MOBILE COMMUNICATION FOR EFFECTIVE LIVESTOCK DEVELOPMENT

SUBHASHREE DAS I.D.No. MVM 11024 (AHE)

Thesis submitted in partial fulfilment of the requirements for the degree of

MASTER OF VETERINARY SCIENCE

in

VETERINARY AND ANIMAL HUSBANDRY EXTENSION

to the

TAMIL NADU VETERINARY AND ANIMAL SCIENCES UNIVERSITY ${\it CHENNAI-600~051}$

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CERTIFICATE

This is to certify that the thesis entitled 'Mobile Communication for Effective Livestock Development' submitted in partial fulfilment of the requirements for the degree of MASTER of VETERINARY SCIENCE in Veterinary and Animal Husbandry Extension, to the Tamil Nadu Veterinary and Animal Sciences University, Chennai, is a record of bonafide research work carried out by SUBHASHREE DAS, under my supervision and guidance and that no part of this thesis has been submitted for the award of any other degree, diploma, fellowship or other similar titles or prizes and that the work has not been published in part or full in any scientific or popular journal or magazine.

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ABSTRACT

MOBILE COMMUNICATION FOR EFFECTIVE LIVESTOCK DEVELOPMENT

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In the context of global competitiveness, the needs of livestock keepers are much more diverse. With the increasing penetration in rural areas, mobile phones can appropriately be used as a tool in animal husbandry communication. Hence, this study was designed to know how effectively this fast spreading tool can be used for livestock development. It can also be ascertained from the study that how far mobile phones could be utilized for technology dissemination and technology adoption in livestock development. Data were collected from 60 veterinarians and 180 livestock farmers from three districts namely Puri, Khurda and Angul of Odisha state using suitable sampling techniques. A data collection tool was developed to study how mobile phones were utilized for animal husbandry communication by the livestock farmers and veterinarians and the strength, weakness, opportunities and threats associated with the use of mobile

phones in animal husbandry communication. The data collected pertaining to the objectives set forth were analyzed using appropriate statistical tools and suitable strategies for livestock development were evolved.

The results of the research showed that majority of the livestock farmers belonged to middle age group and were males. Majority of them were literates, possessed small land holdings and had livestock farming as their secondary occupation.

Majority of the livestock farmers had low level of annual income with medium herd size of 2 to 5 cattle / 6 to 15 sheep and goat, high level of experience in livestock farming, medium to low level of social participation and medium to high level of information seeking behaviour on livestock farming. They resided more than five km away from the veterinary institution and used mobile phones to contact veterinarian.

Majority of the veterinarians belonged to young age group and were males. Nearly one- third of the respondents were post graduates and majority had low to medium work experience. The veterinarians were posted in rural areas, perceived moderate to high level of workload, high to medium level of achievement motivation, medium to high level of job involvement and rated themselves as medium to high job performers. Majority of them had more favourable perception towards working in rural areas.

The livestock farmers possessed basic model of mobile phone and used Nokia brand phone while the veterinarians possessed multimedia phones and used Samsung brand. Majority of the livestock farmers used less than two models of mobile, subscribed GSM network and used mobiles since 2 years whereas majority of the veterinarians used more than two mobile phones, subscribed GSM network service and had upto five years of experience in using mobile phones.

All the livestock farmers and veterinarians had the knowledge on making and receiving calls whereas all the veterinarians knew to read and send SMS. Majority of the veterinarians used other facilities such as radio FM, games, calculator, setting alarm, reminders. The livestock farmers made or received less than 50 calls per month whereas majority of the veterinarians made or received less than 100 calls per month.

Majority of the livestock farmers used less than three gadgets and spent upto Rs.50/- on recharging mobile phones every month whereas veterinarians used more than

three gadgets and spent Rs.201/- to Rs.500/- every month to recharge their mobile phones.

The livestock farmers called the veterinarians mainly for treatment purpose and veterinarians made or received less than 100 calls per month for livestock related activity and majority of the calls were to attend emergency cases and type of information given was for first aid.

Majority of the livestock farmers had medium to high level of perception on the use of mobile phone for communication. Education had highly significant positive contribution towards the perception of mobile phone communication, while age showed a significant negative contribution and information seeking behaviour showed a highly significant negative contribution.

The study predicted that the livestock farmers who had better education level, herd size, social participation and information seeking behaviour were more likely to subscribe mobile phone which can thereby be used for livestock development.

Based on the priority ranking as well as concordance between the farmers and the veterinarians, the major strength factors of using mobile phone for livestock development were dissemination of technology / information is fast, regular reminders can be sent and farmers are connected anytime for livestock development and the major weaknesses considered were theft / loss of devices, SMS can't be sent in local language , different types of mobiles leave less scope for some services like video calls, multimedia messages etc. The opportunities of mobile phone usage were livestock farmers can receive information on potential selling opportunities, farmers can exchange views with peer farmer groups, exploitation by middle man can be reduced and more companies in market whereas lack of repairing facilities, high end mobile phones are not user friendly, profit oriented mobile companies and SMS is not useful for illiterates were considered as the major threats of mobile phone usage for livestock development.

The strategies for effective mobile communication were involvement of youth, training programme, increase subscription, improve complementary investment and reforms and curtailing the charges for various services provided.