At the same time theories were developed to explain how managers could more efficiently and effectively perform their jobs. Scholars outside the field of communication developed classical theories of organisations. Max Weber (1909 - 1948) wrote about the benefits of bureaucracy. Henry Fayol (1916 - 1949) identified key principles of management such as division of work, centralisation of power and the hierarchical chain of command.

Frederick W Taylor's (1911) Scientific Management Theory was meant to correct the unsystematic ways in which organisations operated at that time. Taylor advocated among others, upward communication and scientific analysis of tasks to increase productivity. He suggested piecework, that is, paying workers on a number of units they produced rather than the length of time worked. Roethlisberger Dickson (1939) conducted the Hawthorne studies that changed perspectives in management. As a result the Hawthorne studies, theorists began to consider the effect of communication and human relations on productivity. Managers were taught to consider informal as well as formal organisational communication systems. Managers were taught to listen to their employees and stimulate upward communication. Chris Argyris (1957) and Rensis Liker (1971) further developed human relations theories of leadership and supervision. Reacting to the assumption of both scientific management and human relations that there is one best way to manage all workers, Fredler (1967), Redding (1970) and others developed contingency theories of group leadership. These theories stress different styles of leadership appropriate to the needs created by different organisational situations.

Thayer (1968) identified three basic communication systems which fulfil an organisation's communication needs:

1) The operational communication system concerns task-related information;
2) The regulatory communication system fulfils members' needs for information about orders, rules and instructions regulates the organisation processing function; and
3) The maintenance and development communication system provides feedback on people and communication networks related to an organisation's internal functioning or to an organisation's connections with its environment (public relations, employee relations, advertising and training functions, for example). Thayer believes this communication system provides preventive maintenance for the organisation.

Redding (1972) identified the following components of the ideal managerial climate: supportiveness; participative decision-making; trust; confidence and credibility; openness and candour; and emphasis on high performance goals.

3.2. Organisational communication for organisational and national development

The definitions given above of communication are intended to introduce the reader to the concept of communication for development. What the student intends to show is the fact that without efficient communication there can be no development; and without efficient and effective organisational communication there can be no organisational and, indeed, no national development.

The student's attachment theme was trying to link the theory of communication for development with the development of the Zambia's roads through ROADSIP. Since the theory of communication for development rests on the premise that successful development cannot take place without effective communication, the student is therefore arguing that useless the ROADSIP programme uses planned and effective communication skills and strategies, its development will not be enhanced.

The student's attachment revolved around three concepts: organisational communication, international communication and development. Before any further discussion, the student will pause and first give operational definitions of the three concepts.
3.2.1 Organisational communication

Infante et al (1997:310) points out that organisational communication involves exchanging messages to stimulate meaning within and between organisations and their environment. Organisational communication involves one-to-one communication (such as communication between superiors and subordinates), small group communication (meetings for example), public communication (press release, company newsletters, new product announcements using teleconferencing, perhaps even internal corporate television programmes). Each of these forms of communication may occur between members of the same organisations to co-ordinate behaviour with each other or with their environment (customers, government or competition). This report will retain the above definition of organisational communication.

3.2.2 International communication

Kivikuru (1990:23) defines international communication as communication reaching either implicitly or explicitly beyond national boundaries in form of intentional and somewhat political persuasion. This is the definition used by the student in this report.

3.2.3 Development

For the purpose of this report the student uses the following definitions of development. Kasoma (1994:24) defines development as the improvement in the human life condition at individual and societal levels through desirable but fluctuating changes or adjustments in the environment. Environment by this definition means the sum total, which goes into making the human life situation. It includes physical as well as psychological vicissitudes of the human condition.

Another scholar, Wang-Dissanyanke in Kivikuru (1990:30) defines development as a process of social change which has as its goals the improvement in the quality of life of
all or the majority of people as closely as possible in this enterprise making them the 
masters of their own destiny.

With the above background in place it is worthwhile to note here that for the sort of 
development defined above to take place the student proposes that communication skills 
and strategies such as interpersonal channels and mass media (audio and visual) be used 
to:
a) collect and exchange information among all those concerned in planning and 
   implementing a development initiative, with the aim of reaching a consensus on the 
   development problems being faced and the options for their solutions;
b) to mobilise people for development action, and to assist in solving problems and 
   misunderstandings that may arise during project implementation;
c) to enhance the communication skills for development agents or consultants so that 
   they may dialogue more effectively with their audience; and, 
d) to apply communication technology to training and extension programmes 
   particularly at the grassroots level in order to improve their quality and impact.

Communication helps to overcome problems of designing programmes that are not 
appreciated by the intended beneficiaries. Communication will help to identify attitudes, 
felt needs, capacities, and constraints to the adoption of a certain programme. Through 
the dialogue and consultation process it employs, it naturally elicits the participation of 
the intended beneficiaries of a development action.

Communication spreads information about successful development experiences as a 
stimulus to others, keeps a dialogue open to all concerned in a development initiative and 
helps to smooth project implementation. Any development initiative to be successful 
depends upon people modifying their attitudes and behaviour and working with new 
knowledge and skills, which can only be imparted through effective communication.
Communication is also required by programmes that have a multi-disciplinary nature i.e. those which involve a number of organisations and authorities and which are, therefore, inherently difficult to manage. Communication can provide the linkage that will ensure co-ordinated management.

Successful communication for development programmes calls for a well-defined strategy, systematic planning and rigorous management. Adhoc communication inputs rarely make any measurable impacts. A communication plan tailored to the particular conditions being faced. The principles may remain the same but the details certainly call for differences in order to succeed.

3.3. Linking organisational communication theories to ROADSIP's organisation structure.

The trend by scholars including communication scholars has been to ignore the use of other communication contexts in their studies except the mass media context. It was thought that organisational communication cannot be linked to national development and that western style communication is more attuned to development that the culture-sensitive messages in organisational communication.

The student argues for the importance of a complementary focus on organisations and that more scholars should engage in studies of research in development communication within organisations. Whereas it is true that interpersonal communication is the most persuasive form of communication. Katz and Lazarsfield (1955), Krugman, (1980), Servaes (1991) in Okigbo (1991) says that all the other forms of communication must be looked into in order to ensure successful development in an organisation.

It is important to note that national development begins at the interpersonal level. Infante and Gorden (1987) investigated argumentativeness in interpersonal communication inside organisations through a theory relating independent-mindedness to organisational
communication. Independent-mindedness involves the tendency of people to have their thoughts and opinions rather than passively accepting the opinions of others and to express and advocate those personal views. This theory examines effective organisational communication from two perspectives:

1) it predicts that employees prefer supervisors who give subordinate freedom of expression and affirm subordinates' self-concepts; and,

2) it predicts that employees who are treated this way by their supervisors will benefit the organisation because they will be more productive, more satisfied with their jobs and more committed to the organisation.

This theory assumes that the values held by the general society should also be affirmed in the workplace. Under the ROADSIP programme, according to the student's observations, there are disputes or rather tensions between the NRB and the organisations it coordinates. This is because the other organisations feel as though the NRB is not giving them enough independent-mindedness on the job. They feel that they are not allowed to affirm their self-concepts and as a result they are less productive, less satisfied with their jobs and feel like committing less to the organisation. This is consistent with Gorden, Infante and Graham (1988) who did an investigation whose finding indicates that subordinates were more satisfied with supervisors who encourage them to argue work-related issues, even if the subordinates themselves did not like to argue.

This theory applies to the ROADSIP organisation in that it suggests applications for group and organisation-wide communication. It thus deals with four levels of a system-cultural, organisational, dyadic (supervisor-subordinate) and individuals - and implies a fifth level, small-group communication. All these contexts are found in ROADSIP where interpersonal, small group meetings, public audiences and the wider organisational communication are all present.
This theory indicates that employees desire more freedom of speech at work and employees who have more freedom of speech were also more committed to the organisation. Workers under ROADSIP made this cry especially those from Ministry of Local Government and Housing who feel they can do more work with less scrutiny and more freedom from NRB.

Supervisors who are effective communicators influence their subordinate to job satisfaction and organisation commitment. This communication effectiveness must be encouraged in ROADSIP. Employees must be trained in the following communication skill to ensure more successful development in organisations, in this case ROADSIP:

1) argumentation;
2) interpersonal communication (to teach an affirming communicator style);
3) freedom of speech and communication research methods (to enable participants to understand the connection between communication climates and independent-mindedness; and
4) Public speaking and small group communication.

If the independent-mindedness model became the foundation of communication education in ROADSIP, organisational communication training would eventually make workers more satisfied and ROADSIP more productive because workers' need for free speech and self-concept affirmation would be more fulfilled. (Infante, 1987: 329)

Another important organisational communication theory, which can be linked to ROADSIP's organisational structure, is the theory of decision-making, identification and control. Tompkins and Cheney (1983) believe the participants' explanations of their decision are important to decision-making and the nature and targets of the identification process.
In a study of communication and unobtrusive control in contemporary organisation, Tompkins and Cheney investigated power in an organisation by studying the ways in which organisations "control their members... by controlling their decision'"(Tompkins and Cheney, 1985: 185). In making decisions, organisation members draw conclusions from premises used in making choices. By providing premises for their members through the process of identification, organisations influence their members' decision-making processes. Because this influence does not come in the form of orders or commands, the control is unobtrusive (subtle and inconspicuous).

The theory advocates for concertive control. This control arises from an organisation's shared values and goals, created through the process of identification. Tompkins' and Cheney's definition of organisational identification emphasises the power of concertive control. "A decision maker identifies with an organisation when he is she has chosen an alternative that is perceived as of interest to that organisation,'"(Tompkins and Cheney, 1985:194) The NRB is such a decision-maker in that it always strives to choose the alternative that is perceived as the best for ROADSIDP. The World Bank has been pushing for policy reforms in the transport policy as an alternative that might make ROADSIDP a more successful programme and at the risk of their jobs, NRB has been pushing MCT for these reforms. Through concertive control, NRB staff members are influenced to make the choice they believe to be the best for the organisation, even though that choice may not be the best for them as individuals.

This theory is linked to organisational communication because of the importance it places on understanding the meanings members use to understand and identify with groups and organisations, make decisions, and explain their choices to outsiders, including academic researchers.

The third and last theory the student links to her attachment is the Structural-Functional Systems Theory. This theory first identifies key elements of the organisational structure. An organisational system consists of interdependent parts, which use energy to process
environmental inputs (information and materials), produce throughputs, and finally outputs or products. The ROADSIP’s structure is such a structure which uses information from all involved ministries and agencies to identify roads to be worked on, who does the job and finally produces outputs - the rehabilitated roads.

Two types of communication are important for organisations. These are concerned with who knows it. The theory describes four sublevels of the system hierarchy: individual, dyadic, group and organisational. At every level, communication is structured in formal and informal networks. Inputs (such as message) may be relatively complex or relatively simple and flow to individuals at a particular rate per unit of time (five telephone calls per hour, for example). When the flow is too great to manage, a person experiences communication overload. If the rate is too slow, underload occurs. The concepts of rate, flow, complexity, overload and underload may also be used to describe other levels of the organisational hierarchy. It is possible for the entire organisation to experience communication overload during a time of changing environmental conditions like government ministries are facing under the Public Service Reform Programmes (PSRP).

Information in organisation flows in patterns called networks. The micronetwork links individuals in the group. The network along which messages are transmitted between groups in the organisation is micronetwork. The macronetwork forms the organisation’s overall communication structure. Networks consist of members and links (communication ties). Links have five important characteristics: symmetry, strength, reciprocity, content and mode of channel. Symmetry refers to the degree to which the link is initiated or used equally by both members. Do both give and takes equally, or does one person always seek information and the other always provides it? If one person usually sends and others receive, the link is asymmetrical. The strength of links refers to use. A strong link is one that is frequently used, while a weak link is used only occasionally. Links are reciprocal (high in reciprocity) if both organisation members report the link. If one person reports frequently using the link and the other says that no communication took place, the link is considered unreciprocated (low in reciprocity). Content of
communication passing along the network might be work-related or social. Mode or channel refers to how the communication takes place: by telephone, in person, through group meetings, by e-mail, or in writing.

Organisational members may play different network roles. Members who have few or no links with others on the network are called communication isolates. Bridges and liaisons link two groups but play different roles. A liaison links two groups but is not a member of either group. A bridge is a group member who links two groups and actually belongs to one of them. A Mediator, a neutral third party like an ombudsperson who helps settle a conflict, might perform a liaison role between two groups.

The second part of structural functionalism, as the name implies, consists of the functions, which the system performs. Communication enables the organisation:

1) to produce throughputs and outputs (production);
2) to change the system and generate new ideas for procedures and products (innovation); and,
3) to maintain interpersonal relations among organisational members (maintenance).

Even though the major purpose of an organisation may be to produce automobiles, for instance, organisation members must direct the work, co-ordinate the delivery of parts and distribution of finished automobiles, and control their entire production process on the assembly lines. Production, innovation, and maintenance are the three essential activities of a communication system. (Infante, 1997: 350).

3.4 Conclusion

The chapter gave the definitions of the concepts that the student’s attachment focused on. It then went on to give the theories of organisational communication that were linked to the attachment. A final word would be to say that the organisational communication
provides a context where members know each other relatively well to achieve quality communication and this is what this chapter was trying to bring out.
CHAPTER 4

Personal experiences during the attachment

The purpose of this chapter is to highlight some personal experiences of the student during the attachment which will hopefully help the reader of the report to put it into context.

4.0. Background

As stated earlier, the student was attached to the National Roads Board (NRB) for a period of four months from 19th July to 12th November 1999. The National Roads Board is situated in Fairley Road in the Ridgeway area, Lusaka. The NRB was established by statutory instrument No. 42 of 1994 for the purpose of administering and managing the road fund for the development of roads countrywide. The NRB is private sector driven comprising of 12 members, seven of whom represent key private sector road transport organisations and five ex-officio members representing stakeholder ministries. The NRB is also mandated to attract revenues considered as road user charges as government may determine from time to time.

The NRB is run by a permanently employed secretariat comprising 11 members of staff. This may sound like a very small team but it is a small and very efficient and effective team. The NRB offices are small, well furnished with a homely feel. The student went to NRB so that she could be actively involved in NRB activities for the period that she was there. This was done as a learning period - to learn how National Roads Board operates, how ROADSIP is managed and by who. The biggest reason for the student’s attachment was for her to investigate the communication channels which exist between NRB and all the stakeholder ministries which are involved in the running of ROADSIP. Is there a well defined, strategic, systematically planned and vigorous communication structure? Or is there an adhoc communication structure which is not well defined and put in black and white? Is the communication plan that is present tailored to the particular conditions
being faced? Or is it a plan that has been borrowed or adopted from a developed nation without changing it to suit the Zambian environment?

The student was trying to find out to what extent the communication channels employed in the ROADSIP are effective. Effective communication is required by programmes that have a multi-disciplinary nature i.e. those which involve a number of organisations and authorities and which are therefore inherently difficult to manage - like the Road Sector Investment Programme. Communication can provide the linkage that will ensure coordinated management.

After being accepted into the organisation as an attachée, the student was told to act as an independent problem-solver among the different organisations which are involved in ROADSIP. This entailed being involved in activities with other organisations and seeing problems being faced. She was then supposed to offer solutions to these problems.

4.1. Initial contacts

As a development agent, the student was faced with a task of finding an organisation to be attached to for her practical course. The student chose to be attached to ROADSIP as it is a development programme trying to develop Zambia’s roads. The programme also includes a number of stakeholder organisations which are involved in its implementation and the student thought it would make an interesting attachment.

The student identified NRB as her choice organisation for her attachment. She proposed this to her supervisor who gave her a go ahead and told her to make initial contacts with the board. The student went to the board and talked to the chairman about her interest in being attached to the board for four months. The chairman was very agreeable and the student reported back to the supervisor that she could go to NRB except the board wanted a proposal first.
The student drafted a proposal which she presented to the supervisor. After the supervisor had gone through the proposal, she took it to the board. The Executive Secretary said she would be told when she could go and present her proposal to the secretariat. She was then invited to go and present her proposal to the secretariat. The student was nervous at first but she was made to relax by the whole team which assured her that they just wanted her to explain more on what her attachment was about. She will never forget one of the first things she was told by the Executive Secretary. He said, “please remember that we cannot offer you a job here as there are no jobs”. Of course the student had hoped that she could be offered a job in the small and seriously managed organisation and her hopes of becoming part of that small efficient team were diminished. At the end of the presentation, the student was welcomed to the board and told to feel at home as she carried out her attachment.

4.2. Hours of work

The NRB’s normal working hours were like most organisations. They work from 8 to 13 hours in the morning and 14 to 17 hours in the afternoon. The members of staff and, at times the student, were expected to work extra hours when the need arose. The normal working days are Monday to Friday but members of staff work on weekends whenever it is necessary.

The NRB members of staff do not have a tea break as such but tea is available anytime you order for it. There are two young men (an office orderly and a gardener) who make tea for the other members of staff. Visitors are also offered tea.

NRB has a series of meetings almost everyday. In fact one of the reasons why the student did not accomplish some of the tasks she set out to accomplish was because she used to attend almost all the NRB meetings because she had to learn what the NRB does with
who. The only meetings she was not allowed to attend were the Board meetings. These meetings are strictly for board members only. The student was always introduced in the meetings as an attaché from UNZA or from the Department of Road Transport (DRT).

4.3. Relationship with NRB staff

As mentioned earlier, the NRB is a small but very efficient team and so it “fights out all its battles.” The overall boss of the secretariat is the Executive Secretary Mr. Nadarajah Gananadha, popularly called “Gana” by all people who work closely with him. He is extremely hardworking and perhaps the only other person the student knows who works as hard is the student’s Supervisor Prof. Francis P. Kasoma. Gana knows his job well and so do the other members of staff at NRB.

The NRB staff is very friendly and transparent. They treated the student as part of the organisation and they expected her to attend all meetings and help in the preparation of these meetings.

The student had no office accommodation and so was sharing with the Procurement Coordinator, Mr. Gideon Hakana. He was called “G.H. by his close workmates. At first the student thought she would be an inconvenience to him but he was very welcoming and did his best to make the student feel at home. He did all the procurement work and the student was instructed to act as his helper.

4.4. NRB expectations

The NRB expected the student to act as one of them. They never thought of the student as an intruder but expected her to work like one of them. The Executive Secretary “Mr. Gana” had a brief chat with the student the day she started work and he told her that he expected her to act as a problem-solver for the ROADISP programme. He explained that
the ROADSiP is implemented by so many different ministries and agencies. He said as a result there are operational problems due to overlapping of duties and misunderstanding of the organisational structures. He gave an example of how the donors emphasized the issue of some policy reforms to ensure the success of the programme but the parent ministry (Ministry of Communication and Transport) has been very slow to act. The donors are busy pushing for reforms and the ministry is still reluctant to act. NRB was very transparent and invited the student to all its meetings so that she could see all the operational problems they were facing. The NRB then challenged the student to be the independent problem-solver that they needed.

4.5. Relationship with other ROADSiP implementers

The other ROADSiP implementers like Ministry of Local Government and Housing (MLGH), Lusaka City Council (LCC) and Ministry of Works and Supply (MWS) were also warm and helpful. They considered the student as a person who could let out in the open some of the frustrations they were facing in ROADSiP. They said they wanted to do so much for the programme but there were constraints. MLGH felt that NRB was stifling their progress. They wanted to do so much for ROADSiP but NRB was not giving them the freedom. The NRB were taking long and scrutinising all the contracts that MLGH was trying to award.

When the student said this to Mr. Gana, he replied by saying, “trust cannot be born overnight.” By this he meant that government ministries have messed up a lot of programmes and so the government should not expect NRB to just trust them and give them the freedom to run ROADSiP as they thought was best.

He concluded by saying that NRB was mandated to set guidelines on how ROADSiP should be run and it was only doing the job it was mandated to do.
4.6. Conclusion

On the overall, the student would like to say that she spent a busy and 'lesson-filled' four month period with NRB. She was warmly welcomed, treated as a fellow member of staff and learnt so much from the attachment. She also discovered some tensions among the different organisations implementing ROADSIP. But perhaps one of the biggest lessons learnt was that when you are working on a developmental project like the ROADSIP, you sometimes have to sacrifice your freetime to do more work. The student remembers how the entire office worked overtime for a whole week while preparing for the ROADSIP annual review meeting. Sometimes NRB staff even risked their jobs for the good of the programme and the nation. Good examples of these incidences are the many times the board pushed MCT for them to make the policy reforms which are delaying the implementation of the ROADSIP programme. The Ministers are not keen about the reforms and they keep blasting NRB but NRB is not intimidated. Mr. Gana used to say, "don't work for people, work for God. God will reward you."
Chapter 5
Problems and constraints

This chapter will give an account of the problems encountered by NRB and ROADSIP as a whole. It will go on further to explain some of the attempts that the institutions involved have made to try and solve these problems.

5.0. Background of National Roads Board (NRB)

Before going into the problems faced, the student will explain how ROADSIP is implemented by the various institutions mandated to implement it.

The NRB is the coordinator of the ROADSIP programme. The National Roads Board (NRB) was constituted for the purpose of administering and managing the Road Fund set up under Statutory Instrument No. 42 and advising the Minister on any matter in connection therewith. The Board consists of:

a) seven members being nominees of each of the following:
1) Engineering Institution of Zambia;
2) Zambia Chamber of Commerce and Industry;
3) Chartered Institute of Transport;
4) Copperbelt University;
5) Automobile Associations;
6) Farmers; and,
7) Transport Association (UTTA, Fedhaul and TAZA);

b) five ex-officio members being nominees of the ministries responsible for the following:
1) Communications and Transport;
2) Works and Supply;
3) Local Government and Housing; and,
4) Finance and Economic Development.
The Board in the discharge of its functions is assisted by staff seconded from the Ministries of Communications and Transport; Works and Supply; Local Government and Housing; Finance and Economic Development; and includes:

1) highway transport engineers;
2) road engineers, inspectors or both;
3) budget analysts; and,
4) accountants.

The reader is probably wondering why there is so much background information being given about the NRB. This information is given because it is only when a person fully understands which institutions implement ROADSIP and how it is implemented that one can appreciate and understand the problems faced by its implementers and the solutions they come up with.

For the purpose of performing its functions, the Board has the power to:
1. classify, reclassify, close or divert any road;
2. accept or reject proposals and programmes from road agencies;
3. construct, maintain and control storm water drains;
4. control roads and road traffic in the country during maintenance and construction of roads;
5. place temporary and permanent traffic signs;
6. remove and alter road advertisements;
7. enter upon land to carry out investigations connected with siting, diverting, maintenance and construction of roads;
8. recommend the reservation of land for proposed roads;
9. prohibit any unauthorised acts that may lead to damage of existing roads in state lands and reserves;
10. park vehicles, erect huts on private land during construction, maintenance and investigation;
11. regulate undertaker’s work across, on and within road reserves;
12. prevent damage to roads;
13. provide footpaths, cycle tracks and similar passageways; and,
14. undertake ancillary works.
The functions of the Board shall be to:

1. administer and manage the Road Fund;
2. prepare and publish audited annual accounts of the Road Fund;
3. recommend, to the Ministers, additional fuel levy and other road user charges and tariffs as required;
4. recommend projects for donor funding to the Ministers;
5. allocate resources for road maintenance and rehabilitation for various classes of roads as may be determined by the Ministers;
6. recommend funding for development of new roads;
7. provide guidance and technical assistance to various road agencies;
8. receive and consider reports from road agencies on their activities and prepare quarterly and consolidated annual reports;
9. prepare and award contracts, certification and payments and advise the Ministers accordingly;
10. review design standards and classification of roads and traffic signs for approval by the Ministers;
11. prepare and review terms of reference and guidelines for the various Road Authorities and budget guidelines;
12. recommend to the Ministers the granting of highway authorityship to any person or institution;
13. plan, manage and co-ordinate the road network in the country;
14. review from time to time the status of road agencies and recommend appropriate action to the Ministers; and,
15. make recommendations in relation to the siting of buildings on road sites.

As can be seen from the above powers and functions, the NRB is mandated to do a lot of duties in ROADSSIP. The Board is to elect a Chairman and Vice-Chairman of the Board from amongst the members of the Board. The Board meets at least once every two months at such a time and place as the Chairman may determine. The Chairman may at any time and at the request of the Minister or of not less than half the members call a special meeting of the
Board. All decisions of the Board shall be taken by means of a resolution passed by a majority of the members present and voting at a meeting, and in the event of an equality of votes, the person presiding at the meeting shall have a casting vote.

5.1 The Road Fund

The Fund styled the Road Fund established by the Permanent Secretary of the Ministry of Finance under paragraph (c) of subsection (1) of section eight of the Finance (Control and Management) Act shall be vested in the Board for the purpose of road maintenance and rehabilitation.

The Road Fund shall consist of:
1. fuel levy;
2. such sums as may be appropriated by Parliament for the purposes of the Board;
3. donor funding;
4. SAP Road Fund; and,
5. Road user levies including tariffs, taxes and tolls as may be recommended by the Board (see figures 5.1 and 5.2).

5.2. ROADSIP implementation

The Road Sector Investment Programme (ROADSIP) was conceived in mid 1995 as a ten year programme with the broad objective of continuing and consolidating support to the road sector in Zambia. It envisaged a total investment of some US$860 million. Of this, almost half was to come from internal sources - the Road Fund and GRZ counterpart funds, and direct subventions - with the remainder coming from external financing agencies. The first five year period (ROADSIP) envisaged expenditure of US$460 million. Commitments to ROADSIP have exceeded this target and disbursements are accelerating. The roads to be worked on include:
1. trunk, main and district roads;
2. feeder roads;
Figure 5.3: Zambia Roads Sector

FILE: ZAMMLGH.dat

Zambia
MLGH
URSP

- Zambia Roads Sector
- MCT
- MWS
- MLGH
- MOFED

ROAD TRAFFIC ACT 764 under review

About 50,000 km roads

Cabinet Committee

National Budget: K30 Billion p.a. 1999

Technical

- Finance
- Roadsip
- Tetap
- Donors

ROADSIP
TETAP
TECHNICAL
FINANCE
WEIGH-BRIDGES
DONOR/CONSULTATIVE

NATIONAL ROADS BOARD
Committee of Ministers

NATIONAL ROADS BOARD
Chairman & Board of Directors
Public + Public membership

EXECUTIVE SECRETARY

- Board Committees

MANAGEMENT SUPPORT TEAM

- Highways Engineering Co-ordinator
- Inspectorate Co-ordinator
- Accountant
- Transport Economist

- MWS
- MLGH
- MEWD

Urban and Feeder Roads

Directors
DISS

URBAN ROADS
FEEDER ROADS
ECONOMICS
WATER & SANITATION
OTHER SERVICES

Source: Gannett Fleming with Scetauroute Technical Proposal (October 1998)
Figure 5.1: Funding sources

Zambia Roads Sector
FUNDING SOURCE

Vehicle driver

Fuel station

Fuel company

Assess taxes/duty/levies received

Pay to ZANOC

Pay to ZRA

Pay to MOFED

Pay to MCT

Pay to NRB

Pay 60%
To MLGH

Pay Third
Of 60%
To Urban
roads

Source: Gannett Fleming with Scetauroute Technical Proposal (October 1998)
3. tourist roads;
4. urban roads;
5. community roads;
6. pontoons and bridges;
7. intermediate means of transport.

All the above roads have different organisations responsible for them. (see Figure 5.3).

MCT is responsible for the overall transport policy and for the supervision of transport enterprises. The Roads Department within the Ministry of Works and Supply is responsible for the operation and maintenance of main roads. All other roads are under the jurisdiction of 9 urban, 4 municipal and 48 rural district councils currently under the Ministry of Local Government and Housing.

Having looked at the institutional framework of ROADSIP implementation, one can see that there are many organisations involved in it and a sound management structure is needed to ensure the smooth running of the programme.

5.3. Problems being faced

Zambia decided to set up a road fund that works. This road fund was set up not only to finance all local roads, but to finance them on a cost-share basis. In many ways, this arrangement is ideal but it complicates management. If funds are going to be channeled to all roads, there must be an approved national roads programme, agreed cost-sharing arrangements with local governments, agreed procedures under which local governments will manage their share of the road fund, and appropriate financial and technical auditing procedures. Once these procedures are in place, it is probably the best type of road fund to have.
Figure 5.2: Funding apportionment

Road Sector
FUNDING APPORTIONMENT

ROADS SECTOR

Louis Berger Report

Road Traffic Act 764
Under review 50,000 km roads

Ministry of Communication and Transport

NATIONAL ROADS BOARD

MLGH

Trunk Roads
National budget 40%

Urban roads
National budget 20%

Feeder Roads
National budget 40%

Road User
ZANOC
ZRA
RF

1999
K30billion p.a.
National Budget

Source: Gannett Fleming with Scetauroute Techical Proposal (October 1998)
5.3.1 Friction among the implementers

As a result of the complicated management of ROADSIP, there are frictions which have arisen among the different implementers. These frictions are a consequence of the overlap of functions between NRB and the road agencies, notably the Roads Department and MLGH. This is mainly because the direction of future institutional reform is unclear.

As one engineer from MLGH said, "I feel the NRB is assuming too much. They want to scrutinise each and every contract we sign and as a result they are delaying works." He said he felt the functions NRB had assumed were wrongly assumed and that these functions be reverted to the right agencies (Roads Department and MLGH).

The general feeling in the RD and MLGH is that NRB harbours desires to "take over" the road network as the de facto national road authority and that the basis for NRB's operation is inappropriate as its potential powers under S1.42 are broad ranging and overlap with other agencies. Because all the other road agencies feel that NRB is an advisory body which is de facto executive, NRB is largely as a result of this excessively at risk as it feels it is being held accountable for the road sector (ROADSIP) without having the formal responsibility. NRB should be put in a firm legislative basis per government statement, i.e. it should have its own act.

5.3.2 Problems with fuel levy and other funding sources

The route by which fuel levy proceeds reach the road fund is circuitous and lengthy and gives rise to opportunities for delay in crediting the account. There may be legal impediments, it is true, but it seems like the government is just not living up to its policy commitment in this regard.

The biggest problem is that the money goes from fuel levy to Ministry of Finance and Economic Development before it can be reverted to NRB who administer it as part of the road fund.
There is also rigidity in some donor agency procedures for the channel of funding to ROADSiP. These rigid donor procedures also cause delays to access some of the donor funds.

Another problem in the funding area is that it is difficult to ensure that the road fund resources keep pace with maintenance cost requirements of the network (which increase in real terms over time, especially in Zambia where the currency is so unstable). This problem is important and affects the sustainable development of the road sector in Zambia. The solution has always been to add other road user charges to the fund but this only gets us a small way to the total amount needed. Other measures, especially the revision of the basic fuel levy calculation, is seen as the biggest solution to the problem. The ROADSiP ensured that they targeted real fuel levy in US cents per litre per year of ROADSiP but these targets have not been followed. The perceived solution to this problem is that it is important to establish one or more areas where fuel levy is required and set up a schedule and budget to MOFED. After MOFED has studied the budget and understood the importance of fuel levy, they can sign a memorandum of understanding with ROADSiP setting out strategies of increasing fuel levy and the annual targets.

5.3.3 Implementation progress is behind

The implementation progress is behind the objectives set for 1999. The annual performance review meeting which was held on 28 and 29 October, 1999 highlighted the implementation progress in 1999. The total funding that was made available was US$73.7 million compared to the targeted amount of US$168.5 million. Whereas the road fund is at US$7 million and donor funding at US$37 million both running at about 30% of target, government funding is at US$30 million, 11% of target. (Mission Aide Memoire, 1999). This pattern of financing has resulted in a substantial underfunding of maintenance works where it was discovered that indeed no funding at all was made available until July, 1999 when funding of Lusaka rehabilitation was stopped.

Another big problem is that it seems much of government’s funding appears to go to “emergency” works rather than to highest priority lists which have been drawn up by the
various road authorities. These “emergency” works are unfinanced projects but are brought up and worked on under ROADSSIP and therefore disrupted the prepared lists. It was decided at the review meeting that this matter must be addressed in the planning of the year 2000 works.

Due to the erratic release and shortages of funds created by the above development, physical achievements have also been behind target. Work on feeder roads (completed or in progress) amounts to 2,372 km of full improvement, 2,084 km of accessibility improvements and 743 km only of routine maintenance. For urban roads, 240 km of rehabilitation is currently underway or complete. Some progress has been made on contract maintenance but this only covers 27 km in Lusaka. All elements of the work programme have been affected by the shortage and erratic release of funds. (Mission Aide Memoire, 1999).

5.3.4 Capacity constraints

Some progress is being made in addressing capacity constraints but all current programmes need to be used more effectively to transfer knowledge to Zambian staff and build sustainable organisations and procedures. NRB, MWS and MLGH have all employed technical assistance staff and these should transfer knowledge to the Zambian staff to help put systems and procedures in place for improved sustainable development. The problem of capacity constraints is perpetuated by the fact that the institutional set up is not very ideal. There are continued difficulties in filling posts with experienced employees in road agencies, there are institutional overlaps and unclear roles of the agencies leading to inefficiencies in road management. All technical assistance programmes need to be seriously evaluated to maximise opportunities for building local capacity.

A further problem which perpetuates capacity constraints is that the basis for assessing the performance of road agencies is not clear therefore it is difficult to assess whether the current structure is working well or not. There seems to be an outcry to consolidate the NRB function of financier only not as implementer. This is viewed as a mistake by some that fear that ROADSSIP might crumble as a result. The fear is whether all the road agencies are correctly institutionally structured. Is the balance of in-house and contracted out work right? Are there enough qualified personnel to do the work properly? Are government workers given proper
incentives to ensure the success of ROADSIP? Are they properly motivated to give their best to the implementation?

Another problem in capacity constraints is the lack of qualified contractors. It takes months to find a contractor who fulfils the qualities that are specified in the tender documents to carry out certain works. This has contributed to the delay in the programme. This problem is being sorted out by the component of ROADSIP that addresses local contractor development. The programme has been initiated but is still not making much headway. There have been complaints about the slow progress of the programme and hopefully it will be improved in the year 2000. Progress has been adversely affected by staff problems and consequent delays in the launching of specific activities. A new Executive Secretary is to be in place as of November and hopefully accelerated implementation will take place.

5.3.5 World Bank's (WB's) perception of problem areas of ROADSIP

The World Bank gave the following areas as their perceived problems of ROADSIP and why it is progressing at a slow rate.

a) Reform of road sector policy and institutional framework

The performance of ROADSIP as regards the reform of the road sector policy and institutional framework is unsatisfactory. The biggest problem perceived is that there is a lack of commitment from the government. The government is also unsure and has not formed a consensus about the future direction of institutional reform. If the Ministry of Communications and Transport (MCT) could come up with a transport policy, the situation might improve. Since the mid 90is MCT has been battling with a draft transport policy but it has not been adopted up to now. Transport policy adoption may help somehow. The approval of the policy is being delayed but little is being said about the reason. A good conclusion would be to say that it is just a lack of commitment from the government causing the delay. There is even the worry by the World Bank that the draft transport policy does not go far enough into road sector specifics. This may have to be addressed before the policy can be adopted.
The reforming of the Roads and Road Traffic Act (Cap 464) is another problem area experienced by ROADSIP. The government seems committed to reforming CAP 464 but it has not laid down any detailed objectives of reforming the Act. The revision of the Act will make clear some uncertainties about which road agency is responsible for what.

There has been no timetable of actions yet made by the government to address what has been raised in the letter of sector policy. The WB believes there has to be a firm legislative basis for NRB and the road fund and a transfer overload responsibility to NRB. These actions are perceived to be the solution to improving the management system of ROADSIP.

b) Strengthening of road sector financing aimed at sustainability of the road maintenance effort:

The WB views this component of ROADSIP as unsatisfactorily done. It states that there seem to be uncertainties as to when actions agreed on in the letter of sector policy are to be implemented. Some of these actions include the streamlining of transfer of fuel levy proceeds to the road fund which it believes is too complicated right now and involves too many and unnecessary channels. Another action is the addition of road user charges to the road fund. Road user charges such as road tax and toll fees are collected by the Department of Road Transport but they are not added to the road fund. Levels of funding for the road fund and consequently ROADSIP are well below what is required for maintenance of the road network. The funding available is about 35% to 40% of the required fund. What makes the situation worse is that there is no plan which has been made by the government as to how this level can be raised or if there are resources available, how the expenditure need can be reassessed and reduced.

The WB would like to see action taken on revising norms for allocation of road fund resources and policies and safeguard measures to avoid skewed allocation of funds in the coming years.
c) Strengthening the local construction and consulting industry:

This component has been unsatisfactorily dealt with. WB notes that there has been widespread dissatisfaction among stakeholders about the limited progress achieved. What needs to be put in place are security and predictability of maintenance funding, appropriate arrangements for programming works, managing contracts and paying contractors to ensure success of local construction and consulting industry.

None of the elements above are assured at the moment. As a result, evidence is that contractors already trained are not being effectively utilised in the road sector. The National Construction Council (NCC) will also be expected to play a bigger role in helping to address constraints in the area. Donors need to be more creatively utilised for financing than has been done so far to support expansion of local contractor opportunities. During the annual review meeting in 1999 it was learnt that some contractors have been trained from the Road Training School. It is not clear how the trained contractors are being used and what action has been proposed to ensure that they are getting work every year regularly. It is recommended that an analysis be carried out to see how much money has been spent on the training of each contractor and how this contractor training can be made more cost-effective. The alternate option to train the contractors in-house by each implementing agency should also be explored. This will have two likely benefits:

a) less expenses will be incurred;

b) the training will be more specific in terms of the agency’s needs.

d) Management of maintenance contracts:

The two key issues which emerged during the discussions at the ROADSIP annual review meeting held in Lusaka in October were that lead time to prepare the maintenance contracts is too long and the elapsed time between the invoice submission and payment made is not decreasing. The option to consider the award of performance contract was considered a good idea. However, the certification of payments for the works carried out under performance contract needs a lot of work in terms of revision of the bidding documents, setting of quality control standards and good training for all consultants, contractors and the agency staff.
Nonetheless it will still not solve the problem for managing a large number of small contracts for the maintenance works and supervision consultants.

Therefore, it is recommended to consider the option of contracting out complete function of maintenance management to a consultant, who will be paid on the basis of work performance. This method has been tried in South Africa and found successful.

5.4. Summary of problems encountered

The NRB in their draft bankable document ROADSI P II (1999) listed the following problems and lessons learnt from ROADSI P I so far. The following are the problems:
1) There are a lot of delays in the approval of documents due to government procedures;

2) The need to involve all the responsible agencies in the ROADSI P implementation gave rise to certain conflicts. A MOFED employee interviewed by the student said that the conflicts were a “power struggle”. By this he meant that the government ministries were not happy that they were not controlling the ROADSI P funds and the situation would be worsened further if NRB was given a firm legislative basis because it would mean they would have absolute control. As such each agency was trying to ensure that it becomes the main road authority under the sector policy reforms;

3) Need to procure technical assistance added to the cost of preparation;

4) The rigidity of donor procedures caused delays to access of some donor funding;

5) Capacity constraints;

6) Inadequate experience and understanding of procurement processes;

7) Some defects in contract management;

8) Insufficient use of Highway Management Systems in decision-making processes;

58
9) A maintenance culture is yet to permeate all participants in ROADSIP.

5.4.1. Lessons learnt

The following were cited as lessons learnt in ROADSIP I so far:

a) private sector participation with the public sector is crucial to success;

b) dissemination of information is necessary to broaden ownership. One of the challenges that are repeatedly highlighted in the implementation of ROADSIP is the lack of adequate funding to support the various programmes in the road transport sector. The public must be encouraged to see roads as their property. Innovative ways must then be sought by the whole community to address this challenge to raise additional funding. In this particular regard the example of Chingola is inspiring. The Chingola community got very concerned with the state of their roads and organised themselves and contributed cash and in kind to the rehabilitation of their roads. The NRB then got involved at a later stage of the programme. The NRB should think of ways to nurture such a spirit by for example, providing incentives to communities that are prepared to upgrade or maintain their road infrastructure. For example, for every Kwacha that the community spends (in kind or cash), the NRB can contribute a further Kwacha. In this way, expectations can be managed and priority can be given to those infrastructural programmes that have community support. NRB brought TV and radio advertisements which were meant to conscientise the communities into realising that the roads belonged to them and they should care for them. The adverts were entitled “National Roads Board: Better roads; Safer lives”;

c) One agency needs to co-ordinate the activities of all participants. This will reduce the overlap of activities and tensions which arise from them;

d) Contact and dialogue with the donor community is essential;

e) Transparency and accountability are necessary to earn credibility; and,
f) Banking arrangements need effective internal controls to eliminate fraud.

5.5. Conclusion

From the somewhat numerous problems that have been highlighted in the chapter, it can be concluded that ROADSIP is a programme that needs a proper management structure to ensure its success. The way forward proposed by the Community Transport Infrastructure (CTI) component is as follows:

1. NRB should continue to administer the road fund and continue as a co-ordinating institution for all road programmes in the country;

2. RD should continue to render technical support to all road agencies that may require their services apart from their designated function of maintaining trunk, main and district roads;

3. The DISS through local authorities should continue to render technical support to all road agencies that may require their services apart from their designated function of maintaining urban and feeder roads. They should also provide technical support to communities during maintenance of community transport infrastructure; and,

4. A legal framework that will allow private ownership of transport infrastructure should be created to enhance sustainability of infrastructure through regular maintenance.

If the above measures are properly institutionalised, the road sector should provide the right level of service with the right calibre of staff attracted, retained and sufficiently motivated to execute their mandate. The programme implementers and all stakeholders will then live up to the challenges of the programmes.
CHAPTER 6
Student’s input

This chapter is intended to give an account of the input of the student in helping to solve the problems of the institution where she was attached. It is then supposed to go on to give the reaction of the institution to the suggestions as well as results of trying out some of the suggestions.

6.0. Student’s terms of reference

As earlier stated, the student was attached to NRB for a period of four months from 19 July to 12 November 1999. She used the observer participant approach in her attachment. She was required to get a thorough understanding of what ROADSSIP is about through participation in the activities of NRB. NRB was established in 1994 to manage and administer the road fund. It is also the co-ordination institution for all ROADSSIP programmes in the country.

The student participated in NRB meetings and performed other chores together with the members of staff. She also carried out personal interviews with members of staff of other ROADSSIP implementing agencies and ministries.

Specifically, the following were her terms of reference:

1. Be involved in NRB activities by being attached there for a period of four months.

2. Act as an independent problem-solver among all different organisations, which are involved in the implementation of ROADSSIP.
3. As a participant observer, suggest ways and means of how properly strategised communication channels can be strengthened to ensure the success of ROADSIP programme.

6.1. The student’s input

The student has to confess immediately that she did not make many suggestions while she was attached to NRB. This was mostly due to time constraints. She became fully involved in NRB activities which involved attending meetings almost everyday and she also had to conduct personal interviews with the individual ROADSIP implementers and act as an assistant to the procurement coordinator. Her four months were over before she even knew it.

6.2. The problems as the student perceived them

The student perceived the following issues as the ROADSIP problems:

1. A wrong institutional framework
2. Human resource constraints
3. Inadequate financing arrangements
4. Lack of clear responsibilities
5. Ineffective management structures
6. Weak management systems
7. Inefficient work methods

6.2.1 The institutional framework

The institutional framework is part of the reason why ROADSIP implementation in Zambia has problems. The road sector in Zambia is managed like a social service e.g.
health or education. Road users pay taxes such as road tax, toll fees and certificates of fitness to be able to use the roads but these proceeds are treated as general tax revenues and are not used for road maintenance.

Instead of being financed through user charges, roads are financed only through fuel levy which is determined as part of the annual budgetary process. Road users in Zambia are baffled by the fact that although they pay road tax and certificates of fitness, this money is obviously not used to finance roads. Road users, therefore, do not feel any sense of ownership for roads and expect the government to come up with all the finances to maintain and rehabilitate the roads.

The student encouraged the move by NRB to place advertisements in the newspaper, on radio and T.V to encourage a sense of ownership among Zambians for their roads. The student believes and suggests that the way forward is to continue disseminating information to the road users on how important it is that they, together with the government join forces in the challenge of maintaining and rehabilitating roads. This does not mean that they should contribute more money for roads but rather that they should ensure that the money they pay for roads is used appropriately for road maintenance and not just as general tax revenues. This can be done by making sure road tax fees are deposited into the road fund. The government and all Zambian citizens must together put a system in place where accountability to road maintenance is ensured.

This can be done by NRB introducing a newspaper column, which explains to Zambians how terrible the condition of roads is in Zambia and how much money is needed to rehabilitate the roads. The government should then ask the Zambian citizens to suggest ways in which the finances needed can be collected. At the same time, we can have phone-in radio and television programmes to involve all citizens in the brainstorming exercise of the best way to raise money for our roads. By so doing, Zambians will come to realise that the road problem is very much their problem as well as a government problem.
The government must carry out all these ventures through the NRB. This is because the staff at NRB has an efficiency ethic and has more proper incentives to rise to this challenge.

The biggest problem with the staff in the government ministries is that their salaries are very low, their working conditions pathetic and yet they are expected to be motivated enough to do very challenging jobs.

In the student’s view, it is very unfair that some employees e.g. NRB should be better paid than the government workers and yet they all are working for the success of the ROADSIP programme. The student also feels that the transport issue of the “non-professional staff” at NRB should be looked into as this can be demotivating. She herself faced transport problems during her attachment as there is only one vehicle, which is supposed to cater for all the non-professional staff, and there is no transport provided to and from their homes.

6.2.2. Human resource constraints

This is a very big problem in the government ministries. Government ministries suffer from an acute shortage of technically qualified staff and at the same time, they employ far too many unskilled workers. In Zambia for example, the parent ministry for ROADSIP, the Ministry of Communication and Transport (MCT) is one of the ministries which has not yet been restructured. This means that the ministry has in fact more unskilled workers than skilled ones. This makes the task of implementing a programme as challenging as ROADSIP a very difficult task.
This problem is compounded by the fact that there are low salaries in the ministries and it makes workers morale very low. Poor working conditions discourage initiative and personal accountability is also diminished.

In Zambia, the ROADSIP programme implementers in government ministries are mostly inadequately trained to carry out their new professional responsibilities as road agents.

These people are graduates all right, in various fields like engineering, economics and public administration (to mention but a few) but they do not have any relevant training in transport and road management. This knowledge can only be gained through going for professional training and through exposure to other countries’ road programmes.

As earlier mentioned, the student suggests that ROADSIP takes the task of training and giving better salaries to its implementers very seriously. This is because one cannot manage a road agency with a demoralised, poorly trained and poorly paid staff. Inability to do this will result in the best employees leaving the ministries to join the private sector where the conditions of service are better. This will leave the ministries with mediocre staff. Another consequence of poor salaries is that employees will be more interested in “PJ’s” - private jobs done during normal working hours. This has became common in ministries where you find especially the ‘graduate employees’ doing consultancy work during their normal working hours. As Heggie and Vickers (1998) point out that “road departments paying qualified technical staff a fraction of the going market wage end up with high vacancy rates, employ expatriate road managers paid through donor financed technical assistance programmes or use part time staff forced to supplement their income by moonlighting, daylighting, manipulating allowances and pilfering. This problem cannot be solved through training, bonded studentships and improved allowances. There is no point in training staff who spend only a fraction of their time on the job. Likewise, bonded graduates have no interest in making a career in the road departments and leave as soon as their binding period ends. Improved allowances are equally ineffective since they are
discretionary, subject to change and are not bankable, that is, cannot be used as security for mortgages and other loans. (Heggie and Vickers, 1998:19)

The best solution, therefore, is to improve salaries for the staff, accommodate them, give them house and car loans and train them. Then they will not have any reason to run for greener pastures because their own pastures will be green enough.

Members of staff in many road departments are not held personally responsible or accountable for their work. This is because managers are not sure which skills are needed at particular levels and so are unable to judge whether or not workers possess them. It is thus impossible to assess performance fairly, allowing greater leeway for political or personally driven performance appraisal. In most ministries, promotions are still made on the basis of administrative criteria rather than merit and senior staff are often political appointees, with consequently limited technical capacity and autonomy. Political appointees also come and go frequently during times of political change, causing discontinuity and disrupting management of the network and staff. This has been another problem in MCT where ministers have been coming and going and the ministry has had about five ministers within a period of two years! Each of the ministers has had to be updated on the programmes going on in the ministry, but before he/she can perform any duty he/she is transferred and so the process continues and very little gets done at the end of the day.

Finally, the staff in the road departments tends to be engineers who may be strong in the technical aspects of building and maintaining roads but these people may be weak in the analytical and managerial skills needed to look after a network in the long term. It is being suggested here that the engineers in managerial positions must also be trained in management courses to equip them with analytical and managerial skills. All professional staff must be trained to cover such areas as planning and economics analysis, environmental assessment, contract management and supervision and prioritization of
works. Updating of skills acquired is also very important especially for engineers who need training in modern construction and maintenance techniques.

6.2.3 Inadequate financing arrangements.

According to Heggie and Vickers (1998), all countries suffer from shortage of funds for roads, a shortage of funds for both investment and maintenance. Low investment results in high congestion often intensified by the frequency of lane closures because of the need to repair deteriorating pavement and structures. Lack of funds for maintenance results in the decay of road networks. The initial impact of this funding crisis has been to increase road transport costs, in terms of travel time; VOC’s; road conservation; pollution; and road accidents. The long-term impact has been to reduce commercial and agricultural competitiveness in international and regional markets and consequently slow overall economic growth. (Heggie and Vickers, 1998: 22).

In Zambia road maintenance is under funded mainly because the money road users pay for their use of the road network is not used for road maintenance. It is treated as general revenue and the road sector does not get any percentage. Table 6.1 shows the source of funding in selected countries and 6.2 for Zambia’s road programmes. Table 6.3 shows the funding requirements of Zambia.

As can be seen from Table 6.1, only Korea which is a fairly developed country is able to raise almost the total of money needed for road maintenance from its road users. The rest which are developing countries only raise small amounts of money from road users because peoples salaries are very small.

Table 6.2 shows Zambia’s sources of funding and only 21% can be raised from the already overtaxed Zambians. Compared to the total required figure in Table 6.3 it seems very little but if it could all be channeled to the road fund, it could help to restore some roads.
Table 6.1: ROADSP expenditures, financing and actual required maintenance in selected countries

<table>
<thead>
<tr>
<th></th>
<th>Argentina</th>
<th>Chile</th>
<th>Ghana</th>
<th>Hungary</th>
<th>Jordan</th>
<th>Kyrgyzstan</th>
<th>Korea</th>
<th>Pakistan</th>
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<tr>
<td>Road Expenditure</td>
<td>333</td>
<td>526</td>
<td>191</td>
<td>348</td>
<td>74</td>
<td>101</td>
<td>5,768</td>
<td>395</td>
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<td>Amount Finance</td>
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<td>by</td>
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<td>105</td>
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<td>205</td>
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<td>20</td>
<td>5,593</td>
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<td>Road Users</td>
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<td>20</td>
<td>97</td>
<td>58</td>
<td>5</td>
<td>175</td>
<td>320</td>
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<tr>
<td>Maintenance</td>
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<td></td>
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<tr>
<td>Required</td>
<td>68</td>
<td>760</td>
<td>135</td>
<td>240</td>
<td>31</td>
<td>176</td>
<td>970</td>
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<td>Actual</td>
<td>61</td>
<td>308</td>
<td>73</td>
<td>127</td>
<td>9</td>
<td>101</td>
<td>655</td>
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<td>Maintenance</td>
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<td>62</td>
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<td>22</td>
<td>75</td>
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<td>54</td>
<td>53</td>
<td>29</td>
<td>57</td>
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Source: Survey of country road agencies, WB sector and project report and WB task managers in Heggie and Vickers (1998)
Table 6.2: Source of funding

<table>
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<tr>
<th>Source of Funding</th>
<th>Amount of Funding</th>
<th>Application of Funds</th>
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<tr>
<td></td>
<td>ZK billion (US$ million)</td>
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<tr>
<td>Other Roadworks Total</td>
<td>6.742 (2.931)</td>
<td>Other roadworks</td>
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<td>Road users</td>
<td>25.728 (11.186)</td>
<td>Road maintenance and rehabilitation programmes</td>
</tr>
<tr>
<td>World Bank</td>
<td>3.220 (1.400)</td>
<td>Consulting Services, vehicles and equipment</td>
</tr>
<tr>
<td>Donor Community</td>
<td>55.331 (24.057)</td>
<td>Kapiri-Serenje, Mazabuka-Monze, Great East Road and Feeder Roads Programmes</td>
</tr>
<tr>
<td>Total</td>
<td>120.401 (52.348)</td>
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</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>Road Sector</th>
<th>Investment Program (ROADSIP 1997-2002)</th>
</tr>
</thead>
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Table 6.3: Total estimated project cost (Millions USD)
The suggestions offered by the student is that the government should:

1. Separate road user charges from general tax revenues; and
2. Earmark national taxes to finance maintenance, improvement and construction of roads (of course general revenues must supplement this).

1. Separating road user charges would involve ensuring that from the tax paid on anything to do with vehicles, the government deducts a certain percentage and credits it to the road fund. These taxes can include:

   a) Road tax (motor vehicle license fees);
   b) Toll fees
   c) Certificate of fitness (COF) fees
   d) Increasing percent of fuel
   e) levy proceeds to the road fund; and,
   f) Purchase tax on new imported vehicles.

2. Earmarking would involve estimating how many percentages from each revenue-raising venture would finally add to a figure that is required for road construction and rehabilitation.

6.2.4 **Lack of clear responsibilities**

The above mentioned is one of the ROADSIP’s biggest problems. It is not really established which agency is responsible for managing different parts of the road network, who supervises and who co-ordinates the entire ROADSIP programme.

Responsibility for roads has been diffused among several government agencies (MCT, MAFF, MWS, MOT, MLGH, MOFED and MEWD) and local government agencies
(LCC, NRB). This has led to duplication, confusion and a lack of coherent management policies. In all we have about seven ministries, one local government council and a board. The perceived solution to this problem is the establishment of a coherent legal framework and cogent mission statements for the various agencies. This includes concluding the transport policy and revising CAP 464.

6.2.5 Ineffective management structures

The problems of ROADSSIP are worsened by the diverse management structures under which the road sector is administered. The Zambian government manages the main road network as part of the Ministry of Communication and Transport (see Figure 6.4). This system is cumbersome and in practice largely ineffective as a framework for promoting a sustainable approach of road maintenance. Regional engineers often are answerable to their permanent secretary instead of to the director of roads, technical assistance staff are in all ministries and sometimes they have a clash of systems. Engineers that the student talked to from the private contractors (Phonix and Shimz) both said that the system where engineers from MLGH and MWS go through the tender documents and okay them, and then NRB engineers also go through the same work and find flaws shows the inefficiency in the present management system. They argued that if the two groups of engineers would sit and agree on the best format for the contracts beforehand, the delays caused by the present system would be avoided. The contractors would be very happy if this was done because to them time is money and they are businesspeople who can not afford to waste time and money, all because of an ineffective management structure.

The student feels that if proper communication takes place between the different departments, the problem of differing over contracts would be largely minimized. While the road sector has grown rapidly, relative to the other sectors, this increased importance has not been reflected in changed priorities or the changed relative status of
Figure 6.4: Typical management structure of a ministry of works and transport

departments. The staff remain underpaid, with little modern training to upgrade their skills and demoralized because they feel they do not have much freedom to make certain decisions in the programme. This is because they feel NRB assumes too much power over them. These issues must be addressed otherwise workers will lack commitment to their jobs.

6.2.6 Weak management systems

One engineer from DISS actually said that, “there are no systems in place for road maintenance in most government departments. As a very dedicated and committed civil servant (this is very rare in Zambia) he said his dream and challenge in the road sector was to leave behind systems in place which will enhance the development of the transport sector in the country”.

The World Bank has been trying to get countries to use its highway design and maintenance model but it seems it is difficult to use it. Zambia needs a functioning maintenance management system to determine network wide maintenance priorities. ROADSIP cannot manage the large Zambian road network efficiently without a usable management information system to help managers set priorities and monitor performance against set targets.

6.2.7 Inefficient work methods

Road agencies must be subjected to some form of market discipline. This will make them competitive and more motivated to designing effective work methods.
6.3 Conclusion

This chapter was trying to answer the question of what suggestions the student can make to ROADSIP for them to improve road financing and road maintenance policies? What can be done to strengthen the management of ROADSIP? The student suggested the following reforms:

1. Proper responsibility must be assigned to all ROADSIP implementers to avoid duplication, overlapping of duties and consequent tensions that arise from this.
2. Road users must be involved in road maintenance by creating the concept of “ownership” in them. This can be done by information dissemination through the various communication media in the country. NRB’s decision to start a cost-sharing initiative between communities and itself is a good beginning.
3. Stabilising road finances by setting priority lists and sticking to them.
4. Strengthening management of ROADSIP by introducing sound business practices and enforcing managerial accountability to replace the current government bureaucratic systems, which are currently in place in government ministries.

By implementing the above reforms the ROADSIP programme will be able to develop sustainably and achieve most of it’s set objectives.
CHAPTER 7

A discussion

The chapter will discuss the findings and experiences of the student during her attachment in the light of communication theory presented in the conceptual framework in Chapter 3. The chapter is more or less an extension of Chapter 3 in that it will look at concepts and theories discussed in Chapter 3 and link them up in a discussion of findings, experiences, theories and concepts.

7.0. Assessment of the communication links within ROADSIP

The ROADSIP is a road sector development reform programme, which is aimed at improving the road network in Zambia. It’s main objective is to develop Zambia’s roads. As mentioned earlier in the report, the student’s major aim in the attachment was to assess whether the implementers of ROADSIP have incorporated the theory and concept of communication as a way of ensuring the programme’s success.

For the purpose of this report, the student has defined communication as that which emphasizes both the sender and the receiver. Communication calls attention to the symbolic and intentional nature of communication. “Communication is a social, symbolic process which occurs in a context”. (Infante et al. 1997: 11) This definition of communication is intended to introduce the reader to the concept of communication for development. What the student intends to discuss in this chapter is the fact that communication is a necessary tool for development to take place in an organisation. Communication occurs in a lot of contexts (see Figure 1 Chapter 3). The context which the student refers to under ROADSIP is the organisational context of communication.

Infante et al. (1997) point out that organisational communication involves exchanging messages to stimulate meaning within and between organisations and their environment. Organisational communication involves sometimes: one-on-one communication (such as communication between supervisors and subordinates), small group communication (meetings
for example), public communication (including speeches by a director or chairman), and mass communication (press releases, company newsletters, new product announcements using teleconferencing, perhaps even internal corporate television programmes). Each of these forms of communication may occur between members of the organization or between organisations to coordinate behaviour with each other or with their environment (customers, government or competition). This is the operational definition of the concept 'organisational communication' for the purposes of this report.

Under ROADSIP, all the above mentioned communication links are present in the programme. In this chapter the student argues that it is important that organisational leaders focus most on development communication within their organisations. This may sound very academic, on the contrary, development communication is utilised in most organisations without their realisation. However, the student wants to suggest to organisations to avoid a situation where they do not have an intentional, well-structured, strategic and effective communication programme.

The ROADSIP programme on the overall, is a programme where proper communication links are observed. NRB which is the coordinator of the ROADSIP programme has an effective communication linkage. There is transparency in the Board where the Chairman and the Executive Secretary are the leaders of the Board but they are not bosses. They are open to their employees and they meet as a secretariat or Board and discuss all matters of importance before a decision or solution can be reached. The Board has all the necessary technologies that are needed in this day and age to make people's tasks manageable and more efficient. They have telephones, faxes, e-mail facilities and computers in their offices. They have proper incentives that will ensure job satisfaction.

The departments in the ministries which are responsible road authorities for the ROADSIP are also well equipped with modern equipment to make their jobs easier. There are also laid down management systems in ROADSIP (see Figure 3 in Chapter 5).
7.1. The importance of effective communication links

In ROADSIP, the aspect of interpersonal communication is very strong. There is openness between individuals from all the different implementing agencies. The secretaries’ behavior from all organisations within ROADSIP are a further testimony of the strong interpersonal links that are present in the programme. When the student went from one implementing organisation to the other and introduced herself as coming from NRB she got a very warm welcome everywhere. She was assisted with the necessary materials she asked for and was given appointments for interviews with the people she asked to interview. The student is suggesting that probably, the ROADSIP programme is among one of the most successful programmes in Zambia because it has strong interpersonal communication links.

But important aspects of relationship (affection and trust for example) differ when they occur between two individuals and when they occur in a small group. The feeling of trusting one other is not the same as trusting a given group of people. Differences in communication between two individuals and the communication among several people necessitate identifying interpersonal and small group as two distinct contexts of communication. The student will, therefore, now look at the issue of communication links within groups under ROADSIP.

The ROADSIP Programme is based on a ‘participative type’ of decision making. When matters of importance arise, the NRB Secretariat or the Board members themselves meet to reach a decision or come up with a solution. Besides the Board and the Secretariat, there are other groups within ROADSIP which meet to come up with solutions and programmes for implementation of ROADSIP. Some of these groups are the:

1. Technical Committee
2. Project Management Unit;
3. ROADSIP Steering Committee; and,
4. Task Force.

These are not the only groups which exist. There are many more but the unmentioned ones are mostly ‘adhoc’ groups which are set up under special conditions when the need arises.
Small group communication refers to communication in gatherings which vary in size from three to about fifteen persons. Devito (1991) specifies that a group is considered small if members are able to switch roles from receiver to source with relative ease. When groups are composed of fifteen people or more, it becomes difficult to switch from receiver to source. Such a situation is often somewhat formal in that the order of speaking is assigned and the rules of parliamentary procedure may be followed.

The size of a small group influences the likelihood that everyone will get along with each other. The larger the group, the greater the probability that some members will not be able to talk as much as they would like. Size can also impair group performance. The adage that ‘too many chefs spoil the broth’ is based on this concept. There may be an optional number of people for solving a given problem; additional people may cause confusion and impede group progress rather than help. The student is suggesting that ROADSIP implementers take the above mentioned facts into consideration when they are forming their groups for whatever purposes. They are also advised to know the different types of groups that exist so they can choose to form a group that will do the best of the task that is given to them. These types of groups are:

Task-oriented groups - those that have a job to do. Within this designation we can make additional divisions. A problem-solving group attempts to discover a solution to a problem by analysing it thoroughly. Typically, the problem is investigated and solutions are examined in terms of which solution best solves the problem. Often this is done through group discussions.

Problem-solving groups should receive a lot of attention and should be commonly used in organisational problem-solving.

Decision-making groups are also concerned with problem-solving. However, they have the added function of actually deciding which solution will be implemented, when and how it will be put into effect, how progress will be monitored, how changes in the solution will be handled, and how the programme involving the solution will be evaluated. The National Task
Force on ROADSIP II is such a group that looks at issues and decides on the way forward for the programme.

The idea-generation group is a third kind of task group. The purpose of idea-generation groups is to discover a variety of solutions, approaches, perspectives, consequences etc. for a topic. The ideas generated are not evaluated because value judgements tend to inhibit members. For example, a member might hesitate to express an idea if he or she fears a negative reaction. The idea-generation group is often called a brainstorming group. This kind of group is very necessary in organisations and the ROADSIP programme could use such a group to find ideas on the best way forward for the programme.

It is being proposed here that ROADSIP must also constitute or form learning groups. The purpose for these groups is for the individuals and the group to acquire more information and understanding of a topic. This is good especially at workshops and seminars where work to be learned can be enhanced.

The student here is trying to show the different internal links that can exist in an organisation and should exist in an organisation. This is an important issue in all organisations and the student suggests that all organisations need to have strong internal communication links to enhance their development.

The various groups mentioned above need not be exclusive to each other. An organisation can formulate a group to serve all the mentioned tasks together or it can separate them.

7.1.1 The issue of roles in group communication

The concept of roles is a very important and fundamental aspect in all organisations. In communication study, this is a very important aspect as well. "Certain communicative behaviour in groups (such as using humour to get members to relax) are intended to accomplish certain goals (releasing group tension, for example). Someone enacting that behaviour can be described as playing or taking a given role". (Infante et al, 1997: 294).
Benne and Sheats (1948) in Infante et al. (1997) provided an analysis of roles which have remained influential over the years. They suggest there are three main categories of roles enacted by group members. These are:

a. Group task roles;
b. Group building and maintenance roles; and
c. Individual roles.

a) Group task roles

These roles pertain to group discussions aimed at selecting, defining and solving problems. The specific roles identified by Benne and Sheats are:

i) Initiator-contributor - proposes new ideas, changes, procedures;
ii) Information-seeker - asks questions about information and other suggestions;
iii) Opinion seeker - asks questions about the values guiding the group;
iv) Information giver - states his or her position on issues;
v) Elaborator - clarifies what is being considered, extends the analysis of an issue;
vi) Opinion giver - states his or her position on issues;
vii) Coordinator - gets people to function together, put information together;
viii) Orientor - keeps group focussed on goals, points out departures from goals;
ix) Evaluator critic - argues the evidence and reasoning pertaining to issues; Energiser - motivates group toward a quality decision;
x) Procedural technician - performs routine tasks, busy work; and,
x) Recorder - writes group proceedings so a record exists.

These are roles which must be performed by individuals in groups. For example, NRB committees and task forces must ensure that in all the meetings they must have people playing the above roles to ensure a successful meeting which will come up with solutions and implementations. These roles are often played by more than one person in a group. One person might perform several of the twelve task roles during the course of a discussion. In fact, a single incident of communication might involve several roles: a member offers an
opinion follows that with a question and then tries to energise the group so it will not “drag its heels”.

At a management meeting held with WB officials at NRB offices on 3rd November, 1999, the WB team leader performed these tasks in the course of the discussion. He was trying to get an answer as to why it is taking the Zambian government such a long-time to make policy reforms. The NRB Executive Secretary is another person who likes to play the above roles during group meetings. He calls it “provoking a situation”. The student is suggesting here that NRB must deliberately assign these roles to people during their meetings to ensure full participation from each member and therefore more fruitful discussions.

b) Group building and maintenance roles

These roles are concerned with the socio-emotional climate in the group. That the feelings that group members have for one another and the task are recognized as very important in terms of the group achieving its task goals. These roles are:

i) Encourager - provides positive feedback to members, shows warmth;
ii) Harmonizer - reduces tension between members and mediates conflict;
iii) Compromiser - attempts to have each party in a conflict gain something;
iv) Gatekeeper - promotes open channels of communication and participation by everyone;
v) Standard setter - suggests and uses standards to evaluate the group;
vi) Group commentator - describes the processes operating in the group to change or reinforce the group climate; and,

vii) Follower - confirms to group ideas, acts as a good listener.

Sometimes the above mentioned roles are best performed naturally and not as assigned roles. In such a situation, it is important for leaders to be able to identify the different roles displayed in meetings.

These seven roles and the first twelve roles are all concerned with the group achieving its purpose. Thus, each of these 19 roles is very group centred. These roles must be encouraged in all group meetings. However, not all behaviour in a group confirms to this selfless
7.2. The importance of leadership in organisations

Leadership is essential in organisations - it is so important that no one can underestimate its importance in the running of an organisation. In fact our whole society needs leadership. Our institutions, corporations, organisations, clubs and even political parties would be so chaotic if they had no leaders. Without leadership, the groups would have never been formed in the first place!

NRB and ROADSIP as a whole are organisations which need leadership and not just any leadership but effective leadership for them to succeed. The communication field has taken four approaches to leadership:

1. Trait approach;
2. Functional approach;
3. Style approach; and,
4. Situational approach.

1) Trait approach

A trait approach to leadership is based on the idea that leaders have traits which distinguish them from followers. Leaders according to research have been found to have high traits of self-esteem, extroversion, open-mindedness, aggression, achievement motivation, analytical thought, sociability and argumentativeness. It is, therefore, important to know the traits of an individual before giving him a leadership role.

2) Functional approach

A functional approach to leadership focuses not on the individual, as in the trait approach but on the leadership behaviour which is needed by a group to accomplish its goals (Barnlund & Haiman, 1960: 96). The leadership behaviour which is functional to the success of a group does not have to be performed by a single person. Instead leadership can be enacted by any number of group members.
The two types of leadership behaviour are task and group maintenance. Task leadership behaviour includes initiating ideas and procedures, coordinating member’s contribution, summarizing to let the group know its progress and elaborating on ideas (Beebe & Masterson, 1997). Group maintenance behaviour involves releasing tension that builds to an unproductive level, regulating the amount of talk by each member, improving group morale, and mediating group conflict (Beebe & Masterson, 1997).

Cragon and Wright (1995: 47) provided a useful analysis of the leadership behaviour needed in a problem-solving or decision making group. Leadership ideas, evaluating ideas, asking others to evaluate ideas and promoting understanding of ideas. The leadership behaviour in the procedural area are: setting goals for the group, preparing an agenda or outline for the group to follow, clarifying ideas, summarizing at various points in the discussion and verbalizing when the group is in complete agreement on something. There are also other types of leadership communication behaviour in the interpersonal relations area. They include regulating participation so no one feels left out, creating a positive emotional climate, instigating group self-analysis, resolving conflict in the discussion and instigating conflict in order to stimulate a move through examination of issues.

3) Style approach

The style approach to leadership has identified three major types or styles of leadership: authoritarian, democratic and laissez-faire (White and Lippett, 1968). These are different ways of leading. They are not studied as traits of the individual or as functional behaviour which any number of the group members may perform. Instead, each style represents a unique set of leadership behaviour.

The authoritarian style involves the leader being very directive in terms of the groups goals and procedures, the evasion of work and deciding the outcome of conflict. Group members do not feel free to argue with the leader on these matters. Research suggests that organisations can be quite productive with an authoritarian leader; however, members’ satisfaction with their experience in the group tends to be lower than with other leadership
styles. This authoritarian style is said to be the most appropriate in situations which are highly stressful or dangerous (emergencies, for example) or highly competitive (such as an athletic contest). The belief is that in such situations arguments can be counterproductive; what works best is a strong competent central figure who guides the group forcefully on an efficient and productive path.

In contrast, the *democratic style* views all issues (including goals, procedures and work assignments) as matters to be discussed by the organisation. The actual decision on the issues can be made in one of three ways. A *majority* decision is produced when members vote. The agreed-upon percentage (for example 67 percent) of votes must be obtained for an idea to pass. *Consensus* occurs when the group tries to find a resolution of the given issue that everyone in the group can support. This can be difficult to achieve. If such a solution can be found, it will enjoy significant group support. A *participative* decision involves members contributing ideas and the leader then being guided by the expressed preferences in making the decision. This democratic style of leadership tends to produce the most member satisfaction even if this group is not as productive as those operating under another leadership style.

The *laissez-faire* style of leadership involves a minimum of involvement by the leader in an organisation. Basically, the leader provides as much information as needed and then the group members are left to make decisions as a group, to act as individuals, or as subgroups. This lack of direction from a leader can be counterproductive, especially in groups with low motivation. However, this style can work very well with people who are highly motivated, experienced, self-starters, and who donit work well together. The leader says in essence, you donit need me to tell you what to do (Infante et al. 1997: 296-298).

4) Situational approach

This approach has the belief that situations preliminarily determine behaviour because situations are unique and present different demands on the individual. People experience these demands and try to adopt their behaviour to the environment. Therefore, behaviour is not consistent.
Here, the student suggests that ROADSIP looks at all forms of leadership and applies the situational approach where the situation should determine whether a democratic, authoritarian or functional type of leadership is the most convenient method.

The communication scholars, this one inclusive, suggest that the management structures in all organisations must have a communication department that follows a systematic communication plan. We are not trying to say that organisations have no communication strategies but rather that organisations must have systematic communication structures which are intentionally and strategically laid down to avoid unnecessary conflicts and tension in the organisations. This is especially necessary for the ROADSIP programme which is a very complex programme and involves a lot of stakeholders. This brings us to the issue of conflicts in organisations and how communication can help to resolve them.

7.3. The issue of conflicts in organisations

Although most people think of the term “conflict” only in negative terms, not all forms of conflict are necessarily bad. Certainly, there are types of conflict which are destructive. But, there are kinds of conflict which are essential to the success of a problem-solving or decision-making organisation.

Conflict exists in an organisation when members realize that there are different positions in the organisation on a given issue and the proponents of the positions are motivated to defend their positions. According to Fisher (1970), problem-solving and decision making groups typically go through four stages; orientation to the task, conflict over what the group should do, the emergence of a group position, and group reinforcement of the decision. The conflict stage is especially important in determining what will be the final product of the group (Infante et al. 1997:299).

Nemeth (1986) clearly illustrated in her research that conflict in a small, problem-solving group improved the quality of the group’s process in making decisions. The conflict which she studied took the form of an argumentative minority that opposed the majority opinion. Nemeth found having an opposing view did not necessarily persuade the majority away from
access to a sustainable increase in material, educational and physical well-being (World Bank, 1991).

In those nations where significant economic development has taken place, the engine driving rapid economic development has been a new alliance between national governments and private sector multinational organisations, and their participation in trade within global competitive markets, which have led to the effective allocation of a nation’s economic and natural resources.

The ROADSIP programme is trying to involve the private sector as much as possible in its implementation to improve its chances of success. However, before a nation can become an active player in world trade, a nation’s people and its government must first transform themselves into a global competitor. (This analysis is on a macro level but it can be used also at organisational level). Communication is central to this process.

Communication between a government and its people must function to reduce inflation, develop a convertible covering, put in place an infrastructure, and diffuse practical knowledge on how to be world class in making things.

Under the ROADSIP programme, NRB under MCT must act as the government machinery to communicate with Zambians to encourage them to practice the concept of “ownership” of their roads. Road users must identify with the roads as their property and join forces with the government in the challenge of improving the same roads.

Communication between the government and the people is vital in this situation. This type of communication has been central to the development process in Hong Kong, Taiwan, Singapore, South Korea, Malaysia, Spain, Mexico and Argentina. (King and Cushman in Moemeka 1994). Once this has been established, organisational communication is central to the development, production, distribution and sales of a nation’s products throughout the world.
7.4.1 High speed management

Countries which have developed their world trade successfully have at the centre of the process, the privatisation of a nation’s agricultural, manufacturing and service industries, the transfer of advanced technology by multinational corporation from one country to another, and the creation by national government of a favourable economic climate for entering into world trade, thus allowing the competitive market to allocate a nation’s economic and natural resources. Concurrently at the centre of this allocation process is the creation of private sector organisations which, through high speed management and new effective organisational communication processes generate continuous organisational improvement programmes which in turn stimulate and sustain economic development (Cushman and King, 1993: 37).

According to Cushman and King (1992:42):

“Being a successful business executive in the 1990’s will be very difficult and require a new management orientation. Rapidly changing technologies, the globalisation of economic forces, unexpected competition and quick market saturation creating an increasingly complex and volatile business climate. As enviromental turbulence increases, the rate of organisational change necessary for survival also increases. To compete successfully in such an environment requires that executives employ new management assumptions and practices which emphasise organisational innovation, flexibility, efficiency and speed of response”.

Rapid environment change creates organizational problems but also creates organizational opportunities. An organisation’s management system, its integration, coordination, and control system must have certain specifiable characteristics in order to respond to the opportunities created by successive, rapid, environmental change. A management system, which capitalizes on environmental change, must be innovative, adaptive, flexible, efficient, and rapid in response - a high-speed management.
Innovation management refers not only to product development but innovation corporate structure, manpower utilisation, outsourcing, inventory control, manufacturing, marketing, servicing and competitive positioning.

Adaptive management refers to an organisation's appropriate adjustment to change in employee values, customer tastes, investor interests, government regulations, the availability of global economic resources and strategic positioning of competitors.

Flexible management refers to the capacity of an organisation to expand, contract, and shift direction on products and competitive strategy and to assimilate acquisitions, joint ventures, coalition and to excise unproductive or underproductive units.

Efficient management refers to maintaining the industry lead in world class products, productivity, investor's equity, return on investment, employer satisfaction, customer support, product quality and serviceability.

Rapid response management refers to gaining and maintaining the industry standard in speed of response to environmental change (Cushman & King, 1994: 150 - 151).

The focus of this new corporate perspective and thus the goal of high speed management is the use of the new information technologies and human communication process to rapidly develop, test and produce a steady flow of low-cost, high-quality, easily serviced, high-value products which meet the customers' needs, and of quickly getting these products to markets before one's competitors, in an effort to achieve market penetration and large profits. A management system with high speed characteristics can in the final analysis be developed, implemented, and maintained only by the appropriate use of information technologies within a unique communication environment which adjusts people to technologies and technologies to people through the use of effective communication processes in developing and maintaining continuous organisational improvement programmes.

The way to effectively use communication to develop organisational continuous improvement programmes is through an organisational interdependence in which each of an organisation's
sub units clearly articulates its needs, concerns, and potential contributions to the organisations functioning in such a manner that management can forge an appropriate value-added configuration and linkage between units. An appropriate value-added configuration and linkage between units is one which integrates, coordinates and controls each unit’s needs, concerns and contributions so that the outcome is mutually satisfying to the units involved and opting in value-added activities to the organisational functioning as a whole.

The above outlined management system may seem too business oriented and unsuitable to use for a programme such as ROADSID. But, the underlying objective of ROADSID is to try and mange roads as a commercial business. It is only by involving the private sector fully in ROADSID that it will achieve its objectives faster. This has been accepted in almost all countries, which are setting up road user based road funds to finance road programmes.

Some of the elements of the management system outlined above are very necessary and crucial to an organisation and must be utilized even in the ROADSID programme. Innovativeness, adaptiveness and efficiency are some of these elements which are a must in all organisations.

7.4.2 Television in organisational development

Around the world, television is designed with the intention of promoting national development, social mobilization and change. Yet television and other mass media have been shown to be primarily a reinforcement tool, not a change agent (Klapper, 1960: 72).

Television is certainly useful in development, but used by itself, it is useless unless in a coordinated programme.

Television must be used strategically for national development. In Nigeria for example, the state uses television to promote a national identity among ethnically, linguistically and culturally distinct peoples. Through careful manipulation of television it can be used as a tool for development.

The ROADSID programme has used television to communicate its objectives to the Zambian citizens. This is a good strategy. The way to ensure the most influence is to make sure the
message is simple and should affect the people it is addressing personally. The advertisement on television of a man throwing rubbish in the drainage and the women clearing the drainage is a good example of how people get conscientised about how their behavior can be harmful.

Television is indeed a powerful weapon for national development. The trick is to know how you control it to your advantage.

7.4.3 Newspapers in organisational communication

Newspapers have the function of disseminating information, interpretation, service and entertainment and their roles include acting as a watchdog on those in power and fuelling the engine of business through advertising.

The ROADSIP programme must use newspapers to watch the governments progress in implementing road sector reforms. It must also utilize the newspaper as an advertising tool to advertise its works and meetings and their progress as a programme. Above all, newspapers must be used to solicit for suggestions in finding sources and the best way forward for the programme.

Newspapers are not very powerful in changing deep-seated attitudes and behaviors among individuals in nations but they help to raise awareness and provide the information and education which must be acquired by individuals and groups before development can occur and this must be utilized by ROADSIP.

7.4.4 Radio in organisational communication

Radio to have an impact on organisations wishing to use it for communication for development must create a channel for dialogue and not necessarily talk at people.

As such ROADSIP could introduce phone-in programmes where information on the programme is given and then people are given a chance to phone in and give their suggestions
and comments. It must be a two-way process. In this way ROADSIP will be sure its message is reaching the people.

7.5 Conclusion

The chapter was a discussion of communication theories and concepts in the light of the student’s findings during her four months attachment. The main theme of the chapter was to argue for the fact that there can be no development without proper communication strategies. The student actually discovered that NRB and the whole of ROADSIP use communication skills and strategies to ensure the success of the programme. Some of these strategies involve advertising in newspapers, on radio and on television.

Group communication is also commonly used to solve problems and make decisions. The student would, however, like to conclude by saying that the ROADSIP implementers must put in black and white a communication policy for their programme. This will ensure that there are less tensions and conflicts within the organisation. This is because all subunits of the programme will have well laid down mission and properly defined communication channels.
CHAPTER 8
Conclusions and Recommendations

The road network of a country is a very large investment upon which other sectors of the economy like trade, agriculture, industry and the welfare of the communities depend. This fact is not an exception for Zambia. In fact roads are particularly important for Zambia which is a landlocked country. If Zambia does not maintain its road network in good order, its economy and citizens will suffer.

The Zambian government has shown its concern about the road network. To show its commitment to try and manage its roads properly, it has agreed to follow proven economic principles in roads maintenance and investment. The establishment of a road fund, the National Roads Board and ROADSIP as a whole, for the purpose of managing and administering the road fund for maintenance and rehabilitation of the road network is this sign of the government's concern. However, this is a challenging task, which involves improving road planning and management in an effort to get maximum results from the resources, put into the road sector.

As already mentioned in Chapter 3, there is an element of international communication in this programme, which somewhat entails a political persuasion from the outside donors of the project. This scenario presents a problem because some Zambians may not feel committed to the programme in that they feel it is a foreign programme and not a Zambian programme.

8.1. Summary of the report

This report dealt with the student's findings and experiences during her four months attachment to the ROADSIP programme and specifically to the National Roads Board. It began by giving a background to the whole road sector reform programme in Zambia and
then moved to review some literature on other countries’ efforts at road sector reforms. Chapter 3 gave a conceptual background to the attachment report. This entailed developing definitions for the basic concepts or conceptual material that the student has used throughout the report and related it to her attachment experience. Chapter 4 highlighted some personal experiences of the student during the attachment, which hopefully helped the reader of the report to put it into context.

Chapter 5 gave the problems and constraints of NRB and the ROADSIP implementation and what the implementers of the programme perceive as possible solutions to these problems. Chapter 7 was a discussion of the findings and experiences of the student in the light of communication theory presented in the conceptual framework in Chapter 3.

This chapter will give the general conclusions and recommendations which have resulted from the discussions in the above mentioned chapters.

8.2. Conclusions

The following are the conclusions, which follow from the discussions in the preceding chapters:

1. Roads are one of Zambia’s biggest assets and an input for national development. This is especially true in Zambia’s case, as it is a landlocked country. No sector of the economy, be it agriculture, health, mining, trade and even good governance can be developed without a good road network. Therefore, a good road network is something to be worked at.

2. The cost of poor road management and inadequate road financing are born primarily by road users. In urban areas, bad roads make vehicle operating cost very high. In rural areas, bad roads became impassible especially in the rainy season and the
subsistence farmers cannot travel to agriculture markets to sell their produce. Their harvests end up rotting and the whole country ends up with a food shortage. Rural health centres become unreachable due to bad roads and people’s health suffers.

3. The Zambia National Roads Board was set up in 1994 for the purpose of administering and managing the road fund for the maintenance and rehabilitation of roads. The NRB is determined to follow proven economic principles in road maintenance and investment.

4. The ROADSIP’s road fund is mainly from fuel levy but the route by which fuel levy proceeds reach the road fund is circuitous and lengthy and gives rise to opportunities for delay in crediting the account.

5. Friction continues as a consequence of overlap of functions between the NRB and the other road agencies, especially the Roads Department and MLGH.

6. The basis for assessing the performance of road agencies is not clear and therefore it is difficult to assess whether the current structure is working well or not. Are the road agencies correctly institutionally structured? Is the balance of in-house and contracted out work right?

7. The issue of inadequate funding for the road programme must be addressed. The road users pay toll fees; certificate of fitness fees and the road tax but these fees are not used for road maintenance but are credited to the government’s general revenue account. Fuel levy percent that is credited to the road fund is also too little. Government vehicles and diplomatic vehicles do not pay road licence fees. These vehicles nevertheless impose measurable costs on the road network and it is other road users who have to pay for these costs.
8. The reform of the road sector policy and institutional framework is unsatisfactorily being handled. Zambia has no transport policy and the drafting of this policy has been delayed for a long time. One can only conclude that there is lack of commitment on the part of government to draft and pass the transport policy. Or it may be that the government feels this is an imposition on them from donors and they do not really see the need for a transport policy. The reform of CAP 464 is also an outstanding issue that has to be sorted out since there is pressure from the donors.

9. The local construction and consulting industry must be strengthened. Some contractors have been and are being trained at the Roads Training School but these contractors are not being effectively utilized. NCC is expected to play a bigger role in helping to address the constraints being faced. Security and predictability of maintenance works, managing contracts and paying contractors are essential for the success of the training programme. None of these is assured at the moment.

10. The institutional framework of the programme is part of the reason why ROADSIP implementation has problems. The road sector in Zambia is managed like a social service (e.g. health or education) and yet it is too big and costly to be run as such.

11. Human resource constraints are an impediment to the ROADSIP programme. MCT, which is the parent ministry for ROADSIP, has not yet been restructured which means there are more unskilled workers than skilled workers in the ministry. These workers do not have the knowledge and skills to live up to the implementation of a programme as challenging as ROADSIP. The government workers are also very poorly paid and this reduces their morale.

12. The ROADSIP programme implementers in government ministries are mostly inadequately trained to carry out their new professional responsibilities as road agents.
13. The fact that ROADSIP is run as part of the Ministry of Communications and Transport is cumbersome and ineffective as a framework for promoting a sustainable approach to road maintenance.

14. The student commended NRB on its effort at ensuring proper communication within and outside ROADSIP to the citizens of Zambia. This was apparent in the fact that they produce annual reports, do a feature or more in the Zambian Transport and Communication magazine, place television, radio and newspaper advertisements as a way of disseminating information to Zambians and thereby making them feel more a part of the ROADSIP programme.

15. The NRB is encouraging the concept of ‘ownership’ of roads to road users as was seen in their article in the local newspapers on 12 January, 2000 where it was reported that they want to introduce a cost-share initiative with communities. This initiative will give priority to maintaining roads in communities where the owners of the community have shown an interest.

The above conclusions lead to the following recommendations:

8.3. Recommendations

1. The National Roads Board must be put on a firm legislative basis i.e. it must have its own Act. This will remove it from the government bureaucratic processes, which it presently goes through before it can perform most duties. This causes unnecessary delays, which should not be the case when handling such a big business as the road business.
2. A performance criteria for ROADSIP implementing agencies must be established on which basis annual or bi-annual performance will be objectively assessed to ascertain whether the programme is on course or not.

3. The government through NRB must create a consistent organizational structure with more clearly assigned responsibilities for managing different parts of the road network. It must also strengthen the road traffic and safety units as these have a large bearing on the performance of roads. These arrangements must have an accurate inventory, a functional classification of roads, designation of appropriate road agencies and a clear definition of the relationship between the road agencies and the parent ministry. Responsibilities to be assigned should include operations, maintenance, improvements, road network development, traffic management, accident and claims resolution and assessment of environmental impacts. This will get rid of the frictions existing right now due to overlap of duties between NRB and other ROADSIP implementing agencies.

4. ROADSIP implementers must encourage more the active participation of road users to help win public support for secure and stable road funding. What is needed is a partnership between road users and government to strengthen road management and raise appropriate finances. The government must, however, pay attention to the fact that Zambians are already hugely taxed from their meagre resources and so the fundraising ventures must not be such that they subject Zambians to more tax paying. It should be that road users act as watch dogs on government to make sure the money they are already paying as road user fees is going to proper use of road maintenance.

5. The government must maintain steady financing for roads. This includes clearly separating road user fees from general tax revenues and avoid using budgeted money for “emergency works” which are not in the ROADSIP priority lists for works. Fuel
levy fees must also be worked out at a percentage that will make a sufficient contribution to the road fund.

6 ROADSSIP management must be strengthened by introducing sound business practices and enforcing financial and managerial accountability to replace the current government bureaucratic systems that are prevailing in ROADSSIP. This will result in the road sector being run more like a business than as a social service as is currently the case. This improves efficiency in implementation.

7 Communication skills and strategies such as strengthened interpersonal skills, mass media (audio and visual) must be used more to enhance and improve the success of the ROADSSIP programme. Communication will help to identify attitude, felt needs, capacities and constraints to the adoption or success of the programme. Through the dialogue and consultation process communication employs, it naturally elicits the participation of the intended beneficiaries of a development programme. Road users will actually feel involved and will suggest ways to improve the programme if communication strategies like phone in programmes and suggestion columns for ROADSSIP are made available to road users.

8.4. Conclusion

To wrap it all up, the student concludes by saying that ROADSSIP is a programme with a multi-disciplinary nature. It involves a number of organisations, ministries and authorities and this makes it inherently difficult to manage it.

The student suggests that proper and intentional communication skills and strategies be put in place to provide the linkage that will ensure coordinated management of the programme.
References


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APPENDIX

List of persons talked to

Mr. K. Chirwa, MLGH
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