

**MEDIA REACH AND RECEPTION IN DEVELOPMENT**

**COMMUNICATION: the case of the Rural Industries**

**Innovation Centre in Botswana**

**Thesis**

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**by**

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“Not I, but ten thousand clerks rule Russia.”

An Eighteenth Century Czar.

Think Globally, Act Locally!  
Develop in your own way!  
Take Control of your own world!  
Facilitate Dialogue for development decision making!  
Power to the People!

Shirley A. White, 1994.

## **ABSTRACT**

The study was conducted in Phitshane-Molopo in Botswana. Phitshane-Molopo is located about 115 kilometers south of the main village of Kanye in which the Rural Industries Innovation Centre operates. The study constitutes the first attempt at evaluating audience reach and reception of the RIIC media messages. In this study, a sample of 50 representatives of households (the rationale is covered in chapter 1) was taken, for which a questionnaire was administered, including conducting in-depth interviews with key informants.

The study found that RIIC media are not reaching the audience in keeping with the corporate goals and assumptions on the basis of which the communication strategy was established. The audience has claimed that the print media relayed to them through the extension officer channel do not reach them.

The study also found that the audience possessed adequate literacy skills and the majority of them could read materials produced in Setswana. Only a few individuals preferred media text produced in the English language. The study therefore deplores RIIC's proclivity towards producing its media texts only in the English language. This has tended to marginalise members of the audience who cannot read in English. It is thus hoped that this study would provide a learning experience for RIIC to consider producing its communication media in relation to the needs of the audience.

The study also found that the impact of the RIIC radio programme is very poor, with only a low of 2% of the sample population having listened to this programme. The problem stems from the poor Radio Botswana transmission system. The audience said that for the larger part of the day, they can't get Radio Botswana on air. As a result, they have shifted their interest to the South African radio stations such as Radio Tswana and Radio Mmabatho, which are constantly on air.

The study concludes that the RIIC communication strategy is failing in the study area because the paradigm in which it is located is somewhat flawed, as a result of which it does not effectively impact upon reach and reception. At the core of this failure rate are implementation problems and the lack of evaluation that would have picked up the problems earlier, for which solutions would have been found. Consequently, the study recommends the need to explore the suitability and effectiveness of the indigenous media for possible syncretization with conventional media as recommended in the need based integrative model (Nwosu and Megwa: 1993). Indigenous media are ideally suited to rural communication needs because they are consistent with the socio-cultural expectations of the audience. RIIC therefore stands to benefit from these media because the bulk of its audience resides in rural areas.

# TABLE OF CONTENTS

<b>ACKNOWLEDGEMENT.....</b>	<b>i</b>
<b>PREFACE.....</b>	<b>iii</b>
<b>CHAPTER 1.....</b>	<b>1</b>
<b>INTRODUCTION, PROBLEM STATEMENT AND METHODOLOGY.....</b>	<b>1</b>
THE METHODOLOGY.....	4
CONTESTING THE CHOICE AND JUSTIFICATION FOR STUDY SITE.....	7
IN-DEPTH INTERVIEWS AND THEIR GOALS.....	10
SURVEY, SAMPLE SIZE AND JUSTIFICATION FOR THE SIZE.....	11
APPROACH TO INTERROGATION OF THE RESEARCH SUBJECTS.....	13
INDIVIDUALS COVERED PER HOUSEHOLD.....	15
PILOT TESTING.....	15
SECONDARY DATA.....	17
THE APPROACH TO DATA ANALYSIS.....	17
ANALYSIS OF RAW DATA.....	18
PROBLEMS WITH FACE TO FACE INTERVIEWS.....	20
MYCONNECTION TO RIIC: IMPLICATIONS FOR RESEARCH FINDINGS.....	22
CONCLUSION.....	23
<b>CHAPTER 2.....</b>	<b>24</b>
<b>THE THEORETICAL, CONCEPTUAL FRAMEWORK AND LITERATURE REVIEW</b> <b>.....</b>	<b>24</b>
DEVELOPMENT PARADIGMS AND COMMUNICATION MODELS.....	25
THE TWO STEP FLOW MODEL.....	30
THE MULTI STEP MODEL.....	30
THE REVISIONIST PARADIGM.....	32
THE CONVERGENCE MODEL.....	34
CONSCIENTISATION: EXTENSION OR COMMUNICATION?.....	37
COMMUNICATION: THE FREIRIAN PERSPECTIVE.....	38
THE BASIC NEEDS APPROACH: THE WORLD BANK PERSPECTIVE.....	40
THE AUDIENCE PARTICIPATION MODEL.....	42
THE IMPORTANCE OF MEANING IN A PARTICIPATORY PROCESS.....	44
DEVELOPMENT COMMUNICATION PARADIGM.....	45
THE IMPORTANCE OF RECEPTION IN DEVELOPMENT COMMUNICATION.....	47
CONTESTING THE APPLICABILITY OF TECHNOLOGY TRANSFER CONCEPT.....	49
HOMOPHILY.....	50
THE EFFECT OF HOMOPHILY ON COMMUNICATION MATERIALS.....	52
THE CONCEPT OF HETEROPHILY.....	52
THE EFFECT OF HETEROPHILY ON MEDIA RECEPTION.....	53
THE NOTION OF EMPATHY.....	55
THE NOTION OF CREDIBILITY.....	56
THE KNOWLEDGE GAP HYPOTHESIS.....	57
CONCLUSION.....	59

<b>CHAPTER 3.....</b>	<b>61</b>
<b>THE RURAL INDUSTRIES INNOVATION CENTRE: Institutional profile and communication strategy.....</b>	<b>61</b>
BACKGROUND TO RIIC.....	61
RIIC'S DEVELOPMENT INITIATIVES.....	63
TECHNOLOGY TRANSFER PROGRAMME: THE RIIC'S PERSPECTIVE.....	64
THE RIIC COMMUNICATION STRATEGY: GOALS AND ASSUMPTIONS.....	66
THE EXTENSION DEPARTMENT.....	66
THE RIIC INFORMATION UNIT.....	68
COLLABORATION WITH BTC OVER THE JOINT NEWSLETTER AND RADIO PROGRAMME.....	69
CONCLUSION.....	72
<b>CHAPTER 4.....</b>	<b>73</b>
<b>RESEARCH FINDINGS: LITERACY SKILLS AND CONSTRAINTS TO IMPLEMENTATION.....</b>	<b>73</b>
LITERACY SKILLS IN PHITSHANE-MOLOPO.....	73
READING SKILL: A CATALYST FOR MEDIA CONSUMPTION.....	74
THE SCOPE OF THE WRITING SKILL WITHIN THE POPULATION.....	76
EDUCATION STATUS OF THE INFORMANTS.....	77
LANGUAGE PREFERRED FOR THE RIIC MEDIA.....	78
AUDIENCE'S OPTION BETWEEN RADIO PROGRAMME AND INFORMATION BROCHURES.....	79
ADVANTAGES OF INFORMATION BROCHURES OVER RADIO PROGRAMMES.....	79
ATTITUDES OF THE AUDIENCE TOWARDS RADIO PROGRAMMES.....	80
CONSTRAINTS ON COMMUNICATION STRATEGY IN PHITSHANE-MOLOPO.....	81
INADEQUATE COMMUNICATION WITH THE AGRICULTURAL OFFICE.....	82
ENGLISH LANGUAGE AS A CONSTRAINT TO THE DIFFUSION OF INFORMATION.....	82
INADEQUATE INTERFACE BETWEEN EXTENSION DEPARTMENT AND INFORMATION UNIT.....	83
CONCLUSION.....	85
<b>CHAPTER 5.....</b>	<b>87</b>
<b>RESEARCH CONTENTIONS: MEDIA REACH AND RECEPTION.....</b>	<b>87</b>
THE SCOPE OF THE AUDIENCE'S KNOWLEDGE ABOUT RIIC'S ACTIVITIES.....	88
THE SCOPE OF RADIO LISTENERSHIP IN THE COMMUNITY.....	92
THE CAUSES OF POOR RADIO LISTENERSHIP IN PHITSHANE-MOLOPO.....	93
AUDIENCE'S PREFERRED LANGUAGE FOR THE RADIO PROGRAMME.....	96
COMMUNICATION CHANNELS PREFERRED BY THE AUDIENCE.....	96
INSTITUTIONAL COMMUNICATION CHANNELS.....	96
INTERPERSONAL COMMUNICATION CHANNEL.....	97
CONCLUSION.....	101
<b>CHAPTER 6.....</b>	<b>106</b>
<b>CONCLUSIONS AND RECOMMENDATIONS.....</b>	<b>106</b>
LIMITATIONS OF THE STUDY.....	109

SIGNIFICANCE OF THE STUDY.....	110
SUGGESTIONS FOR FURTHER RESEARCH.....	111
COVERAGE OF KEY INFORMANTS.....	112
DETERMINATION OF RADIO UTILISATION PATTERN AND ITS IMPACT.....	112
ASSESSMENT OF THE CONTENT OF MEDIA MESSAGES.....	113
ANALYSIS OF THE CONCEPT OF MEANING.....	114
DETERMINATION OF THE RESOURCE CAPACITY FOR THE IMPLEMENTATION OF THE RIIC'S COMMUNICATION STRATEGY.....	114
DECENTRALISATION OPTION.....	115
<b>BIBLIOGRAPHY.....</b>	<b>116</b>

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Jackson Mogopodi Maleke

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## **PREFACE**

This study was carried out in Phitshane-Molopo in the Southern District of Botswana between June and July 1996. The aim of the study was:

- to establish audience reach and reception of the RIIC print and broadcast (radio) media
- to identify the specific constraints to the RIIC's communication strategy in Phitshane-Molopo
- to suggest recommendations for RIIC's action to consolidate its communication strategy and improve its effectiveness and efficiency, based on the findings.

Chapter 1 of this study discusses the problem statement and the research methodology. It also identifies the research problem and questions around which the field study devolves. This chapter also assesses the methodological considerations which influenced the study and has identified qualitative methodology as the basis for its investigation. The choice of this methodology was influenced by the need to capture information from the informants in their natural environment using an indepth interview technique and through the administration of a questionnaire resulting in an information rich data collection package. The data analysis technique used follows a coding process in which the generated data are categorised, ordered, manipulated and summarised to obtain answers to research questions. Where numerical data feature, quantitative measures and analysis were applied. They are used in a limited scale in the percentalisation of the data to gain meaningful numerals for expressing some findings in the study.

Chapter 2 discusses the various communication strategies with a view to identifying the most appropriate strategy for the diffusion of communication messages. The study however, discounts the diffusion of innovations theory as an inappropriate strategy for conceptualising diffusion of information because of its emphasis on mass media. Mass media are a necessary but not a

sufficient mechanism for engendering the diffusion process. The specific problem with the mass media is that they tend to deliver information in a top-down manner and assume the audience to be incipient, passive receivers of information.

In contrast to the theoreticians, the media practitioners soon discovered that the audience was not simply passive. Mass media can only be successfully used in facilitating technology transfer by striking the right balance with inter-personal communication interventions. This is especially important because the needs and socio-cultural composition of the audience vary considerably and therefore must be approached and addressed in various ways.

Chapter 3 discusses the RIIC's institutional profile and its communication strategy in the light of the development paradigms. The aim is to bring into perspective the various technological breakthroughs the centre has generated, and to identify and discuss the various institutional structures which are responsible for the implementation and dissemination of information at RIIC. The aim of this discussion is to establish the capacities and limitations of these structures in the implementation of the communication strategy in line with the corporate goals and assumptions and to decide on an alternative strategy that would suit the RIIC's perspective in the light of the development paradigms discussed in chapter 2.

Chapter 4 discusses the ramifications of literacy rates in Phitshane-Molopo for the communication strategies being implemented by RIIC. Given the existing literacy rates in Phitshane-Molopo, including constraints identified in the study, the chapter then concludes that a meaningful communication strategy must combine mass media with specific interpersonal communication interventions.

Chapter 5 discusses media reach and reception in Phitshane-Molopo. The findings reveal that the RIIC media are not reaching the audience in conformity with the institutional goals and assumptions. Only 4% of the overall sample have received the RIIC informational brochures and an equally depressing number (2%) has been reached through the centre's radio programme. The major problems associated with the poor reception of the RIIC media in the study site are two-fold: the study has revealed that the dissemination of information through the centre's regional extension programme is inadequate because the programme does not effectively utilise a homophilous communication network approach.

Secondly, the poor Radio Botswana transmission system hampers the delivery of information through the radio to the target audience. Consequently, members of the audience in the study area prefer to listen to the South African radio stations such as Mmabatho Radio station which broadcasts in Setswana. Hence poor reach and reception of the RIIC radio programme in the study site.

Chapter 6 outlines the specific limitations of the study and provides a list of recommendations and suggestions for optimization of the RIIC communication strategy. It recommends the need to explore the need-based integrative model with a view to adapting some of its features to the RIIC's communication strategy. Indeed, RIIC has not yet explored the indigenous media to determine their suitability and effectiveness for information dissemination. Considering that the bulk of its target audience resides in the rural areas, indigenous media could constitute ideal channels for syncretisation with conventional media in order to maximise RIIC's out-reach capacity, as recommended in the need-based integrative model.

# CHAPTER 1

## INTRODUCTION, PROBLEM STATEMENT AND METHODOLOGY

### Summary of the study

This study seeks to assess audience reception of the Rural Industries Innovation Centre's (RIIC's) radio and print media messages.

### The rationale for the study

The study will establish if the media in question do reach the audience in line with the institutional goals and assumptions.

The study will determine if RIIC's communication strategy and activities require any improvement to be effective. An effective communication strategy is of crucial importance to a developing country like Botswana because the bulk of its population (about 56%) resides in rural areas and just like their urban counterparts, the rural people need information about development activities germane to their socio-economic imperatives. In addition, rural areas in Botswana are marked by a relatively high knowledge gap compared to their urban counterparts. It is therefore hoped that through an effective communication strategy, RIIC would diffuse its media messages and get the necessary feedback to improve its communication activities and to bridge any knowledge gap that may be identified in the study site.

It is hoped that, if the study shows problems arising out of one-way communication flows, this knowledge might encourage an increase in the participation of the RIIC's target audience in planning communication activities to improve the effectiveness of the centre's media activities. One way communication process, which is fully discussed in chapter 2 under theoretical conceptions, is problematic because it does not create an enabling environment for dialogue. It therefore impedes communication within a social system.

Since the establishment of the RIIC's communication programme, no study has ever been launched to evaluate the effectiveness of the centre's media activities. This study is therefore the first of its kind to investigate this issue.

### **The research problem**

The purpose of this study is to determine if radio and print media of RIIC do reach the audience in line with the institutional goals and assumptions.

### **The hypothesis**

The effectiveness of the RIIC's communication strategy in achieving its aims is limited because of its location in a flawed paradigm that does not take into account the factors that impact upon reach and reception.

## **The research questions**

What are the goals and assumptions which shaped the perspective of the organisation's corporate communication strategy?

What is the frequency of the media used and how does the timing of the media impact upon listenership and readership?

What are the audience's literacy skills and language preferences and what are the implications of these factors for media reception? What media do the audience prefer and why?

Are the texts produced by the RIIC suitable in terms of their content and presentation formula for the audience served and how do such factors impact upon the reception of the media by the audience?

How effective are the radio and print messages in achieving corporate goals? Do they validate the assumptions which led to their adoption?

Based upon answers to these questions, alternative solutions to the problems identified will be suggested to assist the organisation to improve its communication strategy.

## **The methodology**

Any research inquiry operates within a methodological context which determines the operational trajectory along which the inquiry is piloted. In addition, the research methodology is dictated by the nature of data required and the research problem identified. Thus, arising from both the theoretical rationale and the research questions posed, this study is designed as a qualitative research exercise.

Qualitative methodology is being employed because it offers a descriptive and an analytic approach to the findings of an inquiry from the point of view of those being studied. Moreover, the two types of data collection methods used, an in-depth interview and a purposive sampling all require a descriptive interpretation, a characteristic of a qualitative methodology. Masilela (1994) echoed similar sentiments about the indispensability of an interpretative approach for a qualitative study saying, "Humans live by interpretations. They do not merely react or respond but rather live by interpreting experience through the agency of culture. It is then, to this attempt at recovering human agency - the ways people live by intentions, purposes, and values - that qualitative studies are dedicated..." (Masilela, 1994: 131).

From the above contention, it is evident that qualitative research is exploratory and discovery oriented. Consequently, the methodology permits a greater degree of flexibility to gain a profound understanding of an investigated phenomenon which otherwise cannot be achieved through a more rigid approach.

Also, qualitative methodology is essentially preferred for this study because, as Leedy (1993: 144) argues, it "...focuses on the perspective of the insider, talking to and/or observing subjects who have experienced firsthand the activities or procedures under scrutiny. The qualitative researcher believes that firsthand experience provides the most meaningful data."

Moreover, qualitative inquiry is preferred for this study because it is field focussed and it is non-manipulative of the research situations and objects. Thus, on the whole, qualitative researchers observe, interview, record, describe, interpret and appraise settings as they are. This is why qualitative research focusses on subjective data as enunciated by the subjects based on their experiences, as a result of which the data are typically expressed or reported through language. Moreover, because qualitative study collects data from subjects' natural settings from which conditions are uncontrolled, the researchers are often incapable of manipulating the research subjects. Leedy (1993: 144) confirms that "this permits any variables that naturally influence the data to operate without interference."

However, the above contention has not gone unchallenged by a number of scholars, including Silverman (1993: 27) who said concluding that data from a qualitative inquiry cannot be manipulated because it is generated from participants in their natural setting, is spurious. He argued that "Artificial and natural settings are both part of the society; no data or its analysis is ever asocial or untouched by human hands". In terms of this argument, raw data are subject to interpretation by the researcher and it is at this stage that the researcher could manipulate them to reflect his view, thus tempering with the natural attribute attached to the data. It is here that a high degree of professionalism and self-discipline should be exercised, to ensure that the data are interpreted and recorded to reflect the true picture of the unfolding scenarios. Reading meaning into the data than

deriving meaning from them is absolutely unethical and can only bring disrepute to the research tradition.

In spite of the foregoing contention, Silverman (1993: 28) concluded that "While the attempt to erect a polarity between "natural" and "artificial" setting is spurious, it does give rise to a legitimate methodological preference". Given that qualitative inquiry is field-work focussed, it allows for adequate assessment of theoretical conceptions. For example, the fact that the diffusion of innovation theory proved impractical as an information dissemination approach in the Third World, was proven in field-focussed inquiries, under natural conditions, and so did interpersonal communication focussed theories such as the participatory and development communication models, to mention a few.

The fact that the interviewer is directly involved in the administration of the measuring instruments and indeed in engaging the key informants in an in-depth interview to solicit their autonomous perceptions and suggestions on the state of communication in the public arena, exemplifies the importance of the sensibility and perceptivity which undergird a qualitative inquiry. Without underlining these particular features of this inquiry, the subtleties of social reality would go unexperienced.

Furthermore, qualitative inquiry is vested in the utilisation of expressive language and renders voice to the textual presentation. For instance, statements such as "the informants said..." impart human presence and expressive voice to the presentation.

On the basis of the variables enunciated above, the data acquired from a qualitative inquiry tend to have a high internal validity and therefore representative of a true and full picture of what the researcher is attempting to investigate (Leedy, 1993: 144).

Although a qualitative methodology has been cited as the *sine qua non* for this particular study, some modicum of quantitative data has been extrapolated to formulate numerical constituencies. The same observation undergirding the symbiotic relationship between qualitative and quantitative methodologies was proffered by Masilela (1994: 131) in his assertion that "...the term qualitative inquiry is not meant to imply that qualitative studies do not make use of quantification or that quantitative research methods are not concerned with qualities."

The data extrapolated from this study therefore, will incorporate the quantification of subjects within the various codes and the percentalisation of values on such factors as reception, readership, writing skills and listenership of the radio medium etc. The numerical values extracted will present a realistic image of media consumption and preference patterns and shall constitute the basis for informed choices and strategic actions required for stimulating the effectiveness of the RIIC communication strategy.

### **Contesting the choice and justification for the study site**

This study is being used as a pilot for a larger national survey to assess the effectiveness of the RIIC's communication strategy and activities. It is expected that RIIC will consider a national study

at a subsequent stage for a wider data collection to determine the implications of its communication strategy for the diffusion of its innovations.

This study was conducted in Phitshane-Molopo village in the Southern District of Botswana between June and July, 1996. Phitshane-Molopo, with a population of 1394 people, representing 623 males and 771 females (courtesy of the Central Statistics Office, 1991 population census, Botswana) is being favoured for this study principally because it is a rural area and therefore it falls within the purview of the RIIC's institutional development mandate. The choice of the site has also been dictated by the involvement of its residents in a diversity of economic activities including both arable and pastoral agriculture; shopping centres; small scale baking activities etc. Of these economic activities, agriculture is a predominant sector in which about 97% of the people are involved, including those who are pursuing conventional businesses such as shopping centres, bars and bottle stores, bakeries, etc. With the majority of the people involved in agriculture, the village indisputably holds considerable potential for the diffusion of information about RIIC's agricultural technologies. Thus, the residents of Phitshane-Molopo, considering their serious commitment to agriculture, can benefit greatly from RIIC's media interventions.

Moreover, it has been concluded that the proximity of the study site to Mmabatho in the North West province of South Africa somewhat influences people's lifestyles in Phitshane-Molopo. This village shares the border with South Africa along the Molopo River, from which the village derives its name. When the boundary was demarcated between Botswana and South Africa, it divided the village into two - Molopo South Africa and Molopo Botswana. As a result, people of both villages have relatives on either side of the border and there is continuing communication and exchange visits between the residents of the two villages. The village of Molopo in South Africa popularly

known as Makgobistat, which is clearly visible from the Botswana side of the border as much as Phitshane-Molopo from Makgobistat, is very close to Mmabatho now renamed Mafikeng, the capital town of the North West Province, South Africa. Thus, the influence of the Mafikeng urban lifestyle on Makgobistat is inevitable, and it impacts upon Phitshane-Molopo to the same degree because of the close proximity enjoyed by the two villages. No wonder, there is a high listenership of South African radio stations in Phitshane-Molopo.

In other words, Phitshane-Molopo, although a rural area, continuously enjoys a touch of modernity from its propinquity to South Africa with its highly developed industrial, commercial, agricultural and media infrastructure, and indeed from its neighbouring fast developing village of Good Hope, the administrative centre of the Barolong Farms, which incorporates the study site. The choice of my sample was based on these factors, and in particular, the assumption that residents of Phitshane-Molopo should have been influenced largely by their neighbours in Makgobistat to be active consumers of the media.

In addition, various public sector and non-government development programmes are operational in the village, including an adult literacy programme which provides tuition to adults to acquire basic functional literacy skills. It is hoped that the existing socio-economic diversities in the village will also provide as much variety as possible in terms of media consumption patterns and their ultimate impact on the RIIC communication strategy. Moreover, Phitshane Molopo is within reasonable reach of RIIC (about 115 kilometres) as a result of which it is assumed that its residents should have been exposed to the RIIC's media in one way or the other.

### **In-depth interviews and their goals**

A purposive sampling was to be used for in-depth interviews with key informants in the area. The informants consisted of "information rich" individuals such as government field staff who include community development officer, literacy assistant, agricultural extension officer, councillor, headman, the chairperson of the village development committee and a member of the farmers' committee. Any Non-government organisation operating in the village would be included. A sample of seven of these officers was considered sufficient. It represented about 50% of the key informants in the area. This sample was taken on the assumption that although the officers come from different occupations and professions, they have a common understanding of the development problems affecting the village by virtue of the fact that all of them sit on the village extension team.

It was hoped that the above sub-groups are relatively well informed about a wide spectrum of issues within the community, as a result of which they should be "information rich". Generally one would expect them to be active consumers of the media due to their distinctive position within the community. Moreover, their positions locate them within the community to serve as opinion leaders from whom the less active members of the community could get valuable information for development purposes. Furthermore, these forces work closely with the RIIC regional extension officers and could provide tangible advice as to whether their working relationship is effective or ineffective for the promotion of communication in the area. They can equally offer useful alternative suggestions on the extent to which RIIC's communication strategy can be improved to stimulate the diffusion of information about its activities. I visited these officers individually for a verbal interview with them about issues affecting the RIIC communication strategy in Phitshane-Molopo.

Although many of them were away on official engagements outside their duty station, the few who were present offered helpful information and suggestions, without which this study would not have been a success.

### **Survey, sample size and justification for the size**

In addition, this study employed a sample size of 50 representatives of households for which a general questionnaire was administered. A sample survey deals with a fraction of the entire universe about which generalised statements are made so that the selected part will represent the total group. The sample, ideally, is a population microcosm. According to Leedy (1993: 199) "the sample should be so carefully chosen that through it the researcher is able to see all the characteristics of the total population in the same relationship that they would be seen were the researcher in fact to inspect the total population".

In discussing sampling, the question of the sample size frequently crops up, i.e, how big should the sample be? Although the basic rule is "the larger the sample, the better", sample size, according to Leedy, depends largely on the degree to which the sample population approximates the qualities and characteristics of the general population. (Leedy, 1993: 205). A big sample size is more applicable to a heterogenous population and when the population is homogeneous as in Phitshane-Molopo, the application of a small sample is warranted. The population of Phitshane-Molopo is homogeneous in that the people have a common origin, common socio-cultural practices such recognition and payment of bride price, they recognise extended family relationships marked by

continuing communication with their next of kin on the other side of the border (in Makgobistat, South Africa); they speak the same language and derive most of their income and livelihood from the same economic activity(ies), in particular, agriculture.

Moreover, a small sample is considerably cost-effective, and this factor, in association with the question of a homogeneous population, entirely influenced the adoption of a sample size of 50 individuals, with each member of the population drawn from a different household for this study. Given that the population of Phitshane-Molopo (1991 census) is 1394, a sample of 50 households represents 3.6% of the overall population of the village. This sample was considered to be a reasonable representation of the overall population because the people of this village, as earlier said, are homogenous and the largest proportion of the population pursues agriculture, a predominant economic activity, on which people depend for their livelihood. The data derived from the sample given the above considerations, would be representative of the whole picture in the community. This sample was also considered to be sufficient because the field study and the in-depth interviews with key informants were conducted by the author alone, with no assistance of support staff.

Furthermore, in an effort to ensure the representativeness of the data, a random sampling technique was applied in which every household had an equal chance of being selected in the sample. This sample technique allows for a wide range of people to be covered in a sample. For instance, from the four wards in the village of Phitshane-Molopo, I targeted every seventh house in a cluster of houses in each ward, from which one member was randomly selected for the interview. Fifty households (each household being the unit of analysis) were covered from

which only one member was interviewed. This was done to ensure that the aggregate characteristics of the sample closely approximate those same aggregate characteristics in the population. Having done this, then the researcher can assure himself that the data collected is representative of the total characteristics of the larger population.

### **Approach to interrogation of the research subjects in the field**

It took me three full days (30<sup>th</sup> June, 1996 to 2<sup>nd</sup> July, 1996) to conduct the study in Phitshane-Molopo, with no lunch break during the first day, and only a minimum of 30 minutes spent on lunch break during the ensuing two days.

Interviews started as early as 7:00 am, ending each day at 5:30 p.m. In each case, I introduced myself as an employee of the Rural Industries Innovation Centre (RIIC) who was conducting the study to establish if the RIIC's communication media were reaching them or not. I introduced myself as a RIIC employee right away considering that the audience might have heard about this institution and might be happy to have someone from there physically in contact with them, who could have good news for them. I further indicated that the materials collected from the study would go towards my MA thesis. I considered this disclosure extremely necessary in to avoid deceiving my participants by associating only with my employer and leaving out the key institution for which the study was legitimately being conducted. Moreover, it was inevitable that I revealed my involvement with Rhodes University because of the promise I had made to the participants that

I would make a copy of the study available to them through the resident Tribal Administration office on completion, where they could access it. If they were to discover from the document that it was being presented for a degree, and I had not made them aware of this situation, then they would lose trust in researchers, and in particular, those from RIIC. I believed that following this disclosure, the participants would not consider my interaction with them intrusive and in the process refuse to co-operate with me. It could be argued that disclosing my identity as a RIIC employee could stifle the subjects' freedom to express any negative views they might have about RIIC, or respond in a biased manner in order to please the researcher. However, this perception was countered through an explanation to the respondents that they should provide information as freely as possible, without any fear of retribution by the researcher or any RIIC officials.

I also took the opportunity to brief my subjects on the utility of this research project: that its findings would be utilised to improve RIIC's capacity to deliver better communication services to their village and further assured them that they would be treated anonymously in the study. I further assured them that they would not be interviewed if they declined. Nonetheless, I continued to encourage them to consider taking part in this study because its effectiveness would be measured by their contribution to it. In each case, I informed them that the study was transparent and there was nothing to conceal about it. Only in one case did I have someone opt out of the interview.

As I had met with the village headman to introduce myself as a researcher in his village, with a permission from the Office of the President, the reception in almost all cases was acceptable and the interviews proceeded with little resistance from researchers.

During the university recess in September 1996, I undertook a day long follow up visit with the key informants (opinion-formers) whom I could not meet during the first visit because they were committed elsewhere. Unfortunately, I only met two of them, the chairperson of the village development committee and the assistant technical officer – agriculture, an employee of the government. The rest were still out of the station on official commitments. The absence of the majority of these officers frustrated attempts at interrogating all of them as intended in the objective of the study.

### **Individuals covered per household**

Only one person was approached in each household to get a sample of 50. In other words, each household represented one person. Only one member was interviewed because it was assumed that his/her input would represent the collective position of the entire membership of the family, in as much as the whole sample of 50 was taken as a representative sample for the entire population of the study site.

### **Pilot testing**

The questionnaire was pilot-tested in Pitseng, a rural settlement in the Southern District of Botswana, to determine its appropriateness, applicability, utility and reliability as a measuring instrument. Five people representing 10% of the overall sample were tested, three of whom were

members of the rural population while two others were teachers from the local primary school. This approach was based on a random selection involving picking up one person from different sections of the community. This pretesting allowed for the rectification and resolution of any visible limitations relating to the wording or adequacy of the questions in the measuring instrument. Consequently, some questions were added, rephrased, polished, replaced and others simply junked. With the accomplishment of this process, a fair amount of certainty about the operational adequacy and efficacy of the questions prevailed. According to Buckstrom (1991: 177) pretesting is a necessary condition for a study to ensure that questions "mean what they are supposed to mean to all people; they measure what they are supposed to measure; they provide answers that the interviewers and respondents can agree on without reservations; and they produce results that researchers and clients can agree are useful for problem solving".

Originally, it was agreed to pilot-test the questionnaire in Peddie in the Eastern Cape, South Africa based on the assumption that the general conditions were similar and therefore appropriate for testing the viability and utility of the measuring instruments. The argument can be made that the development problems and communication problems in rural areas of the Third World have certain similarities. Thus, the premise that the viability and utility of a research instrument can be pre-tested in another social setting. However, where it is possible to pilot test in a setting with the most similar conditions to that to be researched, so much the better. Hence the ultimate decision to undertake pre-testing of the questionnaire in the rural settlement of Pitseng in the Southern District of Botswana. Following pretesting, the results on all the modifications effected to the measuring instruments were communicated to the project supervisor at Rhodes University for verification and indeed to get his authorisation to go ahead with the full scale implementation of the inquiry.

## **Secondary data**

Secondary data embraced background information on RIIC's corporate communication strategy, feasibility studies (needs assessment survey, extension programme field reports, technology transfer unit progress reports) and Phitshane-Molopo's background information from district and national development plans. Background information on RIIC's corporate communication strategy is critical to this study because it provides the basis for the institutional policy and assumptions that shaped the perspective of the strategy in question, including the overall corporate attitudinal climate towards the strategy. Secondary data, usually accessible within institutional archives, constitute the most expedient and economical collection due to the minimal cost incurred towards their procurement.

## **The approach to data analysis**

Data analysis, according to Reid (1981: 34) is "the categorising, ordering, manipulating and summarizing of data to obtain answers to research questions". Conventional wisdom holds that the interpretation of research findings embraces the manipulation of the data at two fronts. The initial level of interpretation involves the elucidation of the relations within the data. In this process, I coded the data to segregate and match the variables according to their specific categories. For example, the section on literacy skill has different components such as reading skill, writing skill and I made sure data befitting each of these components were appropriately situated, where they belonged. I then followed with an unbridled articulation and description of the data to provide the

details of why situations were occurring the way they did, including giving an account of any relationships between the constituted categories. I presented the findings in their original form without tempering or supporting them with knowledge from other research findings. This is the conventional practice at this phase of research, to present the findings in their original form, without linking them with other knowledge from other research findings.

The second level of data interpretation places the findings in a broader perspective. According to Reid (1981: 243), this is done by linking one's results to other knowledge, particularly to other research findings and to the theory around which the study devolves. Debates are raised here, for or against any of the views embraced in the findings, based on what other scholars have found. In other words, at this level, I established commonalities and relationships between my original data with what other researchers have found in other studies and I brought in those views to strengthen or corroborate my contention or contest against some of the findings.

### **Analysis of the raw data**

Data analysis employs both qualitative and quantitative methods. The culmination of this process is the examination, segregation and compartmentalisation of the responses into the various appropriate categories, numerical structures (to determine the representativeness of the data), and a narrative account is given, drawing the necessary conclusions and synthesis at each stage of the analysis.

My interviews had a number of questions that seek to extract information on organisational assumptions and goals from the Managing Director and General Manager, RIIC. In my analysis, I

used both explanatory and descriptive analysis. I got additional information from the RIIC's institutional documents including the policies and procedures manual to verify my interviews.

The interviews with villagers employed questions which established consumer opinions about the frequency of the media, whether the time frame within which the media are circulated is acceptable or not and what alternatives are available. Both qualitative and quantitative analysis were applied to acquire descriptive data and quantified data on frequency, timing and alternative suggestions. A copy of the questionnaire used is appended at the end of the thesis. Interviewees answered questions on their literacy skills and language preferences for each media component and how these factors impacted on media reception patterns. In my analysis, I developed categories indicating numerical values for literacy skills and language preferences. I then followed with an explanation and description of problems cited in each item and how these factors impact on media reception.

I asked questions on the relevance of the text to the audience and determined the impact of such text on reception, interest, comprehension, acceptance or rejection of the media. In terms of data analysis, respondents were grouped into two categories: those who understood the text and those who did not, and reasons are given for each reaction. Conclusions were drawn indicating the impact of these variables on reception of RIIC media activities. Interviews incorporated questions that determine the perceptions of the audience on the effectiveness of each component of the media used. The interviewees were categorised into those who feel that the RIIC's media have effectively served them and those who discount this view, and reasons are given for each category. Finally, recommendations, on the basis of the above discussion, are made for RIIC's action to improve its communication strategy as applicable.

### **Problems encountered with face-to-face interviews**

As earlier mentioned, I personally administered the questionnaire, unaided. It should however, be noted that while this inquiry has matured to the level of this final document, data collection in the study site was not hassles free. In one particular household, the old man I meant to interrogate was extremely hostile to me, wondering why of all the households in Phitshane-Molopo I chose his for an interview. This type of unwelcoming behaviour is to be expected, especially in rural areas where the encounter with researchers is not a commonplace. Some individuals loathe strangers and view them with a considerable amount of suspicion.

Confronted with the above hostile reaction, I reacted pleasantly and informed the old man of the objective of my visit to the area and the permission granted to conduct the study by the village headman and the State President's Office. That I meant no harm to him as an individual or did I mean any harm to the community. That the information extracted from the interview was required only for development purposes and nothing beyond that level. I further indicated to him that he enjoyed the liberty to opt out of the interview if he wished. However, I impressed upon him that his participation was crucial for development purposes and I would appreciate if he changed his mind and participated. He then calmed down and the interview proceeded as planned.

In another interview, I discovered that I caught the participant just before he left on a planned trip. During the course of the interview, I realised that his attention to the question was lacking as he answered hurriedly. Considering that the interview had just started, I asked him if I could let him go on with his trip and interview another member of the family, to which he conceded.

The other problem I encountered had to do with some participants being too shy to respond to questions in the presence of other members of their families, only to respond if left alone with the researcher. Other participants were too loquacious and would digress from the interview into issues with no significant bearing on the subject matter of the interview. Faced with this situation, you only need a fair amount of diplomacy to bring the person's attention back to the interview, for the sake of progress and to save time. One strategy I used was to acknowledge the essence of his new subject and request him to bring it up after the interview. In most cases, by the end of the interview he would have forgotten about the subject he was pushing. However, if he brings it up, and it is not connected to the subject of the interview, respond as short as possible and request for permission to leave.

In another household, I was forced to buy a calabash of traditional beer which was being sold in there, before the participant could take part in the interview. He claimed that he was too hungry to take part. However, I promised to buy him beer following the interview, which I did.

In another situation, it appeared that the members of the household were too intimidated to settle down to the interview: the fact that I was presentably attired and driving a car gave them the impression that I had a hidden agenda. After I had introduced myself and established the nature of my visit, nobody seemed willing to present himself/herself for the interview. Statements such as "He is a criminal investigator and would sent you to the gaol if you volunteered information were not uncommon". It took a fair amount of time to explain why it was necessary to seek their participation before one family member volunteered to be interviewed.

These are some of the problems that should be expected from the study site. They pose a challenge to the researcher as a result of which s/he has to utilise a professional approach and common sense to tackle them. There could be more complicated problems than these ones, but in each case, be patient and attempt to resolve them, and if all fails, give the participant the liberty to exonerate himself/herself from the interview and still thank him for his time with you.

### **My connection to RIIC and its implications for the research findings**

As clearly indicated in the Acknowledgement section of this thesis, I am an employee of the Rural Industries Innovation Centre and I am directly in charge of the public relations and information services programme. Prior to undertaking this study, I was under the impression that the RIIC communication strategy was delivering balanced publicity given the formidable effort the public relations section exerted into the design, development and dissemination of communication materials such as radio programmes, newsletters, brochures and catalogues of goods and services. Supplemented with an extension officer initiative, which involves direct interaction with the target audience through dialogue, I got the impression that there was a very good reception of RIIC communication media in the study site, in spite of the fact that the strategy had never been evaluated since it was institutionalised.

I undertook the study with this impression, but then the findings of the study disproved that. However, I could not temper with the findings to suit my impression or to please my employer. I accepted the findings of the study as they unfolded and did so without any qualms because I

realised that my impressions were ill-informed and without a basis. I also paid attention to one of the main questions of this study, which was to find out if the RIIC's communication strategy was effective or ineffective (based on paradigmatic or operational considerations) and that where the latter case applied (ineffectiveness) then make recommendations for improvement.

It is also my earnest belief that when undertaking a study, a researcher needs to transport himself/herself out of the work environment, and visualise himself/herself as an outsider rather than an insider. The researcher must invariably restrict himself/herself to the terms of reference and present the resulting data within the context of those terms. For this reason, the researcher can avoid being skewed and eliminate possibilities of compromising the methodological considerations of the study and indeed the validity of his findings. I saw my role in this perspective.

## **Conclusion**

The conclusion critically reviews each chapter and identifies or proposes solutions to a problem(s) highlighted in each chapter. For example, in the discussion of the various development paradigms, the conclusion should establish which paradigm complies with the RIIC communication strategy and which ones do not and why. Generally, the conclusion spells out recommendations required to solve problems identified in the main body of the text. It also examines in a nutshell, the strategies used in other experiences to solve a given problem and suggests if the same approach is feasible for the current situation or not and suggests the way to go.

## **CHAPTER 2**

### **THEORETICAL, CONCEPTUAL FRAMEWORK AND LITERATURE REVIEW**

#### **Introduction**

This chapter reviews the various communication models to determine their implications for diffusion of information within a community. It concludes that theoretical models suitable for the diffusion of information must incorporate audience participation in order to get at the people and break down any socio-cultural barriers which may be impeding media reception. It is therefore hoped that a review of these theories would reveal a suitable theoretical conception within which the RIIC communication strategy can be located, to improve its effectiveness. This can only happen if any paradigm related problem could be established in the RIIC communication strategy, or if the existing model is insufficient and requires supplementation with another model.

#### **The focus of the chapter**

This chapter will discuss the following communication models: the diffusion of innovations, the convergence model, the Freirian approach: extension-communication model, the basic needs approach, the need-based integrative model, the participatory model, the basic needs approach, development communication model and knowledge gap hypothesis. Concepts such as diffusion, homophily, heterophily, empathy and credibility are also discussed in order to explore their implications for effective communication process. The chapter also makes allusion to the KAP model (Knowledge, Attitude and Practice) which is based on the premise

that knowledge influences attitude formation and that once an attitude has been formed, decisions are made for or against an innovation. However, if information is received and then put to use, the practice mode is fulfilled.

### **Development paradigms and communication models**

Development has been defined variously by different scholars. In the dominant paradigm, Rogers (1983: 120), defined development as “economic growth through industrialisation and accompanying urbanisation, approximately equivalent to passing through the Industrial Revolution. Development performance was quantified in such economic terms as gross national product and per capita income”. Moreover, development was defined in terms of capital intensive and labour saving technologies which were mainly transferred from industrialised countries. One of the key characteristics of development in terms of the dominant paradigm was centralised planning done at the top level by key government economic planners. This planning process emphasised a top-down approach in the development and dissemination of information. It was characterised by the exclusion of the beneficiaries from the planning process, thus relegating them to a passive receiver role.

However, in the 1970s there was a shift away from the mere definition of development in terms of the features alluded to above. The shift involved the definition of development “as a widely participatory process of social change in a society intended to bring about both social and material advancement (including greater equality, freedom, and other valued qualities) for the majority of people through their gaining greater control over their environment” Rogers (1983: 121). The

contention here is that if development was more participatory, it would bring about self-reliance on the part of those being served at all levels. Furthermore, if development policies were more and more less elite-oriented, and more concerned with equalising the socio-economic benefits of development, then everybody would be a “shareholder”. Participatory development requires a corresponding communication strategy, not only to sensitize the target audience but also to involve them in the planning and implementation of communication activities. Participatory development strategies have the effect of overcoming organisational, cultural, societal and psychological factors that could impede message reception by the target audience. It is in this context that a good communication strategy is ideally suited to a country like Botswana because the bulk of its population lives in rural areas, and therefore require communication strategies suited to their socio-cultural orientation. The Rural Industries Innovation Centre, whose programmes are geared towards the rural people also requires a communication strategy that can fit into the context of rural realities.

It can, however, be argued that in many Third World countries, development has continuously lagged behind because the processes and strategies for information dissemination are either inherently ineffective due to the poor institutional arrangements or the materials being delivered to effectuate behavioural change are diametrically incongruous with the audience's socio-cultural expectations, irrespective of how well-intentioned the strategies purport to be.

One of the communication theories which fits into the context of the above scenario is the diffusion of innovations (Rogers: 1983). Conceptualised and adopted with the intention of effectively articulating technology transfer, this theoretical conception failed to achieve its intended objectives because of its head-on collision with cultural barriers in developing countries. It was too product

and technologically oriented and it did not incorporate local community participation in the project decision-making process. Thus, the message passed on to the communities through the mass media on which it exclusively depended did not reach the audience because of the incongruity of the message with the audiences' socio-cultural expectations, intentionalities and imperatives. This exemplifies one of the egregious shortcomings of the capital intensive media: their unsuitability for the needs of grassroots communities if they are not supplemented with interactive approaches. Grassroots communities by their nature require communication strategies germane to their ecological idiosyncracies. The contention here is that communication materials meant for the urban population, the elite stratum of the entire population, be it in Botswana or any other developing country, should be varied from the message packages designed for the rural audience. Various factors such as environmental, cultural and psychological could impact upon diffusion and reception of the media by the target audience. Diffusion, a process by which information about an innovation or new ideas is prepared, transmitted and received by the intended audience would not be achieved without consideration of the above factors. Communication planners and practitioners therefore need to seriously accommodate the foregoing factors in the design, development and transmission of media messages.

Moreover, the diffusion theory vaingloriously failed to deliver a product in developing countries because the innovations it proffered and the communication strategies it employed were decided in advance and imposed on the recipients in an authoritarian, top down manner (Masilela, 1994:26). This approach denied the target audience the autonomy to establish priorities on what suited them since they were considered to be too passive to conceptualise any tangible development agenda without exogenous influence.

In addition, the diffusion theory was hierarchically organised and emphasised persuasion of the audience to adopt the already decided technological artifacts. Nowhere would you see the audience being solicited to suggest the technological innovations which would be germane to their socio-economic imperatives. As Masilela (1994) vehemently contended, "these strategies, the basis for the diffusion of innovations studies, were technologically-bound in addition to being product-oriented. They reflected a confidence in the power of mass media technology to produce desired effects. The mass media were seen as cheap multipliers of information. Mass media exposure was seen as being correlated with indices of modernisation". However, this approach spelled doom for the diffusion of innovation strategies as a result of which it never picked up its momentum thereafter. As Masilela (1994: 27) further maintained, "...These communication strategies have since fallen into disrepute and the diffusion of innovations studies based upon them have reached a cul de sac".

Given these inadequacies, the diffusion of innovations paradigm failed to achieve its anticipated objectives. This also derived chiefly from the failure by the extension staff, the catalysts of the process, to ensure comprehension of the innovations they were proffering for adoption by the target audience. However, it needs to be stated that while the diffusion of innovations theory did not effectively deliver the goods as expected in Third World countries due to the lack of utilisation of a participatory approach, it did so very effectively in the developed countries for which it was designed.

It can also be contested that in spite of the ineffectiveness of the diffusion of innovations theory in developing countries, it did to some extent deliver some technologies which have found wide use in rural areas such as radios, vehicles, television sets, telephone systems, borehole engines and the

list can endlessly go on. These technologies are not only used in urban areas but also in rural areas. It therefore means that those who adopted these technologies in rural areas did to some extent benefit from the communication mechanisms based on the diffusion of innovations theory in one way or the other. However, based on the arguments advanced by some scholars later in this chapter, diffusion of innovations theory can only be effective in developing countries if it is supplemented with participatory communication interventions where the audience can take part in deciding which innovations best suit their needs. This explains why the model failed to engender technology transfer at grassroots level, as was expected by its architects.

The rationale for this contention is that the reception and assimilation of information within a social system can be effective if the communication strategies employed are appropriate to the needs and aspirations of the audience. If the media can reach the people, but people do not understand the content and fail to provide the necessary feedback for decision making, then the media are as good as non-existent. Thus, the audience are more likely to view with suspicion any development agenda which proposes solutions to their problems, but fails to embrace them (the audience) in deciding on ways in which such propositions will address their needs. The audience will reject outright such propositions, pointing to the stark loopholes and discrepancies in the communication strategies designed to facilitate a development agenda.

From the above discussion, it is evident that RIIC's communication strategy does not fall into the diffusion of innovations model because the centre operates a dialogue-based model to some extent with the extension workers. However, it is evident from the findings of the field study that the RIIC communication strategy is plagued by paradigmatic problems with the dialogue model chosen by the centre proving insufficient for the mobilisation of the productive potential of the target audience

especially as far as information dissemination in Phitshane-Molopo is concerned. The other problem derives from inadequate reach and reception of the mass media activities and the lack of evaluation of the communication strategy from which the problems hindering the effectiveness of the strategy could have long been picked up and addressed.

### **The two-step flow model**

Advanced by Lazarsfeld in a study he conducted in 1944, the two-step flow model was aimed at analysing the role of mass media in clinching political decisions. The researchers however, were baffled to find evidence indicating that almost no voting choices were directly influenced by the mass media. Instead, according to Lazarsfeld and Menzel (1963: 96), “people appeared to be much more influenced in their political decisions by face-to-face contact with other people...than by the mass media directly. It was therefore concluded that “ideas flow from radio and print to opinion leaders and from these to the less active sections of the population” (Lazarsfeld, 1944: 151). It is therefore expected that the same situation should obtain in Phitshane-Molopo where the field study was conducted, i.e., once opinion leaders get information about RIIC from the radio and print media, they are likely to pass some of it on to those who did enjoy the same exposure.

### **Multi-step flow model**

This model does not call for any number of steps nor does it specify that the message must come from a source by the mass media channels. It contends that there are several ways in which messages can be transmitted from a source to a large audience. It further argues that some people will be able to get the messages from the source through specified channels while others may be

several times away from the source as a result of which they will get the message through any other available means.

The exact number of steps involved in this model depends on the intent of the source, that is, how far does the source want the message to go. The way in which the message would be transmitted depends on the availability of the relaying mechanisms.

In a nutshell, the contention of the multi-step flow model is that if several relaying channels are used, there will be fewer contradictory messages in the environment. The same message will be heard from more than one source and each channel will have access to some members of the public whom other channels do not reach. This assertion is confirmed by Smith and Lundstrom (1985) in their contention that “Experience has shown that the total effect of multiple media (where they share the same message content) is greater than the sum of effects when the same media are used separately”.

The above conditions therefore confirm the imperativeness of a multifaceted communication strategy that incorporates both conventional and traditional media activities. It is for these reasons that although RIIC enjoys the use of print media, extension officer channel and a broadcast channel with Botswana Technology Centre as discussed elsewhere in this thesis, the centre continues to utilise broadcast services extended by other channels such as the ministries of agriculture and commerce and industry. The centre also takes advantage of several local print media channels to spread the same message to its target groups. The cumulative effect of these several channels is that the same message will be duplicated and heard at different times and from different channels, with

the result that those members of the public who missed this message in a particular channel, would receive it from the other channel(s).

### **The revisionist paradigm**

It was in the light of the inadequacies with the diffusion model that the 1970s witnessed an evolution of a "revisionist paradigm" (Melkote: 1991) which advocated a different style of communication at the grassroots level. As its starting point, this paradigm "revised" and critiqued development concepts and development practice since the 1970s. This new paradigm of development recognised not only the crucial role that cultural, political and social structures play in the process of planned change, but also the contributions that the intended beneficiaries of development programmes can make towards the success or failure of a development project. Among those theories to which the revision was extended was the diffusion of innovations. The revision revealed that this theory failed to recognise contextual (i.e. political, social and cultural) differences between developed and developing nations in its advocacy for the diffusion of information. The proponents of this revisionist paradigm argued that communication strategies designed for developed countries are not equally suitable for developing countries because of contextual differences between the two environments. In other words, developing countries require a different style of communication owing to the different expectations and intentionalities of its people.

Accordingly, the proponents of this new paradigm advocated a transition from mere information dissemination to a process of communication. Informing the audience implies a direct, unidirectional flow of information materials from an active source to a passive receiver who is

entirely at the mercy of the change agency. This is not communication. Communication, even in its most subjective dimensions, involves two or more people talking to each other, not a direct delivery of information to a passive audience. It denotes active participation between the benefactor and the beneficiaries resulting in a mutually beneficial intercourse. Thus, a mere information dissemination alone through a unidirectional approach (which constituted the basis of the diffusion of innovation paradigm) is inappropriately suited for articulating media reach and reception and cannot be relied upon, especially in rural communities where expectations and communication styles differ markedly from those of the urban areas. Moreover, there is absolutely no guarantee that the grass-roots level audience would understand and utilise information presented to them through a unidirectional communication strategy since this approach excludes their voice from being heard.

As part of the experiences gained from the revisionist paradigm, Kincaid and Rogers (1981) joined the bandwagon by concluding from their study of network approaches that the diffusion of innovations theory was enfeebled by its exclusion of an inter-personal communication intervention. As a result, they concluded that mass media were a necessary but not a sufficient way of articulating technology transfer unless supplemented with inter-personal communication interventions. Henceforth, interpersonal communication became an indispensable component of the communication theories that evolved subsequent to the diffusion theory, giving impetus to the strongly held view that mass media of their own accord are not strong catalysts for facilitating communication at the grassroots level, where comprehension levels can be affected by numerous factors, including inadequate literacy rates. This led to the emergence of the convergence model, details of which are discussed below.

### **The convergence model**

The convergence model, the brain-child of Everett Rogers and Kincaid (1986), focussed on the need to share meaning as opposed to ordinary, unidirectional information transfer. It was acknowledged that the receiver was in control of message reception and that meaning resulted from a dialogic interaction between two communicating "participants". In presenting this model, Rogers and Kincaid defined communication as "a process in which participants create and share information with one another in order to reach a mutual understanding". They argued that this definition implies that communication is a process of convergence (or divergence) as two or more individuals exchange information in order to move toward each other (or apart) in the meaning that they ascribe to certain events. (Nair and White, 1993: 155).

The convergence model was equally strongly supported by eminent African scholars, among them Gabriel Bangui (1990: 46) who postulated that "it puts emphasis on the audience and the communication planner as equal partners who are seeking a mutual understanding on a specific issue". The model takes into account the fact that mass media by themselves cannot entirely satisfy communication problems in a social system. If they are used, they must be supplemented with interpersonal communication interventions in order to directly share information with the masses and empower them through their involvement in decision over issues that come to bear on their lives.

A similar view was postulated by Mendelsohn (1973: 50-61) who maintained that "the mere offering of information through a campaign is insufficient. The communication planner should use environmental support systems, i.e., interpersonal communication. Combining mass communication

and interpersonal communication should be considered". Thus, where media do not reach the audience for various reasons, the communication specialists must provide alternative ways of reaching the audience including opening up channels through which the media can reach the audience or develop a strategic way of reaching those areas through interpersonal communication approaches.

Thus, in contrast to its predecessor, the diffusion model, the convergence model emphasises audience participation in a communication process to reinforce information delivered by the mass media. This view is neatly captured by Windahl (1992: 58) who said "in recent times, horizontal exchanges of communication as well as communication from below have become important. An interplay between mass communication and interpersonal communication is characteristic of the approach".

From the above perspective it is clear that the convergence model outrightly rejected top down communication intervention due to its proclivity towards a one-way, quasi-authoritarian transmission of information. Top down communication is geared towards persuading a passive audience to maintain the status quo. This communication model, if adopted without taking account of community participation, can impede communication process within a social system. Top down communication strategy is viable if it is combined with bottom up strategies to allow for some degree of complementarity between the two strategies. Bottom up communication strategy is based on a participatory approach, it is more democratic and it is based on social interaction, symmetrical exchanges and voluntary sharing of experiences between the benefactor and the audience "...under conditions of free and egalitarian access, dialogue, and participation". (Masilela, 1994). Bottom up communication approach, in contrast to top down communication interventions, uses small media.

With this communication approach, the problems associated with mass media reach and reception can be overcome. This study therefore, advocates the merging of both bottom up and top down communication strategies as independent utilisation of one of these strategies can create a gap in the communication process. Where a gap exists, one of them must fill in for the other.

The convergence model therefore stands out as an efficient communication model because of its advocacy for merging both top down and bottom up communication strategies. This is based on the fact that people's needs differ markedly and must be approached in different ways.

If the above approach is adopted, the audience's confidence will be strengthened due to their involvement in decisions affecting or approximating their socio-economic realities. This means that the attitude of the audience towards change can be systematically gauged if their voice is recognised in the communication process and their intentionalities and socio-cultural imperatives are taken into account as a result of which existing or discernible barriers towards the utilisation of the media can be identified and addressed, thus satisfying the conditions of the KAP (Knowledge, Attitude and Practice) model. This model postulates that if the audience has sufficient knowledge about an innovation, they can change their attitude towards it, and make use of it.

The rationale for the foregoing contentions is to demonstrate the transformative process undergone by development communication from the dominant paradigm-led communication process to a people-centred, dialogue-based process located in the convergence model. These theories will be revisited in the conclusion chapter, when decisions are made to establish the appropriate communication model within which the RIIC communication strategy can be located.

### **Conscientisation: Extension or Communication?**

In the late 1970s a new way of conceptualising development through communication rather than through an extension approach was emphasised by Paulo Freire, a Brazilian educational philosopher who had become increasingly disenchanted with the approach to the dispensation of knowledge within the social system via an extension-led process. Freire contended that an extension approach was bent on filtering information to the target audience via a change agent in a unidirectional, top-down, authoritarian manner. He argued that such an approach is incapable of effectively conscientizing the individual to establish the contradictions inherent in social reality. He further criticised extension philosophy for the use of a persuasive approach with its propensity for manipulating the audience.

Freire argued that extension officers undermined the integrity of the audience by denying them the latitude to exercise their autonomous thinking and choice through decision making. Instead, the extension officers decide the status quo for the target audience, which he said amounted to cultural invasion. As a result Freire (1973: 111) argued that "any invasion implies, of course, an invading subject who seeks to penetrate another cultural-historical situation and imposes his system of values on its members. The invader reduces the people in the situation he invades to mere objects of his action".

Freire, (1973: 111) argued that "...the invader has his say, the invaded...listen to what the invader says. The invader thinks, at most, about the invaded, never with them; the latter have their thinking done for them by the former. The invader dictates; the invaded patiently accept what is dictated". The views of Freire about the inadequacy of the extension model conjures up images of the

diffusion theory and top-down approach which all failed at grassroots level because their architects overlooked the necessity for consultation which is a viable and an indispensable communication intervention at the grassroots level.

Freire's contention is reminiscent of many situations in many Third World countries such as Botswana where the extension officers present themselves as "the know-all types" and go about prescribing solutions to rural problems and dictating the *modus operandi* in terms of how the audience should implement the prescribed solutions. This approach is not happily accommodated within the field of development communication. It is for this reason that in the ensuing model, the communication approach, Freire indicates how the problems identified in the extension model can be solved.

### **Communication: The Freirian perspective**

In the communication model, Freire emphasised dialogue as the key facilitator of development communication. He argued that dialogue is a liberating form of communication because it effectuates co-participation and reciprocity between the benefactors and the beneficiaries, thus allowing both parties to decide on a communication process suitable for the needs of the latter without prescribing a methodology. It is therefore important to note that members of the rural communities are not as passive as we have been made to believe in the extension model. Given the chance, they can make constructive judgement on their own realities and on that basis, decide on solutions appropriately suited to their needs. In terms of this model, media reach and reception can only succeed through the involvement of the audience in the planning of a communication strategy.

The foregoing sentiments have been shared by Mda (1993: 30), an ardent follower of Freire, who contended that "members of the rural community should be seen as thinkers, with the potential to be drawn into decision making processes affecting their holistic scope of life. Therefore, the task of the communicator is to activate the community to express its needs, to formulate solutions, to achieve its goals. Participation therefore becomes an essential element of liberation".

Freire's view of communication process reflects striking parallels with the vision espoused by Diaz-Bordenave (1977: 21) who contended that "merely transferring content from a knowledgeable and authoritative source to a passive receiver does nothing to promote the receiver's growth as a person with an autonomous and critical conscience capable of contributing to and influencing his society". A similar view was espoused by Nwosu and Megwa (1993) who strongly contended that the necessity for a shift in the analysis of development communication from an exclusive concern with source-side but more importantly, with recipient's considerations, was warranted. This contention takes into account the fact that face to face communication channels have a better potential for feedback.

The arguments for participatory communication bear semblance to those advanced for the notions of convergence and bottom up communication models which confirm the indispensability of dialogue in development communication. This means that mass media alone do not constitute a panacea for the diffusion of information without supplementation with interpersonal communication interventions.

### **The basic needs approach: the World Bank Perspective**

Further to the importance attached to participatory driven development programmes, the early 1970s witnessed a concentration of effort on the conceptualisation and rationalisation of development activities by multi-lateral organisations such as the World Bank in terms of meeting the basic human needs. Melkote (1991: 245) subscribed to this view in his assertion that "if development is to have any relevance to the people who need it most, it must start where the real needs and problems exist...People living in such peripheries must be encouraged to perceive their real needs and identify their real problems". Melkote further argued that "...much that is innovative in rural development stems from the traditions and practices of the poor themselves who have experience in the demands of survival in harsh environment.." (Ibid: 315). Hence the need to dovetail the resulting communication interventions into the audience's perceived needs, aspirations, circumstances and expectations. It is only in this way that the resulting communication interventions can be ideally suited to the delivery of an innovation to the target audience.

The basic needs approach was taken a step forward in the need-based-communication model advocated by two African scholars, Nwosu and Megwa (1993: 8 - 10), who postulated that "the assumption of this need-based integrative approach to development communication is that the people must be involved in deciding what these needs are from the design stage to the implementation stage of the programme."

The need-based integrative model emphasises communication within a system as one of the crucial dimensions through which the diffusion process can be engendered. That communication facilitates

interchange and feedback within the various sub-systems in an integrated manner to achieve the intended goals.

The architects of this model argue that there is no such a thing as a universal development communication paradigm and conclude that “communication paradigms are culture-and country - specific and situation-realistic” (Ibid: 4). But given an earlier contention advanced in chapter 1 (Pilot-testing) that development problems in the Third World have some commonalities, it can be concluded that this model, although designed to address agricultural development problems in Swaziland, could equally be assessed and modified for possible application in other African countries.

For the above reason, the conclusion chapter actually recommends the need for an extensive exploration of this model to determine the feasibility of ultimately applying it at the Rural Industries Innovation Centre in Botswana. The largest proportion of the clients for the Rural Industries Innovation Centre are the rural people. Considering that the majority of the people of Botswana stay in rural areas, it is possible that this model would be of immediate fitting into their contexts. More interesting about this model, as Nwosu and Megwa (1993: 9) contend, is that “...it does not radically alter the existing communication equilibrium in Swaziland. Rather, it suggests ways by which existing resources may be effectively maximized to achieve optimal productivity. The need-based integrative model recognises the relevance of traditional modes of communication - a missing component in programmes of change in Swaziland - and thus makes provision for further research into these media, and their possible syncretisation with modern media”.

Thus, the need-based -integrative model is not biased towards any particular media but envisages an integration of the entire communication media: the mass media, small media, the traditional extension-communication model and the indigenous modes of communication (which taps on the unexplored potentials of rural people) the syncretization of which would result in an effective and long-lasting communication impact on the target audience.

The rationale for integrating these communication strategies is to render a variety of ramifications in which the communication needs of the audience can be met. As Nwosu and Megwa (1993: 12 - 13) rightly observed, "while a communication strategy may be effective in reaching a particular audience, it may not necessarily be effective in reaching another audience group. Therefore, it is eminently important to vary communication strategies or formats to suit particular audiences and social environments". Communicating with the audience in more than one channel constitutes a recognition of the differences that exist between the audience itself, which must be catered for in various ways. This position is one of the most important ways in which media reach and reception can be enhanced in development communication.

### **The audience participation model**

With parallels in the convergence model, bottom-up communication, the basic needs and the need-based integrative model,<sup>3</sup> the audience participation model is seen by many as a process of enabling or empowering the people to manage their own development and ultimately increasing their self-reliance and problem-solving skills. This model also rejects the diffusion theory's hypothesis that innovations spread from local influentials to followers, as an argument without universal validity. The contention of this model is that seeking people's participation in identifying their problems,

setting their own priorities and adopting alternative solutions, increases the probability of full involvement of the people in the implementation of development initiatives. The rationale for this participation, according to Masilela (1994), is to create understanding between the beneficiaries and the benefactors about their respective needs, goals, knowledge, and problem-solving skills. Masilela further argued that this participation is intended to create a communication environment which reliably enables development planners and technical specialists with all their worldly sophistication and special idiom of communication to enter into practicable knowledge-sharing as co-equal discourses with the urban and rural poor. (Ibid: 53).

Knowledge sharing therefore allows for the effective mobilisation of the larger knowledge resource from the rural people, which knowledge has been under-utilised in development projects. Participatory communication therefore has the likely effect of reducing the possibility of conflict between groups, between communities, between nations, both powerful and powerless. Thus, the role of communication in participatory development needs to reinforce the purposes of liberation, freedom, justice and egalitarian ideologies (Nair, 1994).

The concept of community participation is premised on the contention that any innovation or intervention should have, as its starting point, the community's own blessings, wishes and aspirations. This contention is further reinforced by McKee (1992) who conceptualised participation as sufficiently suited for creating conditions conducive to information sharing between the beneficiaries and the benefactors. McKee (Ibid: 3) lists four fundamental variables which must be present for community participation to occur as follows: the involvement of the community in what should be done and how it should be carried out; a mass contribution to the development

effort; a sharing of the benefits a given programme may bring and the involvement of the community in the evaluation process.

Participation therefore implies empowering the grassroots people to take part in the planning, construction and production of media content, including participating in deciding topics and channels for the messages. This approach is potentially suited to bridging the knowledge gap and increasing self-reliance of the intended receivers of the messages. As a result, there will be a greater response from the people when they have been involved at all the relevant steps of the programme.

### **The importance of meaning in a participatory process**

For communication to have an impact, the resulting content must convey an acceptable meaning to the audience being served. It is therefore the contention of this thesis that the rationale for audience participation is to ensure acquisition of meaning about the innovation to gain understanding of the necessity of the innovation towards alleviating their socio-economic problems. Two models, American interpretivism and the British cultural studies approaches, provide varying explanations regarding the way in which meaning can be derived from textual presentations by the audience (Moffit, 1993).

In terms of the American interpretivism, meaning is privileged in the individual audience member. This means that every audience member applies a different cognitive interpretation to textual products, by means of which meaning is obtained from the text.

In terms of the articulation model, drawing heavily on and informed by the British cultural studies tradition, "meaning is not determined by the receiver's social-economic or gender position, but it is the result of intersection, or articulation of social position, social practices and social texts, and consequent intersection of ideologies embedded in these discursive conditions." (Moffit, 1993: 234). Simply stated, meaning that people extract from texts derives directly from their situational contexts. It is on this basis that the field study covered in Chapters 4 - 5 addresses the question of literacy skills to determine the extent to which such skills influence effective utilisation of the media and the consequent extraction of meaning from the texts through which the success of communication process can be measured. With these factors in mind, a communication agency will be duty-bound to segment the audiences according to their cultural predispositions and literacy abilities, and provide the relevant communication materials designed to suit the different backgrounds of the audience.

### **Development Communication**

Development Communication model echoes the same sentiments emphasised in the participatory model that people's active participation is an essential component of sustainable development. This position is espoused by Bessette and Rakasunderam (1996: 1) that "Any intervention with the intent of achieving a real and sustainable improvement in the living conditions of people is doomed to failure unless the intended beneficiaries are actively involved in the process. Unless people participate in all phases of an intervention, from problem identification to research and implementation of solutions, the likelihood that sustainable change will occur is slim". Development communication is therefore the process by which people assume leadership role, become principal actors in the conception and implementation of their own development agenda. Moreover, the

model refers to the planned use of strategies and processes of communication aimed at achieving development. This communication process enables people to go from being recipients of external development interventions to generators of their own development.

The model rejects the mere production and dissemination of information without an interface with the audience. This communication process is ideally suited to grassroots level audience, because grassroots communities by their nature prefer a dialogue based communication process. This communication process is capable of empowering the audience through their involvement in decision-making processes affecting their socio-economic imperatives. It also compensates for knowledge gaps, produces a consensus among the participants in a development initiative and thereby promotes social justice and democracy.

According to Bessete and Rajasunderam (1996: 1), "The concept of development communication emerged within the framework of the contribution that communication and the media made to development in the countries of the Third World". During its early conceptualisation, development communication was viewed within the context of numerous projects sponsored by the United Nations utilising the media for communication, information or education purposes in order to facilitate the initiation and implementation of development projects. First used in the Phillipines in the 1970s to designate transmission and communication of new knowledge related to rural environments, the development communication model has since been extended to all those undertakings likely to help improve the living conditions of the disadvantaged people. Development communication therefore entails the application of communication for promoting socio-economic development, a planned social change.

Development communication views development as an endogenous process, a process that does not emanate from outside the system but from within. It moves from one-way, unidirectional flow of information to the promotion of bilateral and multilateral systems based on grassroots participation. The model is the mother of all other models such as the convergence model, the needs based integrative model, the basic needs approach, the communication model, the participatory model etc., all of which advocate that successful diffusion process is dependent upon combining mass media and interpersonal communication. A combinatorial approach is being used at RIIC, although the field results have deprecated its effectiveness.

### **Importance of reception in development communication**

As earlier enunciated, the main question of this study is to establish if RIIC's media do reach the audience in line with the centre's institutional goals and assumptions. For this reason, the notion of reception is of critical importance to this study because it marks a point where the communication media reach their final destination, when they are received by the intended consumers, from the change agency. Once the materials are received, it is expected that the consumers would make decisions confirming the viability or validity of such materials to their needs, or just keep and utilise the materials as regular as they need, to enrich their knowledge and understanding about the activities of the change agency from which the materials were generated.

However, to be of value to the target audience, the communication materials received must convey some meaning. This argument is taken a step further by Windahl (1991: 108) who says that reception of messages and utilization of their meaning should be influenced by their appropriateness to fit within the values and norms of the receiving group. They should faithfully represent the

communication object and should be capable of bringing about a change in target population envisaged in the goal.

Also, Newton (1990) raises the concept of "horizon of expectations" which he says is critical for reception of communication by the audience. According to this concept, all media consumers approach the media with certain expectations and if the information received does not meet their expectations, then communication fails and simultaneously invalidates reception.

The rationale for this debate is to sensitize the communicator to the crucial importance of reception process and that while acquisition of information materials by the audience matters, the materials presented should be intelligible and must be meaningful to the audience. Within this context, then, the documentation will be easily assimilated by the audience and therefore likely to have an effect on them. Thus, reception alone does not justify successful communication, but it is the meaning derived from the communication materials that matters greatly to the audience.

Also to be noted is that where the text does not convey meaning to the audience, direct communication with the source is desirable through dialogue, so that the audience can democratically articulate their needs, raise questions and get feedback from the communicator on the spot. When the intended message has been received and understood, we say reception has taken place.

Reception is crucial to the field of development communication because through it, the audience can make informed decision regarding the applicability of the media to their socio-economic imperatives. Unless the media message is received and understood, the primary goal of building an

informed audience would be of no consequence. The media would therefore be as good as non-existent. It is for this reason that the concept of reception is primarily important to this study, and more so to the field of development communication.

### **Contesting the applicability of technology transfer concept to this study**

Technology transfer process is premised on the notion that innovations are not an end in themselves but are a means to a good end. Innovations are therefore developed bearing in mind that they will fulfill the identified needs within a social system. A similar view has been expressed by Ascroft (1994: 295) in his assertion that technology transfer performs such functions as informing the audience about the existing technological capability and in this diffusion exercise, assisting them in learning how to take advantage of the innovations. Thus, the launching of innovations into a social system must be preceded by a communication campaign to create an enabling environment for the target audience to understand the relevance of the innovations to their needs, on the basis of which they can make informed decisions as to whether to adopt or reject such innovations. Thus, a communication strategy is integral to a technology transfer process. Hence the adoption of a communication strategy by RIIC.

Kashem et al (1992: 1) has conceptualised technology transfer in a similar way as Ascroft and has contested that: "The mere creation and generation of new technologies is of no use unless these technologies are utilised by potential users... Usually the transfer of technology means the movement of information or technology from a research system, through an extension system to the client system."

Windhal (1992: 66) argues that: "The stronger the change agent's orientation and the more extensive his or her client contacts, the more successful the promotion work becomes". The change agent is an important player in the diffusion process. In his effort to effectuate technology transfer, he normally employs the services of change aides at village level to assist in communicating with the audience in the community. As a result, the change agency must not restrict his audience reach to the mass media alone, but must also embrace dialogue with the people. This will be detailed out in chapter 5 within which the role of the village development committee and the existing government structures are discussed.

An extension agent, as earlier indicated, has been identified as a principal actor in facilitating communication process at community level. According to Rogers (1989), an extension agent can effectively serve as a catalyst for communication process if he embraces the following four basic attributes: homophily, heterophily, empathy and credibility.

### **Homophily**

This concept refers to the degree to which pairs of individuals who interact are similar in certain attributes. Rogers (1969: 181) argued that "communication is more effective when a higher degree of homophily is present, that is, when a source and a receiver are more similar in certain attributes. A homophilous pair shares common meanings and interests; they are better able to empathise with each other because their roles are similar. Further, greater reciprocity is involved when the change agent and client are more similar to each other".

This principle should guide the selection of change agents and other individuals entrusted with the responsibilities for the dissemination of information within a social system.

Proposed in the above contention is that change agencies should as much as possible strive to deploy change agents whose overall predispositions come as close as possible to those of the target audience. The accessibility of the change agent to the target audience is imperative for engendering communication flow within a social system. Thus, in terms of homophily, for communication to be engendered, the change agent should speak the same language as the audience, must be able to identify with the audience's culture and must easily interact with them within the social system.

However, homophily has its downside as well and should be cautiously applied. It can counter communication process within a social system. Homophilous networks have acquired considerable notoriety for restricting information to themselves and their own kind, thus preventing its flow to the larger community. This is typical amongst opinion leaders and change agents who display similar predispositions. They are likely to target audiences with similar attributes as they are, thus restricting information flow to their stratum and excluding audiences with dissimilar predispositions, with the result that information dissemination flow over a large area is thwarted. Thus, notwithstanding its advantages, homophily displays some shortcomings as a result of which the utilisation of the concept must be approached carefully, as earlier enunciated. This is why it is imperative for extension officers to work in collaboration with change aides who have commonalities with the local groupings within the community.

### **The effect of homophily on communication materials**

Homophily is effective only to the extent that the material produced is targeted at the people with the same socio-cultural predispositions with the person (change agent) initiating the communication process. Homophily can therefore be stimulated by publishing communication materials in the language of the audience and accepting a degree of heterophily so that different socio-economic needs are equally catered for. Hence the necessity to understand people's socio-cultural predispositions as the basis for developing the communication materials.

### **The concept of heterophily**

This concept denotes a different make-up between a client and a change agent on the basis that the change agent may be from a different socio-cultural background from the clients. Usually, such differences act as a deterrent to communication process within a social system.

Recognising the community's negative perceptions towards them, heterophilous agents have tended to work with opinion leaders. However, the disadvantage of this approach is that it often inflates the heterophily gap between the change agents and the audience, especially if the agents can locate more innovative opinion leaders, who are too advanced for the grassroots audience.

Nonetheless, the trend in most organisations is to field change agents with far more superiority than their client community, and who are different in formal education, attitude towards change and technical competence. Rogers (1989: 182) has argued that if the clients did not differ from the

change agent on these dimensions, the change agent would not have much of a role to play in the modernisation process, the clients would already be as modern as the change agent.

However, it can be contended from the above that the most important thing a change agent should do is to understand the problems affecting a given situation, discuss it with the affected people and collectively agree on a solution. The change agent cannot have answers to all problems by virtue of having acquired more formal education. Rural people, who constitute the target audience for the change agent, although having enjoyed no privilege of exposure to formal education, are equally capable of providing practical solutions to their own problems and issues affecting their daily lives if they are involved in decision making processes. Thus, it does not follow that if people are educated, they can provide answers to the entire range of problems which they encounter in their daily lives. Even anthropologists are known to have, in addition to observing the daily activities of a local community, eventually asked them how and why they executed some activities the way they did.

### **The effect of heterophily on media reception**

Granted that heterophilous networks are crucial in the delivery of new forms of knowledge into the social system, they can equally constrain communication process, and therefore can inhibit media reach and reception. In as much as material presented by a person with the same socio-cultural background would benefit those individuals with the same background, communication materials presented by a communicator to the people from whom he differs considerably are unlikely to effectuate desired results because of their incomprehensible nature. For instance, Melkote (1991:

259), in a study conducted in India in 1984, came across a battery of media materials used in extension programmes which were incongruous with the expectations and abilities of the audience, lending them to being rejected outright. He found that the materials "...such as pamphlets, posters, booklets, and radio scripts used in an extension project were laced with pro-literate terms even though the target farmers were illiterate...In short, the language in all media, was needlessly complex and technical". Definitely, these materials will stifle communication process within a social setting.

The lesson learnt from the above scenarios is that for communication to succeed, media materials must be varied among the audience in relation to their literacy capacities and socio-cultural background. The same view has been expressed in the reception theory. As Windahl (1992: 166) put it: "We view this theory as strongly stressing the notion of variations within the audience and supporting the use of pretests of messages and segmentation of the audiences". Two key notions emerge from this assertion by Windahl: pretesting and audience segmentation. Firstly audience segmentation requires the identification of the various constituencies within the target audience to assess their various aptitudes and abilities in terms of which the various media activities produced should be targeted.

Moreover, pretesting of the communication materials should be conducted within the identified constituencies so that from this exercise, a determination can be made on the extent of the applicability and suitability of the materials, or whether modifications are warranted to further tailor the materials to audience's needs. These parameters, taken seriously and consistently implemented,

could enhance media reach, reception and consumption, and create conditions conducive to the success of a communication process within a community.

### **The notion of empathy**

A successful change agent must express empathy with the client. He must put himself in the shoes of the clients and mutually conceptualise himself as being on an equal footing with the clients, communicate with them as equals, stay and sleep in their environment, dine from the same facilities with them, and accommodate himself within the confines of their holistic cultural realities. This notion is premised on the assumption that empathising with the audience allows the communicator to comprehend and gain insights into their cultural realities, the extent of the problems that inhibit their socio-economic development and the nature of solutions required, based on the mutual decisions and priorities reached by both parties. Empathising with the audience during the communication process can reduce or even eliminate any bottlenecks that can impede message reception. This means that in developing communication materials, the communicator must invariably see himself as a member of the audience whom he is to serve. As a result, the communication materials developed to serve the audience will in all intent and purposes, meet their needs.

### **The notion of credibility**

A communication channel is credible if it is trustworthy. If the client perceives that a change agent possesses relatively higher credibility than various other channels, the client can be expected to be more receptive to messages from that change agent. (Rogers, 1969: 184). Communication activities delivered through a trusted channel stand a high chance of being accepted, as much as an untrusted channel stands a very high chance of being rejected. For instance, in the field study in Phitshane-Molopo, members of the community have developed considerable distrust for Radio Botswana owing to its poor transmission system which inhibits the station from reaching the audience. As a result, the audience has resorted to either listening to Radio Tswana or Mmabatho Radio (South Africa) which are constantly on air. Furthermore, if the RIIC communication materials do not feature in Phitshane-Molopo, as it is certainly the case in terms of the findings of the field study which will be discussed in detail in chapter 5, it is unlikely that the audience will see the source of the documentation as credible.

The rationale for the foregoing contention is that the success of communication is contingent upon a credible channel. This process requires a communication channel that can reach the audience regularly with the right message at the right time. Any channel that fails to conform to this expectation will be rendered ineffective for the intended purpose.

### **Knowledge gap hypothesis**

Knowledge gap is instigated by the existing socio-economic disparities within the society with people of a higher socio-economic status benefiting far more from mass media interventions than their counterparts from a poor socio-economic background. It is for this reason that the architects of this concept, Tichenor, Donohue and Olien (1970: 159 – 160) described knowledge gap hypothesis as follows: “As the infusion of mass media information into a social system increases, segments of the population with higher socio-economic status tend to acquire this information at a faster rate than the lower status segments, so that the gap in knowledge between these segments tends to increase rather decrease”.

It has been a long-standing assumption that the press, and later broadcasting, have added so greatly to the flow of public information that they will have helped to modify differences of knowledge resulting from inequalities of education and social position. However, evidence shows that an attentive minority gains much more information than the rest, thus widening the gap between certain sectors of the public. Nonetheless, Tichenor (1970) further argued that “It does not hold that lower status population segments remain completely uninformed or that the poorer in knowledge gets poorer in an absolute sense. Instead the proposition is that growth of knowledge is relatively greater among higher status segments”. This assertion is supported by Windhal (1992: 212) who postulated that, “One of the reasons for these gaps is the pattern of media use. For example, higher education and socio-economic status individuals tend to use more information-rich media, such as print media”. It is therefore reasonable to conclude that if knowledge gap hypothesis described an inevitable law of social existence, it would suggest, in the words of its architects (Tichenor, Donohue and Olien: 1970: 170) that

“The mass media seem to function similar to that of other institutions: that of reinforcing or increasing existing inequalities”. A mechanism for bridging this gap is therefore required.

The knowledge gap hypothesis relates closely to the study of news diffusion, which deal with patterns inherent in public awareness of important events. In terms of the diffusion theory, incoming information initially reaches opinion leaders who in turn pass it on to the less active members of the society. To this end, knowledge gap hypothesis can play a fundamental role in communication planning. Based on the experience from this hypothesis, communication planners need, in their planning process, to cater for the development of a diversified communication approach in order to meet the needs of the various members of the public, thus ensuring that information successfully reaches not only the privileged but the less privileged members of the society as well. RIIC must take this hypothesis into consideration in the design and development of its communication materials. In doing this, RIIC must not lose sight of employing communication channels that can serve the interests of both the underprivileged and members of a high socio-economic status. These people have to be catered for differently because their interests differ widely based on their socio-cultural orientation.

Other lessons learned from the knowledge gap hypothesis are that it is important to identify peer group structures, and opinion leaders of the under-privileged within the community and work with them through extension agents so that they can ‘conduit’ information on to their homophilous contemporaries through interactive processes. The hypothesis also calls for the creation of conditions conducive to the participation of the less privileged in planning and execution of communication programmes. As a result, the messages generated from the

communication activities by the less privileged would fit within their norms and values, faithfully represent their interest and capably bring about change in their envisaged goals.

## **Conclusion**

This chapter has discussed and reviewed strengths and limitations of the various communication theories and concepts, and concludes that the RIIC communication strategy does not fit into the diffusion of innovations model. RIIC operates a double pronged model: a dialogue model with the extension officers who periodically feature in rural communities to discuss the centre's development activities with the target audience, and mass media interventions (Chapter 3). This is the right way to go as validated by the debates in the convergence model. However, from the field study (chapters 4 and 5) it is evident that the RIIC's paradigm lacks adequate dialogue and feedback that would have picked up the existing problems long earlier. A lot of effort is therefore required to close the knowledge gap revealed in the findings of this study. This can come about through the consolidation of the communication strategy through a reform process which would include adequate implementation of the paradigm of dialogue. The paradigm of dialogue is important for RIIC because the centre works closely with the rural communities (for which participatory communication strategies are indisputably applicable).

Perhaps, as part of this conclusion, it is important to justify why the RIIC paradigm of dialogue is inadequately achieving results in the study site. According to the RIIC extension officers who are charged with the implementation of this paradigm, each extension region is too big for one extension officer, lending the officer to being thinly spread and being viewed by the villagers as under-performing. Moreover, RIIC extension philosophy is based on a group approach, as a result

of which the officers during field trips tend to target specific groups and individuals in the community. This is an acceptable approach due to resource limitations, but it also reveals one shortcoming of an extension service implemented in the rural areas from RIIC in Kanye. Perhaps RIIC should consider a decentralised extension programme for Phitshane-Molopo, given the problems with the on-going extension programme in the area. Unless this recommendation is taken into account the same problems will continue to confront RIIC in its effort to implement its communication strategy through an extension initiative.

It is therefore concluded that the problem with the RIIC communication strategy derives from inadequate implementation and the lack of evaluation. It is contended here that if an evaluation was carried out earlier, it would have picked up some of the major problems confronting this strategy now, and effort should have long been made to address these concerns. The author further contends that the double-pronged communication approach may be limited and wrong because it restricts itself to conventional media activities and the paradigm of dialogue which have given problems. It is for this reason that the centre should also consider possible syncretisation of indigenous media with the existing RIIC communication efforts, as in the need based integrative model, so that the centre could have a variety of options through which it can reach various members of the audience. The indigenous media are particularly suited to the rural environment because they form part of the socio-cultural dimension of the community and therefore can be easily assimilated by the target audience.

## **CHAPTER 3**

### **THE RURAL INDUSTRIES INNOVATION CENTRE: Institutional profile and communication strategy**

This chapter covers a brief profile of the Rural Industries Innovation Centre and the goals and assumptions of its communication strategy. It also covers the Botswana Technology Centre and more importantly, the collaborative initiative between the two organisations through a joint radio programme and a newsletter.

#### **Background to the Rural Industries Innovation Centre (RIIC)**

The Rural Industries Innovation Centre is a branch of the Rural Industries Promotions Company (Botswana), a non-profit quasi-governmental organisation limited by guarantee which operates under the portfolio responsibility of the Ministry of Commerce and Industry. Established in 1975 the Rural Industries Promotions Company (Botswana) was initially funded by Frederiech Ebert Foundation (FEF) in the Federal Republic of Germany. RIPC(B) received funding support from FEF from 1975 till 1982 when the commitment came to an end in compliance with the Articles of Agreement. Since then, RIPC(B) received an annual subvention from the Government of Botswana for its capital development and recurrent budget. Currently, the Government's subvention constitutes 100% of the company's development and recurrent budget.

RIPCO(B) reports directly to a Board of Directors which is accountable to the Minister of Commerce and Industry who also appoints these directors. The RIPCO(B) is chaired by Permanent Secretary to the same ministry.

The main activities of the Rural Industries Promotions Company (Botswana) are carried out by its major subsidiary, the Rural Industries Innovation Centre in Kanye, in the Southern District of Botswana. RIIC began operating in 1977. By the nature of its activities, RIIC is the national appropriate technology development and dissemination centre for Botswana. It operates a diverse programme of activities which is geared to the promotion of income generating activities and employment creation with a view to improving rural living standards.

RIIC's development activities are based on the motto that technology is only a means to an end, it is the people that really matter. Based on this slogan, RIIC's development activities are centred on the needs of the people of Botswana. There is therefore a very strong interface and linkage between technology development and the needs of the clients. This direction is taken to ensure that the products developed at the centre tie up very well with the needs and expectations of the people of Botswana. It is for this reason that RIIC technology development process is invariably preceded by a national needs assessment survey, the aim of which is to document the needs of the people of Botswana, on the basis of which technological solutions are developed to address those needs. The survey is carried out every three years. Other sources of ideas for technology development include brainstorming sessions, literature review and interactive dialogue between the extension officers and the rural people during field trips.

## **RIIC's development initiatives**

RIIC operates a wide range of programmes including an agricultural technology development programme. The programme has consolidated capability in the development of cultivators, planters, post harvest technologies such as the sorghum milling package, sorghum threshers, and chaff cutters for processing animal feed from crop residues. The development and dissemination of the sorghum milling technology has led to the evolution of a small scale decentralised milling industry in Botswana which currently boasts 111 mills with a total workforce not exceeding 800 people, with women dominating in number and in managerial positions.

The centre also operates a programme in renewable energy which includes biogas, solar energy technologies and a photovoltaic lighting system which is geared to providing affordable lighting devices in residential and small businesses all over Botswana in line with the Government's policy on rural electrification. The photovoltaic electrification programme is being funded by the Government of Botswana with RIIC as the implementing agency.

Other developments include water related technologies such as windmills, hand pumps, sand river abstraction; baking technologies such as rim and kgotetso ovens with capacities of 9 and 40 loaves of bread per batch, and a dough kneading machine. RIIC has also consolidated capability in building technologies and in waste water treatment. The treated water is used for irrigation purposes. These are only examples of what RIIC does. There are many more technologies produced in this centre beyond those enumerated here.

RIIC also operates a village skills training programme geared to increasing productivity in rural and poor sections of the urban communities. The programme provides training in baking, tanning, leatherwork, carpentry, blacksmithing, sewing and patchwork, fabric printing and design, knitting and business management. The latter course is taught across all the vocational skills in order to equip the trainees with the basic skills of running their own businesses. The aim of the village skills training programme is to equip the trainees with the basic vocational skills that would enable them to set up small scale income generating activities and create job opportunities. So far, 67% of the graduates of the village skills training programme have gone into business while the rest are either absorbed by the labour market or get the opportunity to further their studies through local vocational institutes.

#### **Technology transfer process: the RIIC perspective**

RIIC institutionalised a technology transfer programme in 1988. The rationale for this programme was to create a steady flow of job opportunities for small-scale engineering workshops in both rural and urban areas, and to stimulate diffusion of technologies. An earlier study of the institutional and operational capacity of the small engineering workshops in Botswana had revealed that their progression was severely hampered by insufficient job opportunities, leading to operating losses at year end, with the result that the workforce could lose their jobs. It was against this background that RIIC began to assign some of its technologies to these workshops for commercial production.

In terms of this programme, the workshops produce the assigned technologies on contract for RIIC, for which the workshops are remunerated when RIIC collects the technologies to replenish its stock levels at its warehouse in Kanye.

To ensure compliance of the workshops with contractual obligations, RIIC provides all the back-up support imperative for timely accomplishment of the delegated tasks. The support entails provision of software and technical requisites, including training of the contracted workshop staff in the production processes of the assigned technologies, and quality control techniques. Software support provided includes a set of drawings of the assigned technologies. Nonetheless, the centre, fully conscious of the need to maintain a high quality standard on its products, continuously supports the workshops with professional expertise through inspection of the products during the production cycle and at the completion stage. The rationale for this concerted effort is to ensure that the final product is in accord with the design parameters and specifications. Technical support includes provision of jigs and fixtures within which assigned technologies are produced. These are assembled by RIIC for ease of use by the contracted workshops.

Production of these technologies by these workshops has increased RIIC's capacity to meet customer needs whenever they arise. Once the products have been collected from the workshops, the responsibility to promote them lies with the extension department and information unit as elaborately discussed in the succeeding sections.

## **THE RIIC COMMUNICATION STRATEGY: goals and assumptions**

The Rural Industries Innovation Centre (RIIC) adopted and institutionalised its communication strategy with the establishment of an extension department in 1979. The adoption of the strategy was geared towards the institutional goal of maintaining continuing dialogue with the centre's target audiences about its technological innovations appropriate for their socio-economic exigencies. In terms of the RIIC's institutional mandate, the effort to adopt a communication strategy has been underpinned by the need to create a mechanism for downward and upward communication between the centre and its target audience. The assumption was that bridging the communication gap between the centre and the audience would bring about a mutually beneficial symbiotic relationship between the benefactors and the beneficiaries, resulting in the creation of an enabling environment for the diffusion of information on RIIC's technological breakthroughs. This task is carried out through the centre's communication and outreach functions, namely the extension department and information unit whose activities are discussed below.

### **The Extension Department**

The extension department has since its establishment continued to serve as an outreach arm of RIIC, linking the centre and the target audience through information dissemination. In addition to assuming this role, the extension officers are duly mandated to advertise and market RIIC technologies and activities in the target communities through interactive dialogue such as addressing public gatherings, specialised groups such as farmers' committees, participating in district agricultural shows, international trade fairs, council meetings etc. Moreover, the extension

department is required to establish a vital link between RIIC and the government extension network and the village development structures in rural areas. These structures assist in the mobilisation of the productive potentials of the RIIC target audience through information dissemination on RIIC's behalf.

In addition, the extension officers are required to regularise field data collection (needs assessment surveys, rapid rural appraisal studies and brainstorming initiatives) on the perceived needs of the target audience to enable RIIC to effectively respond to the ever recurring needs of the target audience through development of appropriate technologies.

Moreover, from its regular contact with the centre's target audience, the extension department is required to provide continuous advisory support to the information unit on the specific field needs requiring media intervention, either in the form of publications (brochures, operator's manual, newsletters, etc), radio programmes or video productions. This effort is geared towards strengthening the RIIC institutional communication process, in order to meet the needs of the target audience. Although this institutional framework has been established, requiring the extension department to provide advisory support to the information unit, the latter must not sit on the laurels but must establish a mechanism to instigate timely reaction of the extension, rather than wait until the department has reacted. Moreover, the two units hardly ever pool their professional resources together to develop a joint communication strategy or to share ideas on how they can overcome some of the existing constraints to communication. Regular planning sessions between these two structures are indispensable for the success of the RIIC communication strategy.

The original extension approach at RIIC was centred around the extension officers covering undelimited sections of the country from the centre in Kanye. This approach limited coverage depth per area and was further restricted by resource limitations. It was against this background that the year 1987 culminated in the revamping, reconceptualisation, redirection and revitalisation of the centre's extension strategy in order to strengthen its outreach capacity to enhance the diffusion of information on RIIC's technological breakthroughs. The net result of this process was the institutionalisation of a regional extension cadre of five officers. As a result, each officer is now responsible for a designated region in Botswana, within which the designee undertakes four extended trips per year to disseminate information (both verbally through dialogue and in print), follow up on prospective clients and consolidate alliances with community structures.

This regional extension approach restricts the RIIC extension officers to operating within a clearly delimited and delineated geographical context. This is believed to be the best approach for stimulating the diffusion of information on RIIC's innovations. However, the field study (chapters 4 and 5) has revealed some limitations with this approach.

### **The RIIC Information Unit**

The centre's information unit was established in 1986 to render complementary support to the extension department through print and broadcast media initiatives and therefore ensure that there is effective communication between RIIC and its target audience through out Botswana. The unit's specific functions include media selection, specification of the target audience, usage, design and production and dissemination of the media activities.

In terms of the print media, the main thrust of the information unit's programme is directed towards production of a wide range of publications to serve the needs of the target audience at national, regional and international level and indeed to make these publications available to the extension officers to distribute to the clients during field trips in their regions. However, this study reveals that the media activities, especially the print media, are inappropriately suited to the needs of the grassroots audience, to whom RIIC largely directs its development initiatives. They only meet the needs of people with formal education to whom they were tailored. More about this issue will be discussed in chapter 4 and 5.

#### **Collaborative initiatives between RIIC and the Botswana Technology Centre (BTC): joint newsletter and radio programme**

In addition to other media activities mentioned elsewhere in this document, RIIC produces a joint newsletter with the Botswana Technology Centre (BTC) which is disseminated in Botswana, Africa and the rest of the world. Like other media activities, this newsletter requires an evaluation to determine its implications for reach and reception, and indeed to determine its effectiveness in linking RIIC and BTC with the target communities.

As far as the broadcast media are concerned, RIIC also runs a monthly radio programme in conjunction with the Botswana Technology Centre, through the latter's officially designated slot at Radio Botswana. The Botswana Technology Centre is a parastatal organisation involved in technology assessment, development and information dissemination. Its activities include the evaluation and promotion of technologies, technical assistance and advice to the public and private sectors on technology transfer and suitable technology choices and the documentation, collection

and dissemination of science and technology information that is of relevance to the people of Botswana.

The radio programme comes through Radio Botswana monthly and it is conducted in Setswana to ensure comprehension of its message by the rural audience and other interested parties. However, this programme, like the rest of the RIIC media activities, has not been evaluated to determine its implications for reach and reception. The only evaluation that is being consistently done is through a short quiz that tests understanding of the content of the material presented. Unfortunately, the respondents have largely been from major villages and urban centres. Also with the radio channel generally not reaching the rural audience due to the Radio Botswana transmission problems as reported in the ensuing chapters, the extent to which the RIIC's radio programme is reaching the rural audience in compliance with the centre's institutional assumptions and mandate is questionable. The author feels that this study is a step in the right direction in a quest to evaluate the effectiveness of this radio programme to determine its capacity for engendering audience reach and reception.

Another major discrepancy that stifles the effectiveness of this radio programme emanates from the perception of the audience that there is no distinction between RIIC and BTC. This perception has resulted in the audience being unable to identify RIIC without confusing it with BTC and the same thing with BTC. This confusion has been corroborated by some people visiting RIIC whose perception was that RIIC was amalgamated with the Botswana Technology Centre while in fact the two institutions are separate entities geographically and administratively. This confusion could prevent audience from targeting the relevant institution for the right solution when the need arises. The solution to this problem can be approached through the two ensuing options. Firstly, the

possibility of dedicating a radio programme towards identifying the distinction between the two organisations is worth exploring. The programme could be repeated over a period of time to generate the desired impact. The same message could be communicated with the rural audience by the extension officers through public gatherings. Information officers should also make this issue the subject of their regular presentations when briefing visitors to RIIC.

Secondarily, RIIC could work towards acquiring its autonomous radio slot from Radio Botswana, so that it can air its programmes directly, without having to rely on BTC, since this arrangement has created confusion among the audience. If this option fails, the centre could join forces with a non-technology development organisation such as Forum on Sustainable Agriculture which is currently pursuing a proposal for a radio slot with Radio Botswana, on behalf of the NGO community. If these suggestions are implemented, it is likely that any confusion amongst the audience regarding the distinction between the two organisations could be thrashed out.

Moreover, RIIC exploits available broadcast opportunities through ministries of Agriculture and Commerce and Industry's radio slots, and the Radio Botswana morning show to increase its publicity. In terms of this agreement, RIIC voluntarily or at the pleasure of the ministries in question, submits its materials and depending on the availability of air time, the materials are aired. Although the impact of this programme remains overshadowed by the absence of an evaluation exercise to determine its efficacy, and the fact that it is out of direct control of RIIC, the assistance of these ministries in providing the support to enhance RIIC's outreach capacity, is highly appreciated. This approach has value: the use of multi-channel offers a lot of advantages in comparison to one-channel by creating unlimited opportunities for a proliferation of knowledge and understanding across a wider spectrum. According to Hornik (1988: 130) once several channels are

used, there will be fewer contradictory messages in the environment. The same message will be heard from more than one source.

However, timing of these programmes can either have positive or negative implications for the diffusion of information about RIIC. To generate effective impact, programmes have to be aired during the time of the day within which the audience will be available. This issue will be further discussed in the subsequent chapter on the findings to establish the effect of timing on radio listenership patterns across the sample population.

### **Conclusion**

As a technology development centre that is charged with the mandate of improving rural living standards, RIIC certainly requires an effective communication strategy to link itself with its target audience. The adoption of a double-pronged communication model incorporating both media activities and dialogue is the right way to, in spite of the fact that the field study in the ensuing two chapters has revealed some problems with this approach. What is required, then is to follow the recommendations presented in the conclusion chapter and in other relevant sections of the whole document, to improve the RIIC's communication strategy. RIIC is executing an important and a laudable programme of activities which requires an effective communication strategy to link the centre with its audience and at the same time providing an opportunity for the audience to give their input, thus ensuring the applicability of the strategy to their socio-economic exigencies. Through such a communication strategy, the centre's motto that "Technology is only a means to an end, it is the people that really matter" would be translated into reality.

## **CHAPTER 4**

### **RESEARCH FINDINGS: Literacy skills and constraints to implementation**

This chapter covers the findings of a study of literacy rates in Phitshane-Molopo. It then seeks to establish if the target audience is able to utilise the RIIC communication activities, especially the print media. It also outlines constraints on the implementation of the communication strategy based on interrogation of the key informants.

The study concludes that the existing literacy skills in the community are sufficient for development and provision of suitable communication activities.

#### **LITERACY SKILLS IN PHITSHANE-MOLOPO**

The ensuing discussion on literacy rates has implications for the successful implementation of the RIIC's communication strategy. The discussion assesses the audience's literacy skills in order to determine if reliable and sufficient capacity exists within the sampled population for sustainable utilisation of the RIIC media activities. The discussion also looks at the language preferred by the audience for the media activities generated by RIIC, taking into account that successful communication is underpinned by the language employed, among other variables. On the basis of these factors, RIIC will be in a position to target its communication materials at the right audience constituencies in the community.

### **Reading skill: a catalyst for media consumption**

A household survey was conducted to assess the literacy skill(s) of the members of the sampled population and to determine if they have the capacity to consume RIIC's informational brochures. Moreover, the study was intended to determine if any correlation existed between literacy skills and media consumption patterns within the community. The ramifications of literacy which constitutes the basis for this investigation encompass reading, writing, and the language preferred in the communication materials.

Of the 50 representatives of households interviewed in Phitshane-Molopo, 37 people or 74% claimed that they could read. They claimed that they acquired the literacy skill through formal education as will be discussed later in this chapter under the “education status of the informants”. Only 13 people or 26% said they could not read at all. On the basis of this finding, it is concluded that a substantial number of interviewees are capable of reading. At least 64% (32 people) claimed that they could read in Setswana only, whereas 12% (6 people) said they could just manage, implying that they could read in Setswana with some difficulties which could inhibit ample comprehension of the text. A total of 12 people or 24% said they could not read at all in Setswana. This information was solicited from the informants through direct interview. No reading tests were conducted to confirm the audience's claims. It was not within the purview of this study to conduct the tests. It is hoped that these tests would be carried out in the national study recommended in chapter 6.

As far as reading in the English language is concerned, 42% of the informants said they were unable to decipher any material presented in this language. At least 32% of the interviewees said they

"could just manage" to read material presented in the English language. This suggested that they struggled through the textual presentation such that they lost the full grasp of the meaning and the substance, resulting in the text engendering ineffectual comprehension. Only 13 people (26% of the informants) said they could read in the English language. On the basis of these findings, RIIC must produce its brochures in both English and Setswana to cater for the different interests identified in this study. Producing materials only in the English language as it is the case at present excludes other people from benefitting from RIIC.

In spite of the above, one would have expected that those who read in the English language would pass information on to the rest of the community in terms of the two-step flow model. This does not seem to be the case in terms of the existing knowledge about RIIC in the community as will be discussed in chapter 4. It was only on one occasion that a secondary school teacher who had visited RIIC, ultimately passed on the information to her neighbour who then applied to attend and actually participated in a bakery course run by RIIC. Otherwise the rest of the members of the community in the sample do not have the information. However, one cannot dismiss the two-step flow process as totally ineffective. The fact that it has not worked with regard to the RIIC communication strategy, as revealed by the informants, does not mean that it has not worked well for the informants in a host of other issues. For instance, in the ensuing chapter, 44% of the informants claimed that they have heard of RIIC from routine interaction with their own kind in the community. In this case, the two step flow has worked, at least to a limited extent, although it has not provided desirable information in regard to the activities of RIIC.

### **The scope of the writing skill within the population**

As far as writing as a literacy component is concerned, 52% of the informants said they could write excellently in Setswana, whereas 12% of the same said they could write very well in Setswana. Only 8% claimed that they could write poorly while 28% said they could not write in Setswana at all. As with reading in Setswana, those who confirmed their ability to write in the same language had acquired some formal education ranging from primary to professional qualifications.

Possession of writing skills in English was very low among the informants with 10% and 16% of the people saying they were able to write excellently and very well in the English language respectively. At least 34% of the informants said they could write poorly in this language while 40% confirmed that they could not completely write in the English language. Nonetheless, writing is an important component of communication in that those individuals who may come across the RIIC brochures and decide to make further enquiries to the centre could do so in writing (or respond to radio quizzes by letter).

From these statistical data, it is evident that in addition to producing material in the English language, RIIC should also do so in Setswana, a language with which the majority of the people are comfortable.

## **Education status of the informants**

The rationale for this section is to assess the educational profile of the informants to determine the broad spectrum of their existing literacy levels by qualifications, on the basis of which it can be seen if RIIC has wisely targeted its media.

Of the entire informants, 52% said they had received primary school education ranging from Sub A through Standard 7 while 14% said they had received secondary education ranging from Forms 1 to 5. Only 2 people among the informants or 4% said they had received tertiary education at primary lower certificate and professional accounting courses respectively. A total of 8% of the people said they had received their education through adult literacy programme popularly known as non-formal education system in Botswana.

Only 1 person or 2% of the sample said he had acquired the literacy skill through a literacy programme in the South African mines. At least 10 people or 20% of the sample said they had never received any education at all.

Although these statistics show that while 82% of the population have received education, not all of them can read and write. Others constituting 8% of the sample population said they could not read and write due to old age and poor vision, whereas some said they had lost a fair amount of the skill due to disuse over a long period of time. The latter situation is to be expected in the absence of formal employment opportunities in the village within which the audience could utilise their educational qualifications.

### **Language preferred for the RIIC media**

All in all, 41 people or 82% of the informants confirmed that they would prefer textual and broadcast messages on RIIC agricultural technologies presented in Setswana. This is despite the fact that earlier only 64% of the people confirmed being able to read only in Setswana. The 82% therefore includes members of the audience who have a vested interest in their own vernacular although 8% claimed reading deficiencies as indicated elsewhere in this chapter. The figure also includes those who have earlier confirmed their ability to read in the English language. Preference for English language publications accounts for only 2 people or 4% of the overall sample population against 26% who have earlier confirmed their ability to read in this language. The reality is that although some people can read in English, they however do give preference to their local vernacular.

Furthermore, the statistical differentials between ability and preference is an indicator of the fact that the two terms are not synonymous and therefore cannot be used interchangeably. Possession of ability is not an indicator of preference or vice versa. Thus, ability indicates possession of the capacity to perform a particular function or activity because one has the relevant qualifications or the acumen, whereas preference is an indicator of the flexibility individuals enjoy over the choices they can exercise between a set of given variables. Hence, the data reveal existing differentials between ability and preference as numerically represented above. Ability is however, an essential requirement and only in this foundation can preference come into play.

Of the entire informants, only 7 people or 14% of the informants said they preferred communication materials presented either in English or Setswana.

Judging from the perceptions of the informants, Setswana is the most favoured language in which the majority of the people would prefer media activities from RIIC to be presented. It can be further contended that Setswana has also been favoured by those with the option for both languages: English and Setswana, pushing up the overall preference for Setswana texts by a significant margin.

### **Audiences' option between radio programme and information brochures**

As a part of this study, participants were interrogated to ascertain their preference between information brochures and radio programmes. At least 43 people or 86% of the sample said they preferred information brochures to radio programmes, especially if such publications were presented in the Setswana language. Only 7 people or 14% said they preferred radio programmes to information brochures. They cited convenience as the reason for their preference for radio programmes.

### **Advantages of information brochures over radio programme: an audience's perspective**

The literate informants advanced various reasons for preferring information brochures over the radio programmes. They said the information brochures would afford them unbridled autonomy over the regulation of the time frame within which to read the materials. Also, the fact that the material would be within their easy reach would give them the leverage and the flexibility to revisit it at any time to refresh their memories or to cross-check and validate any point they missed in the initial reading. They said the rigidity of a radio programme denied them the flexibility offered by the information brochures.

Moreover, the informants contended that they could retain possession of the information brochures indefinitely and gain greater opportunities of reading them at their spare time. The interviewees confirmed that this amount of flexibility is impracticable with a radio programme because it requires the presence of the audience at a specified time-frame to listen to the broadcasts. An additional point of view advanced by the audience in favour of the print media was that a busy farmer could carry information brochures on his person and explore them during the course of his livestock tending, as a part-time activity.

Many informants preferred information brochures because of the unreliability of radios, the majority of which could not be used for lack of batteries or were dysfunctional. Also, they said they worried about competition for use and control over channels by some household members, because of the varying interests and preferences within the family. Thus, power relationships over the channels act as a deterrent to the use of a specific channel that would represent the collective interests of the entire family members.

### **Attitudes of the audience towards radio programmes**

In spite of the fact that a radio is supposedly a popular medium in rural areas, the study has revealed a negative attitude towards the medium in Phitshane-Molopo as indicated by the considerably larger preference for the print medium. It is therefore reasonable to assume that if the RIIC print media were available in Phitshane-Molopo, they would enjoy wide readership.

All in all, only 7 households or 14% of the population sampled claimed that they were in favour of radio listening over the print media. Those who favoured the radio medium were either illiterate or

time conscious members of the sample population. Others said they were too old and indicated that they did not want to impose further strain on their impaired vision with reading and hence preferred the radio. Others said they had cultivated a habit of listening to the radio and therefore considered it to be the ideal medium. One informant indicated convenience as his reason for preferring radio over print media - the fact that it took very little time to listen to a radio programme. Others rejected information brochures outright saying they could take too long to reach the audience and concluded that the radio would be the ideal medium.

Interestingly, 4 households or 8% of the sample said they preferred both radio and information brochures because both are good instruments for information dissemination.

### **Constraints on the RIIC communication strategy in Phitshane Molopo**

From the above discussion, favourable conditions and opportunities exist in Phitshane-Molopo for the consumption of the RIIC media activities. This is backed by the apparent existence of high literacy rates with about 82% of the sample population claiming the ability to read and write, and 68% of the informants who claimed that they listen to the radio regularly. Nonetheless, the existing ample capacity for absorption of the RIIC media activities has not yielded any dividends because the media have not reached the people, as will be discussed in more detail in the ensuing chapter.

Other constraints include the following:

### **Inadequate communication with the government's agricultural office in the area**

One of the key informants in the community, the Technical Assistant for Agriculture (an employee of the Government of Botswana who provides advisory support to the farming community in the area) indicated that RIIC extension officers on a field trip to Phitshane-Molopo only used his house for accommodation but avoided his company each time they visited prospective clients in the community. He said his exclusion by the RIIC extension officers denied them the benefit of his experiences since he knew the full spectrum of agricultural needs regarding media intervention.

Also, he lamented the fact that his knowledge of the numerous farmers with literacy skills in the community who could utilise the RIIC's informational brochures did not work to the advantage of the RIIC extension personnel. He claimed that to make the matters worse, his counterparts from RIIC never supplied him with the brochures to pass on to the farming constituencies except only one copy for his reference. It is therefore concluded that this poor communication with the agricultural office should be contributing to the poor diffusion of information in this area. It is therefore evident that homophilous networks, which could yield dividends to RIIC, are not fully exploited.

### **English language as a constraint to the diffusion of information**

As far as literacy skill is concerned, the major constraint on the RIIC communication strategy is that all the information brochures and other publications at the centre are produced in the English language. RIIC has to make provision for regional and global information requests, which requires English language brochures. Nonetheless, the fulfilment of this requirement

should not overlook the needs of the local people who can only decipher and consume communication materials presented in their native tongue. The English language is accessible only to a small proportion of the audience constituting 13 representatives of households or 26% of the sample population. It would therefore be a falsification and mystification of reality to expect that media activities produced in the English language would suit the needs of the audience across the spectrum. The profile of the audience in as far as the field study is concerned negates this approach.

In any case one would have expected that those who can read materials presented in the English language would pass the information on to the illiterate members of the community and those who could only read Setswana texts in terms of the two step flow model. Although this possibility stands, the study has found very little effect of the two step flow model. This derived largely from the fact that only two people ever received information brochures from RIIC, although 44% of people claimed that they have heard about RIIC. It therefore appears that people with information about RIIC had not passed it on to the larger community. Hence the validity of the contention that RIIC should as much more effectively utilise dialogue, in addition to compartmentalising its media activities in conformity with literacy abilities of all sectors of the population. Ignoring these factors and discrepancies would perpetuate the communication gulf between RIIC and its audience.

### **Inadequate interface between extension department and information unit**

Although the two units are required to advise each other on the communication needs of the audience, with extension officers delivering the data from the field and the information unit

providing professional support through the alignment of the data with its media products, this initiative is yet to be fully activated.

The approach described above has resulted in the targeting of similar media content to every member of the audience as though the entire audience were characterised by similar predispositions and levels of understanding. As a result, the brochures being produced have not taken note of the people's linguistic deficiencies and preferences. If this situation is allowed to continue unabated, it could deter communication with the target audience. It is for this reason that regular meetings between extension and information units to exchange ideas on the needs of the audience followed by the drawing up of an integrated communication plan is long overdue.

Moreover, RIIC should routinely undertake short and long term communication needs assessment studies to determine the implications of its communication activities on the target audience. Short term assessment could be covered under such activities as speaking engagements by RIIC information officers in a rural community. The assessment could include, but not be limited to, a rapid appraisal study to determine the communication needs of the audience. This initiative could provide valuable pieces of information for decision making processes and can create opportunities for consistently fine-tuning and consolidating the RIIC communication strategy to improve its effectivity and relevance to the development communication context.

The above contention sets out the right route to follow because a substantial proportion of the audience possesses ample literacy skills to utilise the print media in a way that would benefit themselves and RIIC.

## **Conclusion**

In conclusion, the author contends that conditions conducive to the consumption of the RIIC media activities exist in Phitshane-Molopo in terms of the confirmed 74% literacy rates and 82% of people preferring media activities in Setswana. This means that maximum effort in the future should be directed towards producing information brochures in line with the expectations of the audience identified in this study.

The foregoing finding accords with the view of Melkote (1991) who emphasised the need for communication materials to be compatible with the varying needs and abilities of the target audience. What this means therefore, is that communication materials, if they are meant to achieve results, get utilised and appreciated, should be dovetailed into the socio-psychological parameters of the target audience. This approach can be achieved through regular data collection exercises on the needs of the audience.

The study also concludes that RIIC extension officers must by all means work towards consolidating a harmonious relationship with the government agricultural office in Phitshane-Molopo. This office has expressed the willingness to assist RIIC in the diffusion of its publications to different farmers in the area. Homophilous structures must be exploited as much as possible given that depending on how influential they are, they can create more contacts for RIIC's extension officers in the community and even then, influence the diffusion of the centre's technological breakthroughs, as in the two step model.

Moreover, the RIIC communication structures, namely extension department and information unit must endeavour to meet as regularly as practicable to review and consolidate their communication strategy. If these structures have taken note of the imperativeness of this obligation, they would have long resolved the problems picked up in this study. The study further concludes that to eliminate the confusion surrounding the distinction between RIIC and BTC the former must submit an application for an autonomous radio slot at Radio Botswana, through which its programmes can be aired. However, this does not exempt RIIC from utilising other radio channels, to maximize its publicity over a wider area.

## CHAPTER 5

### RESEARCH CONTENTIONS: media reach and reception

#### Introduction

This chapter presents the findings on the RIIC's media reach in Phitshane-Molopo and audience reception in the area. It assesses whether these ensure that the audience gains the desired knowledge and understanding about the scope of RIIC's agricultural innovations. The chapter presents findings that one of the preconditions for a successful communication strategy is ensuring maximum knowledge creation among the audience. This requires an effective communication process so that the audience can conceptualise change as a necessary condition for human existence and survival within their community. It presents further findings that knowledge creation can be maintained and sustained by ensuring that the media conform to the expectations of the target audience.

It concludes that it is insufficient to hear about or know the name of an organisation without a corresponding knowledge of its activity profile and role in the socio-economic development of humanity. In this study, some members of the audience have confirmed having heard of RIIC, but in the absence of any formal communication intervention to sustain their knowledge, the audience's ignorance about the centre's activity profile is not effectively countered, indicating that the RIIC's communication strategy is not achieving as much results as expected.

The rationale for this conclusion is that the existence of a knowledge gap within a community can magnify and exacerbate the physical and spiritual remoteness and isolation between the organisation and its target audience, to the detriment of each other.

The findings in this chapter will endeavour to determine media reach and audience reception in terms of five considerations, namely:

- \* the scope of the audience's knowledge about RIIC and its programme of activities: media reach and reception;
- \* the scope of radio listenership in the study area;
- \* the preferred language for the radio broadcasts;
- \* the preferred communication channels in the community: institutional communication channels, interpersonal communication interventions; and
- \* mechanisms for improving communication in the village as suggested by the key informants.

**The scope of the audience's knowledge about RIIC development activities: media reach and reception.**

Of the 50 representatives of households targeted in this study, about 44% or (22 members of the sample frame) confirmed that they have heard of the Rural Industries Innovation Centre (RIIC), largely through routine interaction with other members of the public in their community. At least this situation confirms that the two-step flow theory has worked, to some extent. Conversely, 66% of the sample frame said they have never heard of RIIC and did express considerable consternation

at the news of the existence of a centre with a varied and essential programme of activities about which they have heretofore remained completely ignorant.

Moreover, only 32% or 16 people said they could map out the scope of RIIC's development activities with varying degrees of exactitude. Only 2 people or (4% of the sample), a prominent businessman in the area and the headman of Itumeleng ward, who had on individual occasions visited the centre in official capacities, said they knew the full range of RIIC's development activities.

In addition to these two individuals, the study has revealed that two other people or 4% of the sample population had at different times received documentation from RIIC. These two individuals were the adult education literacy assistant and a bakery entrepreneur. The bakery entrepreneur said the documentation reached her through an RIIC bakery instructor who had been contracted by the Non-Formal Education Department to conduct a short-term bakery course in Tshidilamolomo in June of 1996. The bakery course, which featured as an ephemeral and once-off component of the adult literacy programme, drew participants from the propinquity, including Phitshane-Molopo:

The bakery entrepreneur said she received documentation about RIIC directly from a secondary school teacher at Phitshane-Molopo Community Junior Secondary School in 1985 whose urging and persuasion ultimately goaded her to enrol on an RIIC bakery course in 1986. She said it was during this course at the RIIC site in Kanye that she got to know about RIIC's development programmes for the first time.

So, all in all, 4 people or 8% of the sample population claimed that they commanded full knowledge of RIIC's pursuits in the entire sphere of appropriate technology development programme. Nonetheless, the largest proportion of the population constituting 92% of the sample frame said they knew absolutely nothing about RIIC and its development programmes. This astonishing knowledge gap has been reinforced by a staggering 96% of the population who claimed that no documentation from RIIC ever came into their possession or knew of anybody from the local community who had received information materials from RIIC. This explains why there is a lack of understanding about RIIC by a large proportion of the population within the community.

The depressing scenario depicted above confirms absolutely that the RIIC media activities are almost a rarity in Phitshane-Molopo and have not achieved their objectives in the diffusion of information about the centre. The knowledge gap in the area also brings to question the effectiveness of the interpersonal communication strategy employed in the area in order to complement mass media activities. It is therefore the contention of this thesis that the institutional and implementation problems that impede the effectiveness of the RIIC communication strategy have to be reviewed and resolved so that the strategy can empower the Phitshane Molopo residents with the knowledge about the centre's development activities. The review process must follow the recommendations of this study. Also a national study recommended in the conclusion must be considered within the short term, the findings of which would also be used to close any gaps still evident in the RIIC's communication strategy.

As part of the solutions to the problems identified in the strategy, management needs to develop a system by which the extension officers can be evaluated to establish if they are achieving results in terms of the dissemination of information. This recommendation derives from the probability that

interpersonal communication may be a failure because the study area could be cursed with an inefficient extension officer. However, extension officers have acknowledged that their input in their extension areas could be perceived as inadequate because they cover a wide range of activities, in addition to information dissemination. For instance, they are required to fulfil the following activities as well: serve as sales agents, follow up on customers and users of RIIC technologies in the field, collect debts from customers, identify prospective candidates for the RIIC village skills training programme, follow up on the graduates of the RIIC villages skills training programme to identify their successes and constraints and identify new ideas for technology development programme at RIIC. These activities are undertaken village by village in a district and in some cases a region may encompass two districts, which would be too big to cover in toto. Obviously, these activities are too much for one officer and cannot be accomplished in one or two days in an area, irrespective of how efficient an officer happened to be.

It is against the above background that the following recommendations are made: that following each visit by an extension officer, the Chief Extension Officer - Monitoring must tour the area to determine the effectiveness of an earlier trip carried out by his subordinates and recommend remedial measures as appropriate. Given that the activities of the extension officers transcend the information dissemination function, the possibility of information officers performing the diffusion of information function within the target communities is worth exploring. If this role is passed on to the information officers, extension officers would find more time to attend to several other activities which they are mandated to perform during field trips. These activities could be executed during a joint trip between information officers and extension officers, so that each can perform specific functions separately. Management must also tour the extension areas once every year to familiarise

themselves with constraints on the diffusion and reception of RIIC's media and how these could be solved.

### **The scope of radio listenership in the community**

At least 68% of the sample population or 34 households claimed that they listened to the radio almost every day in Phitshane-Molopo if the radios are in order and batteries are not exhausted. These households confirmed that they mainly listened to the radio in the evening especially when they are free from the day's activities, from 6 pm to 10 pm. Only a low of 20% said that they never listened to the radio at all. This latter constituency harboured no negative attitude towards radio listenership but were genuinely constrained by the dearth of the facilities within their households.

Although there is a high degree of radio listenership in Phitshane-Molopo, which sustains the contention that radio usage is high in the area, the study has revealed very poor listenership of the RIIC radio programme. A startling majority of the population constituting 82% of the sampled households (41 people) said they have never heard of or listened to the RIIC radio programme, bringing to question the effectiveness of the RIIC radio programme as a mechanism for the diffusion of information in the study area. Only a mere 2% of the sampled households (or 1 person) claimed ever listening to the RIIC radio programme, and further said this was only by sheer coincidence due to his oblivion to the timing of the programme. However, he said poor memory could not serve him well enough to remember or identify the subject of the programme.

The rest of the people said they have heard of the RIIC programme over the radio but had equally paid scant attention to sustain their memory to identify the channel or the time of the day within which the programme was aired. With poor listenership, it became obvious that the frequency of the RIIC radio programme and indeed its impact on the study area is by all account insufficient. In other words, the conclusion drawn from the discussion is that the RIIC radio programme is highly infrequent and therefore does not reach the audience in Phitshane-Molopo.

### **The causes of poor radio listenership in Phitshane Molopo**

The poor listenership of the RIIC radio programme in particular is not without causative factors in Phitshane-Molopo. Radio listenership is being continuously dogged by the recurring breakdown of the household radios. At least 12% of the population reported that their radios were dysfunctional at the time of this study. One peculiarity was the interviewees' demonstrated lack of commitment, unpreparedness and unwillingness to expedite the repair of the dysfunctional systems, the majority of which have been out of order for several years now. Other households had consistently postponed the repair to the radios, overshadowing possibilities of ever getting them reactivated. Moreover, substitution of exhausted batteries was not seen as an immediate priority, as a result of which it took considerable period of time to get the batteries replaced, with some reported to have not been substituted since Christmas of 1995, eliminating chances of exposure to news about RIIC's activities. Members of the sampled population cited lack of money and time constraint as the principal reasons for not replacing the batteries. An aggressive community mobilisation is required to sensitize the masses to the importance of radio listenerhsip.

Moreover, a high proportion of the population said reception of Radio Botswana in the village has by all accounts degenerated and deteriorated due to the inadequate broadcasting signal and this does not inspire any confidence at all towards listenership of Radio Botswana programmes. This pathetic situation has forced the residents of Phitshane-Molopo to lose confidence in Radio Botswana, leading to inadequate and poor listenership of the entire range of the station's programmes, and inevitably, including the RIIC radio programmes. In the absence of a Botswana-based alternative radio station to sustain the listenership, the majority of people said they have resorted to listening to the South African radio stations across the border, especially Mmabatho Radio and Radio Tswana which broadcast the majority of its programmes in Setswana, a language mostly preferred by a large proportion of the population in Phitshane-Molopo.

Informants further averred that reception of Radio Botswana fades away completely from 9 am until the very late afternoon and the early mornings when it comes back on. The poor signal only affects the RIIC programme which is broadcast via the Ministry of Commerce and Industry from 12:45 pm. Otherwise programmes that are broadcast over the Radio Botswana morning show anywhere between 6 - 6:30 am and through the Botswana Technology Centre at 7 pm are not affected by the inadequate signal. As long as people are in their residences during these times and their radios are functioning, they can have the opportunity of listening to the RIIC radio programmes.

However, female members of the population said they did not prefer to listen to the radio in the morning owing to its interference with their sleep or due to their preoccupation with early morning household chores including attending to their children before they left for school. For the male interviewees, they said their activity schedules commenced early in the morning and terminated in

the late evening. Given these different preoccupations requiring untempered time commitment of the principal household actors, both females and males ultimately settled for 7 pm as the most preferred time frame for radio listenership. Other times such as 12.45 pm and 6 am, within which RIIC radio programmes are currently broadcast through other sources such as Commerce and Industry radio slot and Radio Botswana morning show, were outrightly rejected by the interviewees saying the programmes would interfere with their domestic schedules.

Other households cited the continuing and proliferating monopolisation of certain radio channels by some family members as a limiting factor to the listenership of the RIIC radio programmes. Children were cited as routinely monopolising certain channels to meet their preferred music programmes, and in the process, deprived parents of access to the medium.

A limited percentage of households also proffered varying reasons for the poor listenership of radios in their domiciles. Reasons advanced ranged from some people being ardent South African radio programmes' enthusiasts as a result of which they are not enamoured of Radio Botswana programmes, a dominating feature among the youth; obliviousness to the time frame within which RIIC radio programmes are aired; directing the utilisation of the radio solely to the consumption of national news and thereafter paying absolutely no attention to the subsequent programmes; and unawareness of the utility of the radio as a provider of information on development issues, a dominating feature among illiterate adults.

These constraints have very serious implications for media reach and reception and can stifle every concerted effort directed towards the diffusion of RIIC's innovations in the study area through its communication activities.

### **Audiences' preferred language for the radio programme**

Media as a form of communication can create the desired impact on the target audience as long as, inter alia, it is presented in the language they understand. Thus, the audience in this study has categorically singled out Setswana as the most favoured language through which the RIIC radio programmes should be transmitted. At least 88% of the sample population said they would prefer the RIIC radio programmes in Setswana. Only 10% of the sample said they would prefer either Setswana or English whereas 2% or 1 person preferred English language rather than Setswana. The audience's highest proclivity towards Setswana radio programmes should not be greeted with consternation. Setswana is the most commonly used language in the rural areas of Botswana, in addition to being an official language. Taking cognisance of this ineluctable reality, RIIC has invariably broadcast its programmes in Setswana and it will continue to do so in fulfilment of the audience's expectations and interests.

### **Communication channels preferred by the audience**

#### **Institutional communication channels**

Interrogation of the audience was applied to ascertain their perceptions and attitudinal perspective towards information reaching them from RIIC either directly or through other sources. The rationale for this exercise was to elicit the audience's unbridled views and suggestions for communication channels best suited to them. Firstly, although RIIC is engaged in a joint radio programme with Botswana Technology, the centre is equally committed to the maximization of its

publicity through the utilisation of air slot opportunities offered by other avenues such as the Ministry of Commerce and Industry, the Ministry of Agriculture and the Radio Botswana Morning Show. It was therefore considered desirable to establish from the study subjects as to which communication channels would be ideally suited to their needs.

A significant number of the interviewees confirmed their willingness to accept information from RIIC through the radio medium on the condition that the capacity of the transmission system was reinforced and pitched to a national standard, and as long as consideration for the observance of their preferred time frame was taken into account. In other words, the audience gave RIIC the blessing to continue to augment its publicity through ministries of Agriculture, Commerce and Industry radio slots, and the Radio Botswana morning show. This is despite the fact that the audience had earlier said that the latter radio programmes were not good for them because they were broadcast without their preferred time frame. However, the majority opinion held that people might pick up some interesting issues as they moved about the household attending to domestic activities and further indicated that people were never busy to the same degree everyday within the spheres of their family life.

### **Interpersonal communication channel**

Interpersonal communication is another credible mechanism through which communication can be articulated within a community. The village extension team is one such mechanism through which RIIC is supposed to communicate with its target audience. This team comprises the following government staff in the local community: social and community development officers, agricultural officers, social welfare, medical personnel, district officer for development, council planning officers

and any non-governmental or charity organisations in the area, including structures formed through the initiatives of the members of the local community such as the village development committee.

The rationale for collaborating with the village extension team is motivated by the fact that the closer the proximity the team maintains with the target audience, the more rapport it would build and the higher the propensity for information dissemination through print documents and interpersonal communication on RIIC's behalf. The other strong point supporting this collaboration is that the mandate of the village extension team accords within the concept of community development. Hence the assumption that the team would conceptualise information from RIIC from a development viewpoint and facilitates its timely relaying to the audience whose interests the team represents in the area. Information reaching the masses through this channel will increase the credibility of the village extension team as development facilitators in the village.

Although 100% of the respondents expressed no reservations about the nature of the source through which they would like to receive information from RIIC, about 8% of the sample population vehemently cautioned against members of the village development committee (VDC), a constituent of the village extension (scope defined above), assuming this fundamental responsibility. The 8% categorically accused the VDC of avarice and personal aggrandisement in relation to members of the community. They alleged that the VDC members have historically entrenched a monopolisation of any valuable information and restricted its flow to their own homophilous contemporaries to the detriment of the audience they have been elected to serve. Consequently, the 8% advised against any formal arrangement that would bestow responsibility on this structure for the dissemination of any literature in the community on RIIC's behalf. As a result the majority of the respondents opted, among all other alternatives, to receive information brochures from RIIC

strictly and directly through the postal addresses they have supplied to the researcher. The negative perception of the people towards the VDC discounts the viability of one form of the two-step flow model in the village, which should be filtering information from sources to the less active sections of the population.

In spite of these negative pronouncements against the village development committee as discussed above, the VDC chairperson completely denied ever receiving any documentation from RIIC which she denied the masses and restricted to her personal use. In fact she said no brochures from RIIC ever came into her possession and neither did she listen to an RIIC radio programme. It was against this background that she offered two practical suggestions for consideration by RIIC to stimulate the centre's ability to effectively reach its audience.

The first suggestion incorporates a request for her voluntary participation in the distribution of brochures on RIIC's behalf, by engaging the various VDC constituencies' representatives in the different wards in the carrying out of this function.

Through her second suggestion, she implored RIIC to actively consider mounting seminars at ward levels to promote and consolidate intercourse with the target audience. She cited these seminars as arenas where the voluntary effort of the VDC in reaching the audience on behalf of RIIC could be evaluated, in addition to creating conditions and opportunities conducive to furthering the distribution of the RIIC communication media in Phitshane-Molopo.

She said these fora would also engender discussion of a wide range of communication issues leading to the adoption and implementation of a pragmatic *modus operandi* (incorporating people's

suggestions, views and opinions and not a one-way flow piloted from above) for enhancing effective communication with the target audience.

Furthermore, she suggested that invitation to these seminars should be piloted directly by RIIC to the specific VDC ward representatives who would then volunteer their time to mobilise people in their respective constituencies to the seminars with RIIC officials on the specified date. She advised that invitation should also be extended to the various community leaders, principally the village headman, the ward headmen and the representatives of the various youth clubs in their individual capacities. She was particularly concerned about the future of the youth who are dogged by the scarcity of jobs, for which RIIC technologies may provide the most appropriate panacea. At this seminar, RIIC would give an overview of its technology development profile while the VDC sensitizes the youths and other participating members of the community to the specific socio-economic imperatives that could utilise RIIC technological interventions. The participants would then pool their brains together to establish the constraints on communication in the village, and decide on appropriate solutions to the existing bottlenecks.

She also emphasised the need for regularization of follow-ups to review the impact of communication progress in the village and to determine the way forward. This sentiment was equally echoed by the village headman who said visits by the RIIC's officials to his area were not enough. He said under the circumstances it would be impractical to revive and consolidate people's knowledge and understanding about RIIC's activity profile if visits were irregular.

## Conclusion

Although 44% of the informants confirmed that they have heard of the Rural Industries Innovation Centre, only 8% of the total sample said they know what RIIC is doing. Given the amount of effort and resources RIIC directs into its communication strategy through the preparation of the message and the utilisation of the various channels to relay this message, it is expected that the centre should have gained much publicity in Phitshane-Molopo. The centre adopted a paradigm of dialogue with the full understanding that it would strengthen its conventional media activities and enrich its outreach capacity. It can therefore be concluded that problems with the RIIC communication strategy not only derive from inadequate media intervention but also from the insufficient implementation of the paradigm of dialogue through the extension officer initiative. These problems also suggest that the double pronged model is not enough for RIIC since the two prongs have not squared up to each other very well in facilitating communication between RIIC and its clients. Suffice it to say that the two prong strategy is wrong. Hence the need to explore the need based integrative model with a view to incorporating some its features in the RIIC's strategy, especially the indigenous media component which is ideally suited for the rural people, who form the bulk of the RIIC's audience.

Moreover, RIIC expects to be rewarded by its communication strategy for obvious reasons: it costs RIIC a lot of resources to put together the radio programme materials. The Radio Programme Officer spends an enormous amount of time in rural areas collecting material for the programmes. He is paid *per diems* and night out allowances to carry out this exercise. Costs are also incurred on transport used. Tapes are purchased for recording purposes and additional travelling costs are incurred during the delivery of the materials to the broadcasters. Moreover,

printing of the information brochures from the local print shops is very expensive especially if it is in colour. Further expenses are incurred by extension officers during their month long trip to their designated extension areas every quarter. At the end of the day, the expectation is that the company must be rewarded by its communication strategy, into which it puts a lot of resources, as substantiated above.

The lack of knowledge about RIIC among the informants is even more worrying considering the high level of commitment of the people of Phitshane-Molopo to agricultural pursuits, especially arable farming which is the dominant occupation in the area.

With the RIIC's media not reaching the audience, as corroborated by 96% of the sample population who said they have never received any documentation from RIIC and 88% who said they have never listened to the RIIC radio programme, it is necessary for the centre to intervene within the short term. New strategies conducive to improving the existing conditions are urgently required. Media reception should be activated in the area. Moreover, a community mobilisation strategy is highly required in Phitshane Molopo, and should be treated as a matter of priority.

As part of community mobilisation, it is necessary to conduct seminars and meetings as suggested by the VDC in order to inject knowledge about RIIC's development activities in Phitshane-Molopo. Through this approach a wider audience would be covered in all the four wards in the village. Although some people have expressed negative sentiments against the VDC performing this role, they represented only a small margin of 8% of the sample population. It is therefore necessary to count on the support of the majority, who harbours no ill-feelings against the VDC.

Moreover, it is hoped that the less supportive individuals would ultimately join the bandwagon when they see developments coming into the village through a VDC spearheaded initiative.

From this study, listenership of the radio is reasonably high in Phitshane-Molopo, in spite of the problems encountered with the Radio Botswana transmission system which has swayed the audience to the South African radio stations. Thus, radio still remains a vital communication medium which can effectively deliver the required services if the problems with the transmission system can be obviated.

A study conducted in the rural northern zone of Tanzania by Moshiro (1990) confirmed the effectiveness of radio in development communication. The study found that 60% of the rural population owned a radio set and the average audience at peak hours was around two-thirds, which made radio by far the most common consumed medium in the rural areas. (Africa Media Review, 1990: 23). Also, social mobilisation studies conducted in Zimbabwe and Kenya (1993) have confirmed favourable results from radio usage in community development initiatives.

The success of the radio in these countries derived from its democratisation from the dominant communication paradigm of source-medium-receiver (one way communication flow) of the 1950s and 1960s to a dialogue-based communication process between the audience and the programme producers involving co-partnership in the determination of priorities for the programme content. Melkote (1991: 252) shared this view of audience's participation in the communication planning process and indicated that "the approach incorporates, among other things, multiplicity of ideas...symmetrical exchange with interchange of roles between senders and receivers...this orientation is two-way, interactive and participatory at all levels".

Radio works very well if it has been democratised thereby involving the audience in the determination of the message content. As Machipisa (Saturday Star, 14th Sept. 1996: p. 7) contends: "...one of the key ways to involve people is through communication to understand rural people's underlying needs, their aspirations, their perceptions about the problems rather than how outsiders feel...Consulting the people and actively involving them in making the decisions that will affect them virtually ensures the programme's success."

The approach taken by Machipisa above is the most feasible one, and if adopted by RIIC, could yield incremental improvements in the centre's quest to improve communication with the people. People will be more willing to pay attention to RIIC development endeavours if their voice and worth are being fully recognised and acknowledged. Democratisation of broadcasting can consolidate efforts towards reconceptualisation of institutional communication process with the audience as indicated below by Oepen:

Broadcasting has to be changed from a means of distribution to a means of communication, what a wonderful apparatus broadcasting could be if it would only receive instead of just transmit, make the recipient speak instead of just listen, relate him to others instead of isolating him from them. (Oepen, 1990: 55).

RIIC must face this challenge with fortitude and as a learning experience in order to consolidate its radio programme's capacity for effective service delivery.

Moreover, as part of the solution to the problems identified in the study (pp. 93 - 95) RIIC should consider producing its messages as music programmes or formats to appeal not just to old people

but also to young people. Young people are enamoured of musical programmes and can pay more attention to RIIC's radio programmes if they are varied, to cater for the interests of both old people and the youth.

The chapter further concludes that development communication must be viewed as a dialogue driven arena than simply as a one-way information driven intervention which underplays the functional role of the receivers.

RIIC needs to heed the suggestions made by the audience in order to begin to achieve some of the objectives of its communication strategy.

## CHAPTER 6

### CONCLUSIONS AND RECOMMENDATIONS

This chapter presents a summary of the findings of the field research covered in this thesis. It also outlines the problems identified in the study area. In addition it re-examines the study questions in Chapter 1 to establish if they have been adequately covered, and where questions have not been sufficiently or totally covered, it identifies this as a limitation of the study. It also gives alternative suggestions for future action towards the resolution of the limitations identified in the study. Having discussed the various theoretical conceptions in Chapter 2 and having established the various constraints to the RIIC communication strategy, this chapter recommends a review of the RIIC extension approach since it has implications for the dissemination of information brochures to the target audience. It also suggests a possible model which could be further explored for adoption at RIIC in an effort to strengthen the existing double-pronged approach.

#### **Summary of problems identified in the study**

It is the conclusion of this study that the RIIC institutional information delivery system has inadequately engendered communication with the target audience in Phitshane-Molopo about the organisation's technological breakthroughs. In terms of the findings of this study, no information brochures have reached members of the sample population through the extension effort. The findings further show that homophilous extension networks have not been fully exploited to satisfy the needs of the key community structures such as village development committees, farmers' communities, social and community development, local authorities, to mention just a few. Neither

has this approach been fully exploited by the RIIC officials to enable the organisation to benefit from interpersonal communication strategy which constitutes the basis for the centre's extension approach.

This depressing scenario is confirmed by the 8% of the sample population which knew about RIIC and its activities from their visit to the centre in the past and from the information brochures they received, leaving a total of 92% of the sample population virtually knowing nothing about RIIC development activities.

In spite of the fact that potential literacy skill exists in Phitshane-Molopo, with poor reach and reception of the media by the audience, this resource has remained unexploited to the detriment of RIIC.

The study has also found that the majority of people in Phitshane-Molopo prefer information brochures produced in Setswana. However, RIIC stands to lose because it has tended to produce all its publications in English, a language which is spoken by very few people in rural areas in Botswana. One would have thought that recipients of publications produced in English would pass the message on to the less active members of the audience in terms of the two step flow model. However, this has not happened. However, if people can read for themselves, the centre's communication strategy must make a provision for the materials to reach them.

Some theorists such as Melkote (1991) have argued that it is pointless to produce communication materials which would not be comprehended by the audience whether at grassroots or superior levels. He therefore recommended materials which could effectively utilise the mental potentials of

the individual recipients for whom they are intended. A similar argument has been advanced in the articulation model by Mary Moffit (1993) that communication materials are only meaningful to the extent that they suit an audience's lived experiences. Thus, textual materials which do not conform to these conceptualisations would be of no consequence.

The other constraint is that RIIC has never undertaken any field research study to document peoples' communication constraints in rural areas, in spite of the fact that the centre attaches considerable importance to developing technologies based on the perceived needs of its target audience, for which a needs assessment survey is conducted every three years.

The study has also found that although listenership of radio is generally good in Phitshane-Molopo with over 60% of the audience claiming that they listened to the radio with fair regularity, only a depressing 2% of the sample population has listened to a RIIC radio programme. The majority of the people have lost interest in Radio Botswana because of its inadequate transmission system which fades away for the larger part of the day in Phitshane-Molopo, as a result of which the residents prefer to listen to the South African radio stations which feature programmes in Setswana. A credible medium is therefore fundamental to a communication programme because it captures the minds of the audience and makes them rely on it for their information needs. Until the Radio Botswana transmission system is pitched to a level where it would impact upon all sections of the country the same way, communication through the radio in places like Phitshane-Molopo would continue to be a vain attempt, and worse so for villages far beyond Phitshane-Molopo.

The other constraint is that of lack of awareness by some people that radio is a good instrument for spreading information on development issues. This is a serious problem which could have long been

picked up by the extension officers and advised those ignorant individuals to heed the radio for their own benefit.

These constraints have immeasurably hampered communication between RIIC and the residents of Phitshane-Molopo.

Nonetheless, the study concludes that the potential for communicating with the residents of Phitshane-Molopo exists given favourable factors such as literacy rates and the interest of the village development committee in offering to assist RIIC to foster an environment conducive to interacting with members of the community. This approach is the right way to go given that some theorists such as Melkote (1991) have contended that no programme of development can benefit humanity to the fullest extent unless effective communication mechanisms are put in place to promote the required understanding between the benefactors and the beneficiaries.

### **Limitations of the study**

The limitations of the study refer to the issues which the study failed to achieve during the implementation of the inquiry. Among them is that the analysis of the findings was limited by the paucity of the data on some research questions.

The absence from the study area of the majority of the targeted key informants (see page 10) created a wide gap in the study area in terms of rendering a wide body of data from a cross-section of viewpoints. The key informants are considered to be extremely important information rich sources because of the nature of their roles as gate-keepers within the community.

Also the research instruments did not allow for sufficient investigation of audience reception eg. meaning making. Meaning has implications for comprehension and therefore constitutes an integral aspect of audience reception. Text could have been presented to the audience to test members' understanding, but this was not within the purview of this study.

### **Significance of the study**

As indicated elsewhere in this document, this study is the first of its kind to evaluate RIIC's media reach and reception. In addition, this study has confirmed its hypothesis that the RIIC's media have not effectively impacted upon audience reach and reception. This has created a flaw in the communication strategy.

The study has also found that the RIIC's communication strategy is largely enfeebled by the insufficient implementation of the paradigm of dialogue and the lack of community participation in the planning and implementation of communication activities. It is therefore contended that much of the problems besetting the paradigm of dialogue and the diffusion of print media derive from implementation constraints enumerated elsewhere in this document. Other problems include the lack of evaluation of the RIIC communication strategy, which could have picked up the problems earlier, for which solutions would have been long found. For this very reason, the findings of this study are of vital importance in that they will influence decisions and planning processes aimed at consolidating the effectiveness of the RIIC communication strategy.

In particular, the major contribution of this study emanates from its conceptual adequacy and theoretical relevance to the field of development communication. From a review of the theoretical

conceptions, a communication model which could be tailored to RIIC to improve its communication strategy has been identified. Consequently, the study recommends that RIIC should consider a conceptual shift from the current strategy to a multi-faceted approach which emphasises varied communication channels directed towards accommodating the different needs of the entire levels of the audience.

It is therefore the conclusion of this thesis that RIIC should further explore the need-based integrative model advanced by Nwosu and Megwa (1993). The model advocates the utilisation of all forms of the media channels available, (without any restrictions to specified channels) including the urgent need to explore the indigenous media to determine their feasibility for utilisation in rural areas, where the majority of the people reside, a common feature in most African countries, including Botswana. In adopting this approach, the architects of this model took cognisance of the fact that mass media are restricted to covering short term problems over short periods of time while indigenous communication interventions reward the effort over the long term. A union of these communication interventions (conventional and indigenous media) is suited to ensuring that where one intervention has not extended, or where it does not suit, its counterpart closes the gap as in a multi-step flow model.

### **Suggestions for further research**

#### **More data required from a national study**

This case study has been carried out as a pilot for a larger national study. A larger national study covering a sample of several number of villages, including poor sections of the urban centres is

warranted to broaden data collection base across a larger population spectrum. The idea behind this study would be to determine if the results obtained in Phitshane-Molopo would be obtained in the other sections of the country or not. From the findings of the study, evidence would be produced to establish whether the RIIC communication strategy is only failing in Phitshane-Molopo or performing better elsewhere. On the basis of these data, RIIC would be in a position to reconceptualise and reposition its communication strategy in order to make it more effective.

### **Coverage of key informants**

Further research should target a cross-section of key informants to get broad-based data on their views about the RIIC's communication strategy and ways in which the strategy can be reconceptualised and consolidated to be effective in achieving the centre's goals and assumptions. This will be extremely important because the pilot study had intended to cover the various key informants, but the majority were absent from their duty stations, with the exception of only three individuals. This therefore limited the contributions of these "information rich" individuals to the study.

### **Determine radio utilisation pattern and its impact**

Further study should also examine the utilisation of radios across the spectrum to establish if in these contexts, the Radio Botswana transmission system is equally a limiting factor towards the utilisation of radios and recommend the way forward. It should be noted that similar concerns about the transmission system emanating from a cross section of the audience would add more weight to RIIC's recommendation to government to improve its transmission system

in order to stimulate and boost radio utilisation pattern in rural areas to improve communication.

### **Assessment of the content of media messages**

Further research should also assess the suitability of the media content for the audience's needs in terms of its appropriateness for engendering comprehension. This would involve an analysis of the content of the material from the audience's perceptions and such an initiative should incorporate an analysis of the stylistics, terminology used, photographic work etc.; determine the implications of these variables on comprehension and get the suggestions from the target audience towards improving the content of the media activities. One cannot underestimate the efficacy and imperativeness of studying the effect of these components, but they had to be abandoned in Phitshane-Molopo because of lack of the basis to work from as a result of poor media reach and reception.

For instance, the two individuals who had at one time or another received informational brochures from RIIC did not remember any aspect of the material well enough to be of any value towards the analysis of the content of the material. The researcher could have supplied some information materials to the informants to run a quick interview to acquire analysable data, but that was not within the purview of this study. The study was to find out peoples' reactions to the media they have consumed, which assumed an earlier reception and consumption of the content of the product.

### **Analysis of the concept of meaning**

Moreover, further research could investigate the conceptualisation of the meaning and its influence in the utilisation of media messages. Meaning is central to communication activities because it constitutes the basis through which audience reception and utilisation of the text can be evaluated. This concept has only been articulated from a theoretical perspective but has not been put before the audience for their own diagnosis and conclusions.

### **Determination of the resource capacity for the implementation of the RIIC communication strategy**

Another possible area for further research could be constituted by a comprehensive analysis of the operational capacity of the centre's communication strategy, in terms of the institutional logistical support provided, to determine if the strategy is sufficiently resourced to effectively achieve its goals.

The insufficient coverage directed to the area by the extension personnel could be directly linked to inadequate logistical and human resource support rendered by the organisation, and if the study confirms this as a discrepancy, RIIC might consider increasing resources for the extension department to optimise its effectiveness in sustaining its institutional obligations with regard to information dissemination.

### **Decentralisation option**

Due to the nature of the problems resulting from the initiatives of the extension effort in Phitshane-Molopo, RIIC management should consider a decentralisation of the extension programme as one of the feasible options through which the impact of the centre's communication strategy could be improved in the study site. Once resident in the area, an extension officer can interact regularly with the target audience, exploit homophilous structures to the fullest extent, have more time for follow up visits and get to understand problems of the community better and decide on the solutions with the people. The existence of the office in the area would enable members of the community to visit the extension officer more often and consolidate linkages and working relationships.

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# QUESTIONNAIRE

## SECTION A

Name of the study site.....

### Interviewee's PROFILE

Name of the respondent.....

Respondent's address.....

Sex.....

Occupation .....

Name of the ward.....

Date of interview.....

Language(s) spoken by the interview.....

## SECTION B

### MEDIA REACH, FREQUENCY, TIMING AND LISTENERSHIP

1. Have you heard of the Rural Industries Innovation Centre (RIIC)? yes/no.
2. If yes, what does it do?.....
3. Have you ever received any documentation from this organisation about its agricultural technologies? yes/no.
  4. a. How did the documentation reach you?
    - a. Through an RIIC extension officer
    - b. Through the mail following request
    - c. From a personal visit to RIIC
    - d. Others (specify).....
  3. b. If you have never received any information from RIIC, do you know of anyone who has?.....
  3. c. If yes, what documentation did you or the person you know receive?

- i. catalogue of goods and services
- ii. information brochures
- iii. newsletters: vstp, science and technology
- iv. others (specify).....

4. Do you ever listen to the radio at all? yes/no.....

4.a. If yes, do you ever listen to the RIIC radio programme? yes/no.....

4.b. How often do you listen to this programme?.....

4.c. If you never listen to this programme, give reasons why you do not?

.....  
 .....

5. What time of the day do you listen to the RIIC radio programme?

- a. 12.45 pm
- b. 7 pm
- c. 6 am

6. Of these times, which one do you prefer?.....

7. Why do you prefer one of these to others?.....

.....

8. If any of the times at 5.a. are not preferable to you, state why?

a. 12.45 pm .....

b. 7 pm .....

c. 6 am.....

9. In what language would prefer the radio programme?.....

10. Have you ever received information from RIIC via any of the following institutions radio programme?

- a. Commerce and Industry (Papadi le Madirelo)
- b. Agriculture Ministry (Molemi ithute)
- c. Masa-a-sele (Radio Botswana Morning Show)
- d. Botswana Technology Centre (Dikgang tsa Maranyane)
- e. Others specify.

11. How often do you get information from the RIIC radio programme?

.....

12. Does the information you receive help you to know what RIIC is doing?

.....

13. Have you ever misunderstood any material presented on the RIIC radio programme?  
yes/no.

13.a If yes, what programme was it?

.....

14. b. What specifically did you fail to understand?.....

15. What do you do if you don't understand any particular radio programme about RIIC?

- a. I do nothing
- b. I ask my co-listeners
- c. I ask my neighbours
- d. I follow up with RIIC

16. Does asking someone help you understand the radio message better? yes/no.

17. Are you satisfied with the information you obtain from RIIC, irrespective of whom  
you get it from? yes/no.

17.a. If yes, how would like to receive information from RIIC?

.....

17.b. If unsatisfied, how would you prefer to receive information from RIIC?

.....

18. Have you ever listened to any other radio station(s)? yes/no.

18.a. If yes, which radio station(s) have you listened to?.....

18.b. Why did you listen to those other radio stations?

.....

19. Do you ever pass information you have received on RIIC to other people? yes/no.

19.a If yes, how.....

19.b. If no, why?.....

## SECTION C

### IMPACT OF LITERACY SKILLS AND IL-LITERACY ON MEDIA RECEPTION

1. Can you read? yes/no.

1.a. Can you read in Setswana?

- i. excellently
- ii. well
- iii. can just manage
- iv. cannot read at all

1. b. Can you read in English?

- i. excellently
- ii. well
- iii. can just manage
- iv. cannot read at all

2. Can you write in Setswana?

- i. excellently
- ii. well
- iii. poor
- iv. cannot

3. Can you write in English?

- i. excellently
- ii. well
- iii. poorly
- iv. cannot

4. What is the highest level of education have you achieved?.....

5. Have you ever read any material from RIIC? yes/no.

6. If yes, in what language was the material presented?.....

7. If you cannot read, how do you use information materials from RIIC?.....

.....

8. In what language would you prefer information brochures presented?.....

9. Why do you prefer the medium you have chosen?

.....

## **SECTION D**

### **APPROPRIATENESS OF CONTENT AND ITS IMPLICATIONS FOR COMPREHENSION**

1. Is the content of the information material that you have received from RIIC, either print or radio, appropriate for your needs? yes/no.

2. If yes, how is it appropriate?

- i. it is presented in the language I understand
- ii. it is simple, understandable because it is not clouded with pro-literate terminology
- iii. sufficient images are used
- iv. others (specify).....

2. If no, how is it inappropriate?

- i. it is too technical to understand
- ii. it is too detailed and confusing
- iii. it is difficult because it is presented in pro-literate terminology
- iv. others specify

3. Then what type of information would you have preferred to receive from RIIC?

.....

4. In what way(s) could the RIIC communication strategy be improved to satisfy you better?

.....