CHAPTER 4

Conclusion

4.1 Introduction.

The importance of agriculture development forming the core of national development is being increasingly recognized. Dairy development assumes new significance since it generates gainful employment opportunities and enhances the social and economic status of the farmers in the rural areas. Many area-specific and target-group specific programmes are launched throughout the Karnataka State to achieve integrated rural development. Dairy development forms an important component of agricultural development. Planning for better development communication at the grassroots level becomes inevitable.

This chapter contains the summary of the study, findings of the study, implications on the government bodies, non-government organizations, media institutions and research institutions; and an ideal media mix at grass roots level in Karnataka State.
4.2 Summary

Development continues to be the watchword of 21st century planners. The contribution of agriculture in the country's GDP accounts for about 25% in India. The Karnataka State has always remained in the forefront of all agricultural development activities including dairying in the country. Communication is indeed a major dairy development resource. Dairy development is playing a significant role in generating gainful employment opportunities and boosting the economy of the state. A constant and consistent research on the role of media in dairy development is imperative. The present study examines the media intervention for dairy development at the grassroots level in Karnataka State.

The grassroots level dairy development scenario of Karnataka State is less understood mainly due to lack of comprehensive communication investigations. The primary data were collected from 300 respondents who were selected on the basis of incidental sampling technique. The present study approaches the problem through a research design which is exploratory by nature. Besides Ex-post-facto research, non-participant observation, informal discussions and several secondary sources of information were also used as other methods to study the role of various communications media in the process of dairy development in Karnataka State. Chi-square test was
applied to find the significance of difference between the independent and dependent variables. The study being descriptive in nature, no parametric statistical tests were involved to draw inferences based on the sample results. The usual limitations of the Ex-post-facto research, namely time, human inadequacies, resource constraints, recollection and communication were experienced by the researcher.

The findings reveal that media intervention for dairy development in Karnataka State is not satisfactory in many respects. Extension media are the only honourable exception in this regard both in developed and under-developed areas. Development communication has been successfully used as an instrument of development in the advanced countries. Media intervention has not been integrated into dairy development planning at grassroots level in Karnataka State. The dairy development administrators have regarded communication as an incidental service. The media owners, managers and professionals too have neglected dairy development. Traditional media and new media have not made their presence felt by a large number of dairy farmers as instruments of development. Especially, the role of NGOs is least felt from dairy development point of view. Thus, media intervention for dairy development suffers from series of lapses and limitations according to a majority of the dairy farmers.
4.3 Findings

The findings of the study are classified under three different heads, namely a. dissemination of dairy development programme by media, b. diffusion of dairy management practices by media and c. role of media in dairy development.

4.3.1 Dissemination Of Dairy Development Programme By Media

a. With respect to dissemination of mass vaccination programme, the extension communication media which consist of agricultural assistants, health assistants and other field level workers were chief sources of information in comparison to mass media, new media and traditional media both in developed (92.66%) and under-developed (62.66%) areas. It was surprising to note that non-government organizations that play a key role in rural development were not considered as a major source of information collectively speaking, extension media are found as prominent source of information regarding dissemination of mass vaccination programme in both the areas. Mass media (23.67%) have played a limited role in this regard. Traditional media (9%) and new media (1.66%) have played an insignificant role while NGOs have not played any role in this regard in both the areas.

b. With respect to dissemination of information on animal health camps, extension media played a significant role especially in developed area (75.33%) and under-developed area (55.33%). Majority of the respondents are not happy with mass media (17.66%). New media (6%), traditional media (6%) and NGOs (0%) in this regard in both the areas. Once again, NGOs have not made their presence felt in this regard.
c. With respect to the dissemination of information on fertility camp, a majority of the respondents are happy with the role played by extension media in both developed (55.33%) and under-developed (54.67%) areas. The mass media (20%) have played a limited role while the new media (5.66%), traditional media (7.66%) and NGOs (0.33%) remain as insignificant media from this point of view.

d. Majority of the respondents have not received adequate information from various communications media including extension channels (15.66%), mass media (11.66%), traditional media (11.66%) and NGOs (0.66%) both in developed and under-developed areas regarding cattle rally.

e. Extension media are playing a major role in providing information on fodder development programme in developed areas (61.34%) and under-developed areas (58%). Mass media have played a limited role in this regard both in developed (11.34%) and under-developed area (27.33%). Other media namely, traditional media (8%), new media (6.33%) and NGOs (0.66%) have played an insignificant role in this regard in both the areas.

f. Dairy training programmes are not disseminated prominently by various communications media both in developed and under-developed areas. Extension media have played a limited role in this regard both in developed (43.34%) and under-developed (48.66%) areas. Mass media (15.66%), new media (6.66%), traditional media (5%) and NGOs (0.66%) have played an insignificant role in both the areas.
4.3.2 Diffusion Of Dairy Management Practices By Media

a. Extension media have played a significant role in diffusing information on improve cattle shed both in developed (52%) and under-developed (52.67%) areas. Mass media (19.33%), traditional media (12.66%), new media (7%) have played a limited role while NGOs (1.33%) have played an insignificant role in both the areas.

b. Extension media have played a significant role in diffusing information on cross bred cows both in developed (53.33%) and under-developed (56%) areas. Mass media (20%), traditional media (11.33%), new media (5.66%) have played a limited role while NGOs (2.66%) have played an insignificant role in both the areas.

c. The extension media once again have played an important role in the dissemination of information to the farmers about the good quality roughages in the developed (66%) and under-developed (62%) areas. Mass media (21%), traditional media (10.66%) and new media (5%) have played a limited role while NGOs (0.33%) have played an insignificant role in both the areas.

d. Extension media again forms a major part of the source of information on artificial insemination both in developed (60%) and under-developed (54.66%) areas. Mass media (13%), traditional media (13%) and new media (4.66%) also played a limited role and the NGOs are no more a source of information in both the areas in this regard.

e. A majority of the respondents have expressed satisfaction on the role of extension media in diffusing information about sealing of naval cord both in developed (57.34%) and under-developed (50.66%) areas. Mass media (16.66%), traditional media (14.33%) and new media (4.33%) also played a limited role and the NGOs played an insignificant role (0.33%) in both the areas in this regard.
f. The extension media forms a major source of information for the farmers on cow vaccination in developed (61.33%) and under-developed (56.67%) areas followed by the mass media (15%), traditional media (10%), new media (6%) and NGOs (4%) in this regard both in developed and under-developed areas.

g. The extension media educate the dairy farmers about the procedure, effects and advantages of de-horning of newly born cows in developed (64.66%) and under-developed (49.34%) areas. Traditional media (20.33%), mass media (15.33%), new media (6.33%) and NGOs (2.33%) play a very limited role in this respect in both the areas.

h. A majority of the dairy farmers have expressed their satisfaction over the role played by extension media in diffusing information on full hand milking in developed area (72%) while about 36% of them have identified extension media as useful source of information in under-developed areas. Traditional media (16.33%), mass media (14.33%), new media (7%) and NGOs (0.33%) have played a limited role in this regard.

i. Extension media are identified by the majority of the respondents (59.33%) in under-developed areas and developed areas (6.66%) as useful source of information on sanitation measures. Other communications media - mass media (14.33%), traditional media (7.33%), new media (6%) and NGOs (3.33%) have played an insignificant role in this regard in both the areas.

j. A majority of the respondents have not expressed their satisfaction on the role of various communications media including extension media in diffusing information on animal insurance both in developed and under-developed areas. Extension media (40.66%), mass media (15%), new media (13.33%) and NGOs (2.33%) are identified as limited source of information by the respondents in both the areas in this regard.
k. Extension media (51.33%) have diffused adequate information on RDWEP programme especially in Kolar district which is a developed area. Mass media, traditional media, new media and NGOs have not made their presence felt in this regard.

4.3.3 Role Of Media In Dairy Development.

a Extension media remain highly accessible to the dairy farmers in the developed (92%) area and accessible to a considerable extent to the dairy farmers in the under-developed (60%) area. Mass media are also accessible to some extent both in developed (50%) and under-developed (29.33%) areas. Collectively speaking, extension media (76%), mass media (39.66%), traditional media (13.66%), new media (13%) and NGOs (3.33%) are known for varied access to the dairy farmers in both the areas.

b Extension media provide frequent information on dairy development when compared to other communications media both in developed (83.33%) and under-developed (60%) areas. Mass media stand next only to extension media in this regard in developed area (37.33%) and under-developed area (23.33%). Collectively speaking, extension media (68%), mass media (30.33%), traditional media (13%), new media (12.66%) and NGOs (2%) are known for varied frequency in both the areas.

c. Extension media top the list in enhancing the knowledge of dairy farmers especially in developed area (89.33%) and under-developed area (48%). Mass media stand next only to extension media in this regard in developed area (49.33%) and under-developed area (26%). Collectively speaking, extension media (68.66%), mass media (37.66%), traditional media (12.66%), new media (12.66%) and NGOs (5.33%) are known for their varied capacity for enhancing the knowledge of dairy farmers in both the areas.
d. Extension media are identified by more number of farmers in under-developed areas (50%) as source of relevant dairy development information while mass media are identified by more number of farmers in developed area (45.33%). Collectively speaking, extension media (35%), mass media (35%), traditional media (11.66%), new media (4.66%) and NGOs (3.66%) are known for their varied capacity for providing relevant information for dairy farmers in both the areas.

e. A majority of the dairy farmers have stated that extension media have brought about preparedness among dairy farmers both in developed (90.67%) and under-developed (60.67%) areas. Mass media have also been successful in this respect to considerable extent in developed (54.57%) and under-developed (23.33%) areas. Collectively speaking, extension media (75.66%), mass media (39%), traditional media (17.33%), new media (11%) and NGOs (2.66%) are known for their varied capacity for creating preparedness among dairy farmers in both the areas.

f. A majority of the dairy farmers have rated extension media as highly credible source of dairy development information both in developed (80.67%) and under developed (48%) areas. Mass media come next only to extension media in this regard in developed area (35.33%) and under-developed area (20%). Collectively speaking, extension media (64.33%), mass media (27.66%), new media (10.66%), traditional media (10%) and NGOs (1.33%) are known for their varied capacity for providing credible information on dairy development to the dairy farmers in both the areas.

g. Extension media are known as successful sources of information in bringing about innovativeness among the dairy farmers especially in developed area (80.67%) and under-developed area (47.33%). Mass media come next only to extension media in this regard in developed area (42%) and under-developed area (18.67%). Collectively speaking, extension media (64%), mass media (30.33%), new media (9.66%), traditional media (9.66%) and NGOs (1.66%) are known for their varied capacity for bringing about innovativeness among the dairy farmers in both the areas.
h. Extension media are known as effective sources of information in bringing about achievement motivation among the dairy farmers especially in developed area (88%) and under-developed area (52.67%). Mass media come next only to extension media in this regard in developed area (42%) and under-developed area (24%). Collectively speaking, extension media (70.33%), mass media (33%), new media (11.66%), traditional media (10.33%) and NGOs (2.33%) are known for their varied capacity for boosting achievement motivation among the dairy farmers in both the areas.

i. Extension media are known as useful sources of information in facilitating adoption of innovative dairy practices among the dairy farmers especially in developed area (86%) and under-developed area (46.67%). Mass media come next only to extension media in this regard in developed area (42.67%) and under-developed area (16.67%). Collectively speaking, extension media (66.33%), mass media (29.66%), new media (14%), traditional media (9%) and NGOs (1%) are known for their varied capacity for facilitating adoption of innovative dairy practices among the dairy farmers in both the areas.

j. Extension media are known as competent sources of information in facilitating active participation of dairy farmers in the process of dairy development especially in developed area (82.67%) and under-developed area (45.33%). Mass media come next only to extension media in this regard in developed area (43.33%) and under-developed area (22.67%). Collectively speaking, extension media (64%), mass media (33%), traditional media (12.33%), new media (11%) and NGOs (3.66%) are known for their varied capacity for facilitating active participation of dairy farmers in the process of dairy development in both the areas.
k. According to a large number of dairy farmers, extension media provides the dairy farmers with most of the information on increasing the productivity level in developed area (81.33%) and the underdeveloped area (50.67%). Mass media come next only to extension media in this regard in developed area (36%) and under-developed area (20.67%). Collectively speaking, extension media (66%), mass media (28.33%), new media (11%), traditional media (10%) and NGOs (9.33%) are known for their varied capacity for improving productivity among dairy farmers in both the areas.

l. Extension media are known as competent sources of information in increasing marketing opportunities of dairy products in developed area (77.33%) and under-developed area (54.67%). Mass media come next only to extension media in this regard in developed area (40%) and under-developed area (20.67%). Collectively speaking, extension media (66%), mass media (30.33%), new media (16.66%), traditional media (8%) and NGOs (1%) are known for their varied capacity for increasing marketing opportunities of dairy products in both the areas.

m. Extension media provide large number of dairy farmers necessary services that would boost their profit making capabilities of dairy farmers in developed (86%) and under-developed (55.33%) areas. Mass media come next only to extension media in this regard in developed area (40.67%) and under-developed area (24.67%). Collectively speaking, extension media (70.66%), mass media (32.66%), new media (16.66%), traditional media (8%) and NGOs (3.33%) are known for their varied capacity for boosting profit making capabilities of dairy farmers in both the areas.

n. Extension media bring about social change among a large number of dairy farmers especially in developed (65.33%) and under-developed areas (44%). Mass media come next only to extension media in this regard in developed area (39.33%) and under-developed area (24.67%). Collectively speaking, extension media (54.66%), mass media (32%), new media (13.66%), traditional media (12.33%) and NGOs (2%) are known for their varied capacity for bring about social change among dairy farmers in both the areas.
o. Extension media promote leadership qualities among dairy farmers notably in developed (63.33%) and under-developed areas (39.33%). Mass media come next only to extension media in this regard in developed area (24.67%) and under-developed area (20%). Collectively speaking, extension media (51.33%), mass media (22.33%), new media (16%), traditional media (6.33%) and NGOs (4.33%) are known for their varied capacity for promoting leadership qualities among dairy farmers in both the areas.

p. Extension media played an effective role in empowering the dairy farmers in developed areas (67.33%) and under-developed areas (48.67%) followed by the mass media in developed area (37.33%) and under-developed area (20.67%). Collectively speaking, extension media (58%), mass media (29%), new media (15%), traditional media (10.66%) and NGOs (3%) are known for their varied capacity for empowerment of dairy farmers in both the areas.

4.4 Implications

The implications of the findings of the study with reference to Central, State, Local-Self Governments, Non-Government Organizations, Media Organizations and Research Institutions in specific terms are given below.

4.4.1 Implications on Government of India.

The investigation reveals that it is imperative to formulate a national policy on agriculture at this juncture of globalization, liberalization, privatization, prevailing pluralistic farm culture and commercialized agricultural scenario in India. This has been a long pending demand and the Government of India may consider constituting an expert committee of policy makers, farm scientists, social activists and farm experts. This policy may consider devoting a separate section on dairy development at national, regional and grassroots level.
The Government Of India may also consider constituting a National Dairy Development Board consisting of experts, activists and beneficiaries to monitor dairy development scenario at various levels. This board may also consider the need for planning media intervention packages and programmes at national, regional and grassroots level as effective instrument of dairy development.

The Government of India may also consider expanding media units namely, Prasar Bharati Corporation, Directorate of Field Publicity, Directorate of Advertising and Visual Publicity and Song and Drama Division at the district level so that these media units can make apparent contribution for grassroots level farm development including dairy development.

4.4.2 Implications on Karnataka State Government.

The Government of Karnataka may also consider formulating state level agricultural policy which would boost farm sector including dairying. A state level dairy development board may also be constituted with a view to facilitate comprehensive dairy development. The Directorate of Information does not have block level network, plans and programmes. The Government of Karnataka may establish a block level information network and provide decentralized information services for farm development including dairying. The study reveals that extension communication media continue to be the major source of information on dairy development at the grassroots level. Hence, existing communication network can be enriched at the grassroots level especially in development departments including Animal Husbandry and Veterinary Services and Milk Unions in Karnataka State.

4.4.3 Implications on Jilla Panchayat Samithi, Taluk Panchayat Samithi and Gram Panchayat Samithi.

The Jilla Panchayat Samithi can consider dairy development as a priority- based activity and pool communication resources for rural development, agricultural development, dairy development and so on.
Special media campaigns and publications are required to boost dairy development at the district level. Similar exercises are required at block and community levels. Grassroots level workshops, publicity campaigns and participatory communication exercises are required to boost dairy development.

4.4.4 Implications on Non-Government Organizations.

The Non-Government Organizations namely, Peasant Organizations, Worker's Unions, Youth Clubs, Women's Association, Welfare Associations and so on have facilitated rural development all over the country. However, these agencies have neglected dairy development in particular. These organizations may join the local-self government organizations, development departments, banks, co-operatives, media institutions and other welfare organizations and strengthen their efforts toward persuading the people to take active part in dairy developmental activities. These organizations may increase the budgetary allocations for dairy development support communication activities at the grassroots level and organize group discussions, exhibitions, demonstrations, film shows, special lectures and other participatory communication exercises.

4.4.5 Implications on Media Organizations.

a. Print Media.

The study reveals that print media have neglected the coverage of dairy development activities at the grassroots level. The regional and local newspapers and magazines have to accord a place of pride to development journalism in general and farm journalism in particular. Special pages, supplementaries, columns, write-ups etc., are required on various aspects of dairy development since it would alleviate rural poverty and generate gainful employment opportunities in the present times. Critical appraisal of various development activities including dairying is a must to open the eyes of policy makers, administrators, activists and beneficiaries. These newspapers and magazines have to provide proper feed back to the policy makers on the shortcomings of dairy development projects.
b. Electronic Media.
The study reveals that All India Radio, Doordarshan and other audio-visual channels have neglected dairy development coverage at the grassroots level. These electronic media have to develop sufficient rural bias. Rural broadcasting is a critical factor in the process of development. There may be district level radio stations and low power television centers since rural development assumed new significance. The existing software has to be replaced with rurally relevant, timely and need base software. Adequate programmes on various aspects of farm development including dairying are required in good number.

c. New Communication Technologies.
We are living in the age of 'Information-explosion'. Satellite communication, telecommunication and computer communication are utilized for the purpose of development all over the country. The study reveals that the role of new communications technologies in the process of dairy development is insignificant. Hence, new media networks can be created at the grassroots level to provide consistent education on various aspects of rural development including dairying on a priority basis.

d. Multi-Media Campaigns.
Multi-media campaigns should be envisaged as a holistic approach to communication support to integrated rural development. Multi-media campaigns are launched in selected districts on the advice of the National Level Media Coordination Committee. These multi-media campaigns have not been extended to Karnataka State. A mixture of printed literature, audio-visual channels, new communication technologies, demonstrations, exhibitions, group discussions, special lectures, field publicity and advertising campaigns constitute multi-media package. Multi-media campaigns are required to boost dairy development in Karnataka State.

e. Traditional Media.
Traditional media like folk songs, folk theatre forms and folk traditions (fairs and festivals) are utilized for the purpose of educating the rural masses on various developmental activities. The study reveals that traditional media are not playing a significant role in the process of dairy development. Hence, traditional media can be utilized as instruments of dairy development in Karnataka State.
4.5 Implications On Future Research

The study is an attempt to understand the role of media in dairy development. But during the course of the study, it is understood that there are many areas which warrant systematic research interest in this virgin area as far as Karnataka State is concerned. Media intervention for dairy development is a very vast area of research. Yet, there are many areas of future research - New Communication Technologies and dairy development, NGOs and dairy development, Media and Entrepreneurship development among dairy farmers, Media and modernization of dairying and so on. These aspects can be examined exclusively with reference to integrated dairy development in Karnataka State and Indian Republic. Besides this, a combination of quantitative analysis, qualitative analysis, content analysis and experimental research is strongly advocated for understanding dairy development support communication system in future.

4.6 Ideal Media Mix For Dairy Development.

The researcher has suggested the following media mix which can boost dairy development in Karnataka State.

a. Block level audio-visual unit to educate, organize and empower dairy farmers through animation films, scientific films, educational films, news reels, documentaries, etc., on a regular basis.

b. Block level periodicals and campaign materials exclusively on dairy development projects and activities be published regularly.

c. Posters, broadsheets, wall writings and other outdoor publicity campaign tools; and

d. Special publicity and advertising campaigns like special lectures, group discussions, workshops, exhibitions, demonstrations, fairs, festivals etc., on a regular basis.
4.7 Epilogue.

The importance of dairy development forming the core of agriculture development strategies is increasingly recognized. Development communication is the premise of progress in our modern society. Dairy development demands planned, deliberate, systematic and sustainable media intervention strategies and packages. A concern regarding how to plan dairy development support communication for the diverse and locally relevant groups leads logically to alternative media intervention strategies for dairy development. We need a communication strategy which should be considered as a sub-system of overall dairy development system. Optimum use of all communication channels in proper combinations can certainly bring about comprehensive dairy development in rural areas. The future agenda for dairy development support communication at the grassroots level must deal with media selection, media coordination, media integration, participatory communication, scientific evaluation and other related aspects. The government organizations, NGOs, media organizations and agricultural universities have to work in close collaboration toward designing result-oriented dairy development communication system and operations in the rural areas of Karnataka State and Indian Republic.