

PROJECT PROPOSAL ON IMPACT ASSESSMENT OF VILLAGE RESOURCE CENTRES (VRC) IN ACHIEVING MILLENNIUM DEVELOPMENT GOALS

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The overall objective of this project is to assess the impact of Village Resource Center(VRC) and its services on the rural people and proposing a framework to achieve millennium development goals and to map the role of VRC's in helping to achieve Millennium Development Goals (MDGs), building on the global development objectives and indicators already developed by the United Nations. Building upon the foundation provided by the MDGs, a qualitative as well as a quantitative analysis will be done to explain the role of ICTs in VRC in support of each one of the MDGs. Documented case studies and examples will be used as well as an analytical grid, defining broad ICT goals relating to the MDG targets[3]. ICT goals can be developed in support of each MDG. However, the task of developing specific ICT indicators, and eventually targets against which progress could be measured, is a more difficult challenge. Not only solid data is required but a rationale needs to be developed to ascertain the relevance of every ICT indicator to the MDGs. Such work should be based on the agreed-upon goals, hard data available in various organizations, and supported by anecdotal evidence coming from the field. For example, while it is comparatively easy to measure telecommunications infrastructure and investment, it is much more difficult to assess the human dimension of ICT for development (the nature and quality of human capital, the skills and capacities of citizens)[4].

Keywords: VRC, ISRO, e-Governance, NGO, Millennium Development Goals

1. INTRODUCTION

The VRC sector is one of the most important sectors in augmenting e-governance and in achieving millennium development goals. For capacity building and building a knowledge society, few governments along with private partnership opened up various community centers providing VRC at the doorsteps of rural people. ISRO as one of the recent initiatives - for delivering the variety of space technology enabled products and services directly to the grassroots - has embarked upon Village Resource Centre (VRC) programme to facilitate overall development at village/ community level. The VRCs, being implemented in association with selected NGOs, Trusts, Universities/ institutions and Government agencies, are envisaged to serve as a prime delivery system in the rural areas, for the services such as: vocational/ non-formal education; healthcare; local weather; environment; advisories on agriculture, fisheries, livestock; livelihood support; etc. Further, with the participation of the stakeholders at local/ different levels, VRCs will also be able to provide a variety of other services such as, information on price, market, pests & diseases, govt. schemes, e-governance related, job opportunities, and a host of other VRC based services, and act as local helpline[1]. ISRO has opened up around 500 Village resource centers in

different parts of India. The VRC project aims at transferring the benefits of the space and IT directly to the communities at the grass root level to uplift the life and livelihood of rural areas. One of the main aims of the VRCs is to use developments in the field of IT and space technologies to empower rural communities by enabling greater capacity building and awareness. The project aims at increased productivity and sustainability of natural resources, human development and economic sustainability.

Millennium Development Goals

The Millennium Declaration was adopted by 189 world leaders who committed to – “free all men, women and children from object and dehumanizing conditions of extreme poverty by the year 2015. For the purpose the major goals set were promotion and achieving universal primary education, improve maternal health care, eradication of extreme poverty and hunger, promote gender equality and empower women, reduce child mortality, combat HIV/AIDS, malaria and other diseases, ensure environmental sustainability and to develop a global partnership for development. These goals have given a direction for development among the countries, particularly the developing nations. Our country being a signatory for these Millennium development goals has a committed responsibility to achieve this task[2]. While the formula for success must include many factors, ICTs will play an essential role. Indeed, harnessing the power of ICTs can

contribute substantially to realizing each and every millennium goal; either directly (e.g. through greater availability of health and reproductive information, training of medical personnel and teachers, giving opportunity and voice to women, expanding access to education and training) or indirectly (through creating new economic opportunities that lift individuals, communities and nations out of poverty.)

Millennium Development Goals & VRC Concept

Technology plays a prominent role in development initiatives particularly more so in recent decades. Space technology and Information communication technology are state of art technologies of modern civilization. But unfortunately the benefit of these technologies never or rarely reaches the poor. The benefits that technology brings normally reaches or pocketed by the few affordable rich, further widening the poverty gap and also limiting accessibility capabilities within the community. Information and Communication technology with space technology component can play a tremendous role in the development perspective. It can be a tool to disseminate the knowledge flow of any kind to the rural masses; acting as a catalysts to the growth process. ISRO, has envisaged the VRC concept to enhance the knowledge of rural community of the country and thus to empower them.

The VRCs can help on achieving millennium development goals by:

- a. Spontaneous flow of information on health, education, etc., to the grass-root-level.
- b. It will empower the poor and needy as they will also have an access to these.
- c. Spread education, issues of equality and rural livelihood.
- d. Promotion campaigns – particularly health and sanitation related.
- e. Inter linking of development process.

Above all empowerment of the people through awareness and dissemination of knowledge as 'Knowledge is power'. They can play specific roles in fulfilling each of the Millennium Development Goals in their own way. The objective set or perceived for the VRC, project is much akin to these millennium goals. The VRC project can be envisaged as tool to achieve there millennium goals in which the space technology plays a deciding role. Below are some examples to illustrate the advantages of using ICTs through VRC's in various sectors:

Education: Distance learning offers students greater opportunity to learn when they can get education online from recognized universities;

Health: e-Health and telemedicine overcome the constraints of distance and allow contact of health workers and patients from remote and rural areas with referral and specialty hospitals;

Natural Resources Information: Information on land and water resources extracted from satellite images is organised in Geographical Information System (GIS), and provided to the villagers through the VRC. The local farmers, availing the support of the skilled/trained personnel managing VRCs, utilise this information for better management of their land resources;

Environment: There is greater environmental awareness, because information about the weather and the environment is more readily available. It can help to predict and prepare for environmental disturbances and catastrophes;

Media: Greater awareness of factors affecting individual well-being, and information in real time on world events by electronic media;

Decision Support: Greater ability to simulate and consider all factors in decision-making;

Online Transaction Processing: ICTs speed up and ease transactions of all types, and are especially important for business and government transactions;

Commerce and Industry: ICTs enhance, improve and facilitate trade. ICTs enable e-commerce and make markets more efficient and global. With ICTs, all markets have the potential of being international or of being selective, depending on their requirements.

Urgency of the Project

It is not enough to just provide VRC services to the rural people to improve their livelihood and believe that it is going to build a knowledge society and improve their livelihood but it is equally important to see that the people for whom the VRC services have been started are getting benefitted through it. However, there is a blatant lack of empirical data (mainly quantitative information) to verify this link. For this we need to do the impact assessment of the projects at regular intervals to propose ways and means so that the objectives for which VRC's are opened are achieved.

Objectives

- To examine the satisfaction level of rural people towards existing facilities provided by VRC's.
- To examine the utilization of services provided by VRC's.
- To suggest measures in improving the services provided by VRC's in augmenting E-governance and the other services provided.

- Proposing a framework to achieve millennium development goals through VRC's.
- VRC's haven't been able to achieve millenium development goals.

Hypothesis

In consonance with the aforesaid objectives the following Null hypothesis has been framed for verification and confirmation.

- Rural people are not satisfied with the existing services provided by the VRC's.
- VRC's have not been able to build a knowledge society which could help in augmenting e-governance and achieving millennium development goals.

Major Scientific Fields of Interest

E-Governance, e-health, ICT in agriculture and general information.

Unit of Analysis

Unit of analysis can either be the entire 21 states in which ISRO have opened VRC's but owing to the limited budget and manpower, we have divided whole of India into four zones i.e North, South, east, west. We would be studying the impact in northern zone, which comprise of 4 states i.e Himachal Pradesh, Uttarakhand & Uttar Pradesh and Delhi, in which VRC's have been opened.

North India



Research Methodology

No of VRC's in Himachal Pradesh = 30

No of VRC's in Uttarakhand = 19

No of VRC's in Uttar Pradesh = 30

No of VRC's in Delhi = 2

Using randomised sampling 10 VRC's will be selected and 100 users from each area surrounding VRC's will be selected.

From the above stratification we have total 17 sampling units for the selection of the respondents:

$$\text{Sampling Units} = \text{Himachal} (30 \times 20\%) = 6$$

$$\text{Uttarakhand} (19 \times 20\%) = 4$$

$$\text{UttarPradesh} (30 \times 20\%) = 6$$

$$\text{Delhi} (2 \times 20\%) = .4 = 1$$

So a total sampling units taken = 17

Total Sample size = 17 x 20% of (total population of area surrounding VRC).

Time of operation of VRC = More than one year

Sample Features

Out of 4 states, we would be selecting states on the basis of border state, hilly and plain areas. So we select all four states Himachal Pradesh, Uttar Pradesh, Uttarakhand and Delhi.

North= Himachal Pradesh, Uttar Pradesh, Uttarakhand & Delhi.

Himachal Pradesh

VRC's in Himachal Pradesh are supported by NGO Himachal Pradesh Voluntary Health Association (HPVHA) and Y.S. Parmar Horticultural University acting as the nodal organization in H.P. There is a total of 30 VRC operating in all the 12 districts.

Uttarakhand

(VRC) Program is in partnership with NGOs namely Himalayan Institute Hospital Trust, Dehradun, Sri Bhuvaneshwari Mahila Ashram (SBMA), Tehri, Central Himalayan Rural Action Group (CHIRAG), Nainital and Institute of Himalayan Environmental Research and Education (INHERE), Almora. Indian Institute of Remote Sensing (IIRS), Dehradun is the regional coordinator for all of Uttarakhand's 19 VRCs, and HIHT is the nodal centre as well as the expert centre in tele-medicine and tele-education. G.B. Pant Agricultural University, Pant Nagar, is the expert centre for tele-agriculture (agro-advisory). There are total of 19 VRC's in 13 districts.

Uttar Pradesh

There are 30 VRC's in Uttar Pradesh supported by IIIT-A, NH & DA.

Delhi

There are two VRC's in Delhi supported by IIIT-A & DA.

A total of 17 VRC's will be chosen at random for the sampling supposing that they represent the people of each zone. A sample of 1100 people (100 from each area around VRC) belonging to Farmers, Panchayat people, VRC operator and rural people (non farmers), will be selected through Stratified sampling, which will take lot of time. The village/locations from where the respondents will be interviewed will be done on the basis of distance of the location from the VRC center. One location (city/town/village) will be chosen which is near the VRC center and one which is remote. The number of respondents from 'far' or 'near' location could be proportionate to the number of respondents visiting the VRC center from that location. For example, if in a delivery center about 70 percent of the total

respondents are from a near village, the total sample (for that delivery center) may have a 70 percent representation from that village. Discussions with the operators at the delivery center may provide an estimate of proportion of users that come from different locations. The respondents will be administered the survey questionnaire personally. They will be asked to answer the statements on a likert scale ranging from never/rarely to very frequently/always (1 – 5). The personal particulars will be sought including their age, gender, community (whether farmer or non-farmer etc). Moreover suggestions will be sought from the respondents in order to improve the functioning of VRC's in achieving millennium development goals.

Pattern of Analysis

The use of statistical tools is imperative for analyzing and interpreting the data more scientifically and accurately. The type of statistics tools used in the present study includes measures of central tendencies such as mean, standard deviations and averages besides calculating the percentage scores. The correlations will also be calculated where ever required. To see whether their existed significant differences between rural males, rural females and various other groups regarding the functioning of VRC's, t- tests and z tests will be performed in addition to ANOVA (Analysis of Variance). Based on respondents profile, Uday Parikh scale will be used to do meaningful analysis of data. The means will be calculated based on likert scale 1 to 5, 1 defining the presence of that item to minimum and mean score 5 signifies presence of that particular item to maximum.

Tools

Statistical tool MINITAB/SPSS will be used for data analysis.

Approach

In reality, the key Research questions would have been assessed during the planning phase of the evaluation. In this following example, we present an illustrative check that the plan of interviews and household survey would have answered the "Project Purpose" and Research questions:

- What were the project objectives in terms of poverty interventions, have they been met in terms of millennium development goals?
- What have been the outcomes/impacts of the project both in the immediate short term and in the longer term on the full range of project defined stakeholders and beneficiaries?
- Have the project outcomes had an unintended impact on the wider social economic and policy environment?

Deliverable Material

1. At the end of 12 months, progress report will be submitted. Workshop and seminar will be conducted to discuss the outcome of the research project. The detailed outcome of the project would be submitted along with soft copies after the completion of the project.
2. A model for achieving millennium development goals through VRC.

REFERENCES

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