and natural or climatic disaster through manage it before at & after of its creation.
5. Integrate and direct the various development efforts properly towards goals achievements.
6. Assure availability of various documents timely at lower price such as revenue or land/resource records etc.
7. Proper identification of beneficiaries and concurrent updated record is the prime condition for development of poor.
8. To inspire research and development activities and prevent the mismanaging practices of this filed and assure the survival of present as well as future.

### C- Communal Harmony and brotherhood development.

1. In rural environment many socio-psycho problems creates in the lacking of proper information. Misunderstanding among the people as well as development agencies is still exist as barrier.
2. Reduce the level of corruption and exploitation to bring awareness through ICT implication.
3. Emotional, feeling and positive vision can get maturity among the people by clarity of various aspect in social living through ICT network.

### Problems.

Some hazards are indicating blow that effect the status of ICT

implementation and adoption rate adversely in rural India.

### 1. Lower level of education and awareness

Rural mass especially backward classes and women segment of the society or the targeted beneficiaries are not aware properly about ICT use, utility and its impact.

### 2. Negative thinking

People have negative thinking about ICT use regarding self-operational ability, costing aspect and also have a threats or hesitation incase of failure in application.

In other words, lacking of forward vision and initiative attitude is the major cause of lower acceptability of the system.

### 3. Irregularity of support infrastructural facility

ICT use depends on light, hardware and software maintenance etc facility. In rural remote area most probably the availability of these supporting means are not regular.

Beside of this the distance from information center and service provide timings effect the interest of local people towards ICT system.

### 4. Problems of languages and specific symbol

The system consist universal language while people expect local tone. They fear to cheat by other clever hands who are involve in the service of ICT.

5. Noise, part-time availability, long structural scalar chain, overload information, climatic hurdles, networking disturbance and break down, cultural barriers towards community health, belief and other development issue may be responsible to discontinue the flow of operation in the system.

6. Rigid perception, poor conception and lacking of proper clarity before use effects the rate of adoption.

### 7. Lack of poor coordination

Due to avoidance of time management and coordination among sharing authority or agencies as well as support linking system, the utility rate of ICT become down at grass-root level in the sense of goals achievements.

8. Gap between the status or mentality of officials and local people

This cause prevent the interest of common men respectively the use of ICT system.

9. Lacking of relevancy of information set and less active involvement of last users in its determination influence response rate of the people towards ICT adoption.

Besides of this many time in the content of information, the problems of imbalance in local concept and modernization or combination of forward vision with traditional useful practices are still due or waiting for practical solution.

10. Lacking of proper vision of sustainable rural development in information generation as well as lacking of an integrated package of input output effect it's efficiency.

11. Lack of training and capacity building before its use.

12. Socio-economic, political willing and psychological forces also lead the adoption rate of ICT use.

### Suggestion

In the age of technological advancement the ICT is a paramount feature in development world. Yet some suggestion are quite considerable to increase the level of utility and serial acceptability for effective implementation of ICT. To hit the target or benefited the needy segment at grass-root level the following step would bring stability and deserve ness in the way of sustainable rural development.

1. To inspire and motivate the people's participation through sharing knowledge towards ICT use. The data

bank should be mange in accordance to frequency rate and desired quality or quantity of demand. It should preserve the common interest and help the people directly as well as assist to various development agencies. It must also commit to uplift the weaker section of the society. Management by objective approach may prove an effective tool in this regard.

2. The output of ICT should informatics only but also as nut-cell solution of fundamental problems of rural mass. It should be able to produce a compact guideline for them
3. Integrity and link connectivity of ICT should be perfect and supported by two way communication flow up to local level.
4. Quality, quantity, accuracy, social accountability, reliability and concurrent updating in ICT data system should be maintain properly in the interest of common man. Honest & developed efforts, sharpness, activeness and feedback assurance is essential for it's efficient and effective flow towards rural poor.
5. ICT system's design and process should be simple and match as per need assessment and under paying capacity of rural poor.
6. The content should be able to meet their socio-economic, cultural and market need. Village resource profile includes HR inventory and opportunity data bank with current status. It should process and communicate timely at source.
7. Demonstration and knowledge imparting is prime condition for its successful implication.
8. The mental revolution about ICT use among the group of poor is compulsion to assure the fruitful result.
9. Ensure continuity in auxiliary support facility's flow and its proper maintenance at local level.
10. Need to change the behavior of official at the time of interaction with rural mass.
11. Training and education extension efforts may helpful to create favorable environment or awareness building for ICT use as well as to bring desired positive change in perception, values, attitude and in personality attribute.
12. Avoid credibility gap and improve listening skills. If require, then help the people " to be understood the communicated things" properly.
13. Political willingness towards dedicated rural leadership may play an significant role for remarkable adoptability of ICT.
14. Transparency maintenance is a valuable step to get desired result for sustainable development. So it should not limit to clear only " what is to be done" but also clear that "why should be done" this approach will lead an effective communication flow.

### Conclusion

In the part of conclusion we wish to share our experience with our wise, progressive and aware readers. The success of science, technology or any system depend in it's social concern and mental revolution of society regarding to accept or moderate the change. The concept is quite related with the benefit and welfare of weaker section or needy segment of the society. About wide application of technological use and its fruits, the father of nation Mahatma Gandhi said "A technology may not be useful, if limit in few hands, it will more dangerous and responsible for exploitation of mass".

Second major need is to create favorable environment for its adoption and use. An eminent leader of scientific management school Mr. F. W. Taylor strongly advocated the application of "Mental revolution" to assure the success of any sign. It means public or user awareness and their positive attitude toward acceptance is must.

At last but not least, it has proves that ICT is major tool for

optimum utilization of hr, natural & physical resources and able to meet the challenges of present and future with survival. ICT would be establish as a "Path Finder" to search the solution of multi status problems concerning with communication. It will act also as milestone for sustainable rural development in India.