

1 Reaching the Unreached through Touch Screen Information 2 Kiosk: A Field Study

3 Dr. G.R.K.Sharma¹

4 ¹ College of Veterinary Science

5 *Received: 15 December 2013 Accepted: 3 January 2014 Published: 15 January 2014*

6

7 **Abstract**

8 The landless livestock owners who rear different livestock for their livelihood are the
9 vulnerable groups struggling to move out of poverty. Information is an important input in
10 development. This is especially so when the people are more disadvantaged with other
11 resources like land and capital. Information is an important factor that can help the livestock
12 owners to raise their livestock better and to achieve more certainty and security in life.
13 Information has economic value if it leads to the satisfaction of human desires. Information
14 and Communication technologies can play a pivotal role in improving access to information by
15 the poor.

16

17 **Index terms**— e-extension, livestock extension and livestock livelihood.

18 **1 Introduction**

19 livestock have a complex role in the livelihoods of the poor. They have a dual role of bringing daily 'cash income'
20 (milk, meat and egg) as well as 'capital strength' or moving bank (livestock). The cash income helps them
21 to carry on with the day-today expenditure, whereas their capital strength helps them to face crucial financial
22 exigencies like constructing huts, marriages and emergency health care etc. Information plays an important role in
23 decreasing the poverty among farmers by increasing their ability to use human and social capital through making
24 good and useful decisions. Studies also revealed that the poor farmers are also poor in access to information as
25 well ??Cecchini 2002 and ??arforth 2003).

26 In development, making people realize the importance of information in improving their livelihoods is a chal-
27 lenging task. This requires added effort from development personnel involved in this field like more deliberations
28 and effective delivery methods of information dissemination. In this era of Information society, Information and
29 Communication Technology (ICT) application provides new tools for improving access to information. In the
30 context of information management, modern communication techniques and technologies offer powerful force
31 multipliers to conventional extension efforts. The poor need access to locally-contextualised information, which
32 must be substantially demand-driven. Information and Communication Technology appropriately designed and
33 used could help other wise vulnerable group to move out of the disadvantage of information-exclusion.

34 Author: Professor & Head, Department of Veterinary & A.H. Extension Education, College of Veterinary
35 Science: Tirupati -517502, Andhra Pradesh, India. e-mail: sharmagrk@yahoo.com II.

36 **2 Relevance of Information Kiosk in Information Dissemination**

37 ICT is an emerging tool of information access, directly related to social and economic development of rural
38 population and helped to reach the un-reached. It is well known that, the ICTs has the power to cut across
39 social and geographical distance and help people by finding new ways of facilitating the flow of Information and
40 knowledge and is recognized as a development communication tool.

41 Although, information on all aspects of livestock farming exists in all the farmer-related institutions, but its
42 transfer and uptake by the livestock owners needs radical revision at all levels of information transfer. The

6 INSTALLATION OF INFORMATION KIOSK

43 landless livestock owners or resource poor farmers are vulnerable groups struggling to move out of poverty. The
44 resources they have are their labour and time, which they are converting into products through livestock rearing.
45 Appropriate value additions to their knowledge on livestock rearing will help them in their struggle to alleviate
46 poverty.

47 The latest interventions of ICT tools in the process of improving knowledge of the landless livestock owners
48 has remarkable impact in providing sustainable livelihood and reducing poverty. The prevailing conditions have
49 stimulated the investigator to work out with the Touch screen information kiosk project. Touch screen information
50 kiosk are put into use by different sectors, across the country and recently livestock sector has made its mark
51 in utilization of ICT tools for effective and efficient dissemination of technologies. In the process of catching the
52 latest trend, the department of Veterinary & animal husbandry extension of this college has tried to procure touch
53 screen kiosks and develop related software under state plan supported project on 'Action research on needful In
54 this regard, enhancing the farmers' information system through appropriately designed content and outreach
55 methods, which meet the expressed needs and objectives of the resource poor, is one of the important strategies
56 for reducing information poverty and to realize the importance of information in improving their livelihoods.
57 The un-correctable limitations of existing traditional methods and enormous advantages of latest ICT tools
58 have guided this project to come into existence. information on livestock Production and Management for the
59 development of resource poor farmers through Touch Screen Information Kiosks' III.

60 3 Designing of Touch Screen Information Kiosk

61 The Information Kiosk designed for livestock farming information dissemination was thus considered an important
62 information kit. The Information Kiosk has two parts in its synthesis. 1. The machine i.e. hardware part
63 (computer with interactive screen). 2. The matter i.e. software part (programme which has text and pictures
64 with audio back-up)

65 a) The Machine Technical specification of the computer: Intel Pentium IV with 1 GB DDR RAM 800MHz,
66 120GB HDD, DVD R & R/W Combo Drive, Mechanical Keyboard, Optical Scroll Mouse, 100 kbps internal
67 modem and with 19 inch TFT Touch Screen monitor, windows XP operation system, rust free cabinet with
68 wheels (Fig. ??).

69 4 b) The Matter

70 The information matter prepared in consultation of selected livestock owners, field veterinarians and its
71 correctness verified by the faculty of college of veterinary science, Tirupati. Appropriate pictures, photographs
72 and animations were added to the text. later these were translated into local language. The voice back-up was
73 added in both English and local languages for the benefit of those livestock owners who can not read (Table ??
74 and Fig. ??).

75 IV.

76 5 Information at Kiosk

77 At the beginning giving emphasis to the evolution and role of livestock farming in rural livelihood and later, it
78 lead to Main screen, which contains twelve categories related to different livestock farming and waits for the user
79 to interact for instant access to the latest information on every aspect of livestock production and management.
80 The user interface multimedia content, displays the information on an attractive screen along with the voice
81 interface (for those who cannot read) in both the languages such as English and local. The main screen contains
82 Twelve major categories, which in turn includes many more multimedia screens along with text and voice interface
83 in both English and local languages, such as: ? About Us ? Cattle

84 6 Installation of Information Kiosk

85 The place of installation of the farmer usable Information Kiosk is one of the important factors that will decide
86 the effectiveness of the information dissemination. A workshop was organized with the livestock owners and
87 field veterinarians to discuss on the site of installation of kiosk. Although various alternatives like local leader's
88 house, public library and local primary school were in the list, all were of the opinion to have it in the veterinary
89 dispensaries of the Government. They felt that the people could access the kiosk in this venue without any
90 inhibition, since all of them come to the veterinary dispensaries for artificial inseminations and first aid treatment
91 of their livestock. Three touch screen Information Kiosks were procured as an initiation and were installed in
92 peri-urban areas of Tirupati. not aware. The livestock owners are particular in accessing that information which
93 is of immediate use i.e. relevance to the latest management practices. In general, the farmwomen are giving
94 more importance and interest in getting the information than men, probably because of their higher degree of
95 involvement in cattle rearing than their male counterparts. Some of the male livestock owners feel that it might
96 be more useful to the females who are much involved in cattle rearing activities on a day-to-day basis. Milk
97 producers or Vendor feel that they know much of the information from their experience as they were moving to
98 different places and coming across different type of animals and diseases. So generally they won't spend much
99 time with the Kiosk and they even opined that it was really useful to those who recently opted for livestock

100 farming without much exposure. Finally they expressed that it will take time to get tuned to this type of new
101 interventions

102 **7 Usefulness of the Information Kiosk**

103 The Kiosk was useful in the sense that the livestock owners can avail the information that they were (Kiosk) but
104 time will come that they realize the worth of the information. The presence of the kiosk has converted the places
105 of installation into better information centres. In spite of the monotonous routine practices, local veterinarians
106 opinioned to have the satisfaction in making the livestock owners to get the latest and basic information on various
107 aspects of livestock farming. It is observed that Kiosk stimulates discussion / thinking among the livestock owners
108 and other stakeholders thus helps in information dissemination by 'Value added waiting time' to the livestock
109 owners who bring their animals to veterinary dispensaries for various purposes.

110 **8 VII.**

111 Ideal Conditions for Effective Working of Information Kiosk ? Kiosk needs up -gradation at frequent intervals to
112 avoid disinterest among the livestock owners to view the static information.

113 VIII.

114 **9 Conclusion**

115 The livestock owners were satisfied to get information in their own language at an easily accessible place in their
116 locality. They felt that the kiosk saves time and money other wise they would have to spend to gather the same
117 information from various sources. Livestock owners felt they could get whole information on a topic compared
118 to the bits of information they usually get from the veterinary professionals. Seeing the pictures, animations and
119 short movies on different aspects of livestock farming has made the livestock owners to be more satisfied. Kiosks
120 also helped in stimulating further dialogues / discussions with the personnel at the place of installation and / or
121 neighbours and friends. The ability of the Information Kiosk to add value to their waiting time was note worthy.

122 Veterinary and Animal Sciences. Pondicherry, India. http://www.nan.ac.uk/idpm/idpm_dp.htm#devinf_w
p 5. ??ruger, S. (2002)



Figure 1: -

123

- ? The Information Kiosk must be placed in an appropriate site.
- ? The information in the kiosk should be need -based or demand driven and in understandable form at farmer's level.
- ? Care must be taken that not to overload kiosk with information.
- ? Information must be interesting, useful, reliable and accessible in minimum time (since study reveals that majority that the farmers tend to view only 5 screens which take appropriately 15 minutes).
- ? Up gradation and communication variability to be ensured based on user's feedback, but with a caution not to create 'information explosion'.
- ? Livestock owners must always find the kiosk in functional condition.
- ? Close co-operation from the personnel working at the place of kiosk installation.
- ? Advantages of Information Kiosk
- ? It saves money and time
- ? User friendly i.e. less assistance to operate, easy to operate and interesting to operate.
- ? Easily accessible and credible source
- ? Able to get information in their own language
- ? Livestock owners can get 'Whole information' on a topic, compared to the 'bits of information' they get from other sources.
- ? Seeing the pictures makes the information clearer and complete
- ? Sequence of information gives a better perspective
- ? The information provided strengthens the services delivered to the livestock owner in the veterinary dispensary and making it a better 'information centre'.
- ? It helps in information dissemination by 'value added waiting time' to the livestock owners who bring their animals to the veterinary dispensaries for services.
- ? It is an improvised version of 'Farmers' call center' as it provides both audio and visual content of the information.
- ?

Figure 2:

Information Processing (IFIP), Indian Institute of Management, Bangalore, India.

6. O'Farrell C 2001 Information Flows in Rural and Urban Communities: Access, Processes and People. Paper presented at the Development Studies Association annual conference, University of Manchester.

7. Pattanaik B K 2003 Property, Poverty and Rural livelihood, Kurukshetra. Vol.51. # 5. pp.41-46

8. Ramkumar S, Rao S V N, Garforth C and Ganesan R 2003 Cattle health information system of the Year Visions and Realities. Oxford University Press. pp. 265 -269. Table 1 : Methodology adopted in the pr

2014

S.No.
4 1 2
Vol-
ume
XIV
Is-
sue
VII
Ver-
sion
I
(
E
)

Activity
Identification
and
pri-
ori-
tiza-
tion
of
need
based
in-
for-
ma-
tion
on
live-
stock
farm-
ing
Prepa-
ra-
tion
of
rele-
vant
text
for
live-
stock
own-
ers
to
be
in-
cor-
po-
rated
in
the
in-
for-
ma-

on 20th and 21st March, 2003 at Rajiv Gandhi College of Veterinary and Animal Sciences. Pondicherry, India.

9. Roman R and Colle R D 2002 Development Informatics. Working Paper series. Paper No.1

10. Themes and Issues in Telecentre Sustainability Institute for Development Policy and Management University of Manchester. Manchester.

11. Taylor J, Bellamy C, Raab C, Dutton W Peltu

M 1996 Innovation in Public Service Delivery. Information and Communication Technologies

269. Table 1 : Methodology adopted in the pr

Methodology

1.1 Personal interviews with the livestock
1.1.1 Livestock owners 1.1.2 Milk producers
Farmwomen 1.1.4 Field Veterinarians 1.2 Work
with stakeholders 1.2.1 Livestock owners 1.2.2
producers 1.2.3 Farmwomen 1.2.4 Field Veterin
2.1 Printed texts from text books, farmers t
manuals and other references collected by
leader and Research Workers -Draft text in
prepared. 2.2 Text got finalized through a seri

