PLANNING STRATEGIES TO REDUCE RURAL-URBAN DISPARITIES IN DEVELOPING COUNTRIES
WITH PARTICULAR REFERENCE TO IRAN

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ABSTRACT

The thesis contends that rural-urban disparities and inequalities contribute to over-urbanisation and rural backwardness in developing countries. It also acknowledges that developed countries have minimised rural-urban disparities and inequalities through the provision and the expansion of various urban services and facilities in rural areas.

This study recognises that, as a developing country, Iran needs to evolve an efficient as well as appropriate system of providing basic services and facilities such as: health care and medical services, education, water supply, electricity, communication and transportation facilities in rural areas. This would decrease the present socio-economic gap between rural and urban areas and facilitate sustainable rural-urban development. Furthermore, rural resources (human, natural and capital) can be better utilised and the rural sector thus may become more productive in supporting the urban areas and more attractive to urban skills and expertise. As a result, when rural people find their communities more congenial and livable, they may prefer to remain in their villages rather than migrate to the cities.

The effect of service provision programs on equitable rural-urban growth and development is examined through a longitudinal study and the related action research project which was undertaken by the writer in Iran over two decades. In Australia the writer has observed and reported on the impacts of rural services provision and the activities of a number of institutions and organisations which support rural areas. The Yorke Peninsula in South Australia was the location of this work.

The research addresses the question: *How may equitable growth and balanced development in the rural areas of developing countries be promoted?* In seeking to contribute to the answering of this question the hypothesis is examined that:

The provision of basic service facilities, such as health care, education, water supply, electricity, transportation and communications in rural areas may significantly contribute to reducing rural-urban disparities and inequalities.

DECLARATION

This thesis contains no material which has been accepted for the award of any other degree or diploma in any other university. This thesis also contains no material previously published or written by another person except where due reference is made in the text.

I hereby give consent to the thesis being available for photocopying and loan, if accepted for the award of the degree.

Ali A. Taghvaee

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PREFACE

> ... rural areas are not 'just' places where people live and work. They have vital functions for society as a whole. Here our provisions are produced, here our ecological balance is maintained, and here our cultural identity is based ... Consequently, one has to support the existing farms with services and training, one has to attract new jobs and businesses to the rural areas, and one has to maintain the variety of private and public services (Waterhouse, 1990:16).

In spite of the importance of rural areas, authors such as Misra (1981) and Rondonelli and Cheema (1988) argue that there is a general awareness among policy-makers and planners of the world that, rural communities, in both developing and developed countries, tend to lag behind the urban regions in economic and social development.

As one who has devoted a considerable part of his life, so far, to thinking about, and carrying out, research on rural areas and small towns, and to administering the available processes of rural-urban development, the writer supports this belief. Indeed, understanding the facts pertaining to rural-urban inequalities and disparities, with the intention of proposing a strategy to cope with the problem, is central to this research.

Over twenty years ago, firstly as a university student and then as a research assistant, the writer visited several small towns and rural areas in Iran to investigate the various aspects of rural life. Part of this research was carried out on behalf of United Nations' agencies such as the World Health Organisation (WHO), the Food and Agriculture Organisation (FAO) and the United Nations Educational, Scientific, and Cultural Organisation (UNESCO). A more specific study was carried out in the Korbal rural region of Fars Province when the writer as Head of the Rural Research Centre of Shiraz University led a longitudinal action research through

several summers of field-work training in company with different groups of senior students of the Department of National Development.

Throughout the studies it became apparent that there were major differences between rural areas and urban areas. There existed a state of duality between the two communities in respect of many aspects of life. For example, there were unequal and unsustainable socio-economic and political relationships. Cheap food and rural resources were sent to the cities by the villagers, whereas almost nothing was sent from the cities to the rural areas. Urban dwellers regarded rural people as primitive, governmental authorities and officials whose responsibility was to support rural communities did not respect villagers and treated them as slaves.

Some years later the opportunity arose to visit a number of developing as well as developed countries. The situation in the other developing countries was almost the same as that of Iran. In the developed countries rural communities had fewer problems, however, they were behind urban areas in regard to certain social and economic opportunities.

While attending Kansas State University, the writer visited a family farm close to Manhattan, Kansas, to carry out a study on the farmer's living conditions. In response to a question regarding his idea about living on a farm rather than in a city the owner's reply was that, although he loved farming, he disliked having to drive to the city for items that he needed. The farm was less than 50 kilometres from the city, nevertheless he had become tired of making the trips.

From the time spent overseas valuable information was gained about the socio-economic conditions of rural areas and the rural-urban disparities and inequalities in the different countries. Also, came the realisation that the issue of rural-urban inequalities and disparities was an international one, not just a problem of

developing countries. Developed countries have been able to minimise their spatial inequalities by developing infrastructure, providing job opportunities and bringing many urban services and facilities to the rural areas. To cope with the problem of isolation for small, remote communities in Australia, a number of governmental and non-governmental organisations and institutions provide the needed services and facilities throughout the continent.

In almost all developed countries, rural and urban communities are treated as 'integrated' parts in the national economy, both have equal rights and plans and projects at any level are designed to benefit the nation as a whole. In other words, local, state and national governments in the developed world seek national sustainable development instead of devoting most resources to the economic growth and development of cities and urban centres at the cost of small towns and rural communities. Issues such as 'urban sustainable development', 'rural sustainable development' and 'ecologically sustainable development' have come under discussion in developed countries and practical ways are being sought to link urban and rural communities to each other and create a closer and more friendly relationship between the cities and the natural environment. In developing countries, however, development and growth is monopolised by large cities. Furthermore, rural and urban communities are treated separately with different priorities. In national development plans, such as in Iran, priority is usually given to the urban sector rather than the rural sector, which reinforces rural-urban disparities.

A significant role of planners and architects in the management of the built-environment is to achieve integrated, equitable and/or 'sustainable rural-urban development'. Hence to the writer, as a Ph.D. candidate who has been studying and doing research in the environment of a faculty of architecture and urban design,

seeking suitable ways to 'reduce rural-urban disparities' is an important prerequisite for 'sustainable development'.

Having these ambitions in mind it is proposed that even if the developing countries are not able to follow exactly the development policies that are practised in other countries, they can at least learn from their successes. By adopting and adapting new ideas and techniques the developing countries which lag behind might be able to solve their problems earlier and more efficiently. This transference of ideas and experiences will help developing countries to celebrate the marriage of urban growth with rural development, a phenomenon that has been more successfully achieved in developed countries. Clearly, such a big marriage requires much time and effort, the work at hand is just a small part of it.

The day is short and the work
is great. It is not your duty
to complete the work but neither
are you free to desist from it.

Perke Avot

(The saying of the fathers)

INTRODUCTION

Rural-urban disparities, rural-urban inequalities, rural-urban inter-colonial relationships and rural backwardness are major problems in Iran and in other developing countries. It is generally true that developing nations do not demonstrate equitable growth and balanced development to the same extent as developed nations.

In developing nations cities, especially large ones, are often relatively well provided with different types of services, facilities and opportunities, but most rural villages and small settlements are in dire need of the most basic services. This situation has led to complicated problems characterised by community deterioration as both rural and urban communities lose their best attributes and values and suffer from the collapse of positive features as people leave the land for the cities. In this process rapid rural-to-urban migration brings about vacated villages, congested cities and many other related socio-economic problems, such as unemployment, poverty and a high incidence of crime; hence, neither beautiful villages nor vital and decent cities remain.

There is a wide socio-economic and cultural gap between rural communities and the larger urban places in the developing world. This is in marked contrast to what is normally experienced in developed countries. In addition to their higher standards of living, there are other positive factors which play important roles in maintaining equitable and balanced rural-urban growth and development. Due to the activities of both governmental and non-governmental organisations and institutions, the networks of socio-economic linkages have spread nationwide. As a result, small and large communities are linked with each other by various means of communication and basic services and facilities, such as health care, education and

means of transportation, available almost everywhere, making it possible for rural communities to have access to the same or similar benefits that exist in the cities.

We may never be able to bring about a state of absolute equity and social justice in either developed or developing countries, in particular with regard to the complex problems of rural-urban disparities and inequalities. We can strive, however, to develop a more satisfactory balance in our societies by decreasing these disparities. To a large extent this is a political matter, but good urban and regional planning strategies developed by competent policy-makers will help. We may not be able to provide every kind of service and facility for the 65,000 villages in Iran, for instance, but we can look for suitable strategies, or models, to reduce the existing socio-economic gap between the rural and urban areas. In the developed world this process has come to be known as 'sustainable development' which is based on principles that have the potential to enhance the quality of life throughout a nation and even between nations. These principles have been described as principles of: Futurity, Environment, Equity and Participation[1], and they are discussed further in Chapter I.

It is an aim of this research to contribute to the answering of a fundamental planning question which, so far, has not been answered clearly: *How may equitable growth and balanced development be promoted so that people living in rural areas in developing countries can participate more effectively in social and economic activities and obtain greater benefits from the rural-urban-integrated development process?*

In seeking to address some aspects of this question, this study hypothesises that: *The provision of basic services and facilities, such as health care, education,*

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[1] Commission of the European Communities (1990). Green Paper on the Urban Environment, COM(90) 218 final. Commission of the European Communities, Brussels, 1990.

water supply, electricity, transportation and communications in rural areas may significantly contribute to reducing rural-urban disparities and inequalities.

Should this desirable outcome follow, we may expect rural resources to be utilised more efficiently, with the rural sector becoming more productive and sustainable in supporting the large urban areas and more attractive to urban skills and expertise. When rural people find their communities more supportive and livable they may prefer to remain in their villages and work on their lands rather than migrate to the cities. Clearly, if conditions could be designed to bring this about in Iran, there would be lower unemployment, less overpopulation in the cities, less urban sprawl, fewer slum areas and other related problems. It is the intent of the thesis to address these issues.

Coming to Australia has provided the writer with the opportunity to stand back from the immediacy of Iranian rural-urban differences and consider the issues in a wider context in which some aspects of the Australian situation may be relevant.

The program of the research

The research begins with a literature review and a comparative analysis of contemporary strategies and models of rural-urban development in a number of developing as well as developed countries. The situation in Australia, China, India, Indonesia, Japan, Korea, Malaysia, Pakistan, Tanzania, the United States (US) and several European countries is examined. The experiences of certain governmental and non-governmental organisations and institutions in their efforts to link rural and urban communities in these countries are reviewed. Telecottage or community teleservice centres in some European countries and the US, and the Royal Flying Doctor Service in Australia, are examples of private or non-governmental organisations. The Department for Employment, Training and Further Education

(DETAFE), and similar institutions in Australia, rural co-operatives in India, KETENGA small towns scheme in Malaysia, Small Industrial Centres Scheme (*Lingkungan Industri Kacil*) in Indonesia, the *ujamaa* villages' scheme in Tanzania, and co-operative farms in China, Japan, Korea and Taiwan are examples of public or governmental organisations.

The review of the literature shows that both old and new popular models and planning strategies for rural-urban development were designed on the basis of theories of spatial development and also a number of theories in development such as: Christaller's (1933) Approach to Central Place Theory; Lisk and Werneke's (1976), Rondinelli and Ruddle's (1978) and Honjo and Misra's (1981) views on basic human needs; Friedmann and Douglas' (1978) Theory of Agropolitan Development; Stohr and Taylor's (1981) Top-Down and Bottom-Up Development; Lipton's (1982) Theory of Generative versus Parasitic Cities; Rondinelli's (1983) Secondary Cities Approach, his (1985) Growth Poles and his (1993) new approach to "Urban Functions in Rural Areas". This body of theory is but one basis for the present research.

An original longitudinal action research program carried out by the writer in the Korbal rural region of Fars Province, Iran makes up the major part of the thesis. It is a before-and-after research program aimed at determining the impact of delivering basic services and facilities to outlying areas on reducing rural-urban disparities.

The selection of the Korbal rural region as the site for rural studies was based on the following criteria: the people were poorer and more disadvantaged than those in the surrounding regions; the rural-urban migration rate was higher than that of the surrounding regions and nearly every village was in dire need of the most basic services and facilities.

In 1969 and early 1970 the writer visited 15 villages in the region before finding three that were prepared to participate in the program. The people in the other villages were too suspicious of strangers coming to stay to observe their activities and way of life with the intention of suggesting changes.

Work began on the program in 1970. Between 1970 and 1972 field-work studies were undertaken in company with senior students of the Department of National Development of Shiraz University (Research Group). This involved firstly, and most importantly, winning the trust of the people in the three villages under study; living with them; working with and for them; and numerous discussions starting with the first steps of decision-making towards the improvement of their living conditions and progressing to the selection of simple projects, allocation of resources, implementation and the assignment of personnel to run, manage and maintain the projects.

The program was officially sanctioned in 1972 and promises were given by both local and provincial authorities that, as from 1973, any future self-help projects would be part funded. Following on from this the Research Group arranged a meeting with representatives from all of the villages in the region to persuade them to participate in the program.

Seventeen villages volunteered to take part and projects, such as: piped potable water, health houses, schools, roads, electricity and other services and facilities, were implemented. This was done by the senior students - as part of their field-work training - the co-operation of a number of institutions and organisations of Fars Province and the participation of the villagers from the designing of each project to the last implementing process, under the supervision of the Department of National Development of Shiraz University.

The impact of providing those services and facilities on the socio-economic conditions of the 17 villages is dealt with in Chapter III. In summary, the Korbal research program comprised:

1969-1970:

- Seeking out villages for study.

1970-1972:

- Working in the three villages which had agreed to participate.

1973-1974:

a) visiting and surveying the 17 volunteer villages;

b) talking to the people in each of the villages in order to identify and become familiar with their particular problems and needs;

c) data collection on the socio-economic and geographical aspects of each village;

d) a specific survey of the villagers' attitudes towards the provision of basic services and facilities in their village;

e) their opinions regarding the implementation of the most important projects in their village;

f) type and extent of their participation;

g) type and extent of the local, provincial and national governments' help and contribution;

h) finding the exact location for the construction of the projects;

i) final stage of resource allocation;

j) final approval by the villagers' representatives, government representative and the executive manager of the program (who was also the Head of the Research Group).

1974-1978 and 1980-1981:

The implementation of the projects.

Work on the projects began in mid-summer 1974 and continued until the Iranian Islamic Revolution of 1978. Because of the revolution some of the projects could not be finished, they were completed in 1980-1981 with the help of the Ministry of Jihad.

1992:

The purpose of this phase of the case study was to revisit and examine the impact of the delivered services and facilities on the socio-economic conditions of the 17 villages.

Learning from Australia

Coming to Australia in 1991 and visiting several rural communities gave the writer a new perspective on rural-urban development. Comparing and reviewing farmers' living conditions and their dynamic relationships with their surrounding urban communities with what the writer understood about Iran and Iranian villagers led to the examination of one particular, Australian rural region in search of suitable guidelines which might be used as references in the context of rural-urban development in Iran. Despite the socio-economic and political differences between the two countries the writer was motivated in choosing this reference not only by Masser's (1986) point of view - which is examined in Chapter I - but by the fact that, when one uses a reference, it does not mean that one can or needs or has to use all or any part of that reference.

With this in mind, the Yorke Peninsula in South Australia was selected for study. This selection resulted from a series of consultations with a number of officials of the South Australian Ministry of Rural Affairs; several academics at the University of Adelaide, the University of South Australia and Flinders University; sources such as, S.A. DETAFE and members of the Farmers' Union of S.A. The consensus was that the Yorke Peninsula was more relevant in manifesting a combination of rural and urban communities with its small towns and surrounding farms, especially as many of the farms grow wheat and barley and other crops which are also grown in the Korbal rural region.

After visiting the Yorke Peninsula it became apparent that certain rural delivery systems and services which exist there might serve as examples of planning and development strategies which could have some relevance to the Iranian situation.

The findings from the Yorke Peninsula are specifically about the role and functions of a number of governmental and non-governmental agencies in generating rural-urban, socio-economic linkages. These linkages appear to be the basis of rural-urban equitable growth and balanced development in Australia and other developed countries.

In summary, **Chapters I and II** are devoted to a review of theories and approaches to rural-urban development and the discussion of the rural and urban development context. Together these chapters canvass wide-ranging but relevant literature. Not least significant amongst the readings which contributed to the writer's understanding of comparative studies in this field was the work of Masser (1986) whose view that, even small similarities can play a significant role when the planning policies and strategies of two countries are being compared.

Chapter IV describes the rural services provided on the Yorke Peninsula. This research supplements the substantial case study of the Korbal rural region in Iran which is described in **Chapter III.** This longitudinal case study constitutes a significant piece of original research in examining the impact of service provision programs on rural-urban development as part of an ongoing planning strategy. This forms the basis for much of the substantial analysis and discussion which is reported in this thesis for the first time.

Finally, **Chapter V** contains a number of recommendations with the purpose of reducing rural-urban disparities and bringing about a state of equitable rural-urban growth and development in Iran. Moreover, they may possibly contribute to the planning strategies of similar developing countries in the achievement of sustainable development.

CHAPTER I

A REVIEW OF THEORIES AND APPROACHES TO RURAL-URBAN DEVELOPMENT

1. 1 BACKGROUND

1. 1. 1 **Philosophical background**

In the area of societal development, and in planning for this, we see that the main purpose of conducting any research is to find the best methods, techniques and tools to make living easier and better. It is in the nature of human beings to help themselves and others to reach higher and higher degrees of knowledge and understanding in order to improve their present condition to a more satisfactory one in the future. "Human beings have an innate tendency to move toward higher levels of health, creativity, and self-fulfilment" (Maslow, 1987:35).

Similar characteristics exist instinctively in the case of other living organisms, such as plants and animals. This may be called the phenomenon of achieving growth or evolution, by which is meant moving to a higher level of position, condition or situation. The metaphor of a tree might be relevant here. The roots are always searching for water, minerals and other nutritional particles which are then transferred to the leaves to be processed with the help of sunlight and, as a result, soil and water (which are lower elements) are changed into vegetables, flowers and all sorts of fruits and crops. A cow by eating grass or hay yields milk. This process, in itself, can be seen as an incredible miracle; the cow's hunger has been satisfied and a new food produced.

Now, what about the question of the human being as the most important creature? The one for whom, as many scholars believe, everything has been created. Undoubtedly the human product should be much better than the others. The product of human life should be a perfect civilised human society with the feeling of the sense of community, equity and justice, love for other people, regardless of race, culture, location or other characteristics. One would hope that the results of research, knowledge and scientific efforts and activities can be used for the betterment of human societies.

This cannot be achieved unless societies recognise, respect and practise social justice, equality and human rights. If they hope and expect to advance different processes of development and lead more fruitful and meaningful lives, they should consider these aspects of community life as critical as an individual's very personal important matters.

We may believe that human society is like the human body as translated from Saadi (1276), if any organ or part of the body feels sick, the whole body feels sick. The amount of happiness and the state of life satisfaction for any wise person depends, to a certain degree, upon the happiness and satisfaction of human societies all over the world. In this regard Saadi (1276) also believes that those who do not care about others are not human beings.

Most of the world's population live in rural areas which cover most of the globe but share only a very small proportion of its wealth (Jones, 1990). The wealth of the world is accumulated in the cities - particularly in those of developed countries - where only a small percentage of the world's population live. Based on the United Nations' (UN) 1991 Report, just 23% of the world's population were then living in countries with more developed regions.

For quite some time, institutions and individuals alike have been researching and promulgating various means of alleviating such injustice and imbalances at local, regional, national and international levels.

The UN was established for the fulfilment of similar objectives but, in most cases, its plans, policies and strategies have not been applied in some countries for many reasons. Lack of active participation of those nations that are today regarded as super powers is one of them. The latter are economically and technologically in a position to help less developed or developing countries but, regretfully, they do not care very much about the others. In fact, many highly developed countries look at everything with selfish, political eyes. If they could respect, believe and practise the UN's framework, not so many disparities and huge socio-economic gaps between developed and developing countries would exist.

It is generally held that, since wealthy nations and individuals achieve great power and influence because of their wealth, it is rather unrealistic to expect them to agree to a redistribution which would weaken their power base. Most proposals, therefore, have been aimed at accelerating the rate of development of depressed sectors in order to gradually reduce imbalance.

Furthermore, strategies for ameliorating the disparities and inequalities between sectors or regions will achieve little in the transfer of resources from rich to poor if the major provisions are for highly technical industrial development. Clearly, if development is intended to benefit the poor it needs, at the very least, to be appropriate in terms of technology, capital and labour requirements.

It should be the responsibility of the national governments in developing countries to facilitate the means and conditions of expanding the appropriate technological improvement and to encourage people to participate effectively. China

is a good example in this regard. The government has provided the appropriate technology for each region, based on the potential of that specific region. For instance, in an area through which a river flows, the appropriate technology may be to supply boats to transport passengers and goods from one place to another (Fig. 1). It is interesting that in a similar region in another developing country (e.g., Iran) the very same endowment is used explicitly for irrigation (Fig. 2), whereas it could be utilised as a means of transportation as well. This may be because of lack of enough information of the rural people of Iran in this regard, however this should be the duty of the related authorities in the government to give the appropriate information to the villagers and teach them how to maximise and optimise their resources. Regarding capital and labour requirements, Chinese rural authorities help their communities by way of long-term loans to improve the condition of their living environment (Fig. 3). In fact these authorities involve themselves with the problems and issues, needs and wants of the societies under their jurisdiction. A similar mechanism could be applied in other developing countries (e.g., Iran) where many villages are in need of similar support and supervision to enhance the physical condition of their communities. Figure 4 shows an Iranian village in the Korbal rural region awaiting these types of considerations.

China is one of the developing countries which can be a good reference for many other developing countries particularly with regard to rural development issues. Despite its huge population, China's socio-economical condition is improving very rapidly and the rural-urban disparities which are commonplace in most developing countries exist only to a limited extent. Living conditions are so good in the rural areas that many people migrate from the cities. Bowen (pers. comm., 1993) observed that there were many wealthy people among Chinese rural communities. In 1992 one of rural China's biggest exporting items was 23 types of

processed and canned food which were sent to international markets. Other features of rural China will be discussed in Chapter II.

Figure 1: A Chinese village. A river is used not merely for irrigation, but also as a means of transportation.

Source: Photograph taken by Wilf K. Bowen at a village near the City of Beijing, China, March 1991.

Figure 2: An Iranian village. The river is used solely for irrigation.

Source: Photograph taken by the writer at a village in the Korbal rural region, May 1992.

Figure 3: A Chinese village under the direct support and supervision of the local authority.

Source: Photograph taken by Wilf K. Bowen at a village near the City of Beijing, China. March, 1991.

Figure 4: An Iranian village awaiting further improvement.

Source: Photograph taken by the writer in the Korbal rural region of Iran. May 1992.

1.1.2 Learning from other countries

We are living in a time that may be called the era of space and modern technologies; the era of microprocessors and the era of the communication revolution. The network of highly-sophisticated communication facilities has linked most parts of the world together. One can discover what is happening in any part of the world in a very short time with the help of modern communication. Developing nations should take advantage of such opportunities by adopting new suitable ideas and policies from developed and other developing nations; new methods and techniques for solving different types of socio-economic and political problems; and the knowledge and experience in different aspects of life.

Many developing countries may not want to adopt some of the cultural features of developed countries. Nevertheless, they can transfer the positive aspects that are useful in any human society. Developed countries have many admirable qualities and characteristics that are known as accepted values everywhere. Practising strong management, being well organised and punctual, feeling responsibility towards social works and participating in community programs are but a few examples. In these societies, because of the high level of knowledge and understanding, both the people and the leaders feel responsible in solving the problems of their communities. Duties are well defined, public and private organisations and institutions are very well organised and know what they are doing now and what they are going to do tomorrow, the day after, the next week, next month, next year, the next and the second and the third decade and so forth Policies are clear, plans and projects are well designed. There are clear programs and schedules for any social, economic and political activity. The overwhelming majority of people are aware of their duties, rights and responsibilities in each position and circumstance.

These societies are not 'Utopias', but they do bring to mind the image of "the good society" of Maslow (1987:105) who believes:

> ... the good society is one that gives to its members the greatest possibility of becoming sound and self-actualising human beings. This in turn means that the good society is the one that has its institutional arrangements set up in such a way as to foster, encourage, reward, and produce a maximum of good human relationships and a minimum of bad human relationships. ... a good society is synonymous with psychologically healthy society, while a bad society is synonymous with psychologically sick society, which in turn means basic need gratifying and basic need thwarting respectively (i.e., not enough love, affection, protection, respect, trust, and truth and too much hostility, humiliation, fear, contempt and domination).

He adds that the healthy and fortunate people of "the good society" will be largely satisfied in their safety needs (security; stability; protection; dependency; freedom from anxiety, fear and chaos). They also feel safe enough from extremes of temperature, tyranny, murder and criminal assault. It may be very difficult for developing countries to reach "the good society", however, it is possible for them to improve their condition and attain a more satisfactory level than that on the current situation.

A number of developing countries have already been able to get advantage from developed countries' experiences by transferring some of the suitable ideas, policies and strategies to their own developing nations. The result of this attempt has been the improvement of general condition of their countries very rapidly in spite of many serious obstacles that had to be faced before adopting those new ideas and policies. China, Hong Kong, Indonesia, Korea, Malaysia and Singapore provide good examples. The percentage of the Average Annual Growth Rate (AAGR) of Gross National Products (GNP) per capita in these countries shows their success in socio-economic activities (Table 1).

Table 1: GNP per capita and the percentage of the AAGR in a number of developed and developing countries, 1990.

Country	GNP per capita	
	AAGR(%)	US Dollars
Korea, Rep.	7.1	5,400
Singapore	6.5	11,160
Hong Kong	6.2	11,490
China	5.8	370
Indonesia	4.5	570
Japan	4.1	25,430
Malaysia	4.0	2,320
France	2.4	19,490
Australia	1.9	17,000
USA	1.7	21,790

Source: World Development Report: Development and the Environment, World Bank, Oxford University Press, 1992 pp.218-219.

These countries may represent different economic and political systems, but all of them have adopted strategies aimed at creating rural-urban equitable growth and development. One of the most popular and successful strategies that has been practised, particularly in China, Indonesia, Korea and Malaysia is the provision of basic services in rural areas. This strategy is similar to Rondinelli's (1985) approach to "urban functions in rural areas" through the hierarchies of settlements (central villages, small towns, intermediate or secondary cities and metropolitan areas)[1].

None of these countries has been very rich in regard to natural resources, but they could utilise whatever they have; especially the human resources which is one of the most important endowments to be found in almost all developing countries.

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[1] *International Regional Science Review*, Vol.15, No.3, 1993 pp.325-340.

One of the main factors of distinction among the above developing countries and those that have not been very successful in the processes of development is that the former know how to mobilise their available resources. The experiences of these successful developing countries in the processes of development can be good references as well as practical models for those developing countries that are still at lower levels of development.

It might be claimed that those developing countries which lag behind the others do not have the same potential and natural resource endowments as the successful ones, but this does not seem to be a good and reasonable argument. There is no place on the earth devoid of resources. If most of a country, such as Saudi Arabia, for example, is covered by desert, the oceans of petroleum are under its desert, instead. However, the existence of the types of resources in different regions or nations is a relative and uneven phenomenon. One country may have many, another may have just a few. Therefore, the means for development are available everywhere, though relatively, but it is the degree of the effectiveness of utilisation and mobilisation of these resources which makes a region or country more successful than others. Misra *et al.* (1978:xix) believe that "the main problem in removing poverty in developing countries is not the lack of resources, but their mobilisation." Successful and effective mobilisation of resources in any country is not a simple task to be carried out by special groups or by just one or two public or private sectors and organisations, it requires nation-wide participation; it needs integrated rural-urban development plans that cover socio-economic, political and environmental aspects as a whole; it calls for a well-planned and united movement towards equitable growth and balanced development. Therefore, to design such a comprehensive plan, the planners and policy-makers in developing countries should apply their best efforts.

Human societies, regardless of size, location, type, degree of development or civilisation, are generally complex. Rural and urban societies each have their own special socio-cultural and economic characteristics. These specifications, especially in developing countries, vary from one society to another. Furthermore, the process of development planning requires a combination of functional inputs. No single resource, activity, service or facility is likely to make a substantial impact. Each input has a range of possible effects on rural society - and not the same effect on urban society - causing changes that cannot be either predicted or controlled. Any type of intervention may generate consequences and results that are unexpected. Especially when a variety of input that are needed for rural-urban development are combined in a series of integrated projects, they produce large series of unintentional and unpredictable outcomes.

The experience of Malaysia that is discussed further in this chapter can be a good example of this kind. In the same area Bruton (1984:47) states:

> The more difficult general planning problems arise in contexts which are highly complex and when our knowledge of the situation(s) is so limited that we can place little confidence in anticipating future response.

The problem becomes more complicated by the fact that there exists no universally applicable strategy which can be designed for all developing countries or even for a group of them which may be similar regarding the level of development. Drudy (1976), Rondinelli and Ruddle (1978), Cheema (1981) and Prantilla (1981) argue that conditions differ dramatically among countries and also among regions within a country. Because of the differences among socio-economic, political, environmental and administrative systems in different countries, the problems, the needs and the methods of solving those problems and fulfilling those needs also vary. Therefore, some of the decisions and activities that

are essential for improving rural-urban relations to facilitate development in one country may be of marginal importance in others.

Planners and policy-makers in developing countries, therefore, should consider these facts when they decide to adopt strategies from other coutries. They should adjust them to their own socio-cultural, economic, political and environmental conditions prior to taking any step towards the implementation of those new strategies. However, it should be emphasised that, if progress is to be made in practising and implementing new development strategies, planners, policy-makers and authorities in developing countries must be prepared to face any ensuing problems and difficulties. They should be able to take risks throughout the different stages and processes of their work and to confront the difficult problems inherent in program design and execution. It is obvious that when one does anything there will always be errors. Phelps (1901:257) states: "The man who makes no mistakes does not usually make anything." Mistakes cannot be avoided, especially when there is no 'blue print' for development in developing countries, and one has to proceed by trial and error, by experiment, and taking advantage of similar experiences in other countries. Therefore, research and experimentation must proceed simultaneously in policy-making, policy analysis, policy execution and trialing and in selecting appropriate strategies.

1.1.3 **Some lessons of experience**

In recent years, a number of analysts have examined the role of small towns in rural-urban development. Based on reports of small towns in Africa, India, Latin America and World Bank studies, Rondinelli (1985) argues that developing small towns as an effective strategy can perform a wide variety of social, economic and

service functions that are important in bringing about rural-urban equitable growth and development in developing countries.

The contribution that such small towns will make can be divided along an activity line. Lombardo (1982) in his study of small towns in Bolivia and Honduras found that towns within the population range of 10-12,000 provided health, educational and commercial services. These towns are important as transport and distribution centres and as markets for agricultural products grown in the surrounding rural areas.

One argument in support of this policy - as to why more development resources should be devoted to small towns - is that they could provide 'intervening opportunities' to rural migrants and act as a force to reduce migration to large cities. Sibbing's (1984:78-88) analysis of migration and employment patterns in 22 towns in the state of Minas Gerais, Brazil, shows the potential of smaller towns in relating such migrants. Fuller (1981) in his study of migrants' own evaluation of the quality of life in smaller urban centres in a region of north-east Thailand found that migrants, to a large extent, were satisfied with the quality of life found in smaller urban areas. Consequently, "these results encourage optimism about the ability of smaller urban centres in Thailand to retain migrants" (Fuller 1981:101).

Many small towns may also be able to offer a satisfactory location and condition for at least some types of industrial development. Ho (1980) studied rural industries in South Korea and Taiwan and discovered that small towns, in addition to supporting resource processing activities, also provided locations for small market-orientated industries such as: the production of animal feed, ice manufacturing, food processing, clay products, earthenware and hand tools and concrete products.

In a number of small towns in Egypt, India, Pakistan, Syria and Turkey, the writer observed similar activities. The most important role of such towns is undoubtedly their link with agriculture. For example, the distribution of produce through periodic markets. Fabergate (1980:213-254) argues that, in Chinchero, Peru, periodic markets are the most important outlets for goods and services. Hasnerz (1979) remarks that in Kafanchan, Nigeria, local demand had reached a scale where it could support a daily market. Commerce was centred around this market and several permanent retail stores and service enterprises, such as restaurants and accommodation services, had also developed. In most cases, large periodic markets do not operate in individual small towns but may act as integrating factors to link smaller urban centres with the surrounding village settlements. In Grand Bassam, Ivory Coast, Miracle and Miracle (1979) found that approximately 112 different commodities and a great number of services were provided in the markets, and that the village hinterlands were very large.

However, there is evidence from other studies which demonstrates the failure of small towns in contributing to and generating the development process. Singh and Shahi (1984), for example, studied several small towns of Gujarat State in India. They used population as an index of functional performance and it was concluded that towns with a population of under 20,000 had less effect in generating productive activities than intermediate and large cities, despite efforts by central and state governments to improve their development. Another example is Laghouat's (1984) study in which he found the economic relationships between Moroccan small towns and their surrounding areas was more indirect than direct. Specifically, he discovered that there was no systematic correlation between the size or density of small towns and the rural populations of their hinterlands, nor between the 'real and potential wealth' of a region and its small towns.

In 1961, at the time of Tanzania's independence, more than half of the nation's rural population lived in small, scattered and shifting homestead groupings (Munshi, 1981). Permanent settlements had been encouraged by the colonial powers if they produced crops which were suitable for export such as, coffee, tea and cotton; less productive settlements were largely ignored. From the outset government strategy was aimed at overcoming this problem. The policy chosen was based on the linking of the benefits of low-level urbanisation with certain traditional concepts of self-help in respect to the creation of an advanced, agricultural economy.

A plan was prepared to start with the construction of 69 model villages during the period 1964-1969 using a two-step approach: 'transformation' and 'improvement'. In the first stage, new village settlements were expected to employ modern agricultural methods with full financial support from the state. The second phase was designed to change traditional attitudes. This was expected to take place by the community development effort through mass education. This program was later referred to as the *ujamaa* program or *ujamaa* scheme (Munshi, 1981).

The results of this early planning were not as successful as anticipated because of insufficient organisational and financial support, but the objectives of integrated development and self-reliance were obtained. A key element of this policy was the continued emphasis upon *ujamaa* villages as a rural settlement strategy with specific objectives. For example, to:

- increase economies of scale;
- raise labour productivity through collective rather than individual efforts;
- improve the rate of innovation within the villages;
- bring about equality among participants;
- promote social welfare through further improvements in education and

health facilities; and

- the achievement of self-reliance.

The number of such villages increased from 809 in 1969 to 5,556 by 1973, but some problems remained. However, improvement has occurred for a large part of the rural population (Yeager 1980).

Tanzania has been able to control growing inequality by investing heavily in social services and facilities and productive activities in *ujamaa* villages and that, "there is a clear geographic and income group correlation between reduction of poverty and *ujamaa* village membership." Green (1974:268-273).

Shayo (1985:238) notes that by 1980, 72% of the villages had co-operative shops, 35% had dispensaries, 92% had primary schools and 38% had clean water.

The goal of universal education had practically been reached by 1981 (Putterman, 1984:61). Maeda and Bagachwa (1981:335) observe that in *ujamaa* villages much of the rural population had been incorporated into the village decision-making process.

Zaini (pers. comm., 1994) believes that Tanzania, through the *ujamaa* program, has been able to achieve both immediate improvement in living standards and medium-term increase in production capacity by providing capital and services, farm management and technical training.

In Malaysia, one experience in small town development showed that plans are not always successful. In the context of Malaysian development planning, as the Hunting Technical Services Report (1974) indicates, a policy was designed by the government with the intention of distributing the benefits of development across all ethnic groups within the country. Urbanisation was seen as a natural component of

the type of regional development programs that had been proposed. A very important element of that program was the development of resource frontiers. The method used to achieve that aim involved the creation of regional development authorities which were given control over a large region. These authorities were supposed to be responsible for the exploitation of that area's resources and the implementation of that plan. Although the primary strategy was based on agriculture, 'rural urbanisation' was an important part of the plan. This policy stemmed from the fact that most of the poor people lived in rural areas with lower incomes and living standards than those in urban areas.

One such development authority, Lembaga Kemajuan Trengganu Tengah (KETENGAH) was established in Trengganu State in the north-east of Malaysia which subsequently made a contract with British consultants to prepare a master plan as a guide for the development of the area. The approach used by the planning team was to regard Trengganu Tengah as an isolated region and then to suggest the necessary steps which might be appropriate for development in regard to agriculture, forestry, industry and the establishment of settlements, including infrastructure and housing. Different targets were set for important crops and resource-based industries were scheduled to provide primary processing for agricultural as well as timber output. Working on the assumption that agricultural employees on the region's estates would be living in new townships, population projections were prepared and transportation systems and urban infrastructure were also planned and scheduled.

For the first phase of the project five locations were selected for the construction of settlements. Despite the availability of a number of subsidies for various elements of the township plans to make them more attractive to agricultural workers, the actual growth of these centralised settlements disappointed the

planners. The reason being that the projected population for the five towns was 54,139 inhabitants by 1983, while the real total was 12,492 (23.1% of the projection), (the Hunting Technical Services Report, 1974).

Because of the poor results, infrastructural schemes which were practically completed (e.g., the water system) were left with large quantities of oversupply. Many houses had been built which remained unoccupied and, from the financial point of view, the cost per inhabitant for infrastructure exceeded the planners' expectations considerably.

Kaswani (1990) argues that a number of factors have been suggested as to why the urban populations did not reach the projected targets. Some of these reasons were specific to the geographical location of KETENGAH. After the master planning report was completed, oil and gas were discovered off the coast of Trengganu State and the construction phase of this exploitation undoubtedly attracted unskilled workers who might otherwise have settled in the region. However, other factors were more general. One, for example, was that although primary employment opportunities in agriculture had been established successfully, secondary employment did not occur as expected. This might be because of locational disadvantages in comparison with the national markets.

The agricultural land tenure system also had an important effect. Competing agricultural development projects in the region, such as the Federal Land Development Authority (FELDA), gave actual title to lands which were under cultivation by its participants, while the KETENGAH scheme was based on waged work on estates.[1] Clearly, this reduced the attraction of the settlements, regardless

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[1] The Federal Land Development Authority is a Malaysian government corporation which undertakes land development on a co-operative basis.

of the infrastructure, health services and commercial facilities which had been provided. The result might be different if such a plan were implemented in other developing countries but, in general, it may serve as a good reference when the nature of other countries' experiences is seen from a different viewpoint.

Despite the vastness of Australia (7,686,845 sq.km.), the Federal Government has been able to link large and small settlements with each other by providing networks of basic services and facilities and expanding different types of socio-economic and political opportunities all over the country. The service provision, discussed in detail in Chapter IV, has been one of the main reasons for the success of the Australian rural sector such that, in 1990/91, rural export generated $13.7 billion, accounting for approximately 32% of all exports (Cribb, 1991:11).

In Japan, up until World War II, the peasant farmer had not kept pace with the country's general expansion. Concentrations of ownership and 'feudal' relationships of dependence began to reappear but, after the war, new land reform was accompanied by a great strengthening of co-operative structures. By the 1950s and 1960s, the farming sector had improved to become one of the most productive in the world. Farm production continued rapidly such that, in 1989, the income of a Japanese farmer with an average of 3.6 hectares of double-cropped land was more than that of a middle-class citizen (Fazel, 1992:137-141).

Japan is unique among developed countries because of the small scale of the farms. Although it is a mountainous country with only 17% of arable land, the efficiency of the resource utilisation system is so high that this country has been able to compete with a number of developed countries in regard to agriculture. The private farm, strongly supported by a co-operative network similar to that in Britain, has become the norm in a sector so productive that 10% or less of the labour force is required to work on the farms (Fazel, 1992:149-150).

In Taiwan, the government encouraged farmers to apply modern techniques in place of their more primitive methods. In some of the rural areas where new agricultural implements and large inputs of fertiliser had been used and there was almost total membership in a strong co-operative structure, the result was very good. Half-hectare plots produced almost double the output of farms which were more than two hectares. In 1989, figures from the FAO indicated that Taiwan had produced more grain per hectare - 5080 kilograms - than either Britain or the United States. The main reason may be that the peasants have to work much harder to survive and feed their families but the Taiwan example, based on FAO evidence, demonstrated something more. If, to this driving energy of 'self-preservation', one adds secure tenure and the input of modernised agriculture such as: new improved hybrid seeds, fertiliser, co-operative services, storage, wholesaling and, above all, credit - the small farm can become, as in Taiwan now, a "powerhouse" of food production (Koppel, 1991).

The FAO figures give other examples. Based on the comparable efforts which have been made to get co-operative assistance and needed supplies to the small farmer in Egypt and South Korea, the same pattern emerges. Egypt's output of grain per hectare was higher than that of Britain or America and, in the case of Korea, the production per hectare was equivalent to America and not far behind Britain. Surpassing all other countries was Japan, with 5419 kilograms of grain per hectare, and Denmark with 5283 kilograms. These figures provide bench marks for potential growth in other nations. For example, why should India produce no more than 982 kilograms per hectare, Iran 1046, Brazil 1320, Thailand 1764, with every kind of level and variety in between? Climate and soil may be part of the answer. Japan has little fertile land and undergoes many natural disasters, yet it is still successful. The reason may lie in factors such as sophisticated techniques, people's hard work and effective management (Koppel, 1991).

In considering the small farmer in most developing nations, he probably does not own even 10% of the land as in Latin America, for example. In 1978, 30% of the agricultural workers in India had no land at all. Less than 25% of the farmers in Brazil belonged to co-operatives. The figure for Mexico was seven per cent, and for Honduras four per cent. Yet in the latter, nearly 160,000 hectares lay idle and agrarian problems remained unsolved (Lo, 1981).

In countries such as China, Cuba, Kenya, the Sudan and Tanzania land reform played a significant role in solving the agrarian problems and, as a result, living conditions in rural communities improved. In respect of the Sudan's Gezirah cotton scheme and Kenya's tea plantations farmers own the land but produce cash crops under central management. In China, Cuba and Tanzania the land itself is collectively owned by the farmers. It is significant that all of them link earnings with performance. The most productive systems are the Taiwan-Denmark type of combined private ownership and co-operative organising that gives the highest yields per hectare in the world and, at the same time, in developing countries offers the highest chances of absorbing extra farm labour (Seraj, 1991:27-32).

In the majority of developing countries, in most of their plans in the early 1970s, the spatial aspects of planning, particularly in the farming sectors, were not done accurately. For example, little attention was given to rural or farm-to-market roads. They were never built. In fact the matter perhaps was not too important because no-one had ~~done~~ made any significant effort regarding to the improvement of the condition of the market . In Iran, for instance, the sense of actual physical space in planning tended to be so fragmentary that when demonstration farms were set up to introduce a new farming system - there were approximately 30 of them by the mid-70s - no-one had any idea of combining them with the small-scale industrial estates which were being set up at the same time. In other words, no-one

had considered the farms, villages and small towns as essential elements in a local, regional and national network of productive services, in which the efficiency of each level depended upon the efficiency of the other. Very few countries - Malaysia, for instance - attempted a thorough inventory of its natural assets, forests, minerals, farmlands, natural lines of access and communication. Similar surveys were attempted in Colombia and Brazil afterwards (Seraj, 1991).

The type of planning practised in Malaysia has already brought about the choice of active rural-urban market centres, helping them with co-operative banks, light industries serving simple agricultural consumer needs, warehousing and storage, secondary schools, a small hospital with a mobile clinic, and all-weather roads and good transportation facilities leading to the number of villages that should be served. In Denmark, where very careful spatial organisation has been devoted to the placing and servicing of agricultural communities, regional centres served 11 villages in 1988. At the same time, in countries where spatial integration of the nation has played little or no part in economic strategy, the severe isolation of the villages can be measured by such figures as 185 villages to each urban centre in Indonesia, 158 in India and 105 in Iran. The lack of roads reflects the same phenomenon. In Taiwan in the mid-80s, there were 6 kms of farm to market roads for each 2.4 square kms. In Pakistan, the proportion was 1.2 km. (Bavardoost, 1992:45-51).

These intermediate centres could, in their turn, serve and be served by a nation-wide distribution of big cities designed like France's middle-cities which were built to reduce the overcentralisation of Paris. These cities should provide all the employment, education, research, tertiary and quaternary services and advanced industry which are required to keep some of the problems away from the capital cities. Nearly every developing country can select cities of a million which show

the potential for development and diversification. In Eastern Europe, such intermediate centres have been built with the intention of serving the farms and to decentralise employment. Throughout Latin America, medium-sized cities have been on the increase. In China the government has introduced disincentives to reduce and redirect the rural flow away from the biggest concentrations (Manshadi, 1994:111-112).

1.2 THEORETICAL APPROACHES TO RURAL-URBAN DEVELOPMENT

1.2.1 Basic human needs

Lisk and Werneke (1976), Rondinelli and Ruddle (1978) and Honjo and Misra (1981) believe that 'basic needs' is the most essential dimension of rural and regional development. They go on to say that 'basic needs' emerged from the growing realisation that economic growth does not necessarily ensure development; especially when the broader and more realistic meaning of 'development' is under consideration. Human socio-cultural behaviour and the structural rigidity of human society tend to retain the benefits of growth and not allow them to trickle down to the underprivileged. This is the reason why development must always follow two objectives concomitantly - social equity and economic growth.

Basic human needs, also called basic minimum needs (BMN), is not a substitute for economic growth, nor a strategy for consumption needs. It is a new style of development in which economic growth becomes the means rather than the end.

Nagamine (1981) argues that the failure of the policies which were introduced by some developed and developing countries, in regard to the improvement in the living standards of the poor, and the consequent questioning of the goals of the

development policies pursued by these countries, led to the emergence of basic human needs as one of the most important considerations in national development, during the second development decade (1970-79). The strategy refers to the satisfaction of the essential requirements for a human being to live under conditions which are compatible with human dignity. It deals with commonly accepted standards for the level of living; consisting of food, clothing, shelter, social security, health, education, working conditions and human liberty.

According to the International Labour Organisation (ILO),

> ... the basic needs approach means not only the provision of a minimum level of security to all individuals, but the creation of conditions that will allow continuing equal access to opportunities for self-sufficiency and self-sustained growth in the process of development. (Lisk and Werneke, 1976)

Therefore, the strategy attempts that the fruits or the results of development reach poor and underprivileged groups of any country. Nagamine (1981:2) in an attempt to summarise the ILO approach to BMN states that the strategy is designed to:

- increase the income and productivity of low-income people to make available basic consumption goods and to provide the means to acquire them.
- redress the biases that favour urban areas against rural areas.
- increase different kinds of basic public services for the poor, both in the rural communities and urban fringe areas.
- generate economic growth to meet basic needs and carry the strategy forward continuously.

1.2.2 Friedmann and Douglas' Agropolitan Development Approach

In their advocacy of agropolitan development, Friedmann and Douglas argue that the "primary objective is no longer economic growth but social development with focus on specific human needs" and they believe that:

> Development must be fitted to ecological constraints; priority attention must be given to rural development; and planning for rural development must be decentralised, participatory and deeply immersed in the particulars of local setting. (Friedmann and Douglas, 1978:163)

To achieve such objectives, they state that national development strategies should be reorientated to the following policy elements:

1. The replacement of generalised 'wants' by limited and specific human needs as the most important criteria for development.
2. The treating of agriculture as a corner stone sector of the economy.
3. The importance of the attainment of self-sufficiency in domestic food production.
4. The allocation of a higher priority to the production of wage goods for domestic production.
5. The importance of the reduction of inequality in income and living conditions between urban and rural areas.
6. The protection of small-scale production of the domestic market against competition from large-scale, capital-intensive enterprise.

Obviously each of the above elements can play a very important role in bringing about rural-urban integrated development if they are incorporated into the planning framework. Especially, planners and policy-makers in developing countries should give a high priority to the adoption of policies which are effective in reducing rural-urban inequalities and disparities.

1.2.3 Christaller's Approach to Central Place Theory

Christaller's (1933) theory is one of the earliest theories in this area. He believes that establishing service centres in the middle of small settlements would be the most efficient way of delivering services to the surrounding small settlements. He also argues that the central place settlement and its surrounding

small settlements would have mutual relationships with each other. He later added the principle of market threshold to his "principle of centralisation" which determines the minimum settlement size required to provide a viable market for any particular good or service such as, cinema, chemist, supermarket, post office and so forth. For example, a population of 200 persons might be the market threshold for groceries, whereas the threshold for a viable furniture market might be 3000. In general, those items which have a lower frequency of purchase tend to have a larger market threshold. As well as varying from business to business the market threshold was expected to exhibit regional variations. Differences in population structure, such as age, income and sex, as well as differences in cultural values, would result in variations in market thresholds for a particular business from region to region.

On the basis of these concepts of the range of goods and services and the principle of market threshold, Christaller reached two extremely significant conclusions:

1. when urban settlements are ranked according to size (size defined in terms of functional complexity) they fall into discrete groupings, with each successively higher group or order containing fewer settlements.

Christaller called this phenomenon the "urban hierarchy".

2. adopting a pattern of hexagonal hinterlands, the hinterlands of the low order centres nest into the hinterlands of higher order centres in a close-packing arrangement, thus producing a definite geometrical relationship between the number of centres of each order.

He demonstrated that the number of centres in each successively higher order decreased by a constant ratio k. For a normal commercially-orientated region, k=3

and the number of centres in each order follows the pattern 1, 3, 9, 27, 81 and so forth, or, eliminating double counting of centres, 1, 2, 6, 18, 54 and so on.[1] Christaller also showed that for transport-dominated regions the hierarchy corresponded to k=4, and for administrative- or politically-dominated regions k=7.

Since the early 1960s many researchers have written about rural development or urban development. In that time very few have been concerned with mutual and integrated rural-urban development, but considerable research has been devoted to the analysis of urban and rural development as separate issues (Roberts, 1978; Harriss, 1982; Chambers, 1983 and Potter, 1985).

Dixon (1987) observes that since the late 1970s the growing awareness of the importance of urban-rural relationship, on the one hand, and dissatisfaction with urban-based, centralised models of development, on the other, has led to a considerable theoretical reappraisal of such models and issues.

Potter and Unwin (1989) point out that writers on developing countries usually deal either with rural problems or with urban problems, and fail to stress adequately the very considerable relationship between the two. The result, therefore, has been drawing attention away from the connections between these two foci of development.

Increasingly it is now being argued that rural-urban development should be seen not as a process in itself, but as the product of deeper structural transformations all over the world. This reorientation of attention has enabled different kinds of research design to be formulated. By concentrating on the integrated linkages and flows between rural and urban areas, a more comprehensive

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[1] Double counting occurs when the centre of a lower order hexagonal hinterland and that of a higher order hinterland coincide such that the site for a lower order village, for example, is the same as that for a higher order town.

process of social and economic development will be achieved that will affect especially developing countries.

Perston (1975) identifies the following categories of interaction:

1. movement of people (population mobility),
2. movement of goods and capital (resource transfer), and
3. social transaction, administrative and service provision (social interaction).

Within this context Gould (1985:1) discusses that: rural-urban interaction could be considered as the two-way flow of people, goods, money, appropriate technology, information and ideas between rural and urban areas. He further notes that "these flows are not only the symptoms of the 'development process' but are themselves active in the transformation of rural and urban places." Dixon (1987) followed up the same idea in his case studies of rural-urban interaction in developing countries.

Potter and Unwin (1989) believe that the basis of the mechanism of linkages and flows between rural and urban areas is the theoretical reappraisal of certain rural-urban development models that have been used in planning policies by governments throughout the world over the past three decades. Three particular recent models are:

1. The Growth Pole Model, by Rondinelli.
2. Top-Down and Bottom-Up Development, by Stohr and Taylor.
3. Generative versus Parasitic Cities, by Lipton.

The above basic and interrelated ideas have dominated much of the literature on urban-rural links in development planning since the late 1950s; each addressing the same central problem but with different individual aims and emphasis. Adoption of any of these models and approaches or a synthesis of them may help any developing country to cope with a number of its contemporary problems. New,

industrially-developed nations, such as Korea, Indonesia, Malaysia and Taiwan, are among the Asian developing countries which have adopted and adapted these models and achieved successful results, such that their experiences in this regard can be used as guidelines for many other developing nations.

1.2.4 Rondinelli's Growth Pole Approach

> The growth pole concept of spatial development suggests that by investing heavily in capital-intensive industries in the largest urban centres, governments in developing countries can stimulate economic growth that will spread outward to generate regional development. (Rondinelli 1985:3)

The above model is concerned with the fact that, when development takes place in urban areas it will, in turn, generate rural development. "Investment in industry at the growth pole would be the 'engine of development' for agricultural and commercial activities" (Rondinelli 1985:4).

Rondinelli (1983:10) argues that "rural development goals, no matter how carefully conceived, cannot be achieved in isolation from the cities or entirely through 'bottom-up' strategies." He adds that linkages between rural and urban areas are crucial because the major markets for agricultural surpluses are in urban centres; most agricultural inputs come from organisations in cities; workers seek employment as rising agricultural activity frees rural labour; and many of the social, health, educational and other services that satisfy basic human needs in rural areas are distributed from urban centres. Rondinelli (1985) notes that, if governments in developing countries wish to achieve widespread development in both social and spatial terms, they must develop a geographically dispersed pattern of investment. This, in turn, can be achieved through the creation of "a deconcentrated, articulated, and integrated system of cities" which provides potential access to markets for people living in any part of the country or region (Rondinelli, 1983:19). He later

comments that "decentralised investment in strategically located settlements can create the minimal conditions that enable rural people to develop their own communities through 'bottom-up' and autonomous processes" (Rondinelli, 1985:8).

It is the concentration of Rondinelli's approach on linkages, and in particular on linkages between rural areas and small cities, and also between smaller and larger cities, that makes it of such interest in any consideration of rural-urban interaction.

Rondinelli (1983) discusses that the development of 'secondary cities' as a means of spatial linkage provides five main beneficial results:

1. It relieves pressures on the largest cities in terms of housing problems, transport, pollution, employment and service provision.
2. It reduces regional inequalities. Because the standard of living is higher in urban than in rural areas, the spread of secondary cities would lead to the spread of the benefits of urbanisation.
3. It works at stimulating rural economies through the provision of services, facilities and markets for agricultural products, as well as being able to absorb surplus labour, and as a result agricultural production becomes more labour efficient.
4. It provides increased regionally decentralised administrative capacity.
5. It helps to alleviate poverty in intermediate cities, where the problems of poverty and marginality are often most acute and visible.

He further notes that the implementation of rural-urban development is possible through the manipulation of the urban settlement hierarchy. He also argues that any rural change as the basis of rural development can be best implemented and

encouraged by the provision of social and economic facilities in medium-sized urban settlements. This is similar to arguments put forward by Wanmali (1981) who suggests that, in the Indian context, it is the lack of service provision in the smaller towns that has been one of the major constraints in rural development.

Rondinelli also believes that beneficial rural socio-economic change in any region of developing countries will be promoted by the development of marketing facilities within the towns which are close to the rural areas of those regions. He goes on to say that secondary or intermediate city structures dominate the developing world, therefore, to achieve balanced development it is necessary to implement policies that will help the growth of middle-ranked or intermediate cities. Rondinelli (1983:196) argues that:

> ... the challenge for international assistance organisations and national governments in the Third World is to find effective and appropriate ways to help local governments and private investors to strengthen the economies and services delivery capacities of secondary cities through direct investment and national policies that have spatial implications.

Rondinelli has drawn together a broad basis for the analysis of major linkages in spatial development which is summarised in Table 2.

Table 2: Classification of major linkages in spatial development.

Type of linkages	Elements
Physical	Road networks River and water transport Railroad networks Ecological interdependencies
Economic	Market patterns Raw material and intermediate goods flow Capital flow Production linkage - backward, forward and lateral Consumption and shopping patterns Income flow Sectoral and interregional commodity "cross linkages"
Population movement	Migration - temporary and permanent journey to work
Technological	Technological interdependencies Irrigation systems Telecommunications systems
Social interaction	Visiting patterns Kinship patterns Rites, rituals, and religious activities Social group interaction
Service delivery	Energy flows and networks Credit and financial networks Education, training, and extension linkages Health service delivery systems Professional, commercial, and technical service patterns Transport service system
Political, administrative, and organisational	Structural relationships Government budgetary flow Organisational interdependencies Authority-approval-supervision patterns Inter-jurisdictional transaction patterns Informal political decision chains

Source: Rondinelli (1985:143).

Rondinelli contends that the allocation of public services and facilities and infrastructure can be one of the most effective means of growth and development, particularly in poor rural areas when he says:

> One of the most important instruments that governments can use to promote regional economic growth, especially in poor agricultural areas, is the ability to invest in and allocate social services, public facilities, and physical infrastructure (i.e., urban functions). Services and infrastructure play a crucial role in making towns, cities, and regions more efficient locations for production, exchange, and distribution, thereby increasing their potential for attracting private investment and for generating employment and income. (Rondinelli, 1993:325)

He emphasises that a reason for focusing on providing basic services and infrastructure in rural communities is that these services, especially roads, telecommunications, schools, health care facilities and utilities, make these places more attractive for private investment and contribute to expanding regional output and facilitate regional and national development in developing countries.

> If the level of economic development is measured by gross regional product (GRP), the relationship can be represented by
>
> $$GRP = C + P + G,$$
>
> where C is private consumption, P is private investment, and G is national and local government spending. Infrastructure, as a major government spending (G), contributes directly to higher levels of output. (Rondinelli, 1993:331)

He also points out that experience in many developing countries, as well as in Europe and the newly-industrialised countries of Asia, indicates that service facilities and infrastructure are crucial factors in minimising regional inequalities.

1.2.5 Lipton's Theory of Urban Bias

Lipton's theory is against urban-based, top-down development policy. His advocacy of urban bias seeks to show that:

> ... the most important class conflict in the poor countries of the world today is not between labour and capital. Nor is it between foreign and national interests. It is between the rural classes and the urban classes. (Lipton, 1977:13)

He contends that there is a very clear and serious distinction between rural and urban in many aspects, especially in regard to the allocation of resources. He adds that the power of urban people is such that they are able to direct a disproportionate share of resources towards their own interests and away from rural people. In his opinion, it is this facet of urban bias that keeps poor people poor and maintains inequalities not only between rural and urban areas but also within the rural areas and that this situation exists because of an alliance between the urban elite and the rich farmers who are able to provide surpluses of food, savings and human capital to those in the cities (Lipton, 1982:68).

Corbridge (1982:95) found that the symptoms of Lipton's urban bias are:

> ... the cheap procurement prices paid by the urban sector for food, and a series of other 'price twists' adverse to the interest of the rural class; the heavily imbalanced investment strategies favouring the urban/industrial nexus and the resultant rural skill drain; and the basic lack of health care and educational facilities that defines the rural sector.

In this context, other scholars also believe that urban areas exploit their hinterlands when they say:

> The relationship of the city with the 'countryside' is complex. Suffice is to note here that the dynamic of the city tends to determine the pattern of change in the countryside rather than *vice versa*. Indeed cities have never been 'sustainable'. The process of urbanism in antiquity has frequently been linked with desertification of the hinterland. Cities have always exploited the surplus food and materials produced in their hinterland, ... (Elkin *et al.*, 1991:5-6)

1.2.6 Stohr and Taylor: Bottom-Up Development

Stohr and Taylor assert that if development is to become more equitable, top-down development policy need to be integrated with bottom-up development policies. They argue that:

> ... development 'from below' considers development to be based primarily on maximum mobilisation of each area's natural, human and institutional resources with the primary objective being the satisfaction of the basic needs of the inhabitants in that area. (Stohr and Taylor, 1981:1)

They add that "It is oriented directly towards the problems of poverty and must be motivated and initially controlled from the bottom." In contrast to the types of approach advocated by Rondinelli, the bottom-up model of development is rural-centred, small-scale, and also based on the use of 'appropriate technology' to utilise rural resources and to create as much employment as possible. Other characteristics of this model are:

- it is self-reliant and egalitarian;
- it is determined from within the rural communities;
- it is communalist and distributive; and
- it is known as a model that respects human dignity.

1.2.7 Sustainable development

Recently issues such as 'sustainable development', 'sustainable urban development' and 'sustainable rural development' have been under discussion in both developed and developing countries. In fact, these concepts expose related ideas in terms of integrated rural-urban development and planning. However, the concept 'sustainable' when combined with the concept 'development' makes a more meaningful and more humanistic concept particularly in regard to the future.

The term 'sustainable development' was first formally discussed and defined in the World Conservation Strategy (IUCN, 1980) as:

- the maintenance of essential ecological process
- the preservation of genetic diversity
- the sustainable utilisation of species and diversity.

Since then, this definition has been under debate because of its ambiguity. A number of writers point out that 'development' accompanies change, that is from one condition and/or state to a better one, whereas 'sustainability' in a sense is synonymous with stability. Pearce *et al.* (1989) remark that there is some controversy over the meaning of the words 'development' and 'sustainable'. The former implies a series of desirable goals for society and the latter means that this level of development can be supported within the earth's eco systems.

Charoenwatana *et al.* (1988) point out that part of the ambiguity of the definition lies in the fact that 'sustainability' can mean many things: It can refer to the maintenance of a particular management system over time; it is commonly used to mean the maintenance of a particular level of benefits for example, in the stabilisation of a village or household or used to refer to the ability of an agro-ecosystem to maintain a specific level of production over the long term. Rutherford *et al.* (1994) remark that the term 'sustainability' has been primarily applied to a variety of non-urban contexts, particularly agriculture, forest management, fisheries and water resource management.

Much interest in 'sustainability' was generated by the report of the World Commission on Environment and Development (Brundtland Commission, 1987) which characterised development as a sustainable process and defined it as "development which meets present needs without compromising the ability of future generations to achieve their needs and aspirations." This definition was expanded on and clarified by the World Conservation Union, UN Environment Program and the World Wide Fund for Nature in 1991 as: "improving the quality of life while living within the carrying capacity of supporting ecosystems." This means that in order to ensure development is sustainable, it should not exceed or breach the earth's environmental capacity.

Commission of the European Communities in 1990 identifies four principles that are central to sustainable development: Futurity, Environment, Equity, and Participation. Besides these, which provide a kind of framework for environmental protection and resource conservation, two other principles should not be ignored: the need to enhance democracy and the need to reduce discrimination (Elkin *et al.*, 1991). Bosworth (1993) confirms these principles and adds that although sustainable development is a process and not a simple activity to have an end point, it will not be achieved in the absence of the above principles. Indeed, virtually all definitions of sustainable development carry or imply at least some element of intra-generational and inter-generational equity (Agyeman and Evans, 1994).

Environ (1993a:6) stresses the equal opportunity as a principle in defining a sustainable society:

> A sustainable society will offer its citizens in this and future generations an equal opportunity to participate in all aspects of development. It will increase the opportunities for citizens and communities to enjoy an improved quality of life and environment and will work towards more equal access to and use of resources both within and between nations.

Rodger (1994), in the winning submission in the Jerrabomberra Valley National Ideas Competition, describes sustainability as a dynamic process:

> Sustainability will not be found through a reduction of uncertainty. Rather it will be achieved through continuing change and development ...
>
> Sustainability is therefore to be seen not as an end point but rather as a direction accompanied by a set of guiding principles. It is a carefully chosen journey rather than a destination.

1.3 BASIC CONCEPTS IN RURAL-URBAN DEVELOPMENT

1.3.1 Development

The term development has been shown to mean somewhat different things in different places and circumstances (Schumpeter, 1935; Furtado, 1964; Onyemelukwe, 1974 and Hemmat, 1989). In common usage, it is generally thought of in terms of growth or advancement to some higher state, especially in terms of physical items, such as the construction of new roads and services or the erection of industrial buildings, offices and housing. This type of development can be called project development which is, in most cases, associated with macro-economic indicators such as, GNP or per capita income.

A more suitable conceptual basis for development is economic development. Economic development simply defined is a process of institutional change in order to achieve a more efficient allocation and utilisation of resources. Higgins (1967:119) defines economic development as "a broadly diffused rise in per capita income throughout the population." Clearly, there is a fundamental difference between this concept and that of project development in that, not only is development to produce macro-scale increases in total income, but also that this increase is to be distributed evenly among the individuals of a total community. The emphasis, therefore, has shifted from production for its own sake to production for the benefit of all.

Lin (1975) argues that development is based on three principal values:

1. power to the people combined with reliance on the people,
2. serve the people, and
3. self-reliance and autonomy in development.

He concludes that, for the Chinese, development might be defined as follows:

> The movement of the whole socio-economic and cultural systems towards an even larger measure of power to the people for conscious participation in building their own future, higher production for societal needs based upon non-exploitative relations of production and equitable principles of distribution, and the maximum possible enjoyment by the producers in society of culture oriented towards their own reality, needs and aspirations and of an aesthetically and ecologically sound environment. (Lin, 1975:295)

Therefore, Chinese development implies not only equality in the distribution of products but also equal participation by all individuals in the society in the planning and implementation of development.

Todaro (1990:62) points out that, to many, development may be perceived as an economic phenomenon, however, it is a "multidimentional" process which encompasses both the economic and social aspects of people's lives. He defines development in the following categories:

a) traditional economic measures;

b) new economic view of development; and

c) development beyond narrow economic criteria.

a) Traditional economic measures

In this category Todaro states:

> In strictly economic terms, "development" has meant the capacity of a national economy, whose initial economic condition has been more or less static for a long time, to *generate and sustain* an annual increase in its gross national product at rates of perhaps 5 to 7% or more. An alternative common economic index of development has been the use of rates of growth of per capita GNP to take into account the ability of a nation to expand its output at a rate faster than the growth rate of its population. Levels and rates of growth of "real" per capita GNP (i.e., monetary growth of GNP per capita minus the rate of inflation) are normally used to measure in a broad sense the overall economic well-being of a population -

> that is, how much of real goods and services are available for consumption and investment for the average citizen. (1990:86)

He adds that economic development in the past has also been seen in terms of the planned alteration of the structure of production and employment so that agriculture's share of both declines, while the manufacturing and service industries increases. Development strategies, therefore, have usually focused on rapid urban industrialisation often at the expense of agricultural and rural development. Finally, these economic measures of development were often supplemented by 'non-economic' measures or social indicators such as health conditions and services, gains in literacy, schooling, provision of housing, and similar.

Generally, development in the 1950s and 1960s was nearly always seen as an economic phenomenon in which rapid gains in overall and per capita GNP growth would either "trickle down" to the masses in the form of jobs and other economic opportunities, or create the necessary conditions for the wider distribution of the economic and social benefits of growth. Problems such as income distribution, unemployment, and even poverty were of secondary importance to "getting the growth job done" (Todaro, 1990:87).

In the 1990s almost all developing nations sought to build more balanced and sustainable development with greater social equity. In fact, they have realised that achieving this type of development may not be possible without promotion of rural development and decentralised planning and administration, and increased access for rural people and marginal groups to resources, facilities and opportunities.

b) The new economic view of development

Todaro (1990) argues that the experiences of the 1950s and 1960s showed that defining development as annual increase in GNP was very wrong, because a large number of developing countries achieved the overall UN growth targets but the levels of living of the masses of people remained for the most part unchanged. After lengthy debates many economists and policy-makers decided not to place so much emphasis on GNP but, instead, find ways of directly attacking widespread, absolute poverty, increasingly inequitable income distributions and the problem of unemployment. "In short, economic development was redefined in terms of the reduction or elimination of poverty, inequality, and unemployment within the context of a growing economy" (Todaro, 1990:87).

Todaro also quotes the basic questions about the meaning of development that were argued by Seers in 1969 when he stated that:

> The questions to ask about a country's development is therefore: What has been happening to poverty? What has been happening to unemployment? What has been happening to inequality? If all three of these have declined from high levels then beyond doubt this has been a period of development for the country concerned. If one or two of these central problems have been growing worse, especially if all three have, it would be strange to call the result "development" even if per capita income doubled.

c) Beyond narrow economic criteria

Development or underdevelopment as Todaro (1990) states is not just a question of economics or the simple quantitative measurement of incomes, employment and inequality. He believes that development must be conceived as a multi-dimensional process involving major changes in social structures, popular attitudes and national institutions as well as the acceleration of economic growth, the reduction of inequality and the eradication of absolute poverty.

> Development, in its essence, must represent the entire gamut of change by which an entire social system, tuned to the diverse basic needs and desires of individual and social groups within that system, moves away from a condition of life widely perceived as unsatisfactory and toward a situation or condition of life regarded as materially and spiritually "better". (Todaro, 1990:88)

Components of development

Goulet (1971:87-94) believes that there are at least three basic components or core 'values' as a conceptual basis and practical guideline for understanding the meaning of development:

1. Life-sustenance or the ability to provide basic necessities or life-sustaining needs; such as: food, shelter, health, and protection.
2. Self-esteem or feeling of being a person; a sense of worth and self-respect, of not being used as a tool by others.
3. Freedom from any type of slavery or being able to choose and minimising social, political and economical constraints.

Objectives of development

Todaro (1990:90) concludes that "*development is both a physical reality and a state of mind* in which society has, through some combination of social, economic and institutional processes, secured the means for obtaining a better life." He adds that although the specific components of a better life may vary in different societies, development in all societies must have at least the three following objectives:

1. To increase the availability and distribution of basic human needs, such as food, shelter, health and protection.
2. To raise levels of living including: higher incomes, the provision of more jobs, better education and greater attention to cultural and humanistic values, all of

which will serve not only to enhance material well-being but also to generate greater individual and national self-esteem.

3. To expand the range of economic and social choices of individuals and nations such that everybody feels free from slavery and/or dependence in relation to other peoples and/or nations and also from ignorance and human misery.

1. 3. 2 Underdevelopment

Todaro (1990) states that underdevelopment is a real fact of life for more than half of the world's population - a state of mind as much as a state of national poverty. Goulet (1971) argues that underdevelopment is synonymous with squalor, underemployment, low income, poor housing, premature mortality, disease, unnecessary deaths and hopelessness. He also believes that only those who have personally experienced the 'culture of poverty' can speak objectively about underdevelopment.

Components for underdevelopment

Todaro (1990) introduces three components for underdevelopment:

- low levels of income;
- low self-esteem; and
- limited freedom.

He also argues that economic issues impinge on all aspects of life while important non-economic factors, such as: institutions, attitudes toward self-esteem, freedom and similar values, are also vital components of the determinants of level of living. He adds that it is impossible to separate economic from non-economic phenomena when dealing with real world development problems but, in order to understand the

concepts and processes of underdevelopment, we can examine the three components' interrelationships: low levels of living (insufficient education, health care and other social services) are all related in one form or another to low incomes which result from the low average productivity of the labour force. Low labour force productivity can result from a variety of factors, including education, health, nutrition and work attitudes, high population growth and high unemployment, inadequate skills and poor managerial talents. Moreover, low incomes lead to low savings which restrict human self-esteem, human choice and human freedom.

This discussion is very similar to Lewis' (1963:420) view regarding the relationship between level of income and freedom. He believes that the advantage of wealth does not just increase happiness, it also increases the range of human choice and freedom to choose greater leisure, to have more goods and services and generally greater control over natural and physical environments (e.g., through the production of food, clothing and shelter).

1.3.3 Integrated rural development

The UN's Administrative Committee on Co-ordination (ACC) has described integrated rural development (IRD) as follows:

> A primary objective should be to improve the quality of life of the rural poor. This implies the involvement of the rural poor in the development process and requires their participation in the decision-making process and the implementation of those decisions. It presupposes that the rural poor will gain increased economic opportunities through productive and remunerative employment, increased access to resources and an equitable distribution of income and wealth. The mobilization of the energies and resources of the rural poor themselves emerges as the key factor in increasing both their productivity and their self-reliance. Such mobilization requires the formation, adaptation and strengthening of community structures, including organisations of the rural poor. Special attention should be given to the situation of women to enable them to contribute their full potential in improving the quality of life of all the rural poor, for the present and future generations. Basic services for the most vulnerable groups, among them children, should also form part of community based rural development programmes and

> can in fact be regarded as a starting point for them. (United Nations Administrative Committee on Co-ordination, Report on Integrated Rural Development, New York, 1977.)

Other agencies under the UN have expressed similar views on what IRD should do. WHO and UNICEF, which are interested primarily in the delivery of basic services, have emphasised the involvement of the local community in diagnosing problems and deciding on priorities. The key relationship between poverty, general economic and social development, and problems of health, education, nutrition and family care are also recognised. FAO advocates a systems approach which would pursue growth and equity objectives within a single development strategy. The World Bank describes rural development as a strategy designed to improve the economic and social life of a specific group of people - the rural poor - by raising their output and incomes. Stress is put on rural development as a process of socio-economic transformation that is semiautonomous. Integration of the low income groups in the production process, co-ordination of the different government departments and institution-building activities are all part of the concept (Misra *et al.*, 1978).

1.3.4 Integrated rural-urban development

The World Commission on Environment and Development (1987:114) suggests that "The process of development generally leads to the gradual integration of local communities into a larger social and economic framework." Therefore, rural and urban communities also follow this process and mobilise and allocate their resources and capabilities concomitantly. The process also allows the people in the two communities to participate more effectively in productive activities and to obtain greater benefits from the promotion of reciprocal rural-urban relations and linkages.

Integrated rural-urban development, therefore, refers to the processes of change, particularly of a structural nature, towards the enhancement of people's socio-economic welfare and the average individual's scope for self-fulfilment. It involves the transformation of both urban and rural societies' through their institutions, organisations, social rules, customary usages and attitudes - to an extent that makes the society more and more positively responsive to socially desired modern changes. This type of development seems to imply not only rural-urban economic growth but also qualitative and quantitative changes in the quality of life of the average individual.

This viewpoint implicitly puts considerable emphasis on equity considerations. The issue of social justice is one that is naturally reflected in the socio-economic transformation taking place in society. In other words, the concept of 'integrated rural-urban development' requires that there must be social justice in the distribution of jobs, services and the benefits of the society's socio-economic transformation.

Rondinelli and Ruddle (1978:v) contend that concomitant or integrated development brings equitable growth, they define it as the:

> ... expansion of participation in economic activities through the creation of social and economic systems that bring larger numbers of people into processes of production, exchange and consumption, that involve greater numbers in entrepreneurship and employment, that increase levels of income for the poorest groups and reduce disparities between rich and poor so that a larger majority of people can obtain basic goods, save and invest, and gain access to services necessary to enrich the quality of their lives.

1.3.5 Social justice and social equity

According to Harvey (1973) social justice is a particular application of just principles for individual advancement in the society. In the context of rural-urban

development, the principle of social justice relates to the social and institutional arrangements associated with the activity of production - goods and services - and distribution. Social justice is meaningful when it is distributed and practised all over the country and considers both merit and need among other criteria. In other words, it does not only require that better-qualified and more heavily-tasked individuals should have greater claims, it also demands that, since individuals as free citizens or inhabitants of a country have rights to equal levels of benefit, there should be an unequal allocation according to need.

Within the present context, this issue of social equity must also be viewed in a 'spatial context'. On the basis of the spatial variations in the distribution of any country's endowments and environmental problems, there is - for practical purposes of ensuring meaningful integrated development - the need to realise a geographical distribution of merit and need. There is a need to determine what types of 'needs' and 'merit' are to be taken care of and where. There is also the need to devise ways of determining levels of attainment when such need is being provided for in the process of implementing rural-urban integrated development plans. Doing this among other things helps to ensure greater consistency in national development programs as a whole. Merit can also be translated in a spatial context as in the allocation of extra resources to cope with social or natural inadequacies or constraints which affect socio-economic welfare and the quality of life.

1.3.6 Socio-economic welfare

Socio-economic welfare as translated from Mojab (1989:7) refers to social and economic conditions satisfactory to the well-being of the person or group of persons affected. Within the wider meaning of the term welfare, the socio-economic aspect has particular importance in the developing countries context of

meaningful development. Under that subset may be included social and political status, especially in the terms of human rights and level of political participation, of accessibility to social services - health, education, water supply, transport and recreational facilities, etc; income and purchasing power; and accessibility to basic necessities of life such as food, shelter and clothing - whether from within the formal economy or through the household / informal economy.

1.3.7 Quality of life

Quality of life is a complex social phenomenon which may be simply referred to as the individual's state of life which is reflected in their levels of needs and satisfaction in regard to their environment. It is the environment that provides the reference point as well as the yardstick for the individual's evaluation of their quality of life (Dalkey and Rourke, 1973:93).

Since such environmental influences generally vary from person to person, and from one society to another, quality of life levels also varies. According to Dalkey and Rourke (1973:94) 'quality of life' means a person's sense of well-being, the person's satisfaction or dissatisfaction with life or happiness or unhappiness.

1.3.8 Socio-economic indicators of development

Development in a national context is shown to involve processes of change leading ultimately to society's welfare reflected in the enhanced quality of life of its members. The society's welfare seen in socio-economic terms, as Mavaddat (1992:33) argues, must be capable of reflecting levels of the community members' satisfaction with conditions related to their economic and social status, their basic human rights and their access to all that they need in order to move closer to, if not attain, self-fulfilment.

Socio-economic indicators of development must be seen in terms of such levels of satisfaction with those elements. To find a way for these levels to be determinable, the elements must be in a form such that they can be directly observed or indirectly determined through interviews or the use of other similar measures. Therefore, on the basis of developing countries situation, the following may be considered as major socio-economic indicators of development:

a) literacy;
b) access to health facilities and information, including family planning;
c) possession of good health;
d) access to basic social and economic infrastructures;
e) participation in group decision-making affecting work and leisure - through joint ownership of society's important means of production;
f) possession of technical skill;
g) opportunity for improvement in real income and purchasing power;
h) increase in life expectancy at birth; and
i) increasing awareness of social justice.

(Mavaddat, 1992:39)

1. 4 CONCLUSIONS

Equitable growth and development in any nation is meaningful when the majority of people can actively participate in the processes of production, exchange and consumption. In such a society both rural and urban people can be equally involved in entrepreneurship and employment and increase their levels of income and welfare. Furthermore, a greater majority of people can obtain basic goods, save and invest, and gain access to services and facilities which are necessary to fulfil their needs and to enrich the quality of their lives.

To achieve this type of development, the developing nations' planners and policy-makers should search for those theories and approaches of development that can reduce the disparities between rich and poor people and also between rural and urban communities; expand the capacity of public and private organisations, rural

and urban regions, large and small firms all over the country at a reasonably regular rate; stimulate the use of potentially productive resources, adapt appropriate technologies and institutions to traditional as well as modern communities; transform subsistent agricultural and rural sectors into employment- and income-generating elements of the national economy and provide adequate social services and facilities not only to satisfy basic human needs but also to develop productive capacity and human potential.

Therefore, those theories which once sought rapid growth in GNP through large-scale, capital-intensive, export-orientated, urban-based industrialisation which were guided and controlled through centrally-formulated, macroeconomic models, are no longer suitable for developing countries.

Integrated rural-urban development on the basis of rural-urban mutual socio-economic activities by the provision of basic services and facilities and equal opportunities through spatial hierarchies of settlements may be a useful combination of strategies in achieving more balanced growth and sustainable development in developing countries. Different countries have different experiences in practising a number of development strategies. These experiences should be used as valuable lessons in developing nations throughout various processes of development.

The more the planners and policy-makers in the developing world know about rural-urban, socio-economic situations in the world, the better they can guide their nations towards the development path. **Chapter II** provides a wide range of information on contemporary, rural-urban, socio-economic situations in both developed and developing nations and introduces a number of appropriate policies and strategies for rural development in developing countries.

CHAPTER II

THE RURAL AND URBAN DEVELOPMENT CONTEXT

> The truth is that the rural and urban problems cannot be separated and separately treated. Urban poverty, for instance, has roots in rural poverty, ... (Lo, 1981:2).

2.1 BACKGROUND

The rural sector in both developed and developing countries of the world can potentially and practically play a very significant role in the process of national development. Rural areas are generally the providers of food and primary industries. In Australia, for instance, Sher and Sher (1994) contend that rural Australia is: the source of food self-sufficiency for the entire nation; the wellspring of national self-sufficiency in terms of virtually all other raw materials and natural resources and the cornerstone of Australia's export economy. Behrouzian (1992) states that rural Iran is the foundation of a high share (33% in 1990) of the nation's productive activities; source of food and natural resources and the location of renewal and recreation for many Iranians.

In developed countries, due to higher living standards, rural people generally live in better conditions in comparison with their counterparts in developing countries. The rural sector is regarded as an important element in the national economy whereas, in many developing countries, the rural sector is not treated with the same importance as the urban sector such that, in most development plans, priority is nearly always given to urban projects. Danda (1984) argues that in almost all of the developing countries, treating rural areas as "urban colonies" and

practising "urban bias policies" is very commonplace. Indeed, rural communities in these countries are invariably dominated by urban societies. Clearly, such a condition has a very significant effect on the pattern of economic growth and development processes. The accumulation of all types of resources and facilities in urban areas leaves very little for rural regions, therefore, rural communities remain underprivileged.

Lack of basic services and facilities, hard work, low income, feelings of being exploited and the generally poor standard of living are but a few of the negative features of rural life. Many villagers have found migration to the cities the simplest way to escape from the adverse conditions of rural life. This is one of the reasons why the flow of rural-to-urban migration has increased very rapidly during the past two decades.

It is generally perceived that one of the results of such rapid migrations has been rural backwardness and the emergence of primate cities. The experiences of large cities such as: Bombay, Dacca, Delhi, Jakarta and Tehran, for example, manifesting the well-known range of urban problems - overpopulation, unemployment, pollution, traffic congestion, urban sprawl and many other socio-economic and environmental problems - prove the disadvantages of practising these policies. These realities illustrate the very dire need to find the most suitable and appropriate method of decreasing or alleviating rural-urban, socio-economic inequalities and disparities in developing countries.

Finding the appropriate strategies and models in this regard is rather difficult due to the lack of enough sources and research materials. Many researchers and writers in the area of planning and development have concentrated on either rural development or urban development, treating them as separate issues. Few have considered the concomitant or collateral balanced development and equitable

growth of the two foci of development, 'urban and rural' communities (Potter and Unwin, 1989).

Even in the few developing countries where the role of the rural sector is well appreciated, there still remains a wide gap between rural and urban communities in regard to the availability of infrastructure, services, facilities and job opportunities. Both public and private authorities still deal with rural and urban sectors as entirely dichotomous categories whereas, in reality, they are "two sides of the same coin" (Potter and Unwin, 1989).

Treating rural and urban communities as "two sides of the same coin" seems to be one of the fundamental reasons for rural development and rural-urban equitable growth in developed countries. This is a very important and vital type of attitude, vision and philosophy that should be accepted and believed by both people and governments in developing countries if they really want to save their countries from backwardness and inequalities and, as a result, reach a similar state of rural-urban balanced growth and development as developed countries.

2. 2 RURAL-URBAN DISPARITIES

One of the most serious problems in almost all developing countries is that of rural-urban inequalities and disparities. In Iran, for example, Sharbatoghlie (1991) argues that rural-urban disparities increased because of the very poor living conditions in the countryside relative to the major metropolitan centres. Rural communities nearly everywhere tend to lag behind urban societies in regard to the lack of services and facilities, especially the secondary and tertiary ones. This situation to some extent may stem from the nature and character as well as the function of these communities.

However, this cannot be a good excuse for national governments to ignore rural communities. Rural people, especially in developing countries, have to work hard from sunrise to sunset to produce food for the whole nation while, in most cases, their efforts have gone unappreciated.

Living conditions in rural communities are very different from those of the urban societies in developing countries. In most instances, the capital city and a few other big cities are the main centres of socio-economic and political activities. The rest of the country consists of small towns and villages which are far behind the flow of development.

The gap between cities and villages in developing countries is so wide that the people of these communities cannot even communicate with each other properly. Each has its own style, frame and standard of living. Rural life used to be very simple and primitive, and far from most types of basic services and facilities. Life is much more comfortable in the cities despite such drawbacks as air pollution and population congestion. At least the residents have access to their needed services and facilities.

This rural-urban disparity seems to be the basis of 'rural backwardness' and rural-urban dualities. These dualities are of different types: geographical, technological, economic (market, investment) administrative, socio-cultural (level of information and information services, level of education, literacy ratio, etc.). In addition, the availability of infrastructure in urban areas and lack of it in rural areas is another cause of duality.

Each of these factors may play a very important role in the development process, although it may not be possible or desirable to change the geographical or natural by human intervention. However, most of the important factors that are

known as the basis of rural-urban disparities are socio-economic ones that can be changed positively with the help of government, the private sector and the participation of the local people.

The present situation in most developing countries is that large cities become larger and larger at the price of small towns and rural communities. In fact, each city and small town or village has its own specific problems. These specific characteristics bring to mind a hostile environment for the cities and feelings of isolation by the villages. Overpopulation, low security, unemployment, a high incidence of crime and deviant behaviour, air pollution, urban sprawl and the emergence of slum areas, are some of the by-products of large cities. While shortages in both public and private services and facilities due to the low threshold population for the provision of those services, a boring environment as a result of very limited socio-cultural and economic relations and activities, and the sameness of everyday life are some of the negative features of small communities.

Another disadvantage of small communities in most developing countries is that, due to the lack of technology, infrastructure, skills and markets, rural resources cannot be utilised and changed to processed goods and commodities in these communities. Resources in the shape of raw materials are transferred to urban areas for processing, thus generating urban development. The rural areas that provide the raw materials usually do not share in this development and remain backward. Myrdal (1957), Danda (1984) and Todaro (1990) refer to this process as the 'inter-colonial relationship' between urban and rural communities in developing countries.

However, a few developing countries have been able to establish a 'mutual relationship' between their rural and urban communities. Bowen (pers. comm., 1993) observed this type of relationship in Chinese societies. As a developing

country, China has been able to establish small industries in most villages and rural settlements on the basis of population numbers and other regional criteria. Therefore, different types of goods and commodities are processed in these areas - the same areas that produce the raw materials - and are then sent to domestic or foreign markets. In rural communities, just like in urban societies, every able body except the very old or crippled is expected to work. Children go to kindergarten or school and adults go to work from 7:30a.m. to 4:30p.m. Whereas many rural people are unemployed in other developing nations, such as in some of the African countries, for example, in rural China everybody participates in one way or another in their community's productive activities. Hence, both rural and urban people have access to their basic needs. The communes which are supported equally by the government are responsible for delivering services and facilities almost everywhere therefore, people do not need to migrate to the big cities in search of a more suitable life; a phenomenon that can be seen in the majority of developing countries.

Chinese villages are not small and scattered, they are usually quite large both in size and population (Figures 5 and 6). They contain populations of about 10,000 with almost all the facilities and services that are expected to be found in any medium-sized city. People in both rural and urban communities feel that they have equal rights, prestige and opportunities. These are some of the reasons why the relationship between rural and urban communities is of mutual or reciprocal type and not 'colonial'. In fact, China has been very successful in passing through the process of rural-urban equitable growth and balanced development (Bowen, pers. comm., 1993).

Figure 5: A Chinese village.

Figure 6: A perspective of a Chinese village.

Source: Photographs taken by Wilf Bowen of a village near Beijing, China. Spring, 1991.

In contrast with China, many developing countries do not have specific and well-prepared, long-term national plans and policies towards developing optimum-sized settlements for achieving equitable growth and national balanced development. The optimum size for human settlement is still not well-defined, but each country should have some general criteria to determine thresholds for the provision of services and infrastructure in an area such that each settlement can have its own services, facilities and productive activities. In that case the utilisation of resources and potential will be possible in any community instead of their transferring to the large cities. In other words, each community should stand on its own feet rather than be dependent upon others - particularly on the primate cities which are always ready to attract resources from smaller communities.

In the majority of developing countries the relationship between urban and rural communities remains 'colonial'. From 50% to 80% of the population live in rural areas.[1] Because of the shortage of services and facilities, particularly medical care and tertiary education, many villagers have to go to the cities to fulfil most of their needs. This is not easily accomplished because there are no good roads and insufficient means of transportation. The presence of these negative features in rural areas acts as a strong 'push factor' in the process of rural-to-urban migration. The 'pull factor' of the cities, because of the availability of services and facilities and the possibility of job opportunities, accelerates the rate of migration which has resulted in overpopulated cities and many empty villages.

Other related problems are the emergence of slum areas on the fringe of big cities and unemployment. Most of the migrants are illiterate, non-skilled workers who have left their agricultural jobs to go in search of new ones. The cities need only a limited number of skilled workers therefore, the only alternative for the

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1 *Population Headliners*, No. 214, January 1993, p.1.

unskilled may be to buy and sell cigarettes, chewing gum and similar to be able to get some money for food and shelter. In most developing countries one can see these people moving and shouting everywhere, they even move between cars on the streets to find customers among the drivers and passengers. This is a unique feature of daily life in the big cities; a feature which reveals many bitter facts that result in chaos, poor management, lack of control systems, socio-economic inequalities, and certain negative aspects and behaviour in these societies.

2.3 RURAL AREAS OF THE WORLD

A great proportion of the world's population live in rural areas - 56.4% in 1990 and expected to reduce to 51.8% by year 2000 - (Table 3).

Table 3: Rural and urban populations, estimates for 1980, 1985, 1990 and 2000 (in millions), more and less developed regions.

Location	Rural				Urban			
Year	1980	1985	1990	2000	1980	1985	1990	2000
More developed regions	334	324	311	284	802	849	906	992
Less developed regions	2343	2505	2651	2892	974	1164	1383	1959
World population	2677	2829	2962	3176	1776	2013	2289	2951
Percentage	60.1	58.4	56.4	51.8	39.9	41.6	43.6	48.2

Source: Derived from United Nations' Demographic Year Books, 1986 and 1991.

Agriculture, forestry and animal husbandry are the dominant activities and modes of production in rural communities, which form the backbone of the agricultural sector, as well as some small industries and income-earning handicrafts which contribute significantly to the economy of both developing and developed countries. Rural communities also play an increasingly important role in manufacturing, trade and service economy and provide most of any nation's food

and account for a large proportion of the nation's domestic mineral and energy supply.

Ironically, as Mathoura (1982), Lonsdale and Enyedi (1984) and Lahsaeizadeh (1993) argue, rural people - in most parts of the world - are generally disadvantaged because of distance and isolation which result in a lack of choice and limited access to many facilities and services such as: health care and medical services, public transportation, schools, telephone, post offices, shopping centres, recreational areas and entertainment facilities etc. Many rural areas do not have even the basic infrastructure prerequisite for delivering any kind of public service: electricity, water, good roads and so forth. The dramatic decline in the rural population of the world, which is estimated to be 4.6% in the ten years from 1990 to 2000 (Table 3), may be because of the fact that rural areas, particularly those in the less developed regions, can neither fulfil the needs of their populations nor their expectations and as a result many rural people choose to migrate to the cities to satisfy their needs and, hopefully, realise their expectations.

2.4 RURAL AREAS IN DEVELOPED COUNTRIES

In general, rural people in developed countries are in much better condition and have fewer problems compared with those in developing countries. In almost all developed countries, most of the essential services and facilities exist either in rural areas and villages or are within their proximity (Hardoy and Satterthwaite, 1986). The presence of good infrastructure and the availability of public and private transportation facilities throughout the advanced countries enable villagers and farmers to travel to the nearest town or city in a very short time to have access to any kind of services and facilities that they may need.

The majority of the population of developed countries lives in urban areas; in 1990 the figure was 74.4%. Based on the UN's estimation this figure will increase to 77.8% by the year 2000 (Table 3). The small proportion (25.6% in 1990 and estimated to be 22.2% by 2000) who live in rural areas have fully mechanised farms and their income is sufficient for them to live in a good and satisfactory condition; especially since, in some circumstances, they are supported by governmental or non-governmental aid.

In countries such as Australia and the U.S., for instance, patients in remote areas are served free of charge by flying doctor services. In the U.K. patients who are not close to some form of health service can be served by helicopters which are frequently used to air lift urgent medical cases to suitable hospitals (e.g., maternity and accidents at sea).

As Horner and Reeve (1991) mention in their report, the U.S., the U.K. and many European countries, specifically Denmark, Finland, Norway and Sweden have linked their rural and urban communities with a system named Telecottage. By providing such telecommunication technology these countries have been able to overcome many of the traditional handicaps suffered by rural and remote communities. Telecottage has enabled these communities to participate fully in the new information society which is emerging around the globe. At the local government level in the U.K., for example, Taylor and Williams (1989) contend that telematics will play a vital role in restoring local government as an institution by enabling it to effectively provide a wider range of services and by enabling it to be more responsive to the needs of local communities. A recent study by Community Technology (1989:6-9) in Australia also emphasised that telematics will have a major role to play in the provision of information about services at the local community level.

In fact, rural-urban mutual development has been an accepted strategy in the developed countries and has been implemented there as the cornerstone of their sustainable, equitable and balanced national growth and development. Planners and policy-makers in the developed world believe that improved conditions in rural areas will reduce rural-urban disparities and consequently encourage rural people to continue their productive activities. In this way they support urban areas by providing them with food to maintain and/or generate development that is sustainable.

> Urban development cannot be sustainable unless the production of food for its inhabitants is sustainable. Globally the food production system must be able to continually feed the urban population. However, in 'developed' countries the nature of the production system is the current priority. An ecologically sustainable agricultural system in the hinterland of the city is of great importance. Sustainable urban development must increase rather than reduce the integration of the city with the surrounding countryside as a hinterland which produces food for it, ... (Elkin *et al.*, 1991:141)

2.5 RURAL AREAS IN DEVELOPING COUNTRIES

Most rural communities live in poverty. Their standards of living are invariably much lower than those of rural settlements in developed countries. In 1990 more than 76.2% of the population of the world lived in developing countries. This ratio will increase to 79% by the year 2000, 60% of them will be living in rural areas (Table 3). Jones (1990:1) states that, in some of these countries, "Millions die from preventable diseases or starvation, while many of those who survive remain malnourished and illiterate for the rest of their lives."

Developing nations share common characteristics that keep their people poor: high population growth, low levels of health and education, a dearth of services to meet basic human needs, particularly in their rural communities. Most of these nations are land-locked, relatively isolated and have few exploitable resources.

Their physical infrastructure is not adequate for sustaining productive activities. They have poor records of saving and investment and low levels of productivity. Their export earnings are almost always less than their import expenses. Therefore, because of their balance-of-payment problems the ability of their economy reduces. This is one of the reasons why these countries cannot raise the capital needed for investment in social services and production. Weak governments, disorganised and fragmented internal markets, lack of efficient and clear land-use planning and land-tenure systems, the scarcity of skilled workers, capital and credit are the most consistent drawbacks in these nations (Rondinelli and Ruddle, 1978).

Rural areas, like so many other areas of life in these countries, have their own intransigent social and economic problems. Indeed, the majority of the people live where there exist neither good roads nor adequate transportation facilities for the villagers to have access to their essential needs in the nearest towns or cities.

The social, economic and political gap between these areas and urban areas is so wide that many villagers have to migrate to the cities hoping to have access to urban services and facilities and better job opportunities. These migrants are often the most productive people in their villages, because they are nearly always above average in education, skill and motivation. By their migration they drain the rural areas of productive capacity, while their rewards in the cities usually only sustain life in slum areas. This enforced rural-to-urban migration over the past 25 years has already brought about a high concentration of the poor in cities, and a corresponding increase in the need for basic urban services.

Todaro (1990:275-276) points out that, because of urban bias policies, rural-urban disparities have been increasing very rapidly since 1960. He adds that "These differences have served to generate heightening rural-metropolitan

migration and, in this process, growing slum and squatter settlements in the big cities."

People, regardless of their location, need basic services and facilities and governments are responsible for delivering them. Despite this knowledge, governments and policy-makers in many of the developing countries make no effort to provide these basic services and facilities in small towns, rural and more dispersed areas which would create job opportunities as well as reduce the unreasonable rural-to-urban migration. Some of these governments are usually very slow to react in so far that they wait for the formation of slums and the emergence of their related problems before taking action, while the situation could easily be avoided by observing the maxim 'prevention is better than cure'. In other words, instead of extending infrastructure and public services and facilities into the sprawling slums (which is very expensive because of the high cost of land in urban areas), it would be more logical to provide these services for the deprived people in rural areas thus encouraging them to remain and continue working on their lands.

2.6 RURAL AREAS IN IRAN

> A disproportionate number of poor are still located in the underdeveloped rural areas where benefits of growth have not yet trickled down to them. Faced with a declining standard of living, the disadvantaged and disenchanted rural populations have been abandoning their homes and seeking relief in the large urban centers. (Sharbatoghlie, 1991:88)

Approximately half (30 million) of the population of Iran is rural, living in 65,000 settlements scattered all over the country. The number of people in these communities ranges from 15 to 20 persons up to three or four thousand. These areas lag behind with regard to most public services and socio-economic opportunities. Therefore, villagers go to the cities in search of better jobs and have access to services and facilities, especially medical and health care. They have to

spend a great deal of money there to fulfil their needs, whereas this money (which is the villagers' value added) should be spent in their own settlements to maintain rural development and improve the general living conditions in those areas. This mechanism transfers or pulls a great part of the income of rural people to urban areas, and gradually makes the villagers poorer and poorer.

In spite of the efforts of the government in bringing about social equity, the problem of rural-urban disparities and rural-urban 'inter-colonial relationship' of the last regime still remains.

> After the revolution, despite a relative improvement in the living conditions in rural areas, the Iranian villages still contain a high proportion of very poor people, are provided with a minimum of social services and infrastructure facilities, and offer little in the way of well-remunerated work. Although, the post-revolutionary government has elevated the place of agriculture in the national economy and embarked on a number of rural development programs, so long as the major urban areas serve as the centers of political, administrative, and economic power, the spatial disparities will continue to grow. (Sharbatoghlie, 1991:104)

In fact, the state of duality and urban-rural colonial relationship seems to be a unique phenomenon in the majority of developing countries. Danda (1984) argues that in the urban-rural relationship of developing countries in general, the spirit of complementarity is not as much a reality as is the spirit of exploitation. The rural communities notwithstanding being the traditional suppliers of food to the cities have been relegated to a sort of inter-colonial status as they receive very little in return for their efforts. Therefore, it is largely at their cost that the cities of developing nations expand and grow.

Wealth generated by the rural people is being syphoned off to the cities, while the villagers suffer from extreme poverty. Thus, the cities with their growth and prosperity appear as isolated islands having little mutuality in their relationship with their rural neighbourhoods. As a result, the organic relationship between these two

components continues to become gradually weaker, changing from mutual to one sided (rural-to-urban) or eventually colonial. This issue will be discussed in Chapter III.

2.7 RURAL BACKWARDNESS IN IRAN AND OTHER DEVELOPING COUNTRIES

It is generally perceived that the main reason for the backwardness of rural areas in Iran and other developing countries is the lack of a well-developed system to bring about a mutual relationship between rural and urban areas. Cities are the places for social change, economic development, the seat of government, and where large corporations make important decisions. They are also the centres of all sorts of organisations and institutions with a very wide and diversified range of activities. Having no close relationship with these centres means to be far from the flow of dynamic life. Rural areas in most developing countries have been far from this flow for many reasons. The most important ones are:

1. The increasing social, economic and administrative gap

In developing countries it has been accepted as a general rule that cities had the role of leadership and rural areas were the followers. On the basis of this philosophy, the gap between the two gradually widens. Urban residents, particularly those who live in capital cities, seem to think that they have been created to be served by others, especially rural people. They appear to believe that it is their natural right to take advantage of the different services and facilities of the cities. In their opinion, it is the predetermined duty of rural people to work very hard on their lands to produce food for city dwellers. They also resent rural people coming to the urban areas thereby swelling the population which disturbs their hereditary comfort.

2. Urban bias policies and rural-urban problems

Lipton (1977:12-14) argues that the reason why poor people in developing countries stay poor is as follows: small interlocking urban elites comprising businessmen, politicians, bureaucrats, trade-union leaders and a supporting staff of professionals, academics and intellectuals can control the distribution of resources and allocate them to the cities. The cities want to receive, preferably cheap, surpluses from the rural areas: surpluses of food; surpluses of savings over rural investment; surpluses of exportables over imports, to provide foreign exchange for industrial development; surpluses of 'human capital', in the form of rural-born doctors, teachers, engineers and administrators, as children brought up largely at rural expense, but as adults serving largely urban needs.

Although rural people in developing countries have recently been trying to convince their governments to confine the implementation of urban bias policies, they have not been very successful in challenging and changing the situation substantially. In an interview the writer undertook with villagers of Lahore province, Pakistan, in 1988, they complained about their lack of rights and believed that most of the national resources were allocated to the cities, and that the urban bias policies practised by the provincial and national governments limited development potential and constrained the equitable spread of resources to rural areas.

3. Inappropriate utilisation of resources (human, capital and natural) in rural areas

Rural areas in Iran and many other developing countries usually employ primitive techniques and methods for the allocation and utilisation of their resources, while cities are the places with various and more modern technologies.

This condition seems to be the basis for the transmission of different types of resources from rural regions to the cities. It means that farmers have to send most of their products in the shape of raw materials to the cities, receiving low prices for them. These will then be processed in the different factories and then sold at high prices in the market. Therefore, those who run the factories and food-processing industries receive the profit, not the farmers. If the same modern processing factories existed in the rural areas, the villagers could process and pack their own products then sell them in the cities' at higher prices.

4. The existence of a state of inter-colonial relationship between urban and rural communities.

Lipton (1977:13) believes that the power of urban people is such that they are able to direct a disproportionate share of resources towards their own interests and away from rural people. Iran is a good example, human resources are transferred by rural to urban migration; capital resources are transferred by (a) the purchasing of different types of services by rural people from cities, and (b) the difference in the prices of agricultural products between urban and rural areas. This difference is sometimes as much as four times (meaning that the price of agricultural products in rural areas is more than four times less expensive than in urban areas). Natural resources, such as land, also go out of the hands of the villagers by urban-bias policies when the land-use pattern is changed (very good and fertile lands in the countryside become the sites for urban development). Iran demonstrated a clear picture of rural-urban exploitation or rural-urban inter-colonial relationship prior to the Iranian Islamic revolution of 1978.

> In twentieth-century Iran, the relationships between rural and urban areas is one of dominance and exploitation, whereby, the large and powerful cities drain the villagers from some of their most productive labor force and entrepreneurs [*sic*]. In the pre-revolutionary period, the government pursued industrialisation policies at the expense of agricultural decline and rural

> underdevelopment. The living conditions in rural areas relative to urban areas deteriorated. Urban areas gained unprecedented powers and expanded rapidly. However, rural areas became comparatively disadvantaged as the prices of domestic agriculture commodities lagged behind the industrial products and activities in the service sector [*sic*]. (Sharbatoghlie, 1991:103)

5. Differences in the level of information and knowledge between rural and urban areas

Urban dwellers, especially the elite, have access to a lot of information and hence have more knowledge about the allocation and utilisation of resources which enables them to take advantage of the opportunities and possibilities in their communities and their surroundings, while rural people do not have such broad information. Rural people are not even aware of the real value of their handicrafts and sell them at very low prices to intermediate dealers who know where to send the items so that they make up to ten times profit on them, especially by exporting them to Western markets. Rodger (pers. comm., 1992) commented that a simple worker who collects gum on Afghanistan's hills and mountains - and then sells it very cheaply to middlemen - does not know that what he collects is the main raw material for some factories in France which manufacture various products for the world's markets.

6. Lack of co-operation and harmony among the decision-makers

In the majority of developing countries the relationship between local authorities and/or planners and policy-makers at state and national levels is so weak that many of the different processes of planning are repeated. It is also a common phenomenon that many decisions made by local authorities are rejected by the state or some of the decisions that are made by the state - in the absence of local authorities - cannot be adopted by the small communities because of the inadequate

interrelationship between the decision-makers at the two levels. Such chaos creates pessimism and a lack of confidence in the minds of the people in small communities and misunderstanding and wrong judgments about villagers by the city dwellers.

2.8 RURAL-TO-URBAN MIGRATION

In developed countries when agricultural production increases and becomes more efficient, larger harvests can be produced with less labour. Even in those places that have labour-intensive instead of mechanised farming, the agricultural land is limited, therefore, excess agricultural workers move to towns and cities in search of new employment. Here, two other factors, the 'push factor' from rural areas which is supplemented by the 'pull factor' of cities - especially because of the ever-growing manufacturing demand for labour - also have very important roles.

In developing countries, the 'push factor' is stronger because of inadequate services, facilities, job opportunities and the existence of subsistence farming. Lipton (1977) states that, for many developing countries, urban earnings are at least twice as much as rural earnings and, in most cases (e.g., Tanzania), the gap is widening.

In most developing countries, it is typical for large numbers of rural people to work for a few landlords for very low wages. In some Latin American countries the landowners give small pieces of land to the peasants who work for them for their own use, but still these peasants cannot afford the expenses of their lives and eventually find migration to the cities the best way to solve their problems. In Iran farmers are more independent and usually each owns a plot of land which in most cases can support the family. However, inadequate basic services and facilities and infrastructure make rural life in Iran very difficult particularly for the young when

they compare their living conditions with those of urban areas. Many village children who are sent temporarily to urban areas for schooling become used to the urban life and decide to live there permanently. Therefore, one of the significant rural 'push factors' is the lack of educational facilities. Rural people are very much concerned about the future of their children. They are aware that education is one of the best means of escaping from poverty to achieve a good job and a comfortable life. Inadequate health care and medical services, water supply, electricity, transportation facilities, and primitive means of production and marketing of agricultural goods, are all factors which discourage people from staying in their villages.

Beside the above socio-economic and physical factors there are other motives for rural-to-urban migration. When villagers realise that they are living in a small community with very limited opportunities for social interaction and cultural development, they feel socially trapped and try to save themselves by leaving their villages.

Although migration may reflect dissatisfaction with life in rural areas, cities also draw the more ambitious and talented people. Therefore, rural-to-urban migration to a certain extent is inevitable in both developed and developing countries, however, it has a different impact on the socio-economic conditions in developing countries. In developed countries most of these migrants may be able to find a job and start a comfortable life in any town or city of their choice. If they cannot find a job, their government will financially support them. In Australia, for example, unemployed people are protected by the umbrella of social security, whereas in developing countries there is no such institution or other means of supporting unemployed people thus, rural-urban migration in developing countries is nothing but the expansion of poverty to the big cities, especially the capital cities.

The overconcentration of investments and facilities in a few cities is a very strong 'pull factor' for rural people, but this type of migration creates serious problems. Without a system of reasonably-dispersed, intermediate and small-sized cities, rural migrants have nowhere to go except to the big cities which are already overcrowded. Therefore, migration that is known as a positive indicator of healthy economic change in developed countries, will have negative effects in developing countries because of the absence of a system that allows migrants to move progressively from villages to towns, to small cities, and to intermediate cities which might, in fact, permanently absorb a large percentage of them.

Developing countries need a pattern of spatial development that deconcentrates urbanisation and promotes a system of cities, towns and villages on the basis of hierarchies of settlements. Such a system could integrate rural and urban areas to achieve equitable growth through a mutually reinforcing network of development centres. These centres could also provide a very effective and efficient decentralised network for increasing access of large segments of the population to economic, social and political opportunities as well as to urban services and facilities.

2.9 THE IMPLICATIONS OF URBANISATION

Rapid growth of urban populations is one of the remarkable characteristics of socio-economic and demographic change in developing countries. Silver and Crosson (1980) mention that, since 1940, urban populations in these nations have been growing by four to six per cent annually. Much of the growth has been concentrated in principal cities such as: Beijing, Bombay, Buenos Aires, Calcutta, Karachi, Mexico City, Rio de Janeiro, Sao Paulo, Shanghai and Tehran. These are among the largest in the world and still growing at a rapid rate. In Africa, the urban

population increased by more than 4.7% a year between 1950 and 1975. At this rate population doubles each 12 to 18 years. Cheema (1988) points out that, in most developing countries, a large proportion of the urban population live in capital cities. For example, in 1986 26% of the urban population of Indonesia lived in Jakarta; in Thailand and Sri Lanka, 60% of the total urban population lived in Bangkok and Colombo, respectively. The proportion for Manila, the capital city of the Philippines, was 35% and for Tehran, the capital city of Iran, it was also 35%.

The UN's population projections for developing countries show that poor countries in Asia and, in particular, the Middle East, Latin America, the Caribbean and North Africa, are urbanising very rapidly. These countries will continue to have high rates of migration from rural areas to urban slums and squatter settlements over the next decade. This trend of rural-to-urban migration will account for up to half of the population growth of cities in most developing countries by the year 2000, exacerbating the already serious problems which exist at the present time. By the end of 2025, 61.2% of the population of developing countries in Africa, Latin America and Asia (except Japan) will live in urban areas. These places will not have the capacity in regard to: housing, electricity, water supply, basic sanitation, education, health, transportation and similar services and facilities to cope with the joining populations (UN, 1989).

The UN projects that 66%, which is about 2.2 billion of the world's urban population, will be living in developing countries by the year 2000. By the same token the large cities and metropolitan centres in these countries will continue to expand. At the end of this century more than 40 cities in developing countries are expected to have populations of five million or more and it is estimated that 20 of the world's 30 largest metropolitan areas will have huge populations as shown in Table 4.

Table 4: Estimated population change in the largest cities in developing countries between 1985 and 2000.

Cities	Pop. (millions) 1985	Pop. (millions) 2000	G.R. (%/year) 1985-2000
Mexico City	16.7	24.4	2.56
Sao Paulo	15.5	23.6	2.79
Shanghai	12.1	14.7	1.32
Buenos Aires	10.8	13.1	1.29
Calcutta	10.3	15.9	2.92
Rio de Janeiro	10.1	13	1.66
Seoul	10.1	13	1.69
Bombay	9.5	15.4	3.25
Beijing	9.3	11.5	1.38
Tianjin	8	10	1.49
Cairo	7.9	11.8	2.64
Jakarta	7.8	13.2	3.53
Tehran	7.2	13.7	4.29
Manila	7.1	11.5	3.32
Delhi	7	12.8	4.06
Karachi	6.2	11.6	4.2
Bangkok	5.9	10.3	3.73
Lagos	5.8	12.5	5.05
Lima	5.4	8.8	3.19
Dhaka	4.8	11.3	5.74

Source: United Nations, Department of International Economic and Social Affairs, Prospects of World Urbanisation (New York, 1989, Table 6).

According to Devas and Rakodi (1993:89):

> The rapid growth of urban population has obvious implications for the infrastructure and service needs of cities. The failure to expand water supplies, sanitation systems, housing supply and transportation to match the growth of population has been a prime cause of misery in the cities of the developing world. The UN ... estimates that around 30 per cent of the developing world's urban population does not have access to safe water supplies ...

Houston (1990:5-7) states:

> Presently the pressures of an unhealthy rural sector are being borne almost solely by rural communities. However, it is conceivable that this may eventually impact on metropolitan populations, not only in a direct sense by way of changes to the price, supply and quality of food and fibre resources, but also indirectly. For example a resurgence in migration from rural to urban (especially metropolitan) areas will see previous government investment in both social and physical infrastructure in rural areas made redundant, as

> well as multiplying the various housing, employment, environmental, and fiscal difficulties presently faced in most major urban centres.

The UN's Centre for Human Settlements (UNCHS), in its Global Report on Human Settlements 1986, estimated that, in most of the cities of developing countries, 40-50% of the population lived in slum settlements. For instance, the figures for Ankara, Bogota and Addis Ababa were 51%, 59% and 85%, respectively (UNCHS 1987:77). The average rate of room occupancy in urban settlements in Pakistan and Sri Lanka was 2.7 and in urban India 2.8 persons (UNCHS 1987, Table 14). In Bombay, 77% of households - with an average size of 5.3 persons - lived in one room (UNCHS 1987:77).

One of the services which fails to meet the needs of large cities in the developing countries is waste disposal. The UNCHS estimates that only about half of the solid waste is collected by the municipal authorities, the rest accumulates in water courses or on open ground thus creating an unhealthy environment. In Bombay the health situation was so bad that the crude death rate in the central area of the city was twice as high as that of the suburbs. In the low-income areas of Karachi, between 95 to 152 infants per 1,000 live births died before the age of 12 months, while in smaller cities in Pakistan the figure was 32 per 1,000 (Harpham *et al.*, 1988; Cairncross *et al.,* 1990).

2.10 THE REASONS FOR PRACTISING URBAN BIAS POLICIES IN DEVELOPING COUNTRIES

Lewis (1963) contends that the beginning of economic change in the developing countries happened when these countries sought to find an accelerated, pragmatic way to get the most advantage of the resources and possibilities in their own countries and to invest in industry as the basis of economic growth. The

scarcity of resources, techniques, skills, infrastructure, investment and other factors caused them to follow centralised development policies. Therefore, most of the economic activities are centred in the capital city and one or two other big cities where there already exists a foundation of development, such as a network of roads, communication facilities, services, skills, specialities, organisations, markets and similar elements that could not be found in other parts of the country.

The result of the implementation of these capital-intensive, urban-based policies without concern for other regions of the country was that "... small islands of progress emerged from a sea of backwardness" (Rondinelli and Ruddle, 1978:v). These policies changed the spatial setting of most of the developing countries and brought imbalanced development and regional as well as rural-urban disparities.

2.11 RURAL PEOPLE'S EXPECTATIONS

In the past, because of the lack of communication facilities, people in developing countries, especially those in rural areas, had little knowledge of the developed world. Their level of education and understanding was so low that they were not able to evaluate their real situation. They were in dire need of many basic services but believed that it was 'their fate to be poor'. They did not even think about the future, they were only concerned with the present and believed that the next day's issues should be discussed the next day. Therefore, their expectations were very limited and they accepted their subsistence life. These were some of the reasons why the past regimes of these countries did not have the many problems which exist now. Most of these nations were class-based societies in which the majority of the population was very poor and underprivileged. In those days the

governments had only to deal with the problems of a small proportion of the population living in the few existing cities.

Since the early 1960s dramatic changes have taken place in almost all of these societies. Through the modern media rural people's awareness of their deprivation has been heightened. Consequently, national uprisings of peasants - and those who superficially or in reality support the peasants' goals - have become common events. Therefore, prospects of future conflict on a global basis cannot be dismissed lightly, as differences in national wealth and welfare continue to grow (Cassen, 1982:51).

Rural people in the majority of developing countries have been awakened and are demanding a more comfortable life. Even among those who tend to be rather indifferent in thinking about modern life, their children encourage them to do so. They no longer want to be under the domination of the cities and serve them like slaves. They have discovered that they have been exploited for many years and now believe that they should be given equal rights. Just like the people of many of the colonialised countries who refused to serve the so-called super powers, rural people now understand that they have been giving without receiving for a long, long time.

In other words, rural people in developing countries have realised that if their governments were as concerned about rural communities as they were and still are about urban areas, there would not exist the present one-sided or inter-colonial relationship between the two.

Now, they have no wish to continue in the old colonial or inter-colonial style of living and would prefer to make decisions for themselves. Rural people have the best knowledge and understanding of their communities and need not rely

upon the decisions of outsiders (Goldsheider, 1984:69). They would also like to live in comfort and enjoy their lives by having good access to some of the services and facilities that are available to city dwellers. They expect their governments to help them fulfil these basic needs.

If governments in developing countries do not satisfy rural communities by meeting at least some of their essential needs, they may get their rights by force, or they may leave their villages forever. In that case there will remain neither well-developed rural areas nor beautiful cities anywhere in developing countries (Nateq, 1992:91-93). The issue of integrated rural-urban development in these nations calls for widespread political reform and change.

2.12 DEVELOPING COUNTRIES AND THE IMPACT OF POLITICAL FACTORS ON INTEGRATED RURAL-URBAN DEVELOPMENT

Because of the variety and complexity of developing countries it is beyond the scope of this research to discuss their politics in any detail. However, certain broad features that are important to the understanding of the obstacles to integrated rural-urban development in these societies will be discussed: 1) the state of inequality; 2) unsustainable development conditions; and 3) the character of the state and politics.

1. The state of inequality

A common factor in the majority of developing nations is the nature and context of social and economic inequality. Aside from a few countries whose political economies are deliberately structured to cope with this problem, most of them manifest extreme inequality inherited either from their traditional or their past colonial condition. In any case, the state of inequality has worsened with the

growth of economic development and the modernisation process (Harriss, 1982:31).

Weak leadership, poor management and the lack of socio-economic and political justice are some of the other characteristics of these nations. Everything is in the hands of a small proportion of the population who are powerful either because of their wealth, or their ascribed positions, or both. This group dictates for the rest.

Positions, opportunities, benefits and so forth are practically predetermined by a select few. There is no viable motivation for the achieved status. The oppressed people in these countries do not even defend their rights because they know that, due to the presence of corruption and discrimination, their rights are rarely achievable.

In these societies, class relations and the nature of class conflicts also vary, depending on the specific history, culture and politics of the country, and the level and type of its economic development. The most important aspects of human settlements revolve around access to certain strategic resources and basic needs. The control of these resources is in the hands of powerful groups, such as wealthy traders, manufacturers, landowners, employers and professionals. They utilise the resources of the country to benefit themselves. They do this simply through the provision of subsidised projects (e.g., less expensive housing, public services and infrastructure) to those areas which bring them more return. While, at the same time, there are many low-income settlements, especially in rural areas, that are in urgent need of any one of those services and facilities.

2. Unsustainable development conditions

The present crisis in the economic and social development in developing countries, apart from a few exceptions, is the effect of world economic recession. The recent unsustainability of the policies and strategies in developed countries has made the situation more complicated, therefore, the possibility of significant socio-economic changes is, to a large extent, tied to changes in the structure of the world system. In such a condition planning strategies for development in any developing country require more sophisticated as well as more comprehensive policies and techniques in regard to the world development path; in fact, most of the developing countries appear to be, economically, the colonies of developed ones, even though they are recognised as politically independent countries.

Any realistic appraisal of the development problems in developing countries cannot afford to ignore the question of the status and control of the national economy. It is true that, since the 1960s, the struggles of the people in many colonialised countries brought about considerable political awakening leading to independence in most parts of the world. Just in Africa, for instance, in 1959 no more than six countries enjoyed independence but, by 1966, most had become independent. However, the question that remains is, has this type of political independence brought about real social and economic change in the life of these countries? Clearly the answer will be negative in most cases. In fact, the struggle for economic independence has been going on in all developing countries whether they have been politically colonialised or not. In most the imperialist hold on society's economy remains more or less unchanged.

It is common knowledge that the economies of many developing countries are still controlled by foreign powers. In other words, the developing nations of

the world that are not economically independent are under the power of developed countries in one way or another, simply because many socio-political issues have their roots in the economy. The socio-economic conditions of the people will remain a major problem until full economic independence is attained.

The lack of indigenous technical and managerial manpower is not a problem that can be solved easily. Many developing countries cannot produce goods and commodities to compete with those of developed countries in the world markets. Therefore, they have to export their resources in the shape of raw materials at very low prices and receive manufactured goods and the technologies they need at very high prices. This is why, in spite of the continued protests against the unfairness of trade, most developing countries have not been able to find an effective way to narrow the gap.

Thus, a major concern has been how to escape from the economic trap of foreign powers. Meaningful development cannot take place until this is achieved. Countries such as Korea, Malaysia, Taiwan and, recently, Indonesia have taken a number of measures, among which are those related to the quality, level of responsibility and job prospects of their indigenous manpower.

3. The character of the state and politics

This is an important subject that has received attention from many writers (Shaw and Heard, 1979; Hambleton and Hoggett, 1984 and Todaro, 1990). What emerges include the following main features. The first has to do with the centrality of the state in the developing countries' formations: that is, the state's role and perhaps the most central institution in national development. The second is that, broadly, the state is seen as the main institution of social and economic reproduction. The third is that the state is often the forum for class interaction.

It is in relation to the nature of the state that the character of politics in many developing countries takes its form. Domestic elites and classes, and related interests from the urbanised countries often have a significant role in this. But it is the complex way in which the various forces and interests interact which gives shape to the specific forms taken by the complexity of the character of developing countries' politics. The most important features that characterise the politics of these countries are the authoritarian forms of government. These vary from absolute monarchies to military rule, and various forms of party systems.

A related feature of the tendency towards authoritarianism is the factor of increasing centralisation of decisions, concentration of power and the phenomenon of personal rule. Centralisation occurs in terms of location and source of the major decisions and activities of government. In many developing countries these are in the centre, which is often the capital city, within which there is intense concentration on economic, political, administrative and cultural activities. The rest of the urban areas and rural settlements are deprived. Centralisation and concentration exist in terms of activities and access to services and resources. In the process of government the lower levels of administration, such as state, regional and provincial governments, and municipal authorities have little importance and/or status. They are either starved of resources or have to approach the centre for every need. In these systems the people - particularly in rural areas - are treated as a marginal power.

2.13 VARIOUS POLICIES OF RURAL DEVELOPMENT IN DEVELOPING COUNTRIES

Lower mortality rates brought about by improved health care and better nutrition since W.W.II have led to dramatic increases in population in most developing countries. As noted earlier, this has been accompanied by increased job

opportunities in the cities and low standards of living in the rural areas, leading to a very rapid increase in urbanisation as migrants move into the cities.

This rural-to-urban migration has been related to the policies of modernisation and industrialisation that have been followed. In these countries, as much of the developmental efforts have been concentrated in urban areas, the rural areas have been neglected. To redress this 'urban bias' a suitable and practical method should be found to enhance the quality of life in rural areas, reduce rural-urban migration and stabilise rural populations. Over the years, numerous rural development policies have been advocated with some success. Most have been multi-sectoral in character in that the impact of each measure is expected to be felt in all aspects of rural life. However, it is possible to categorise the various policy measures in terms of their primary objectives.

As the present study is largely based on a longitudinal and action research which covered most of these policies, plans and implementation stages but to a lesser degree, it might be useful at this point to explain the different types of rural development policies in developing countries. They can be classified as those designed primarily to improve socio-economic conditions and those which are physical in character. Obviously, there is considerable overlapping between these policies. For example, socio-economic measures usually lead to the implementation of physical projects and *vice versa.*

The measures which are directed at physical development are categorised as those which deal with settlement planning, those which concentrate on the development of infrastructure, and those which deal with housing and shelter. Each of these is divided into different branches to produce various areas of intervention within the general category of physical improvements. These include such measures

as those which are used for economic production reasons; those aimed at improving access and infrastructure; and those which are used to provide housing.

2.13.1 Socio-economic development policies

These focus on the socio-economic rather than the physical improvement of rural areas - although the two are related, each brings about changes in the other. They themselves are divided into organisational and agricultural.

1) Organisational

These are policies that are intended to contribute to rural development by introducing new, improved and more efficient organisation of rural areas. They include community development programs and integrated rural development strategies which are designed to improve rural communities by providing more effective leadership and more effective organisation for the control, consumption and distribution of goods and services and their production. Organisational measures also include sectoral programs aimed at the delivery of better education, health and social services by the provision of more and better-trained personnel as well as the provision of the facilities themselves. The present investigation focuses on these types of program.

2) Agricultural

Socio-economic measures which come under this category range from financial (e.g., loans and credit facilities for farmers), price stabilisation of seed and agricultural products through institutions such as farmers' and co-operative banks and various produce-purchasing agencies, to marketing and distribution measures - designed to: replace profiteering middlemen, fill gaps between producers and

consumers and organise farmers into larger groupings (co-operatives) in order to increase access to machinery and other needs.

There are policies that include land reform programs which reduce the large holdings of landlords for redistribution among land-less farmers. These policies are also very effective in consolidating or rationalising small holdings into more efficient and viable units, either by transfers and trades or by organisation into co-operatives.

One way of increasing the incomes of farmers is to increase their output. This can be done through measures that seek to improve the quality and/or quantity of inputs such as seeds (using improved varieties), nutrients (largely in the form of fertilisers), water (through various programs of irrigation, water storage and tube wells) and the introduction of agricultural machines with appropriate training for their use. Generally, most of the measures taken to upgrade the socio-economic conditions of the rural areas have a physical component.

2.13.2 Physical development policies

These can be grouped under two headings: infrastructure and settlements.

1) Infrastructure

Infrastructure policies are those which improve the level of services available in the rural areas and can be separated into social infrastructure and physical infrastructure.

Social infrastructure policies cover the provision of physical social services, mainly in the form of land and buildings required for the delivery of health, education and social and religious programs developed under the corresponding

category: 'organisational policies'. Sometimes these policies and programs are an integral part of the organisational policy and may even be implemented by the relevant departments of education, health, social or religious affairs. In many countries it is the responsibility of the local authorities to carry out these types of programs with the direct participation and contribution of the people who are to use those services.

Physical infrastructure policies cover the provision of services essential to a community, such as: water supply and disposal, sewerage and sanitation, electricity and access (for pedestrians and vehicles). Like the provision of land and buildings for social services, the program of physical infrastructure may be the responsibility of, and implemented by, either national organisations (public or private) or by local authorities. In some instances, rural people themselves pay for some of these services. In the case of the Korbal rural region in Iran, discussed in Chapter III, a number of projects was funded, planned and implemented with the help of both government and villagers.

2) Settlements

Rural settlement or resettlement policies may be applied for various reasons, some of them may be economic and some advocated as a result of social considerations.

Settlement programs initiated as a by-product of economic considerations fall into three categories: 'economic' (production, consumption and conservation); 'socio-political' and 'natural events'.

- Production-motivated settlements (agricultural)

These settlements or resettlements are initiated by increasing agricultural production. Irrigation projects of various kinds usually necessitate the reorganisation of agriculture in areas that will be irrigated. Often a program of irrigation will radically transform the level of population that can be supported by the land after irrigation. The Upper Kor Basin in the Doroodzan region of Iran is a good illustration of this process. In the Upper Kor Basin where rainfall is inadequate, irrigation has always been an important factor in the economy. Before the construction of the Doroodzan Dam the region had relied on underground wells with small water pumps and short canals to irrigate the fields. Before 1956 only 57% of the cultivated lands was irrigated, whereas 30 years later all of the cultivated lands were irrigated by canals of Doroodzan Dam.

By the end of 1986, the region supported a population of over 80,000, about four times more than before the new irrigation system. The new system led not just to an increase in the population but, because of the development policies followed for its settlement, a radical change in the landscape was made including the nature and character of the settlements.

- Production-motivated settlements (non-agricultural)

In other cases, the primary factor is not agriculture-related but it is designed to increase economic production in other sectors or in general. The building of the Akosomob Dam in Pakistan in 1961 for the generation of hydro-electric power is an example of this kind. The large lake that was created upstream of the dam resulted in the need to shift large populations, this called for a resettlement program and new housing.

- Consumption-motivated settlements

New settlements may be created not so much in order to increase agricultural production or for other economic considerations but to establish a more suitable pattern for the provision of services such as: health, communication, education and banking. The establishment of service centres in the Korbal rural region, for example, was primarily designed to allow various levels of government and other agencies access to rural users of their services. Each of these centres provides basic services for itself and the surrounding villages.

- Conservation-motivated settlements

Sometimes the existing indigenous settlement pattern might be a major factor contributing to the rapid depletion of valuable resources. For example, shifting cultivation can have harmful effects on forests, soil, climate and the environment as a whole, particularly when accompanied by an increase in population. Given these circumstances the rural population may be relocated in new settlements planned in such a way as to conserve resources. The forest settlement program in Thailand is an example of this kind of policy. In 1978 the project was set up with FAO assistance and aims at converting migrant cultivators into settled farmers by a series of demonstration programs of crop diversification, improved cultivation and conservation farming practices.

- Socio-political considerations

Settlement policies and programs may be initiated for socio-political reasons, though of course the resulting settlement system would still need to be economically viable. Malaysia's land settlement projects carried out by FELDA (Chapter I) were, to a large degree, designed to cope with rural-urban migration and the ensuing

political problems. Another example of political or ideological motivation for instituting a particular form of settlement system is Tanzania's *ujamaa* villages (Chapter I).

An *ujamaa* is a social organisation of people working and living together for the common good. Its members are expected to own, run and jointly control the major productive assets (e.g., land, tractors etc.) and most other socio-economic undertakings. The minimum size of an *ujamaa* settlement is 250 families, with certain prescribed socio-economic and political criteria. The concept of *ujamaa* reflects Tanzania's social and rural development policy (Zaini, pers. comm., 1994).

This program was motivated by the government's desire to bring together households scattered throughout the countryside into nucleated settlements, to enable the government to provide them with basic social services, and to serve as a basis for increased agricultural and non-agricultural production through co-operatives.

- Natural events leading to settlement programs

Settlement policies may be adopted as a result of natural events such as: floods, earthquakes and typhoons, whose aftermath can leave people homeless. In some of these situations, the authorities responsible for resettling may perceive these disasters as opportunities to carry out settlement policies that they could not otherwise have done. The earthquake of 1955 in Larestan, southern Iran, was of this kind. The government was able to establish a new town for the survivors, whereas a few years before the earthquake the government wanted to carry out the same program but the people of the region were reluctant to move.

2.14 INTERNATIONAL ASSISTANCE POLICIES FOR RURAL-URBAN DEVELOPMENT

Rondinelli and Ruddle (1978:21) contend that "among international assistance agencies, integrated urban-rural development is increasingly seen as a way of ameliorating some of the most intransigent problems of global concern." They add that both development theorists and aid officials have tried to show the crucial role of spatial planning in increasing food production, relieving energy scarcities, and promoting employment and social welfare. For this purpose, they believe that planning strategies in developing countries should emphasise the growth of small and intermediate regional centres, to offer market, service and storage facilities and light, labour-intensive industries processing local materials. Undoubtedly the construction of such new centres can offer a considerable measure of employment for unskilled workers.

Government officials and development scholars have emphasised the need for more balanced spatial development. This shift in development strategies seems to be central to the widespread creation of employment and to more effective use of the limited capital available in developing countries. The problem, however, is not simply one of generating activity in rural areas but rather of balancing development between urban and rural sectors. The two sectors are intimately related in their economic activities and any change in the rural sector should have harmony with the urban sector as well (Rondinelli and Ruddle, 1978: 21-22).

Since the late 1960s and early 1970s, international assistance agencies have struggled with the complex problem of accelerating development with limited financial resources. Although their policies for alleviating poverty have common objectives - all, for instance, view rural development as the crucial factor in promoting growth with equity - each agency sees the problems from a different

perspective and pursues a distinct course of action. Three major approaches have emerged:

1. A functional co-ordination strategy, adopted by the World Bank, seeks to increase the quality and number of facilities, services, technical inputs, and institutions that the Bank considers essential to expand agricultural productivity and raise rural income levels.

2. Rural modernisation strategy, pursued by some elements of the United Nations development system, seeks to uplift rural areas from traditional to more modern communities, increase food production, change attitudes, and create a diversified economic base capable of promoting higher living standards.

3. The "new directions" in development strategy, employed by the U.S. Agency for International Development (USAID), attempt to change the structure of developing nations by focusing aid on agriculture, nutrition, health, population control, education and human resources - sectors with the greatest impact on the poor majority - and by creating a network of complementary urban and rural development centres, especially market towns and intermediate-size cities, to increase rural production and exchange.

2.15 CONCLUSIONS

It is generally accepted among planners and policy-makers in both developed and developing countries that rural communities tend to lag behind urban communities in regard to services, facilities and different types of socio-economic and political opportunities. This is due to the fact that, historically, cities have been the centres of trade, management and decision-making. The concentration of activities in cities, particularly large ones, permits the creation of specialisation and

exchange, the processes by which economic growth can be achieved easily and rapidly. Cities are also the location for commerce and industry due to the existence of external economies of scale: large numbers of skilled labour, availability of information, access to capital, common services, sources for input and markets for products. All of these interdependencies show that urban areas have a competitive advantage for commerce, industry and a number of other activities.

In developing nations the growth of industry has been the key to economic growth. This happens due to the higher income elasticity of demand for manufactured products compared with agricultural products (Devas and Rakodi 1993:135).

Given the above facts, how are the policy-makers, planners, authorities and decision-makers in the developing countries - where rural-urban disparities and inequalities are more severe - going to answer the following questions?

- Is it fair that only urban dwellers receive the benefits of services and facilities and various other oportunities?
- Why should rural people not be given the same chance?
- After so many urban bias policies have been implemented only to prove their negative, socio-cultural and environmental effects why do policy-makers persist in travelling this path?
- When will the time come for decision-makers at all levels of government to think more wisely and seek the means which lead to a state of equality for both rural and urban communities?

The situation in the rural areas of both developed and developing countries; the present trend of urbanisation in the developing world; rural people's expectations; and the various policies for rural development in some of the developing countries, discussed in this chapter, provide an amalgam of facts and information for those

concerned with rural-urban issues and may assist in the synthesising of appropriate strategies and models for achieving a better state of equality and justice, particularly in the developing nations.

Rural-urban, socio-economic problems and issues in Iran are elaborated upon in **Chapter III**. The impact of providing basic services and facilities on reducing rural-urban disparities is practically examined through a longitudinal action research in the Korbal rural region of Fars Province.

CHAPTER III

IRAN GENERAL DESCRIPTION AND THE IRANIAN CASE STUDY

3.1 PHYSICAL DESCRIPTION

Iran, or Persia, is a vast and diversified tableland which ascends from the shores of the low-lying Caspian Sea in the north to flat elevations of 900 to 1670 metres then descends to the Persian Gulf coast. With an area of 1,648,000 square kilometres Iran is the fourth largest country in Asia and its size is more than one-fifth of the Continent of Australia. Extending approximately 2,300 kilometres from north-west to south-east and 1,450 kilometres from north to south, Iran is bordered on the north by Russia; on the south by the Persian Gulf and Gulf of Oman; on the east by Pakistan and Afghanistan and on the west by Iraq and Turkey (Fig. 7). The country is almost surrounded by mountain ranges, some of which reach into the great Iranian Plateau to cover two-thirds of it (Amuzegar, 1977).

Although located in the northern temperate zone Iran's climate manifests extremes of temperature, humidity and rainfall and is subject to frequent high winds. The winters are very cold particularly in certain parts of the north-west (e.g., Hamadan) with -28^{o}C whereas the summers are hot especially in the central deserts and southern part of the country and the Persian Gulf ports where, at times, the temperature may reach 49^{o}C. Between November and February heavy snowfalls and frost occur all over the country except for southern Khuzestan and the Persian Gulf region. Another climatic feature in many parts are the steady summer winds and persistent high pressure systems which create winter winds. Between May and September in the south-eastern regions, high winds with speeds

up to 115 kilometres per hour occur which shift the desert sand and erode the fertile soil.

In general, the climate may be classified as semi-arid continental, with some marked contrasts. The average precipitation is about 250-300 mm per year. In fact, four distinct climatic regions may be observed:

1. The Caspian zone which has Mediterranean-type weather with an average humidity of 83%. Temperatures range from -4-0°C in winter to 32-35°C in summer. This region receives heavy rainfall particularly in the west with 1524-2540mm but very little in the east, usually about 380mm.

2. The northern zone comprises the regions at the edge of the Caspian Sea and the north-western and north-eastern provinces. These have a moderate climate, but in several parts of the north-east, such as Khorasan Province, summers are hot and winters are very cold.

3. The desert areas in central and eastern Iran are generally dry with sharp temperature variations between summer and winter and also between day and night. Aside from some of the outlying fringes and basins which are protected by isolated mountains, most parts of the Kavir-e-Lut plateau and Dasht-e-Lut have a dry climate with approximately 50mm of rainfall per year and about 20% humidity. These regions are not suitable for large-scale habitation, however, there are some cities and rural settlements around the Lut which experience hot summers 32-43°C and very cold winters -21° to -4°C. The annual rainfall is between 250-380mm.

4. The southern part of the country and the southern coastal region have hot summers with temperatures between 40-49°C and mild winters. The coastal

towns have a very humid climate (70-90%) and a low annual rainfall - about 250mm.

The geographical variety is reflected in an assortment of soils. The central region is infertile while the narrow strip along the shores of the Caspian Sea, the Khuzestan plains and the central Zagros Mountains are extremely fertile (Amuzegar, 1977). About 21% of the country is desert and wasteland, 55% pasture, 7.4% forest and 14.4% (23,731,200 hectares) is agricultural land[1].

Although geographical diversity may present a number of obstacles for the planners and policy-makers, particularly when designing a unique development plan for the nation, there are more positive than negative factors. When the north-western provinces of Azarbayejan, Hamadan and Zanjan are covered by snow, the weather in Hormozgan and Booshehr provinces in the south is hot while, at the same time, the northern provinces of Gilan and Mazanderan enjoy a Mediterranean-type of climate. This is not only advantageous to the tourism industry but also to a number of growers. For instance, most agricultural and horticultural products are available in the markets throughout the nation in all seasons. The neighbouring countries have been permanent customers of some of these products for many years. However, geographical diversity has its disadvantages. Provinces such as Sistan and Baluchestan in the south-east suffer from harsh climatic conditions, are poor in natural resources and are less developed in comparison with other regions.

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[1] Interview with the Minister of Jihad. Reported in *Kayhan Havai* (the international weekly newspaper for Iranians abroad), No.1077, April 21, 1994, p.31.

Figure 7: Map of Iran.

Source: Atlas of Iran. Tehran, Gitashenasi, 1985.

3.2 SOCIO-CULTURAL ASPECTS

3.2.1 Population

On the basis of the latest census taken in 1986 by the Iran Bureau of Statistics (IBS) the population was 49.8 million, 46% of which were living in rural areas (Table 5).

Table 5: Number of households and population in four respective censuses (1956-86).

Year	Households	Total population	Urban areas	Rural areas
1956	3,985,680	18,954,704	5,953,563	13,001,141
1966	5,167,192	25,788,722	9,794,246	15,994,476
1976	6,711,628	33,708,744	15,854,680	17,854,064
1986	9,736,406	49,857,384	26,844,561	22,661,723

Source: IBS, No.1, Vol.1, 1986, p.46.

The average rates of population growth from 1956 to 1986 were 3.4% for rural and 3.6% for urban areas. After 1976, because of the increase in rural-to-urban migration and the higher birthrate in urban areas, urban population increased rapidly such that, at the end of 1986, it reached 6.9% (Fig. 8).

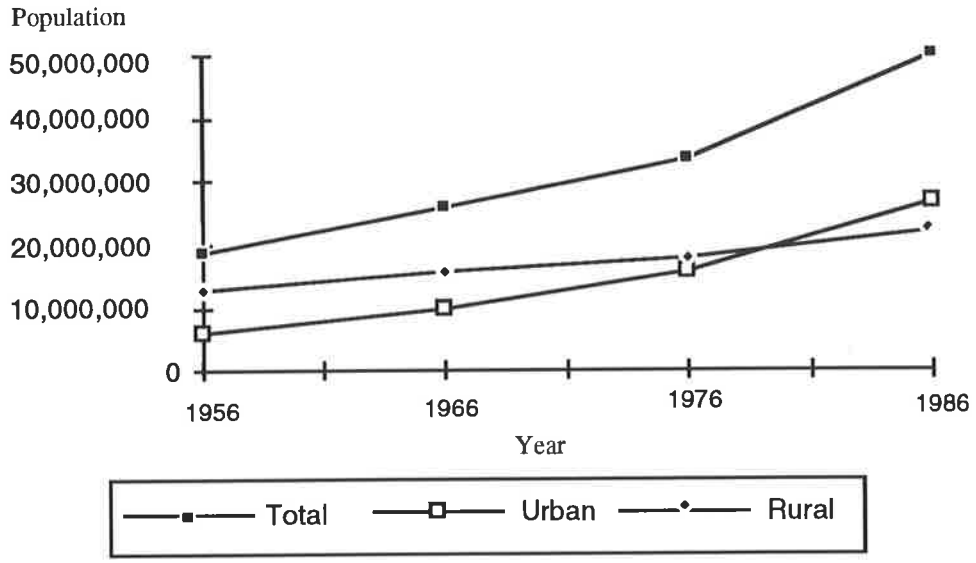

Figure 8: Rural and urban population growth in four respective censuses in Iran (1956-86).

Source: Derived from IBS 1986.

In 1986 more than half the country's population consisted of the active group within the age levels of 15-64, while about 45.5% of the total population was under 15 years of age (Table 6 and Fig. 9).

Table 6: Population of Iran by age and sex (1986).

Age	Total	Male	Female
	49,857,384	26,175,127	23,682,257
0- 4	9,101,904	4,778,500	4,323,404
5- 9	7,572,306	3,975,461	3,596,845
10-14	5,996,034	3,147,918	2,848,116
15-19	5,249,417	2,755,944	2,493,473
20-24	4,299,909	2,257,452	2,042,457
25-29	3,672,169	1,927,889	1,744,280
30-34	2,933,815	1,540,253	1,393,562
35-39	2,131,887	1,119,241	1,012,646
40-44	1,676,006	879,903	796,103
45-49	1,600,564	840,296	760,268
50-54	1,606,100	843,202	762,898
55-59	1,359,379	716,374	643,005
60-64	1,191,940	625,768	566,172
65-69	580,111	304,558	275,553
70-74	337,697	177,291	160,406
75-79	214,422	112,571	101,851
80-84	182,852	95,997	86,855
85 and above	187,354	98,361	88,993
unknown	31,518	16,547	14,971

Source: IBS, No.1, Vol.1, 1986, p.49.

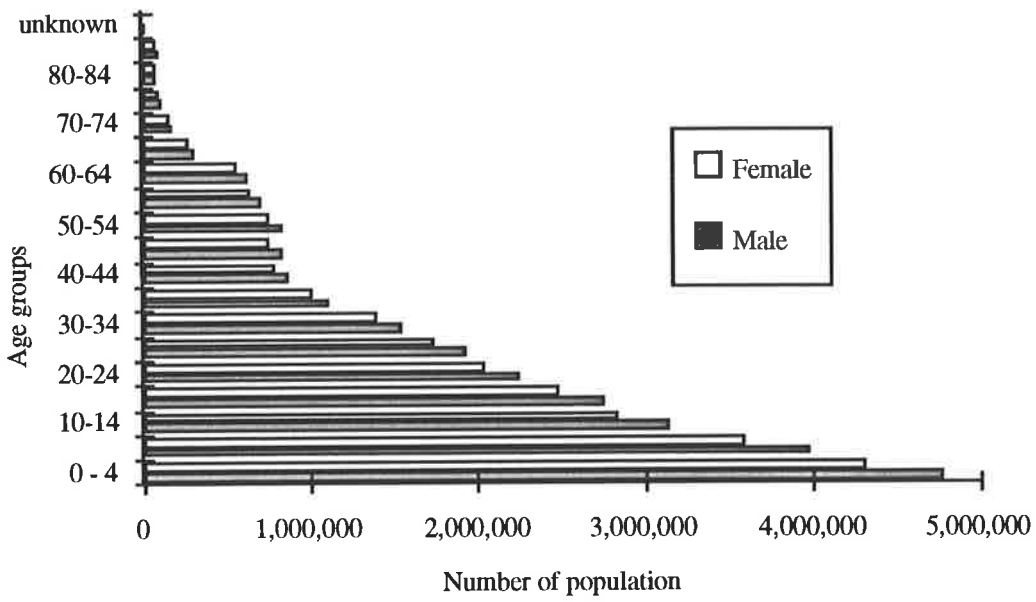

Figure 9: Population of Iran by age and sex (1986).

Source: Compiled from IBS No.1, Vol.1, 1986, p.49.

Therefore, from the viewpoint of age composition, the population of Iran is one of the youngest in the world. Table 7 and Figure 10 give a comparison of age composition in Iran, Australia, Japan and France.

Table 7: A comparison of population structure for Iran, Australia, Japan and France in 1986.

Country	Less than 15 years	15-64 years	65 years and above
Iran	45.50%	51.50%	3%
Australia	23.60%	65.90%	10.50%
Japan	21.10%	68.40%	10.50%
France	21.10%	65.80%	13.10%

Source: Derived from United Nations' *Demographic Year Book*, 1988.

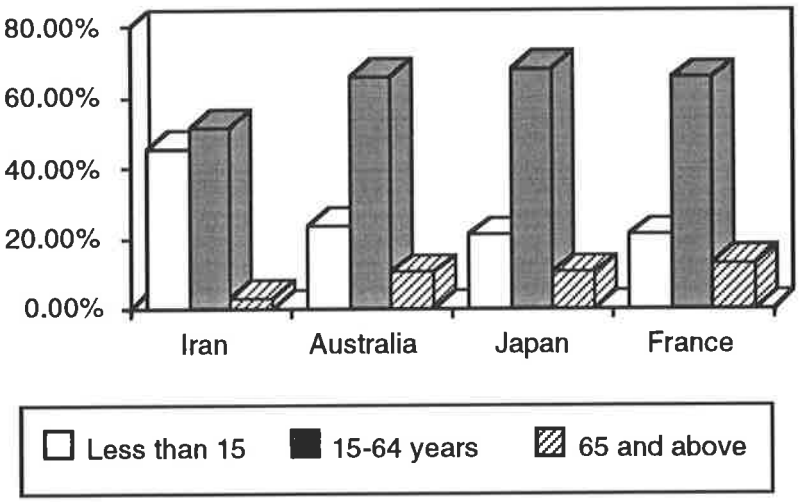

Figure. 10: A comparison of population age-composition for Iran, Australia, Japan and France in 1986.

Source: Writer's compilation from United Nations' Demographic Year Book, 1988.

Recently, family planning and population control policies were successful in decreasing the very high growth rate of the 1980s to a moderate rate of about 2.9 in 1992. According to the estimation of the IBS, the number in 1992 was 61.2 and

will reach 67 million by the end of 1996.[1] An estimation by Sharbatoghlie (1991) indicates that a population with a growth rate of %2.8-%3.5 will reach 73-80,000,000; 96-113,000,000; and 126-159,000,000 by the years 2000, 2010 and 2020, respectively. Therefore, Iran has one of the highest population growth rates among developing countries. Based on UN statistics (UNCHS, 1987:22), among 25 of the most populous countries in the world, Iran's rank was 21 in 1985 and it is estimated to be 17 by the year 2000.

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[1] *Kayhan Havai*, No.1031, May 27, 1993.

3.2.2 Education

According to the IBS, in 1976 - two years before the Islamic Revolution - only 47.5% of the population was literate. This figure increased to 61.8% by 1986. The proportions of literacy among males and females in rural and urban areas are illustrated in Table 8. The figures indicate that the literacy rate for rural women was lower than other groups.

Table 8: Number and percentage of literate people - urban and rural areas - (1,000 persons), 1956-86.

Iran	Total	%	Male	%	Female	%
1956	1,911	14.6	1,454	22.2	457	7.3
1966	5,532	29.4	3,906	40.1	1,626	17.9
1976	12,877	47.5	8,198	58.9	4,679	35.5
1986	23,913*	61.8	14,078	71	9,835	52.1
Urban						
1956	1,396	33.3	982	25.2	414	20.6
1966	3,832	50.4	2,442	61.4	1,390	38.3
1976	8,628	65.4	5,145	74.4	3,483	55.6
1986	15,507	73.1	8,765	80.4	6,742	65.4
Rural						
1956	514	6	471	10.8	43	1
1966	1,700	5.1	1,463	25.4	237	4.2
1976	4,249	30.5	3,053	43.6	1,196	17.3
1986	8,371	48.4	5,287	60	3,084	36.3

Source: Compiled from IBS, No.1 Vol.1, 1986.

*The reason for the difference between the total population and the summation of urban and rural is that the total includes nomads.

In 1986 the literacy ratio for rural areas was 27.4% lower than that of urban (Table 9). However, the rate of increase in literacy was much faster in rural areas (Table 9 and Fig. 11) which indicates rural people's developing interest in literacy.

Table 9: Percentage of literate people, urban and rural, 1956-86.

Year	1956	1966	1976	1986
Urban (%)	33.3	50.4	65.4	73.1
Rural (%)	6	15.1	30.5	48.4

Source: Table 8.

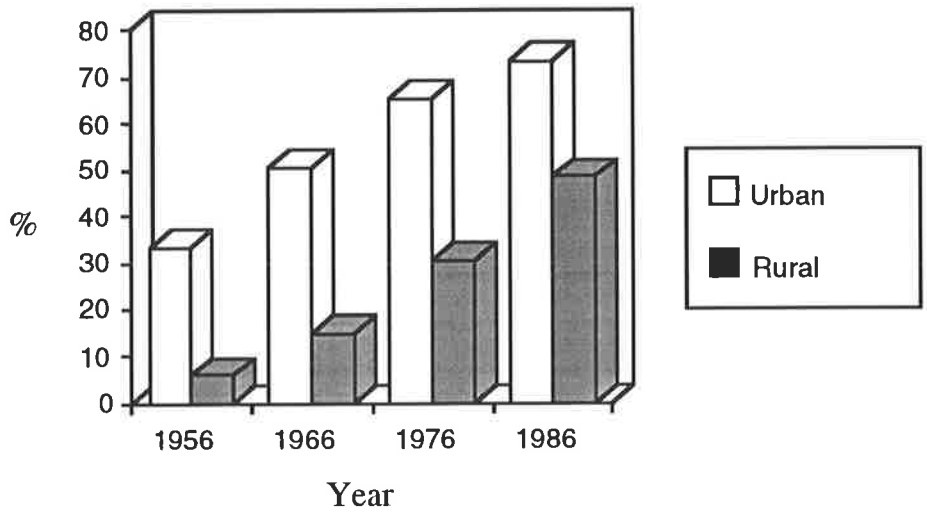

Figure 11: Changes in the literacy ratio in rural and urban areas, 1956 to 1986.

Source: Compiled from IBS, No.1, Vol.1, 1987, p.69.

3.2.3 Health

Despite some success in recent years due to the implementation of primary health care programs, there still remain major deficiencies (see Table 10).

Table 10: Number and type of health personnel needed in Iran, 1986.

Type	WHO standard for number of people that should be served by each unit of health personnel	Population served by each unit of health personnel	Personnel needed based on WHO standard	Total health personnel	Shortfall in health personnel
Physician	1,000	2,932	49,700	16,950	32,750
Dentist	10,000	19,115	4,970	2,600	2,370
Midwife	500	17,890	99,400	2,778	96,622
Nurse	350	5,231	142,000	9,500	132,500
Health worker	2,085	8,143	609,500	30,447	579,053
Hosp. beds	250	695	198,800	71,567	127,233

Source: Compiled from Iran's Ministry of Health and Medical Education, the National Report. March 1987.

Problems, such as inadequate facilities and a shortage of personnel, are more severe in the rural areas. This is because considerable attention has been given to the secondary level of the health system (i.e., hospitals and speciality areas) and not enough to the first level (i.e., primary health care). This has resulted in fragmentation, lack of co-ordination and integration between different levels of health care and medical services throughout the country.

3.3 IRANIAN VILLAGES

3.3.1 Spatial features

The vastness of the country and the diversity of physical conditions contributed to the spatial characteristics of village settlements. Most are located where water is available for domestic use and irrigation, therefore, they were created:

- near rivers;
- along mountain ranges;
- in the valleys or plains between mountain chains; and
- along the slopes that descend to the plateau or the sea.

In the mountainous areas, due to the severe winters, settlements are located on the slopes especially the southern ones rising above the valley floor where there exists very fertile land. These slopes are divided by stone walls to make them suitable for cultivation and terraced gardening. Therefore, water sources, climatic conditions and topography are the three major factors in choosing a location for a village. In these regions the villages are usually in good economic condition. Additional activities include animal husbandry and carpet-weaving.

The villages on the plateau use surface water streams and also pump underground water from deep or semi-deep wells. In these areas there is a traditional method of irrigation which is called the 'Qanat System' (Kamiar, 1983) whereby underground water at the foot of the nearest mountain is carried to the agricultural land by drilling wells and connecting them to each other horizontally. This method is especially suitable in areas where mountains and tablelands combine. The mountains provide water through precipitation and the tablelands are used for cultivation.

Along the Caspian Sea, a different type of settlement can be observed. Due to the abundance of rain, the richness of the soil in the plain between the sea and the rain forest mountains, and the coastal access road, most settlements have taken either a linear shape parallel to the sea-shore or are scattered among the fields of rice which is the main crop. Tourism has been a very important source of income for the people of this region for some years and there are many modern tourist villages along the coast.

3.3.2 The 1962 Iranian Land Reform (ILR)

The ILR was approved by the cabinet in the absence of parliament on 31/12/1961. In fact, it consisted of a series of Acts, the major ones were designed either to divide up the ownership of large holdings into smaller ones or to introduce changes regarding tenancy (Lahsaeizadeh, 1993).

Prior to the ILR rural communities were characterised as hierarchies of power and influence. The ILR brought with it a new structure in rural, social classes. With the emergence and operation of farm enterprises, the system of *arbabs* and *raiayts* changed to a different method which was based on a petty commodity mode of production. In other words, the previous *raiayts* class was replaced by a peasant class in which the peasants were not obliged to work under the power of *arbabs* and they could have second jobs as petty commodity producers.

After the ILR, capitalism developed very rapidly throughout the different branches of agriculture. Many landlords and their agents, as well as some of the independent peasants who possessed large holdings and were rich enough, became capitalist entrepreneurs. The government also encouraged farm mechanisation by allocating long-term loans. This was followed by lease agreements through which multinational, agribusiness firms established contracts with the government. This

situation gradually made more and more profit for the agricultural, capitalist enterprises whereas the petty commodity producers grew poorer and poorer. Those who were engaged in petty commodities, which included independent peasants, tenant peasants and tradesmen, produced those types of goods and services which were considered unprofitable by foreign and/or large-scale investors.

As Moser (1978:1057) states, petty commodity production was identified as a transition from the feudal landlord to the capitalist mode of production. It was under this condition that petty commodity producers were really exploited. The reason that the commodities and services produced by them were very cheap in comparison with those of large enterprises was due to the capitalist-dominant system (Harriss, 1982:15).

There are several explanations for the cause of the land reform. Salmansadeh (1980) believes that in Iran, as in many other developing countries, the traditional or indigenous life style was blamed as the reason for underdevelopment, whereas development was synonymous with Westernisation. Therefore, Western planning strategies and models were imported on a national scale without any consideration for their applicability. Consequently, land reform, agricultural mechanisation and cultural transformation were introduced as the means of rural development. Based on this assumption three phases were put into operation.

The first was carried out by transferring land titles from absentee landlords, thus reducing their political power, to those who were known to be cultivators. Priority was given to the peasants who had an instrument of production (e.g., oxen), rented the land and to the heads of work teams (Keddie, 1978). The policies excluded share-croppers who only provided labour, hence, about 800,000 families benefited (i.e., 20% of the rural population) (Weinbaum, 1977). The rest received either a scattered, dislocated and uneconomic (due to size and place) piece of land or

ended up with nothing (Miller, 1964; Keddie, 1978; Craig, 1978). This phase removed the power of landlords by placing it in the hands of a few newly- created landholders who became the village capitalists because they controlled the means of rural production and wealth accumulation. The rest ended up as labourers to compete in a free market. Consequently, without considering the social and historical situation and process, the traditional communal structure of Iranian villages was destroyed.

Katouzian (1981) argues that the capitalistic nature of the objectives and the political intention of the ILR could be observed in the bureaucracy's absolute rejection of an alternative rural development plan proposed by Arsenjani - the Minister of Agriculture prior to the ILR - whose strategy, based on the traditional village communal structure, was to remove the landlords and divide the land among the peasants without going through a process of nationalisation, thus altering the village land allotment and the traditional socio-economic organisation. The bureaucrats and technocrats strongly objected because they did not accept it as a solution for reducing and, hopefully, eliminating the 35% village unemployment and underemployment; a rate that Katouzian questions in terms of its reliability. Landlords also saw Arsenjani's plan as a threat to their vital economic resource, therefore, they and the bureaucrats undermined the Minister's proposal and blocked its passage through parliament.

There seem to be several reasons to present the view that the government encouraged rural-to-urban migration and the formation of a mobile labour force to accommodate the Western-style mode of production: firstly, by providing loans for the new landlords; secondly, by the opportunities given to the original landlords to invest the compensatory money they received for their lands in shares in nationalised industries or to build urban industries that demanded labour, supplied

by the rural-urban migration (Halliday, 1979; Katouzian, 1981); thirdly, by the bureaucrats and technocrats undermining Arsenjani's rural development plan; and lastly, the allocation of insufficient resources in the third development plan for the rural sector.

The second phase was to group the small holdings - a product of the first phase - that were unproductive and gave little opportunity for mechanisation and create co-operative farming under ministerial control to assure a socio-spatial formation in accordance with the central government's frame of reference. The peasants who owned small, fragmented, arable land were expected to become members of these co-operatives. Under this new order, planners sought to provide technical assistance, capital investment and subsidise farm input. Craig (1978) states that some of the duties of the co-operative societies were to:

- encourage co-operative farming;
- provide low interest loans;
- arrange the transportation of members' crops to market; and
- distribute fertiliser, tools and equipment which the government supplied.

As the peasants saw that it was their right to own land, they initially avoided affiliation and memberships were rather limited. However, the government, by disadvantaging those who refused, forced many peasants to reconsider their views regarding membership and join the co-operatives, thereby losing their right to decide either as a community or as individuals. Amuzegar (1977) mentions that, by early 1977 rural co-operatives, under the guidance of the Ministry of Co-operatives and Rural Development, had 2.7 million members in over 2870 societies.

The writer visited a number of co-operative farms in Fars, Isfahan and Khorasan provinces in 1975. Most of these units were poor and had numerous problems, such as the low prices paid for their products; the high prices demanded

for agricultural implements and machinery; insufficient funds for expanding their productive activities and the lack of access to most essential services and facilities.

The success of these co-operatives was very limited, they were mismanaged and did not live up to expectations. Most were poorly funded and could not overcome the shortage of storage, transport and marketing facilities (Weinbaum, 1977). Their borrowing term was so restricted that they were forced to approach the traditional village money-lenders, who charged very high interest, or the landlord for credit. Moreover, the government paid low prices for their produce and thus transferred the urban subsidy to the rural population.

The government claimed that these co-operatives would be modelled in accordance with the traditional communal organisation. Actually, that was not the case. While the communal organisation was a traditional structure, developed internally, historically and through social interaction, the co-operatives seemed to be another transplanted and imposed contextual mechanism for political control of the villages by the central government. Within the traditional communal society the villagers, in accordance with their rules, resources and their action, used to identify, organise and create their own intention and purpose but, in the new co-operatives, the government controlled the rules, resources and the villagers' personal needs.

Therefore, there is strong indication that the huge, government-controlled, mechanised co-operative farms were intended to reorganise the traditional village and its socio-spatial organisation for political reasons. The breakdown of the communal structure to be replaced by a new, and which proved to be, inefficient system seemed to be the reason for slow growth, the increase of income per capita difference and the acceleration of rural-urban migration.

In the early 1970s, under increasing pressure to raise agricultural production, planners sought other alternatives to reorganise the small, unproductive farms. A third phase of the ILR was, therefore, formulated. Minimum 2000-hectare corporations were seen as a solution to introduce rationalised sharing of farm equipment and agricultural practice. In this phase, farmers exchanged their land for stocks in corporate companies. Peasants then had the choice, either to become employees of the co-operations or seek employment elsewhere (i.e., migrating to urban areas). A study carried out in 1976 indicated that most of these companies were hardly successful (Weinbaum, 1977). It was observed that:

- the peasants saw that they were loosing a traditional and meaningful means of land ownership to invisible and incomprehensible stock;
- the wages for management and labour were so low that they did not attract the appropriate staff; and
- they were generally under-financed.

Soltani (1978) explicitly indicates that, on many small farms, yields per hectare were greater than large farms, in spite of the fact that the latter were mechanised and used appropriate technology. However, due to labour and rent on machines, costs were higher on small holdings, therefore, the net income from large farms was greater, but small farms were much more efficient.

Parallel to the corporations, the government also planned huge agro-businesses. As an alternative to corporations, farmers were given the choice of selling their land for the establishment of agro-businesses. After W.W.II, in Khuzestan Province in the south-west of Iran, an initial investigation was done to utilise the fertile soil. Stephanides (1971) states that the government invited the Development and Resources Corporation of New York to examine the possibility of tapping the water resources of that region and developing its agricultural potential.

The study, known to be the first regional plan in Iran, and completed in 1957, proposed that 14 dams be constructed on the major rivers of the region. It was envisaged that these dams would irrigate about 1.2 million hectares and generate 6600 megawatts of electricity that might be used for industrialisation and to service the settlements. Stephanides (1971) argues that the aim of this research, however, was to establish agro-businesses geared for the export market while, at the same time, there was a shortage of food in Iran. Later, similar schemes were implemented in other regions (e.g., Dasht-e-Moghan in the north).

Under the Fifth Development Plan (1973-1978), these agro-businesses were to account for eight per cent of all rural land production. They were intended to serve as models for both crop experimentation and highly mechanised operation and also to provide opportunities for local and multi-national companies to participate.

In these corporations, the decisions were made by foreigners who received high salaries and lived in very good conditions, while the Iranian peasants were employed on low wages. Without having any role in decision-making and management, the peasants felt that they were regarded only as a means of production, not as human beings. The cultural differences between them and management were so great that communication was very difficult.

By 1976 the government became aware that the performance of the agro-business in Khuzestan was disappointing. In fact, many agro-businesses in other regions were going bankrupt and, in some cases, the government had to buy the shares of their foreign investors. Weinbaum (1977) attributed the failure to:

- the alteration of peasant life style;
- local resentment;
- the stockholders were constantly asked to bear increased costs;
- the cost of levelling for field irrigation;

- foreign companies expected early substantial returns;
- being capital intensive, the businesses absorbed only a limited number of unskilled, displaced peasants; and
- lack of commitment from managers.

Just before the Islamic Revolution of February 1978, the latest rural planning policies broadly outlined a scheme that would displace many of the villages. These policies were integrated into regional development plans. Golabian (1978) states that the fifth plan allocated 1500 to 2000 regions or agricultural poles, each depending on the resources available, and had between 8000-12000 hectares of arable land. Under the new scheme, villages that were scattered, unproductive or too small to be economically feasible for social services and rural industries, were not eligible for government assistance and their inhabitants were forced to move to the newly proposed units. Clearly, for the new scheme to happen, massive capital investment was necessary to develop the land, build houses and infrastructure and utilise the water resources.

3.3.3 Lessons of experience from the ILR

The ILR was a good experiment in indicating the reasons for the shortcomings in rural development planning. It demonstrated that, because the planners and policy-makers did not consider the importance of the regional geographic identity, the local resources, the socio-cultural situations and their significance in social interaction and spatial organisation, they were unsuccessful in their attempts. The slow growth in rural development was due not only to the lack of proper investment and adequate data, but also to the imposition of the Western models and capitalist mode of production and organisation on a communal, peasant society whose

features had continuously developed through the ages to establish a certain identifiable historical situation.

3.3.4 Socio-economic context of Iranian villages before the ILR

Because of the vastness of the Iranian plateau, desert and semi-desert areas have created isolated settlements, therefore, villages, towns and cities are rather far from one another. The isolation has generated a certain inter-social unity and communal co-operation, reflected in their resource allocation, spatial and social management. Each community has its own specific sub-cultural identity. The more isolated a settlement, the greater its difference from the outside world. However, due to their geographic location and manufacturing industries, settlements such as, Isfahan, Kerman, Shiraz, Yazd and many others achieved urban character and gradually grew to become large cities. They overshadowed the nearby rural and urban communities to form a network of intra-related settlements which developed a regional identity.

In the early 1960s, the government set a certain criterion to classify the settlements. Based on this, settlements with less than 5,000 inhabitants were given a village status, and those with 5000 and above were designated as urban. This classification gives 65,000 settlements a village status, of which 48,000 have a population of under 250. The socio-economic and cultural criteria which differentiate the rural from the urban and village from the city were not considered. Furthermore, there were no sub-classifications. This strongly suggests a convenient bureaucratic standard to identify the necessary services and the responsible institution under which the villages were to be managed.

It should be noted that, at the time of writing, urban areas are under the Ministry of Housing and Urban Planning, while the villages are under the

Ministries of Agriculture and Jihad Sazandegi. The former is responsible for agricultural development and the latter for physical development. Before the Islamic Revolution, rural areas and villages were under the Ministry of Co-operatives and Rural Development.

Iran comprises a diversity of races, cultures and life styles. During its long history, various people invaded different parts of the country. In crucial periods, such as the devastation caused by the Mongol invasion, people had to leave their settled areas and chose a nomadic way of life. In the period of internal peace the nomads, who led relatively healthy lives and had increased more than their economic base could sustain, decided to settle and form villages. Later they were joined by people from other tribes to form larger settlements (De Planhol, 1968).

Lambton (1953) discusses the relationship of the village spatial organisation, political system, land ownership and availability of water which have existed for 14 centuries. The classification of society into powerful landlords, peasants and small land ownership was attributed to the taxation system, the type of land ownership and their historical evolution. She has made a lengthy analysis, discussing the Islamic Civil Code under the Shi'ah School of Law, from which the present civil code of land ownership in rural areas and the relationship of the means of production are derived. It is important to note that the idea of share-cropping and traditional customs played an important role. In other words, the right of each individual and community is established by the historical situation and the process of development of the socio-spatial organisation and production in a framework as defined by the spirit of Islamic Law.

The laws of ownership and management of land and water are very much documented in the Islamic tradition. Under the law, there are different types of ownership:

- privately owned land;
- land which the *imam* (or government) holds on behalf of the community; and
- the *awqaf:* land whose benefit goes to the whole community or to a charitable organisation.

According to Lambton's (1953) study, land and village management was generally communal. Dealing with communities rather than individuals was seen at that time as an administrative convenience, especially for collecting taxes. The taxation system had placed a great deal of pressure and unjust demands on the peasants. It made them more dependent upon rich and powerful persons (*khans*) who played an important authoritative role in village production. The *khans* also considered themselves as being protectors of the peasants, *vis-a-vis* the provincial and central government and responsible for carrying out government policies (Lambton, 1953). These *khans* eventually became the powerful landlord class in rural areas before the ILR.

Katouzian (1981) argues that, before the ILR, most of the landlords were absentee, residing in provincial capitals and part of the urban affluent class. Land was not hereditary nor untransferable, as was the case in Medieval Europe, it was bought and sold in the market like any other commodity. This is the reason why, over time, some of the urban merchants became agricultural landlords. It is important to note that, due to the landlord's urban status, some of the surplus produce in villages went to support city dwellers. Keddie (1978) perceives that mechanism as a reason for the lack of capital accumulation and why capitalism did not develop in Iran.

Katouzian (1981) also states that, before the ILR, crop distribution followed the communal production system which was called *buneh.* The harvested crop was divided into five parts according to five inputs: land, labour, water, animal and

seeds. Those who were entitled to a share in the agricultural output were the ones who had contributed one or more of the above inputs.

Miller (1964) points out that, prior to the ILR, the landlord's representative *(kadkhoda)* was responsible for redistributing the landlord's rented land (each three or four years), collecting the dues, maintaining order, settling local disputes and calling upon the peasants for any communal work. After the ILR, the *kadkhodas* were replaced by representatives of the central government.

Prior to the ILR the most important feature of land ownership in rural areas was based on the large-scale proprietorship of whole villages. The common unit of land ownership was 'the village' (*deh*) - an imprecise concept since villages varied considerably in area and population, ranging from less than 10 families in small clusters in the mountain valleys to 400 or more in large villages on the plain (Beckett, 1957).

Usually, most of the land of any village belonged to absentee landlords (*feudal system*) or the government. In some villages parcels of land also belonged to the peasants. According to the research report of the University of Tehran (Research Group, 1964:144) in 1959, just three years before the ILR, only 60% of the peasants were in this group, the rest were absolutely landless. However, these small plots did not always cover the life expenses of the peasants, therefore, they also had to work for the landlords in similar fashion to the landless peasants in order to save themselves and their families from hunger.

It was a generally accepted tradition that the duty of the peasants and their families was to work as agricultural labourers (*raiyats*) for the landowners (*arbabs*), and the duty of the *arbab*s was to provide land, water, seeds and oxen and to help pay the life expenses of the peasants.

Everything belonged to the landlords while the peasants and their families had almost nothing. They were very poor and oppressed and akin to slaves. They rarely had the good fortune to afford their families' life expenses or live in security and comfort. Keddie (1972:380) states that the majority of the *raiyats* had the lowest incomes and were in the most precarious positions. The writer remembers that peasants often had to beg their *arbab* for a small amount of money or other help to have access to a fundamental need (e.g., a doctor when a family member became ill). The peasants were fully exploited by the landlords yet the landlords still perceived themselves as protectors of the peasants. Under such repression the peasants did not have the right to complain about their terrible living conditions, therefore, they were silent. However, this did not mean that they were acquiescent. In fact, they would have liked to rebel but did not because they lacked sufficient confidence resulting from their minimal degree of socio-economic independence and security. Kazemi and Abrahamian (1978:260-61) note that the absence of a peasant rebellion neither meant that the peasants willingly accepted the established order, nor did it prove the existence of social harmony in the rural areas before the ILR.

Wolf (1969:290) points out that the *raiyats* were completely under the domination of their employers without having sufficient resources of their own to serve as tools in a power struggle. In a survey of several villages carried out by the University of Tehran in 1963, in regard to the results of the ILR, 64% of the respondent peasants - when asked why they had endured such treatment - answered that it was because of the fear that the landlord would take away their right of cultivation or create some other difficulty for them.

In June 1959 in Dowlatabad - one of the villages north-east of Darab in Fars Province - the writer witnessed a landlord's agent torturing a peasant who had

remarked that the landlord was a cruel person who ignored his *raiyats'* appeals. This happened in the presence of other villagers who were very angry and upset but none dared to speak out. They were afraid that, if they supported their fellow villager, the same thing would happen to them. Everybody knew that any activity against the landlords was not only useless it was often dangerous because landlords could do whatever they liked and most of them did.

The landlords were "the sole and unchallenged authorities in their own villages" Lahsaeizadeh (1993:104). Indeed, landlords used to live in the cities and towns and rarely watched over the production process, it was the duty of their agents to manage the properties. The agents were the village headman (*kadkhoda*) and bailiff (*mobasher*). The former was appointed by the landlord from among the men of each village and the latter was also assigned by the landlord but usually from among his relatives. The *mobasher* was sometimes responsible for more than one village. As the landlords generally did not have direct contact with their villages, the appeals of the peasants were reported to the landlords through their agents.

Landlords even discouraged geographical mobility by denying cultivation rights to those peasants who did not stay permanently in their villages. They restricted the *raiyats'* contact with markets by controlling their sales in the local towns. Safinezhad (1974:87) mentions that the *raiyats* could not dispose of their surplus without special permission from the landlords' agents. He adds that the landlords also narrowed the peasants' relations with the outside world by assigning a *kadkhoda* as the official intermediary between the village and neighbouring communities. Landlords obstructed horizontal mediation among peasants and instead channelled all relations vertically either through themselves or their

representatives, "in order to secure peasants from all contact which could potentially give them influence or access to other forms of mediators" Loffler (1971:1084-85).

Lambton (1953:262) believes that only a "minority" of the traditional landlords adopted a paternal attitude or manner toward their peasants. In this context Gunderson (1968:31) remarks that a landlord protected his *raiyats* from total disaster but not from continual adversity and poverty. She adds that the landlords, by acting as protectors, tried to show that their existence was necessary to the villages, they did this to ensure the continuation of the peasants' dependence upon them.

Landlords were extremely powerful and were recognised as the dominant class. Some of them held very high positions at the national level and had close and friendly relationships with central government authorities. They even exerted some influence on courts and the judiciary power. Zonis (1968:265-67) states that between 1950-1960 about 80% of the members of the Senate were either landowners or came from landowning families.

3.3.5 Iran's National Development Plans before the Islamic Revolution of 1978

According to Todaro (1989), Zimmermann (1992) and Rondinelli (1993), capital accumulation is one of the most important factors for the provision of resources in the process of development, industrialisation and economic growth. In Iran, a large part of the scarce capital was devoted to meeting urban needs. However, many developing countries, initially, are not able to supply the necessary commodities with domestically-manufactured products. Hence, they usually import them from developed countries until a domestic replacement industry is established. Wherever natural resources are abundant, sufficient capital in the form of hard

currency is obtained to import commodities and also to establish some of the manufacturing replacement industries. Katouzian (1981) argues that, in Iran, it was thought that if replacement industries were planned properly, a sound "economic take off" could be achieved. Furthermore, it is reasonable to look at the rural sector as a potential market and resource for those local industries. Therefore, an increase in the purchasing power of the rural population is necessary. Thus, in the theories and models of planning for development, the rural sector is considered as a catalyst, usually activated by the abolishment of traditional land holdings and the introduction of appropriate technology which encompasses the socio-economic, cultural and geographic conditions.

Before the ILR, the agricultural sector contributed 28.7% to the gross domestic product (Amirsadeghi, 1977); and about 50% of the labour force was engaged in rural activity (Looney, 1977). This indicated an uneven distribution of economic activity and income. The planners who, as Zonis (1976) comments, were Western-educated, elite personnel considered the solution for overcoming Iran's social and economic problems was to become industrialised and to develop its economy and society along Western lines. For this purpose they thought that, because of the special geographic and climatic conditions, agriculture was not as useful and efficient as industry. They also assumed that the country could always import relatively cheap food from the world surplus (Amuzegar, 1977). When they received the bill for the imported food, they soon realised that they were wrong in their assumption because the cost was far higher than they had anticipated

The policy-makers and planners, in their attempts to Westernise the country, viewed the old communal society as too backward a socio-economic organisation for their ideal industrial order. Katouzian (1981) points out that the Iranian

decision-makers tried to guide the country towards social transformation that generated a unified labour force and a social consciousness similar to the West.

Weinbaum (1977) believes that the government tried to change the social organisation of the rural population by increasing urban employment opportunities and encouraging rural-to-urban migration. The planners saw these objectives as very important steps towards achieving industrialisation and Westernisation. However, evidence indicates it was a transplantation of a structure developed historically in a European context. In fact, a similar Westernisation aim was adopted for other institutions, such as education, about which Newmark (1976) remarks that, in Iran, Western science and technology was transplanted without any consideration for the traditional context which had developed historically through the ages. The result of the adoption of some of these policies was the creation of a 5:1 income per capita, expansion of the differences and disparities between the urban and the rural communities, and accelerated rural-to-urban migration with an average rate of 8% in 1973 (Weinbaum, 1977).

The national plans of Iran were seen by some critics, such as Halliday (1979) and Katouzian (1981), as a political ploy. They argue that the plans were generated by the government as a mechanism to: consolidate their centrally-based power; create middle and labour classes and reduce and transform the communal social organisation into a capitalist one. Both the government and the elite supported the adopted Western models because they believed that the traditional or indigenous institutions and systems were the main factors for socio-economic backwardness. It was on the basis of such philosophy that the national plans - under which land reform and rural transformation took place - were implemented.

3.3.6 The 1978 Islamic Revolution and land question

Lahsaeizadeh (1993) states that the revolution started as an urban movement which was soon joined by the rural people. Most of the rich landlords and entrepreneurs left their land and properties to escape to the West where their money had been saved. Many peasants, especially the poorest ones, without waiting for permission from the revolutionary government, divided the lands among themselves. The revolutionary government also helped the villagers in various ways through newly-formed bodies such as the Mostazafin Foundation and the Jihad Organisation. In less than a year most of the peasants had their own lands, but they were still very poor and needed both financial and technical support. In other words, the revolution had solved the problems of land ownership to a great extent but there remained many obstacles to overcome with regard to facilitating farming activities. It was too difficult a task to respond to all of the appeals of the peasants, therefore, the new government asked the nation for their suggestions and comments for preparing a plan to support peasants and rural communities in fulfilling their needs.

Regretfully, while the whole nation was mobilised in this activity, the eight-year war between Iran and Iraq began in 1980 which changed the direction of the mobilisation towards defence. When the war finished, first priority was devoted to emergencies, such as taking care of the injured, protecting their families and reconstructing damaged or ruined hospitals and other infrastructure. The issue of rural affairs and development planning was postponed until a more suitable time. Although a great deal of effort had gone into reducing rural communities' problems, many remained. Most of the villages still did not have satisfactory access to some of the basic services, especially health care, education, roads and transportation facilities. The rapid rate of rural-to-urban migration indicated that many rural people

sought better living conditions, better employment and more opportunities for themselves and their families.

Now it is the mid-1990s and Iran, socially and economically, is in a much better situation than in the 1980s, it is time the government gave more serious consideration to rural problems by adopting and implementing suitable strategies to reduce rural-urban disparities and encourage rural people to remain in their villages and participate in productive activities. Evidence shows that the government has taken some steps in this regard, but still it has a long way to go.

> The favourable attention that is given to the development of agriculture and rural areas since the revolution has reportedly benefited the less-developed provinces that are dependent economically on agriculture. Aside from other factors, the new regime's agricultural policies may partially be responsible for the relative decline of interprovincial disparities since the revolution. It is reported that between 1976 and 1984, the disparities declined with respect to a number of socio-economic and demographic variables: percentage of urban population, average consumption expenditures in urban and rural areas, value added per worker employed in large industries, number of hospital beds per 100,000 population, and number of post offices per 10,000 square kilometres (Atash, 1988:105).

This author also emphasises the role of agricultural development in reducing socio-economic disparities in Iran when he says: "Given the size of Iran's rural population and the percentage of the labour force engaged in agriculture, it is necessary to pay continued attention to the development of agriculture *vis-a-vis* the other economic sectors" (Atash, 1988:105).

3.4 THE IRANIAN CASE STUDY: the Korbal rural region

3.4.1 Geography

The Korbal rural region (KRR) is located to the north-west of Shiraz, the capital city of Fars Province (Figs.12 and 13). A rural town is situated at each end of the region: Kherameh in the south-east and Marvdasht in the north-west (Fig.14). Rahmat Mountain and the Kor River form the northern and southern borders of the region, respectively. The Kor River, which is 278 kilometres long with an average flow of 47.6 million litres per second, originates from the Sayed Mohammad Mountain (eastern part of the Zagros Ranges) in the Eqlid region of Fars Province. After irrigating a large number of farms and agricultural lands along its path, it empties into Bakhtegan Lake in the same province. There are 67 variously-sized villages and the nearest to Shiraz is 61 kilometres while the farthest is 105 kilometres. The total area of the region is 919 square kilometres, of which 29,087 hectares are pasture and 46,538 hectares are cultivated; the rest, which includes 3,800 hectares of marshland, are not suitable for agriculture. The average altitude above sea level is 1570 metres with a slope of .0002 towards the Kor River. As the surface of the river is about six metres lower than ground level, access to water may be had by either pumping or by building small irrigated dams along the river. The average rainfall is 276 mm per year, therefore, the region's climate is semi-arid. July is the hottest month with a maximum of 47°C and January is the coldest with a minimum of -14.5°C.

Figure 12: Location of Fars Province.
Source: Compiled from Amirahmadi and Atash (1987:158)

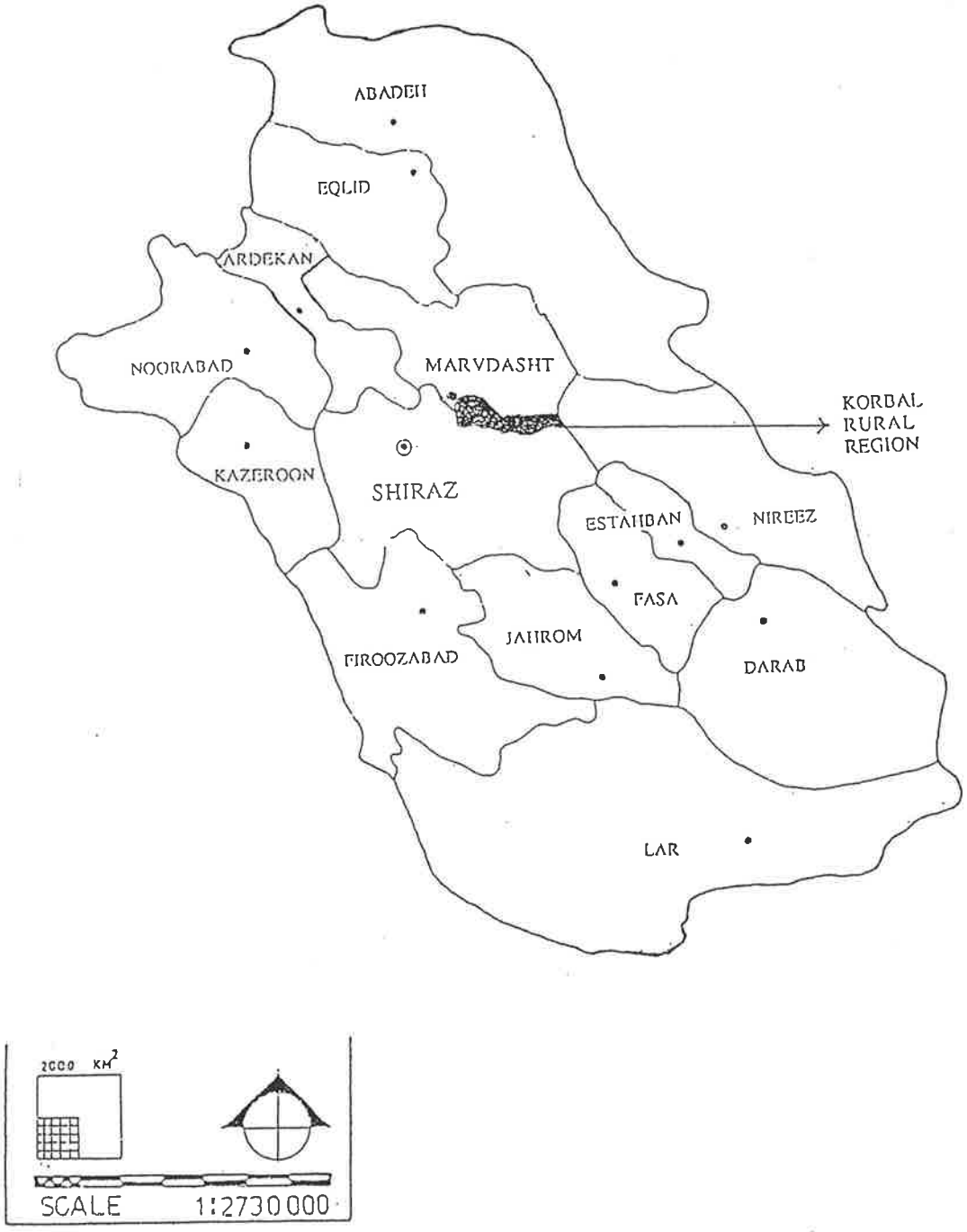

Figure 13: Fars Province, the location of Shiraz, Marvdasht and Korbal Rural Region.

Source: Writer's drawing from Atlas of Iran, 1990.

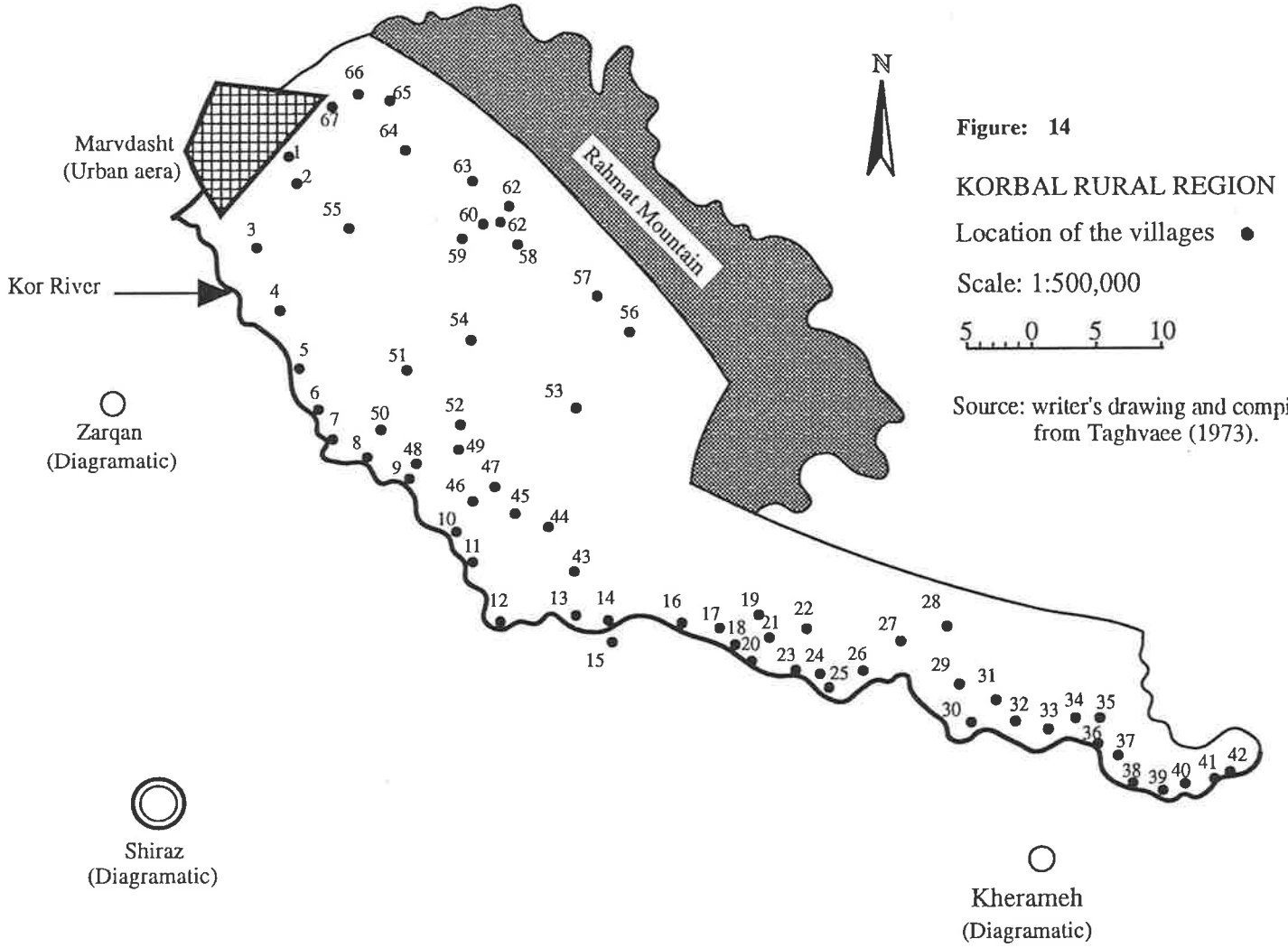

Figure: 14

KORBAL RURAL REGION

Location of the villages ●

Scale: 1:500,000

5 0 5 10

Source: writer's drawing and compilation from Taghvaee (1973).

3.4.2 Socio-economic situation

Before the Islamic Revolution the villagers in the KRR, like many others throughout Iran, were depressed socially and economically. They did not have access to the most basic services, such as safe drinking water, health care and medical services, education, electricity and transportation facilities. Despite their relative proximity to the cities of Marvdasht and Kherameh, the absence of good roads and means of transport made it too difficult and expensive for the villagers to travel to those cities on a regular basis.

About 50% of the households were landless and were forced to work for other peasants as simple agricultural workers receiving very low wages. These workers also spent a part of the year in Shiraz and Marvdasht where, sometimes, they could find temporary jobs when there was not enough work for them in the villages. Most of the time they lived in permanent poverty. The situation for the peasants was only slightly better. There were just a few rich peasants who could afford to live in better circumstances.

After the revolution the majority of agricultural workers in the KRR owned land and their general living conditions improved. It was a very good starting point for rural development but not sufficient to bring about a state of sustainable development. The peasants were still in need of financial and technical support to improve their farms and they also expected the government to provide them with basic services and facilities. This did not happen because of the eight-year war and other problems. As a result, after the war rural-to-urban migration escalated such that many villagers rushed to the cities in search of better employment and adequate access to their needed services and facilities, often becoming permanent residents.

The main crops of the region are wheat, barley, rice and sugar beets (Fig. 15).

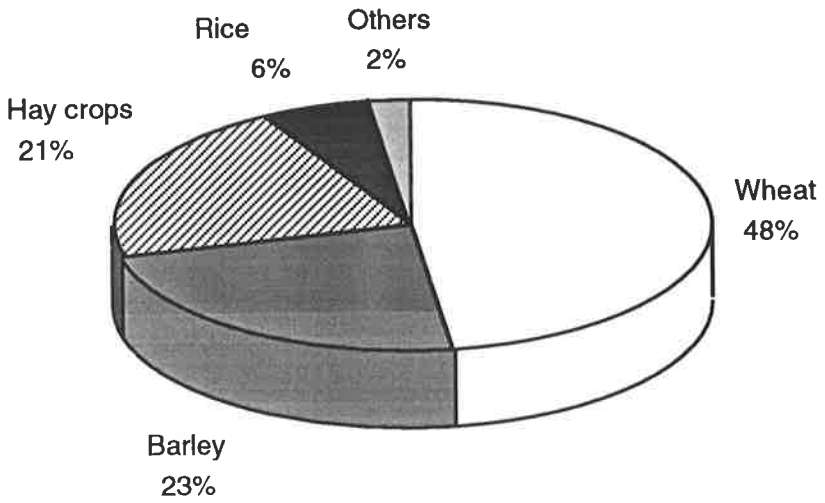

Figure 15: Percentage of different types of crop in the KRR, 1992.

Source: Writer's compilation from General Office of Agriculture of Fars Province, June 1993. Report No.2, Vol.4, p.19.

More than 87% of agricultural land is under irrigation, 12% is used for dry farming and only 1% is given to orchards.

Table 11: Production costs per hectare, in rials, for the major crops of the KRR in 1992.

Crops / Activities	Wheat	Barley	Rice	Sugar beets	Alfalfa
Seed bed preparation	10,500	11,400	20,600	13,500	14,200
Sowing	14,200	12,700	146,000	13,800	31,300
Fertilisers	4,900	4,400	4,050	12,800	29,600
Pest control	1,100	360	2,600	4,500	4,600
Tillage	- - -	- - -	10,850	111,000	- - -
Irrigation	11,800	9,200	72,100	69,000	49,200
Harvesting	7,900	7,500	72,100	85,000	43,800
Transportation	3,000	2,000	3,150	48,700	- - -
Other costs	- - -	- - -	4,400	- - -	- - -
Total cost/hec.	53,400	47,560	335,850	358,300	172,700

Source: Writer's derivation from General Office of Agriculture of Fars Province, June 1993. Report No.2, Vol.4, pp.21-42.

Table 12: Average production in kilograms per hectare for crops in 1992.

Crop	Production: kg/hectare
Wheat	2,655
Barley	2,072
Rice	1,979
Sugar beets	38,000
Alfalfa	12,000

Source: Writer's derivation from General Office of Agriculture of Fars Province, June 1993. Report No.2 Vol.4, p.45.

Table 13: Average cost/benefit in rials of each crop per hectare in 1992.

Crops	Cost, R/hec.	Income, R/hec.	Net benefit, R/hec.
Wheat	53,400	136,500	83,100
Barley	47,560	93,900	46,340
Rice	335,850	458,500	122,650
Alfalfa	172,700	300,000	127,300
Sugar beets	358,300	266,800	-91,500

Source: Writer's compilation from General Office of Agriculture of Fars Province, June 1993. Report No.2, Vol.4.

The main occupation of the people in the KRR is farming and, for the majority of women, carpet-weaving. The average annual income per household was 1,600,000 rials (approximately $US1,600) in 1992.[1] This was about 66% of per capita income at the national level which was 2,435,000 ($US2,435), 53% of that of urban areas which was Rls.3,050,000[2] ($US3,050) and 11% more than that of rural areas at the national level which was Rls.1,420,000[3] (approximately $US1,420) for the same year. The region's system of mixed farming is composed of crop production and animal husbandry. Farming makes up 70% of the household income, animal husbandry and carpet-weaving make up the remainder.

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1 According to the Iran Central Bank's Price Index for 1992, one thousand rials equalled one US dollar.

2 IBS No.1, Vol.1, p.91, 1993.

3 IBS No.1, Vol.1, p.111, 1993.

1. Population

In 1992 the population of the KRR was 49,664 persons = 8,869 households. Table 14 gives the population of each village.

Table 14: The villages of the KRR and their populations, 1992.

No.	Name of Village	Population	No.	Name of Village	Population
1	Kooshk (SR.1)	3062	35	Sofla	1515
2	Rashmikhan	1090	36	Qavamabad	1106
3	Dowlatabad	1871	37	Kooshk (SR.3)	325
4	Qorbanlak	981	38	Hassanabad	309
5	Band-e-Amir	1995	39	Hajiabad	321
6	Kolahsiah	247	40	Kharestan	631
7	Abdolkarimi	150	41	Mozaffari	531
8	Abadeh-Khorreh	52	42	Qalaye Mahmoodi	170
9	Gerehdan	32	43	Mehmanabad	541
10	Esmaeelabad (SR. 2)	298	44	Moqarrab (Sofla)	352
11	Firoozi	475	45	Dowlatabad	335
12	Faizabad	521	46	Lahiji	324
13	Mehrian	789	47	Malekabad	291
14	Pashangan	485	48	Akrad	291
15	Rahmatabad	2937	49	Sadrabad	189
16	Zainabad	499	50	Dejabad	403
17	Jian	397	51	Shahr-e-Khast	29
18	Nosrat	327	52	Khairabad-e-Tadj	221
19	Kamjan-J.G.	504	53	Asefabad	145
20	Hashemabad	578	54	Dehchasht	325
21	Saqaabad	122	55	Rajaabad	1776
22	Noorabad	180	56	Esmaeelabad (SR.1)	574
23	Garmenjan	187	57	Chartaq	849
24	Dehqanan	191	58	Maqsoudabad	476
25	Roubehqan	291	59	Tajabad	599
26	Khorramabad	248	60	Khairabad	679
27	Shahababad	304	61	Beryanak	264
28	Soltanabad	1993	62	Soltanvelayat	685
29	Qeshlaq-e-Dejnian	783	63	Ezzabad	528
30	Salamatabad	724	64	Kashak	918
31	Hossainabad	451	65	Shamsabad-e-Takht	997
32	Esmaeelabad-Paeen	339	66	Sahrak-e-Valiyasr	1210
33	Benjir	829	67	Kenareh	7626
34	Rashidabad	197		Total	49664

Source: Derived from Korbal Population Report No.17, Vol.3, Jihad of Fars Province, March 1992.

As in many other parts of Iran, in the KRR males outnumber females. Males make up 52% of the population and females 48%. Close to 55% of the population is under 15 years of age. Table 15a and Figure 16 give the population structure of the region.

Table 15a: The KRR population structure, March 1992.

Age Groups	Total		Male		Female		Sex Ratio (100 female)
-	No.	%	No.	%	No.	%	No.
0-4	9,237	18.6	4,867	9.8	4,370	8.8	111
5-9	9,585	19.3	4,668	9.4	4,917	9.9	94
10-14	8,244	16.6	4,072	8.2	4,172	8.4	99
15-19	5,811	11.7	3,178	6.4	2,633	5.3	121
20-24	3,278	6.6	1,838	3.7	1,440	2.9	128
25-34	4,172	8.4	1,937	3.9	2,235	4.5	85
35-44	4,023	8.1	1,987	4.0	2,036	4.1	102
45-54	2,284	4.6	1,391	2.8	893	1.8	160
55-64	2,136	4.3	1,341	2.7	795	1.6	172
65+	894	1.8	546	1.1	348	0.7	254
	49,664	100	25,825	52	23,839	48	110

Source: Derived from Korbal Population Report No.17, Vol.3, Jihad of Fars Province, March 1992.

Table 15b: Table 15a simplified		
Age Groups	% Male	% Female
0-4	9.8	8.8
5-9	9.4	9.9
10-14	8.2	8.4
15-19	6.4	5.3
20-24	3.7	2.9
25-34	3.9	4.5
35-44	4	4.1
45-54	2.8	1.8
55-64	2.7	1.6
65+	1.1	0.7

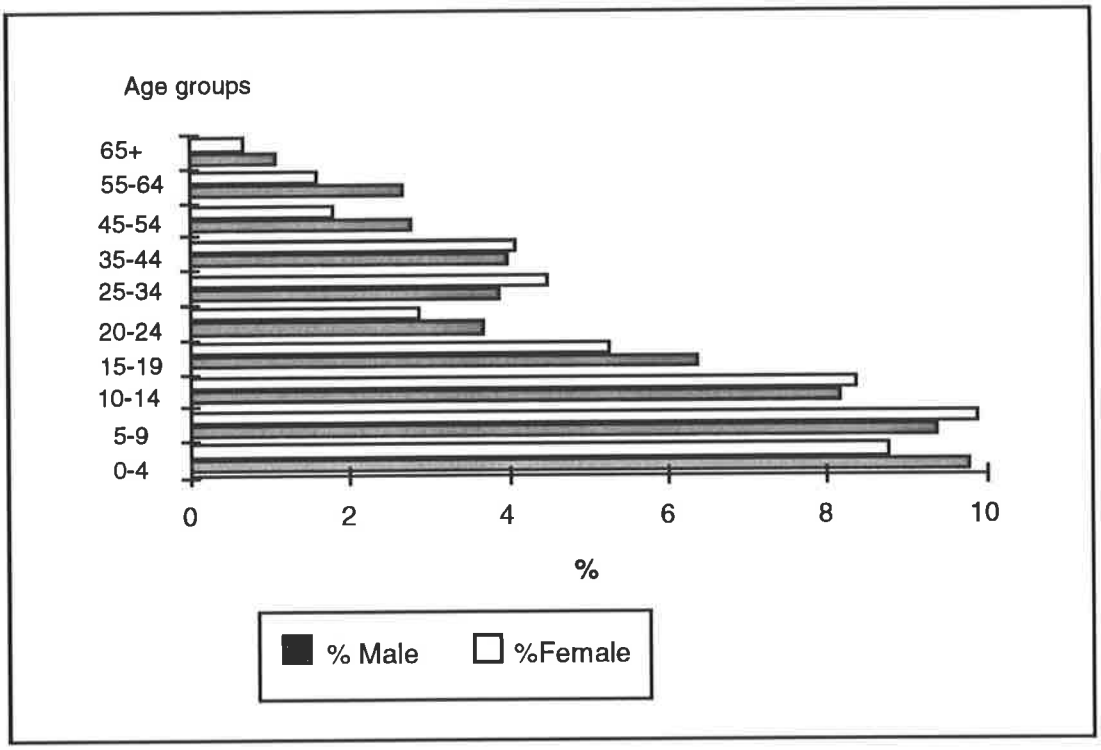

Figure 16: The KRR population structure, March 1992.

Source: Table 15b.

2. Education

In 1992 there were 60 primary schools (years one to five), 40 were co-educational, six were for girls and 14 were for boys. These schools had 5204 students (between 6 to 12 years) and 237 teachers. Only 10% of the teachers were local people, the rest were from Shiraz, Marvdasht and Kherameh. There were 12 secondary schools (years six to nine) with 650 students (between 13 to 15 years). Four of these were for girls and eight for boys. These schools were run by 64 teachers, only five were native to the area. There were no high schools, therefore, the students had to go to Marvdasht, Kherameh or Shiraz. Literacy ratio for the region was 59.8 in 1992.

3. Health

In 1992 there existed four health centres and two health houses. Each centre had three personnel: rural health worker I (Behdar-Roosta), rural health worker II (Behyar-Roosta) and a maidservant. A Behdar-Roosta is a rural health and medical practitioner whose duties are basic medical care, giving family planning as well as mother and children health advice. A Behyar-Roosta is a nurse-assistant whose duties are to administer vaccinations and injections, render first aid and assist the Behdar-Roosta. Each health house was run by a Behyar-Roosta for primary health care services.

The region still had many deficiencies regarding medical care and poor access to various types of medication. Only simple pills and drugs were availabe in the health centres. Environmental health was also far from satisfactory. About 10% of the houses had no sanitation. More than 25% of the villages did not have piped drinking water. Garbage was dumped haphazardly and usually not removed for a long time, thus infectious and parasitic diseases were very common in most of the villages. Based on the statistics of the General Health Care and Medical Services of Fars Province for the second half of 1991, approximately 23% of the health problems in the KRR was related to parasitic and infectious diseases.

To illustrate the situation infant mortality rate has been used as the health indicator. In 1992 the figure was 49 (per 1,000 live births), while at the same time the figure for the urban areas of Iran was 31.

4. Roads and transportation facilities

Until April 1992 there were only 43 kilometres of asphalt road in the region, of which 29 joined the villages of Shamsabad-e-Takht, Shahrak-e-Valiyasr, Kenareh,

Kooshk, Rashmikhan and Dowlatabad, Qorbanlak and Band-e-Amir to each other and to Marvdasht in the west; and 14 kilometres which joined Sofla and Qavamabad villages to Kherameh in the east. The rest of the villages were joined to the two nearby cities by 198 kilometres of gravelled roads (Fig.17). The only regular transport from the villages to Marvdasht and Kherameh and *vice versa* were a few private minibuses. However, there were usually some private cars whose owners, for a fee, would transport villagers and their commodities.

5. Electricity

One of the important issues addressed by the Ministry of Power and Energy with the help of the Ministry of Jihad Sazandegi was the installation of electricity in rural areas. Before the revolution only 6% of the villages in the whole country had electricity, while in 1992 the figure had reached 42%.[1] For the KRR these figures were 10.4% and 55%, respectively.

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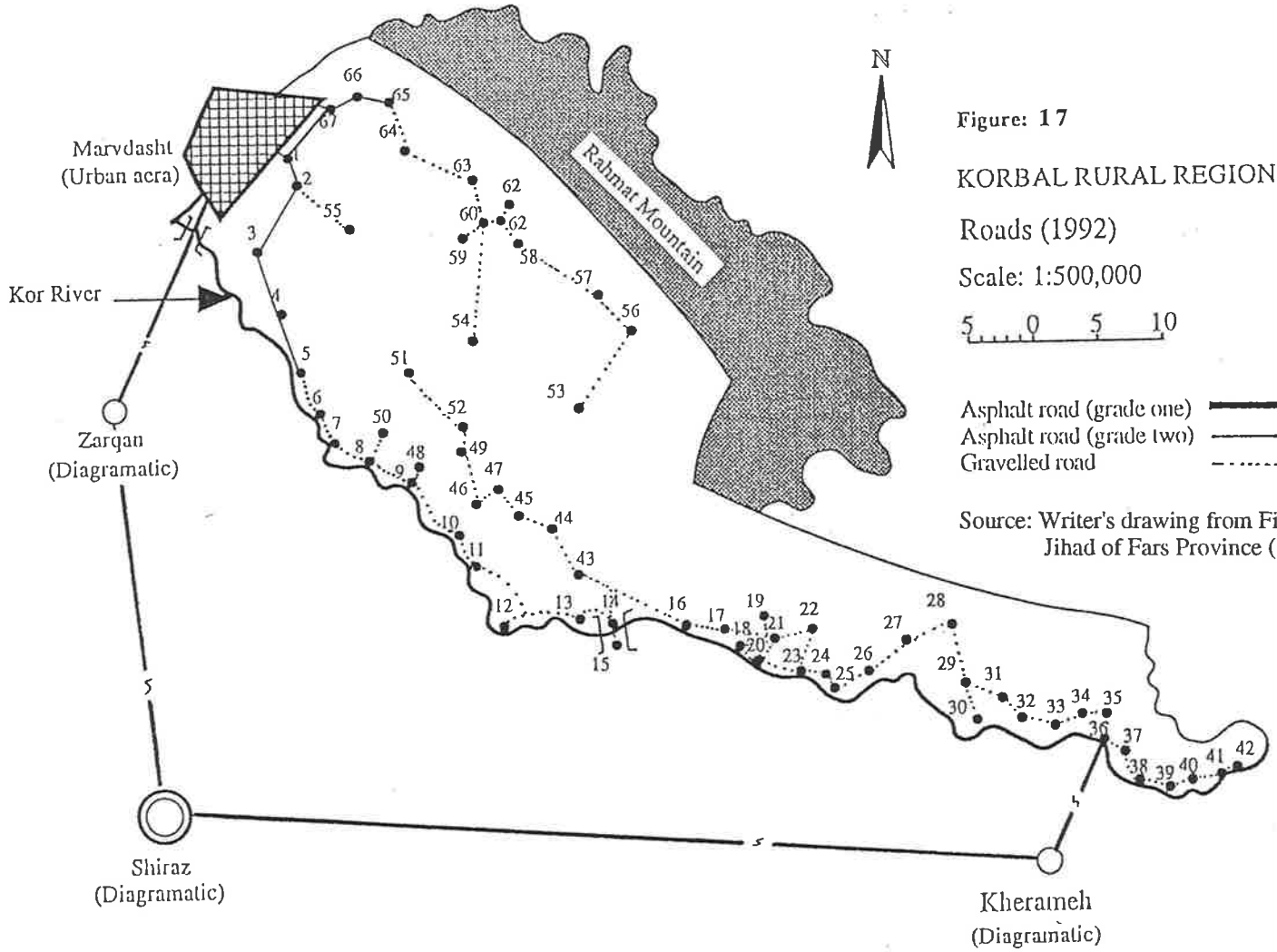
[1] President Rafsanjani's speech at Tehran University. Reported in *Kayhan Havai*, No.1086, June 29, 1994.


Marvdasht
(Urban aera)
Kor River
Zarqan
(Diagramatic)
Shiraz
(Diagramatic)
Kherameh
(Diagramatic)
Rahmat Mountain
N
Figure: 17
KORBAL RURAL REGION
Roads (1992)
Scale: 1:500,000
5 0 5 10
Asphalt road (grade one)
Asphalt road (grade two)
Gravelled road
Source: Writer's drawing from Figure 14 and Jihad of Fars Province (1992).

3.5 ACTION RESEARCH PROGRAM

Before explaining the process of the research, it should be emphasised that the methodology is based more on pragmatic action rather than a highly developed theoretical structure. The related theories reviewed in Chapters I and II serve as a strong background in establishing the validity of the research. Few researchers in the area of social sciences are given the opportunity to carry out this type of study because it requires a great deal of time, money, personal interest, patience, the involvement of skilled personnel and, most importantly, managerial and administrative experience to harmonise and co-ordinate all of the major elements that play a significant role in the various processes of the research.

During the 1970s, firstly as a research assistant and then as Head of the Rural Research Centre of the University of Shiraz, the writer accompanied senior students of the Department of National Development to the rural areas around Shiraz for summer field-work training. Between 15 and 20 students attended the intensive course over a period of 10 weeks, throughout which they gained practical knowledge of: how to identify and deal with the problems in the rural areas; how to conduct the different processes of rural development planning; how to design a rural development plan and how to work with and for villagers towards the improvement of their living conditions.

Each summer academics from various colleges and departments of Shiraz University, such as: Agriculture, Civil Engineering, Health and Medical School, National Development and Sociology were invited to visit the villages and their professional input was sought.

Rahmatabad, Qeshlaq-e-Dejnian and Soltanabad (Fig. 18) were the first villages to accept members of the Research Group into their communities. It was

hoped that working with the people and implementing small projects, such as drinking water reservoirs, the plastering or cementing of irrigation channels and the construction of small silages and similar, with their direct participation, would act as incentives for more comprehensive works to be carried out by the villagers who explained that, before the Research Group came to help them, they had no idea how to perform these tasks; some thought that the jobs were beyond their capability.

After participating in the different processes of planning - from the first talks then meetings to allocating the limited funds, programming and implementation - they understood that they were able to do the same without any outside major supervision. With this understanding, the three villages generated new projects very rapidly such that, by 1972, many changes had taken place.

At the end of summer 1972 the Governor of the Province, the Chancellor of the University of Shiraz, members of the local and provincial authorities and representatives from other villages in the region were invited by the Rural Research Centre to visit the villages to inspect the projects that had been implemented. Their visit was a success and more aid was promised in the future. The local and provincial authorities formally stated that if villagers contributed at least one-third of the cost of the projects their villages needed, from 1973 the remainder would be paid by the government. Preliminary action and management of the related procedures was assigned to the Rural Research Centre.

The Centre took the matter very seriously and two weeks later a meeting was arranged at the Centre with representatives from all of the villages in the region to discuss the successful results achieved in the three villages and the promised contribution by the government towards the implementation of projects in other volunteer villages. Seventeen villages were nominated by their representatives with

the assurance of every kind of co-operation and participation. The rest decided to wait for the results.

Fifteen of the villages: Beryanak, Ezzabad, Khairabad, Maqsoudabad, Soltanvelayat, Tajabad, in the north; and Dehqanan, Garmenjan, Hashemabad, Jian, Kamjan, Noorabad, Nosrat, Roubehqan and Saqaabad in the south-east formed two clusters as follows:

Group A:	Group B:
Beryanak	Dehqanan
Ezzabad	Garmenjan
Khairabad	Hashemabad
Maqsoudabad	Jian
Soltanvelayat	Kamjan J.G.
Tajabad	Noorabad
	Nosrat
	Roubehqan
	Saqaabad

Two single villages, Band-e-Amir in the south-west and Sofla in the far south-east of the region (Figure 19) were separate because: 1) they could not be included in the clusters due to distance and 2) the intermediate villages were not in the program.

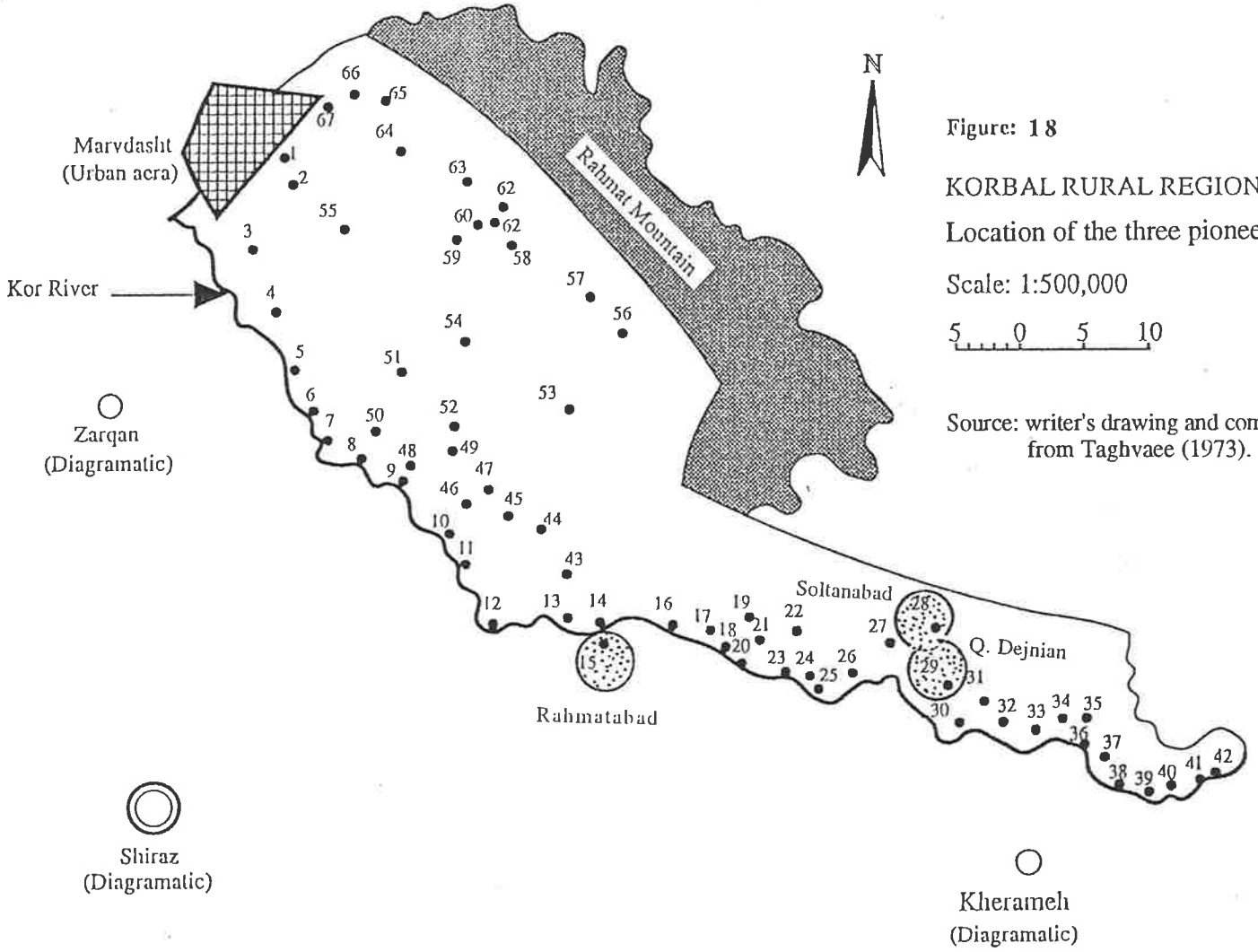


Figure: 18

KORBAL RURAL REGION

Location of the three pioneer villages.

Scale: 1:500,000

5 0 5 10

Source: writer's drawing and compilation from Taghvaee (1973).

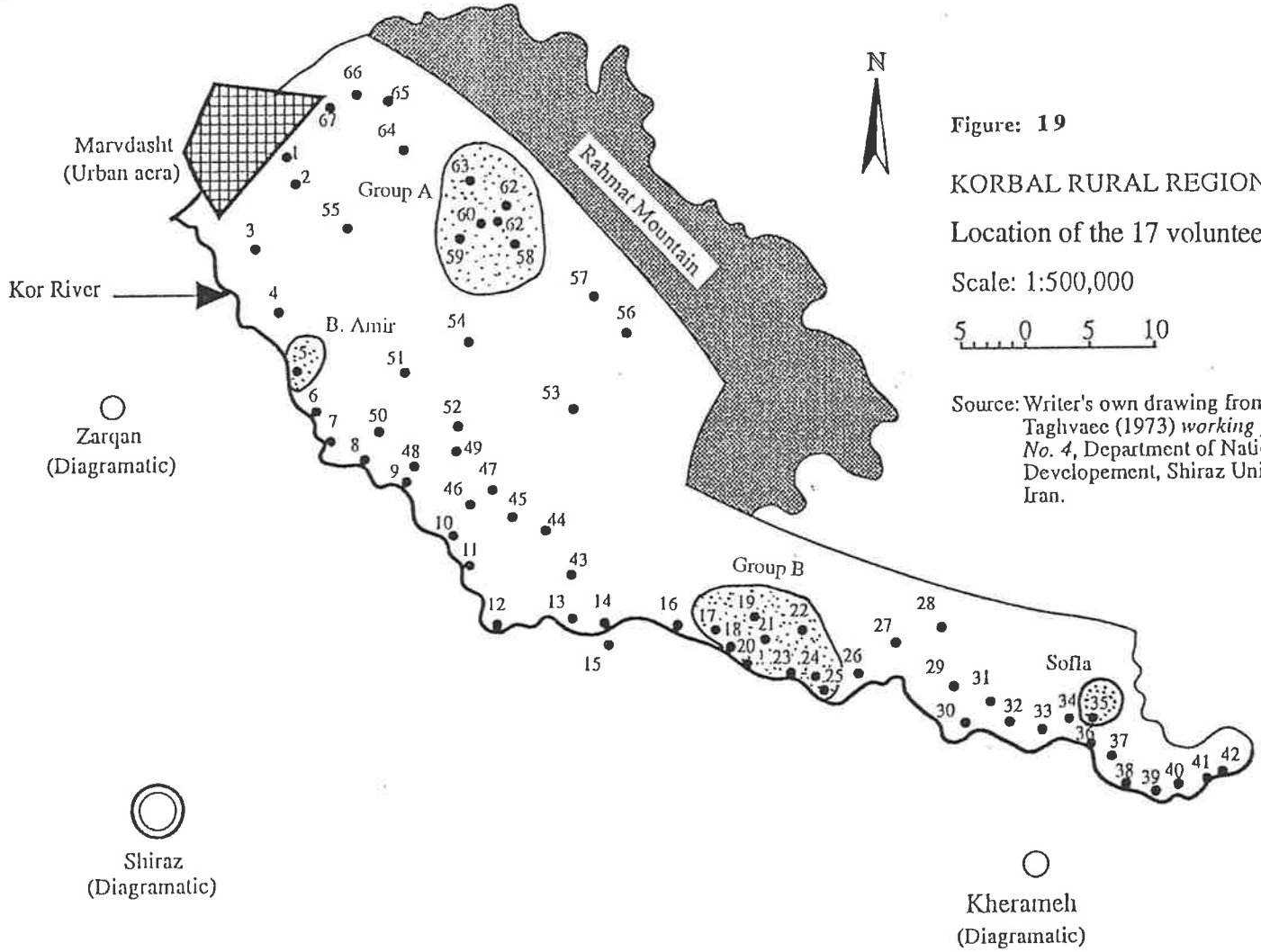


Figure: 19

KORBAL RURAL REGION

Location of the 17 volunteer villages.

Scale: 1:500,000

Source: Writer's own drawing from Taghvaee (1973) *working paper No. 4*, Department of National Developement, Shiraz University, Iran.

In order to gain further knowledge of the region and its surrounding areas the writer devoted the second half of 1972 and early Spring 1973 to visiting all of the Korbal villages together with collecting data through observation, interviews, library sources and local and provincial authorities (Table 16 and Fig. 20). The information served as a general guide for the Research Group in planning and decision-making regarding service provision programs.

Table 16: KRR general situation in 1973.

Total number of villages	67
Total population	29002
Rate of population growth (per annum)	3.2%
Rate of rural-urban migration (per annum)	35/1000
Literacy ratio	22%
Annual household income	$US1150
Facilities:	
Piped drinking water	None
Kindergartens	None
Primary schools	18
Secondary schools	None
High schools	None
Health houses	None
Health clinics	None
Public baths	3
Sanitary toilets	None
Dirt roads total length	280km
Gravelled roads total length	57km
Asphalt roads	None
Regular means of transport	None
Postal services	None
Telephone services	None
Electricity	None

Source: Tagvaee (1973); and the (then) General Office of Co-operatives and Rural Affairs of Fars Province.

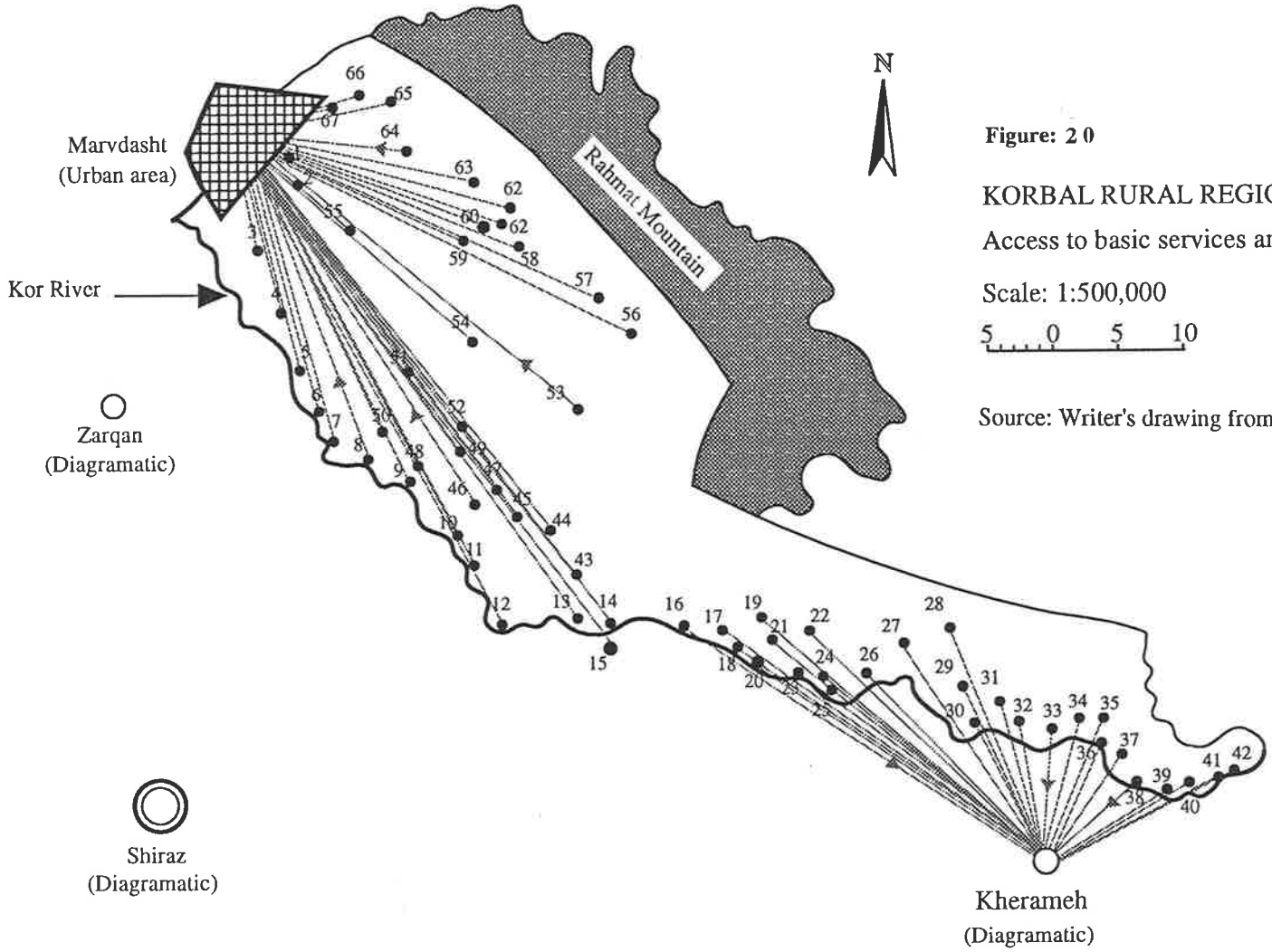


Figure: 2 0

KORBAL RURAL REGION

Access to basic services and facilities, 1973

Scale: 1:500,000

5 0 5 10

Source: Writer's drawing from Figure 14.

3.5.1 Summer field-work training 1973-1974

In early Summer 1973, the Research Group was divided into two sub-groups (SG.1 and SG.2). SG.1 was assigned to work in Group A villages and Band-e-Amir and SG.2 was assigned to work in Group B villages and Sofla.

The duties of the sub-groups at this stage were to:

- survey each of the villages allotted to them;
- draw physical and agricultural maps of each village's environs;
- interview villagers in order to obtain socio-economic data and identify each village's particular problems;
- prepare a list of each village's needs in regard to basic services and infra-structure, based on consultation with the villagers;
- investigate appropriate locations for projects;
- determine the type and extent of each village's participation;
- discuss and make note of any other factors which would contribute to a better environment and/or aid the productive activities of each village.

The lists were then analysed, placing the needs in order of priority according to the villagers' suggestions and the amount of funds and resources available. The most important were selected as projects to be implemented.

In addition to the interviews in the villages, several general meetings were held at the Centre during which the Research Group discussed with representatives from the villages and from a number of local and provincial authorities the priority, type, location and other aspects of the services to be provided.

Given the larger budget, more possibilities could be investigated throughout 1973-74. It was decided to locate basic services and facilities in two central villages, such that these places would develop as service centres for their

surrounding villages. One of the reasons behind this decision was that the Research Group and the representatives of the villages and authorities believed that, on the one hand, central villages would be able to facilitate access to the basic services for the people in the surrounding villages and, on the other, they might generate mutual relationships between the villages and the towns in the region. In fact, it was expected that the central villages would serve the two nearby cities, Marvdasht and Kherameh, by providing them with agricultural, meat and dairy products. In return, the cities would deliver those services that the surrounding villages needed, such as: specialised medical and health care, secondary education and vocational training, and serve as market towns for the surrounding villages.

In order to select the most suitable villages to act as service centres, the following criteria were considered:

- population,
- distance from the nearest town and distance from the surrounding villages (centrality), and
- the services and facilities already available.

Based on these criteria the two villages selected were Khairabad with five villages around it (Group A) and Hashemabad with eight villages around it (Group B). For each central village the following projects were planned:

- piped potable water,
- gravelled road (to connect the central village to the surrounding settlements for all the villages in the cluster),
- sealed road (to connect the central village to the nearest towns),
- a health house,
- a secondary school (years 6-9),

- a rural-urban co-operative shopping centre which contained a production unit for rural handicrafts (e.g., carpet, geleem and jajeem weaving; ceramic products, and hand-made tools and materials) (Taghvaee, 1975),
- a large public bath,
- a ghassal khaneh (funeral parlour),
- a post box,
- a public library, and
- a playground.

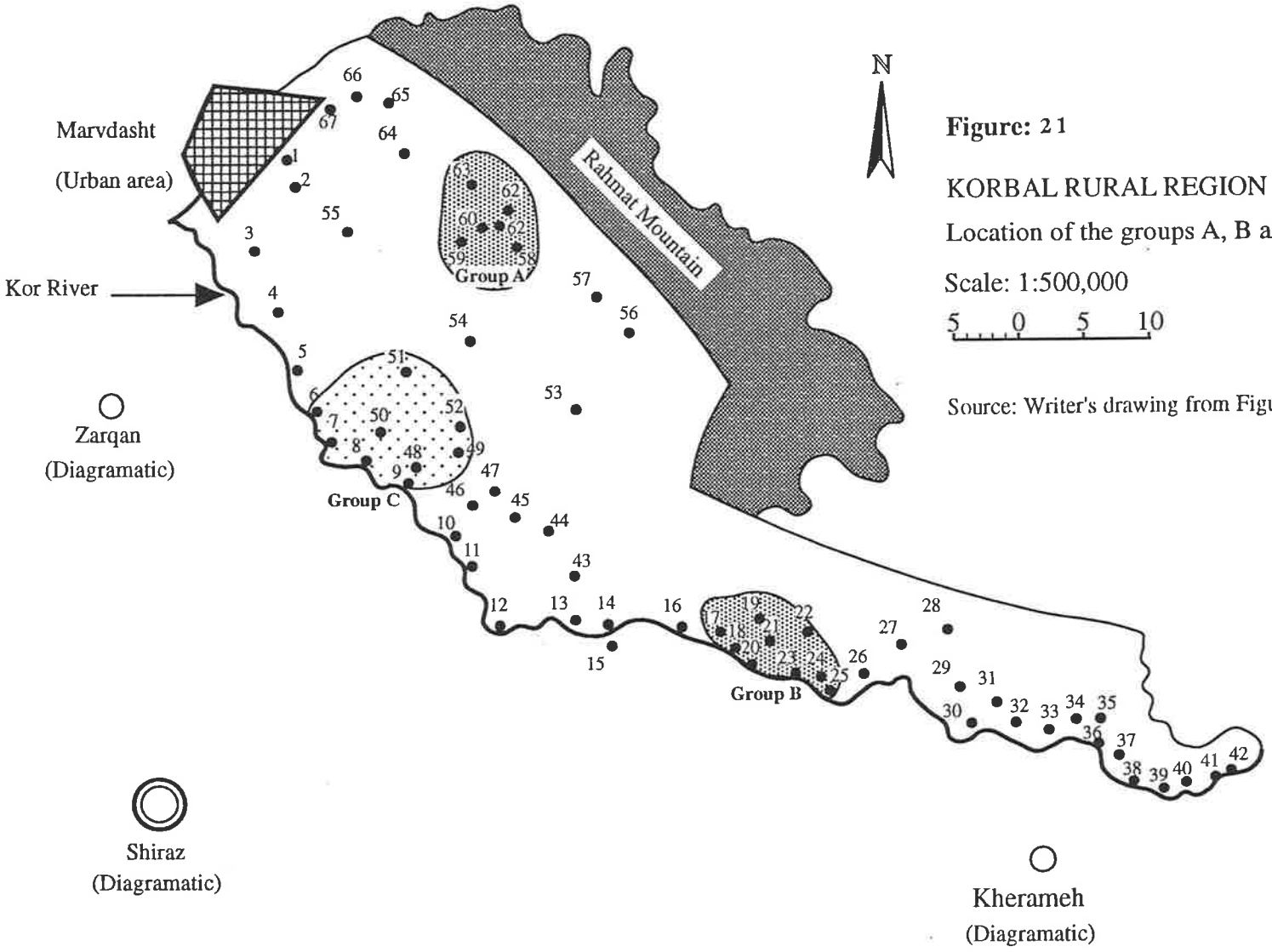
It should be noted that, in addition to the above, a number of small projects were also designed for most of the villages in the two clusters, such as primary schools, small public baths and handicraft workshops, to name a few. For the two single villages, Band-e-Amir and Sofla, only three projects - piped potable water, a public bath and a primary school - were planned for each due to the limitation of their funds.

3.5.2 Implementation of the projects 1974-1978 and 1980-1981

Project implementation began in mid-summer 1974 with road construction. It was within the 1974 budget of the General Office of Road and Transportation of Fars Province to provide gravelled roads to connect the villages with each other and with the main road leading to Marvdasht. The General Offices of Health, Education, and Agriculture sent the needed personnel and some equipment to the central villages in 1975. The Department of Power and Energy of the province supplied electricity to the central villages in 1976. For projects, such as schools, health houses, public baths and telephone connection, one-third of the costs was paid by the University of Shiraz, one-third by the local government, and one-third by the villagers by way of voluntary labour, financial contribution or both.

3. 6 THE RESULTS OF THE ACTION RESEARCH

In 1992 the 17 villages were revisited by the writer and follow-up studies were carried out to determine the impact of the implemented projects of the action research on the socio-economic conditions of the villages. To do this the socio-economic conditions of the villages under study were compared with nine other villages of the region (Group C), based on their similarity to Groups A and B villages in 1973. The Group C villages were: Abadeh-Khorreh, Abdolkarimi, Akrad, Dejabad, Gerehdani, Khairabad-e-Tadj, Kolahsiah, Sadrabad and Shahr-e-Khast (Fig.21).


Marvdasht
(Urban area)
Kor River
Zarqan
(Diagramatic)
Shiraz
(Diagramatic)
Kherameh
(Diagramatic)
Rahmat Mountain
Group A
Group B
Group C
N
Figure: 21
KORBAL RURAL REGION
Location of the groups A, B and C villages
Scale: 1:500,000
5 0 5 10
Source: Writer's drawing from Figure 14.

As the socio-economic conditions in the two clusters of villages will be compared before and after the implementation of projects, data for 1973 and 1992 are given in tables and figures simultaneously to obviate repetition. The criteria used for comparison were: population changes, rural-urban migration, literacy ratio, infant mortality rate and household income for the years 1973 and 1992.

Table 17 illustrates the population changes in all of the village of the region. Tables 18, 19 and 20 show the changes in groups A, B and C villages, respectively.

Table 17: Population changes in the villages of the KRR 1956-1992.

No.	Population Name of Village	1956	1966	1973	1976	1986	1992
1	Kooshk (SR.1)	932	1172	1463	1616	2594	3062
2	Rashmikhan	249	408	511	612	889	1090
3	Dowlatabad	553	691	872	1009	1594	1871
4	Qorbanlak	315	397	475	528	810	981
5	Band-e-Amir	567	711	921	1150	1714	1995
6	Kolahsiah	139	170	205	212	226	247
7	Abdolkarimi	87	111	130	134	143	150
8	Abadeh-Khorreh	38	37	45	47	50	52
9	Gerehdan	20	24	29	31	33	32
10	Esmaeelabad (SR. 2)	144	182	211	226	274	298
11	Firoozi	259	297	341	367	434	475
12	Faizabad	275	333	389	409	486	521
13	Mehrian	329	411	517	563	705	789
14	Pashangan	182	235	273	299	404	485
15	Rahmatabad	811	1007	1303	1517	2487	2937
16	Zainabad	184	239	282	308	415	499
17	Jian	141	171	206	223	328	397
18	Nosrat	121	145	169	185	253	327
19	Kamjan-J.G.	186	236	270	295	417	504
20	Hashemabad	235	268	305	338	476	578
21	Saqaabad	57	64	71	78	101	122
22	Noorabad	74	83	92	109	149	180
23	Garmenjan	85	93	107	118	158	187
24	Dehqanan	85	95	111	118	161	191
25	Roubehqan	129	147	170	187	239	291
26	Khorramabad	149	185	215	221	235	248
27	Shahababad	140	172	201	217	274	304
28	Soltanabad	752	829	931	1083	1672	1993

Table 17 continued

29	Qeshlaq-e-Dejnian	343	416	487	513	662	783
30	Salamatabad	350	449	519	541	663	724
31	Hossainabad	295	377	319	331	414	451
32	Esmaeelabad-Paeen	166	216	251	269	314	339
33	Benjir	452	571	669	709	765	829
34	Rashidabad	85	106	123	141	173	197
35	Sofla	568	712	831	911	1271	1515
36	Qavamabad	447	550	641	705	926	1106
37	Kooshk (SR.3)	152	191	220	238	259	325
38	Hassanabad	188	239	278	301	321	309
39	Hajiabad	191	242	283	327	331	321
40	Kharestan	356	421	491	649	651	631
41	Mozaffari	362	431	503	558	565	531
42	Qalaye Mahmoodi	126	153	178	185	181	170
43	Mehmanabad	400	494	578	593	591	541
44	Moqarrab (Sofla)	260	319	365	379	384	352
45	Dowlatabad	269	320	353	361	366	335
46	Lahiji	241	305	341	356	353	324
47	Malekabad	245	289	317	321	324	291
48	Akrad	177	224	259	267	277	291
49	Sadrabad	127	154	179	182	195	189
50	Dejabad	269	325	373	384	411	403
51	Shahr-e-Khast	15	17	20	22	23	29
52	Khairabad-e-Tadj	131	166	191	197	211	221
53	Asefabad	90	115	133	139	165	145
54	Dehchasht	230	257	309	316	372	325
55	Rajaabad	669	848	989	1072	1586	1776
56	Esmaeelabad (SR. 1)	314	395	467	471	542	574
57	Chartaq	373	468	553	589	758	849
58	Maqsoudabad	141	174	211	236	368	476
59	Tajabad	170	222	261	297	463	599
60	Khairabad	211	257	302	338	529	679
61	Beryanak	85	104	117	131	204	264
62	Soltanvelayat	213	260	303	341	532	685
63	Ezzabad	175	213	231	262	409	528
64	Kashak	318	399	477	518	778	918
65	Shamsabad-e-Takht	311	404	481	519	845	997
66	Sahrak-e-Valiyasr	460	583	623	701	1015	1210
67	Kenareh	2741	3452	3961	4507	6271	7626
	Total	19954	24751	29002	32077	43189	49664

Table 18: Population changes in the Group A villages (1956-1992).

Population Group A	1956	1966	1973	1976	1986	1992
Beryanak	85	104	117	131	204	264
Ezzabad	175	213	231	262	409	528
Khairabad	211	257	302	338	529	679
Maqsoudabad	141	174	211	236	368	476
Soltanvelayat	213	260	303	341	532	685
Tajabad	170	222	261	297	463	599
Total	995	1230	1425	1605	2505	3231

Table 19: Population changes in the Group B villages (1956-1992).

Population Group B:	1956	1966	1973	1976	1986	1992
Dehqanan	85	95	111	118	161	191
Garmenjan	85	93	107	118	158	187
Hashemabad	235	268	305	338	476	578
Jian	141	171	206	223	328	397
Kamjan J.G.	186	236	270	295	417	504
Noorabad	74	83	92	109	149	180
Nosrat	127	145	169	185	273	327
Roubehqan	129	147	170	187	239	291
Saqaabad	57	64	71	78	101	122
Total	1119	1302	1501	1651	2302	2777

Table 20: Population changes in the Group C villages (1956-1992).

Population Group C:	1956	1966	1973	1976	1986	1992
Abadeh-Khorreh	32	38	45	47	39	35
Abdolkarimi	87	111	130	134	125	115
Akrad	182	221	259	267	251	236
Dejabad	251	319	373	384	375	355
Gerehdani	20	24	29	31	30	28
Khairabad-e-Tadj	138	163	191	197	183	167
Kolahsiah	139	170	205	212	226	247
Sadrabad	131	151	179	182	167	158
Shahr-e-Khast	27	24	20	22	23	20
Total	1007	1221	1431	1476	1419	1361

A comparison of the population of the three groups illustrates that they were very similar until 1973. From 1976 to 1992 the populations of Groups A and B villages increased rapidly while Group C villages remained more or less static (Table 21 and Fig.22).

Table 21: Population changes in Groups A, B, and C (1956-1992).

Year	1956	1966	1973	1976	1986	1992
Group A / Population	995	1230	1425	1605	2505	3231
Group B / "	1119	1302	1501	1651	2302	2777
Group C / "	1007	1221	1431	1476	1419	1361

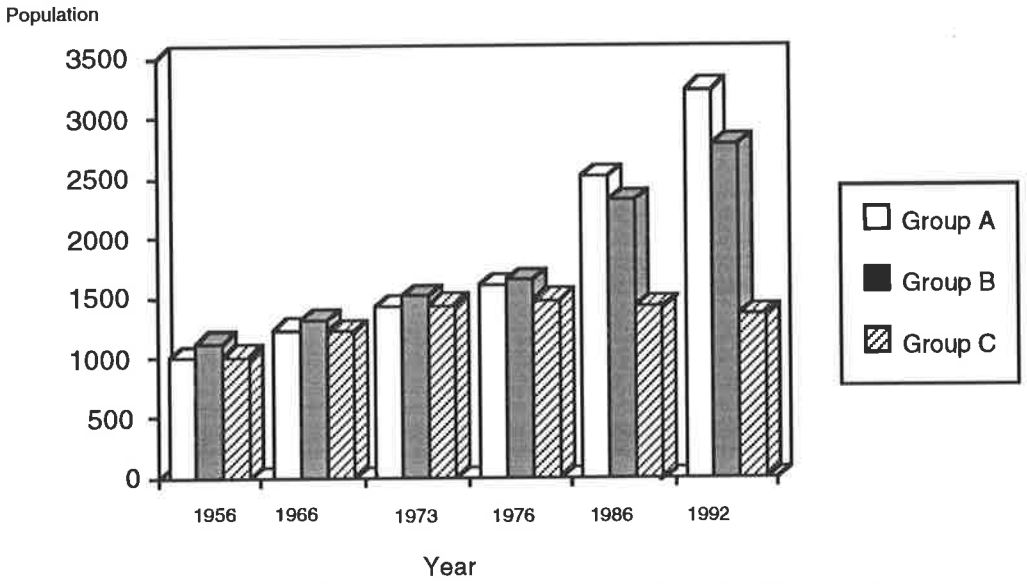


Figure. 22: Population changes comparison for the three groups.

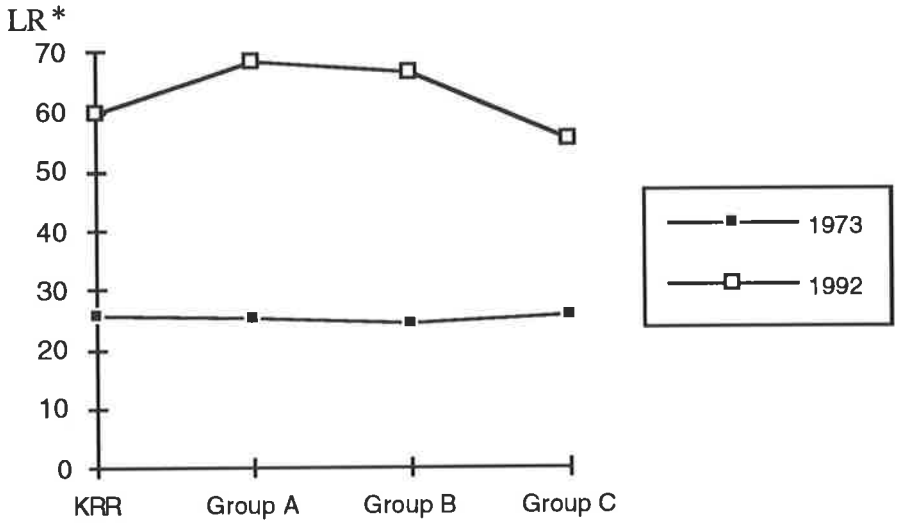
Source: Table 21.

Literacy

The literacy ratio for the three groups of villages was almost the same in 1973, while in 1992 the figure for Group C was less than Groups A and B (Table 22 and Fig.23).

Table 22: Literacy ratio for the villages of the KRR, 1973 and 1992.

Location	Literacy ratio (%), 1973	Literacy ratio (%), 1992
KRR	25.5	59.8
Group A villages	25.1	68.4
Group B villages	24.4	66.7
Group C villages	25.8	55.4



* Literacy ratio

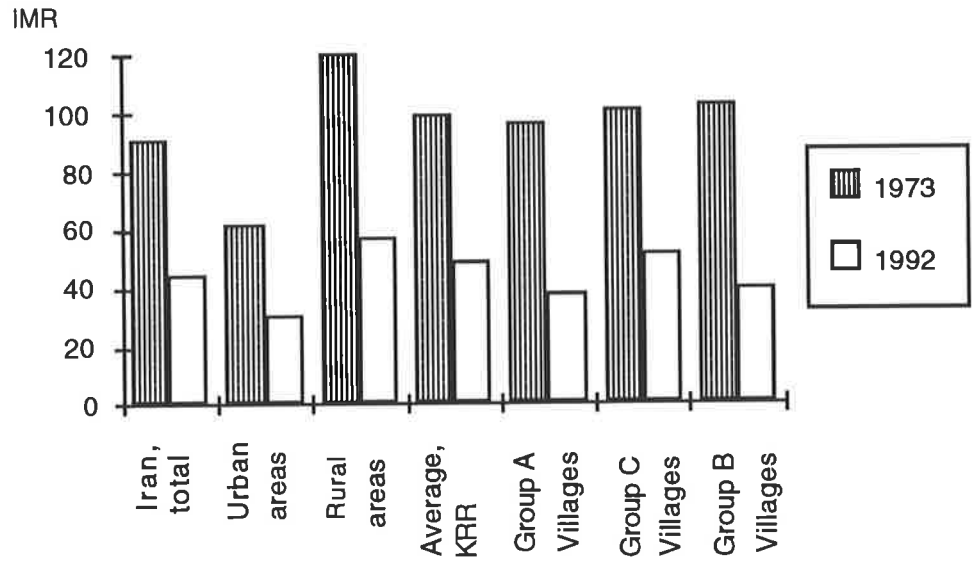
Figure 23: Changes in literacy ratio for the three groups, 1973 and 1992.

Infant mortality rate

In 1973 the figures for Groups A, B and C were 97, 103 and 101, respectively. These figures were 38, 40 and 52 for the year 1992 (Table 23). Figure 24 indicates that the villages in Groups A and B were healthier than those in Group C. In other words, providing health services in Groups A and B villages filled the gap between the health conditions in rural and urban areas. For example, the difference between the infant mortality rate for Group A villages and that of urban areas in 1992 was only seven as against 35 in 1973.

Table 23: Infant mortality rate (per 1,000 live births) in the KRR and at the national level.

Location \ Year	1973	1992
Iran, total	91	44
Urban areas	62	31
Rural areas	120	57
Average for KRR	99	49
Group A villages	97	38
Group B villages	103	40
Group C villages	101	52



IMR: Infant mortality rate

Figure 24: A comparison between the infant mortality rates in 1973 and 1992 for Iran and Korbal villages.

Annual household income

Table 24 and Figure 25 indicate that the difference in annual household income for the three groups of villages was $15 in 1973, whereas it increased to more than $250 in 1992 (based on the constant value of $US in 1973).

Table 24: Annual household income ($US.) in the KRR, 1973 and 1992		
Year / Village	1973	1992
Average, KRR	1150	1600
Group A villages	1180	1770
Group B villages	1165	1760
Group C villages	1165	1515

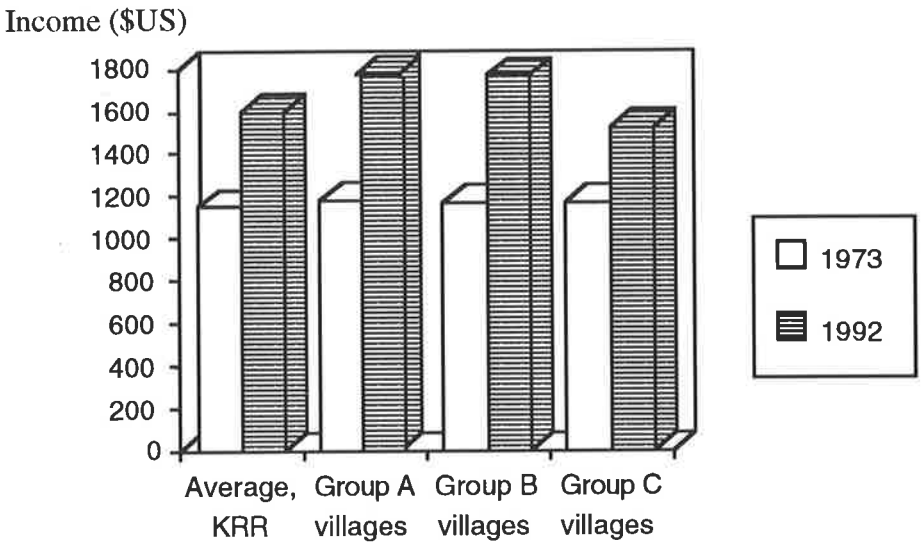


Figure 25: Comparison of annual household income for the three groups, 1973 and 1992.

To a large extent the differences between Groups A and B and Group C villages were due to the provision of services and facilities which, in turn, generated employment. The handicraft units in the shopping centres of the two central villages produced 75 new jobs in the first month of operation. The availability of services facilitated productive activities and spurred the people in Groups A and B villages to greater efforts towards the improvement of their living conditions both socio-economically and environmentally.

In contrast, group C villages' lack of access to most types of basic services and facilities plus the shortage of employment opportunities had a negative effect on the socio-economic activities of the villages and acted as a strong push factor for rural-to-urban migration. Table 25 shows the emigration rate for the three groups in 1973 and 1992.

Table 25: KRR socio-economic situation before and after the provision of services and facilities (i.e., 1973 and 1992).

Socio-economic indicators	Emigration rate (per 1000)		Annual household income ($US)		Literacy ratio (%)		Infant mortality rate (per 1000 live births)	
year	1973	1992	1973	1992	1973	1992	1973	1992
KRR	87	66	1150	1600	25.5	59.8	99	49
Group A villages	28	16	1180	1770	25.1	68.4	97	38
Group B villages	31	18	1165	1760	24.6	66.7	103	40
Group C villages	28	32	1165	1515	25.8	55.4	101	52

Those villages which were provided with basic services and facilities as well as new job opportunities through the action research programs had the lowest rural-urban migration rate in the region. The figures for Groups A, B and C were 28, 31 and 28 per thousand, respectively in 1973, while they were 16, 18 and 32 in 1992. The emigration rate shows a sharp decrease for Groups A and B and an increase of four per thousand for Group C in 1992.

A similar situation can be seen for annual household income and literacy ratio. In 1973 the annual incomes for the three groups were very close - Groups B and C were equal ($1165) - while in 1992, the annual income for Group C was $85 less than that for the whole region, $245 less than Group A and $255 less than Group B.

Literacy ratio for Group A was 25.1 in 1973 which was %0.7 less than that of Group C. In 1992, although the ratio for the whole region had more than doubled since 1973, the lowest figure belonged to Group C which was %55.4. The ratios

for Groups A and B were %68.4 and %66.7, respectively for the same year (Table 25).

The lower infant mortality rate for Groups A and B villages (i.e., 38 per 1000 and 40 per 1000, respectively) in 1992 in comparison with that for Group C villages (i.e., 52 per 1000) indicates better health conditions in Groups A and B for that year.

Therefore, the provision of services and facilities as well as new job opportunities in Groups A and B villages facilitated growth and development in these communities, improved their living conditions and reduced rural-urban disparities very effectively. This reduction becomes more clear when a number of socio-economic indicators in Shiraz and Group A villages are compared. For example, in 1973 the literacy ratios for Shiraz and Group A villages were %61.3 and %25.1, respectively. In 1992 these figures were %82 and %68.4. In 1973 the difference between the two ratios was %36.2, while in 1992 the difference was only %13.6. Other indicators, such as annual household income and infant mortality rate, also illustrate a reduction in the disparities between the rural and urban communities under discussion.

Locating the services and facilities in the region also changed the pattern of regional mobility to some extent. Many villagers instead of going to Marvdasht or Kherameh were able to fulfil most of their needs in the central villages (Fig.26). The two separate villages, Band-e-Amir and Sofla, and the three pioneer ones, Qeshlaq-e-Dejnian, Rahmatabad and Soltanabad had also improved such that they act as service centres; particularly Rahmatabad which serves at least ten surrounding villages. However, to have access to some specialised services Korbal people have to go to Marvdasht and/or Shiraz.

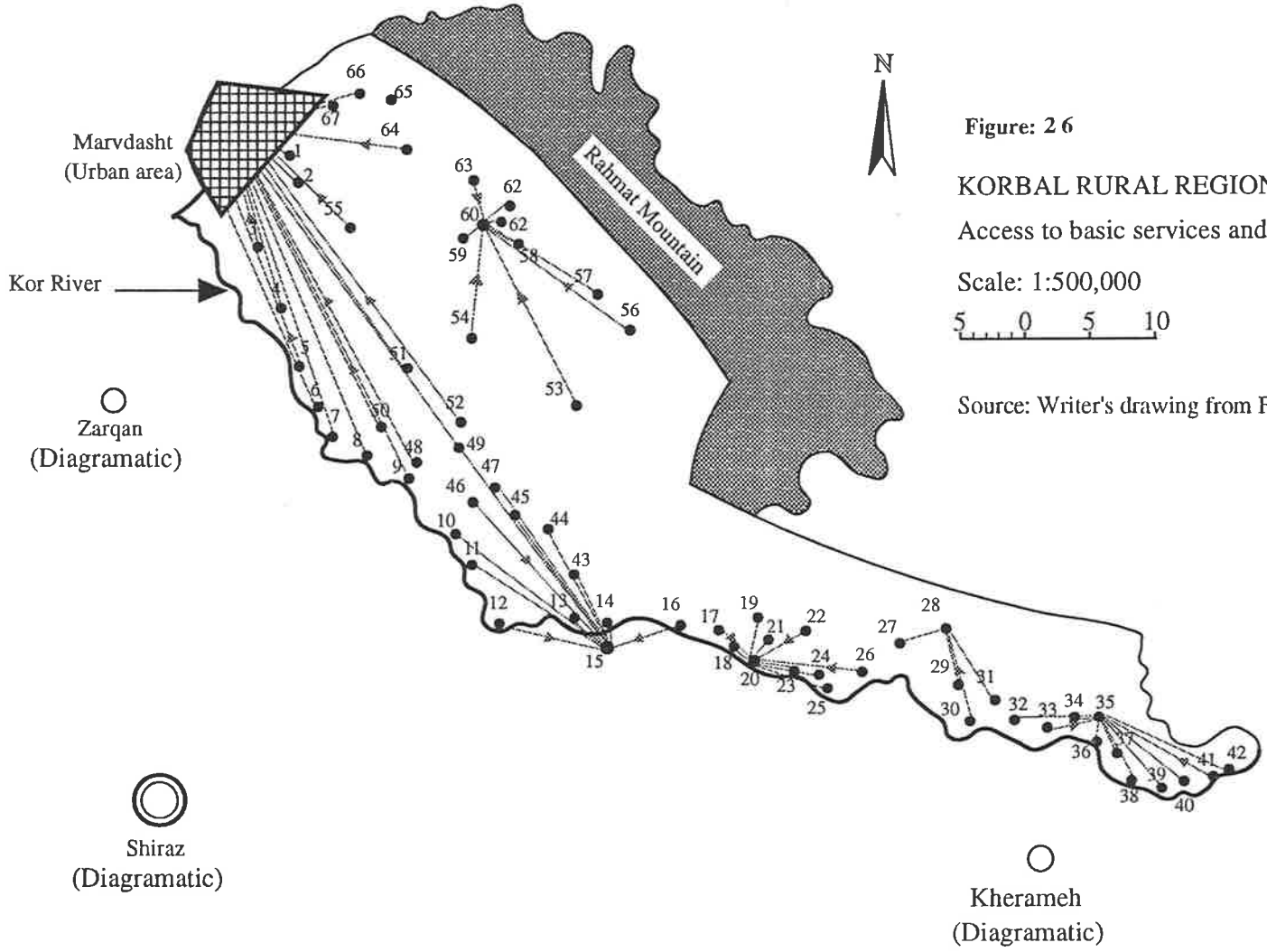


Figure: 2 6

KORBAL RURAL REGION

Access to basic services and facilities, 1992

Scale: 1:500,000

5 0 5 10

Source: Writer's drawing from Figure 14.

3.7 CONCLUSIONS

In spite of their valuable contribution to the national economy, rural people have been the most disadvantaged class throughout Iran's history. Urban bias policies have brought about extreme poverty and intolerable living conditions in the rural areas. This has forced many people to leave their villages for the cities in search of better life, while the potential of the cities to absorb and meet the needs of the continuing influx of rural migrants falls far short. As a result, the nation faces serious socio-economic problems.

The adoption of appropriate strategies to address these problems is vital to prevent a worsening of the situation and to gradually ameliorate its hazards. This requires an expansion of investment in the improvement of infrastructure in the rural areas, particularly medical and health-care services, education, roads and transportation facilities. The creation of job opportunities is another important factor.

The longitudinal action research carried out in the KRR demonstrates that the provision of basic services and infrastructure facilities reduces rural-urban disparities and inequalities and encourages people to remain in their villages. This may be an effective strategy to be adopted for the whole country.

The success of the action research experiment was largely due to the effective participation of the villagers. They understood that the Research Group was aware of the needs of rural communities, respected their values and norms and appreciated the important contribution rural people made to the national economy. The villagers came to trust the group members and looked on them as fellow workers who had come to help them solve their problems, not to dictate their own ideas.

Before the Islamic Revolution, many projects carried out by several famous consultants in other rural regions of Iran, under the supervision of Plan Organisation, were a waste of money and other national resources due to the lack of sufficient information and knowledge about the socio-cultural characteristics of the rural communities. The housing development projects in the Shamsabad-e-Takht and Baiza rural regions in Fars Province are typical examples. The houses were built for the people of those regions but they refused to live in them despite governmental pressure on them to do so. The houses were incompatible with the socio-cultural aspects of the villagers, therefore, they preferred to stay in their old houses.

The positive impact of spending time with people in rural communities, living with them, listening to them and sharing a common goal with them in seeking appropriate solutions to their problems is the message of the KRR longitudinal research. Any intervention in rural societies should be based on a thorough knowledge of their history and their socio-cultural, economic, geographical and environmental conditions such that they recognise the intervening agent as an 'in-group' or indigenous person who can be trusted to contribute to, and participate in, the process of their development.

Working with people for people is an art. Among the skills and expertise of researchers, planners, policy-makers, engineers and authorities should be the ability to win the confidence of the people they want to help, particularly those in rural areas. One should love working with people and be able to demonstrate this by sincerity and patience in order to achieve the planned objectives.

CHAPTER IV

LEARNING FROM AUSTRALIA

4.1 GENERAL DESCRIPTION

The island continent of Australia comprises 7,682,300 square kilometres. It is almost as large as the United States of America (excluding Alaska), 4.7 times greater than Iran and 32 times greater than the United Kingdom. It is the lowest, flattest and, apart from Antarctica, the driest continent (Fig. 27).[1]

Australia features a wide range of climatic zones, from the tropical regions of the north, the arid expanses in the interior, to the temperate regions of the south. About 80% of the land receives an average annual rainfall of less than 600mm and 50% less than 300mm. It also has great seasonal fluctuations with temperatures ranging from a few degrees below zero to above 50°C.[2]

Australia is now one of the world's leading producers and exporters of food, natural fibres and livestock. In fact, farming and food production have served the nation's economy as the "engine-room" for growth and development. This has been achieved in the face of harsh climatic and environmental conditions which necessitated the development of highly-specialised agricultural systems, skills and technology.

Agriculture and food production, wool and leather processing and similar activities are Australia's largest and most competitive industries. They are effective sources of employment in rural Australia and play a very important role in making

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[1] *Year Book of Australia* (1994). Australia Bureau of Statistics No.75, p.3.
[2] *Ibid.* p.8.

the rural sector more distinctive and vital in the national economy. When the chain from the farm to the supermarket shelf is considered, the rural sector accounts for about 30% of the country's total economic activity and employment.[1]

Today, Australia occupies a place in the front-rank of global farm trade, being the world's largest exporter of wool and beef, the fourth largest exporter of wheat, the second largest supplier of sugar to the open market and a major international source of dairy produce, fruits, grains and seeds, cotton, rice, flowers, honey and farming technology.[2]

In 1991/92 the value of Australia's agricultural production totalled $20,623 million. With a population of only 17.9 million people, sufficient food and fibre were produced to meet the needs of more than 55 million human beings world-wide. Rural export generated $15,587 million, accounting for 22.6% of all exports.[3]

These facts indicate that the rural sector has been very successful in the Australian economy. One of the major contributory factors to this success may be the existence of very efficient and effective institutions and organisations which support the rural communities. These governmental and non-governmental agencies have been able to bring rural and urban communities closer to each other - to a large extent - regarding socio-economic conditions and equal opportunities. Australians, especially those living in rural areas, may not appreciate this situation as much as a researcher who has examined other developed as well as developing countries in this regard and compared them with each other.

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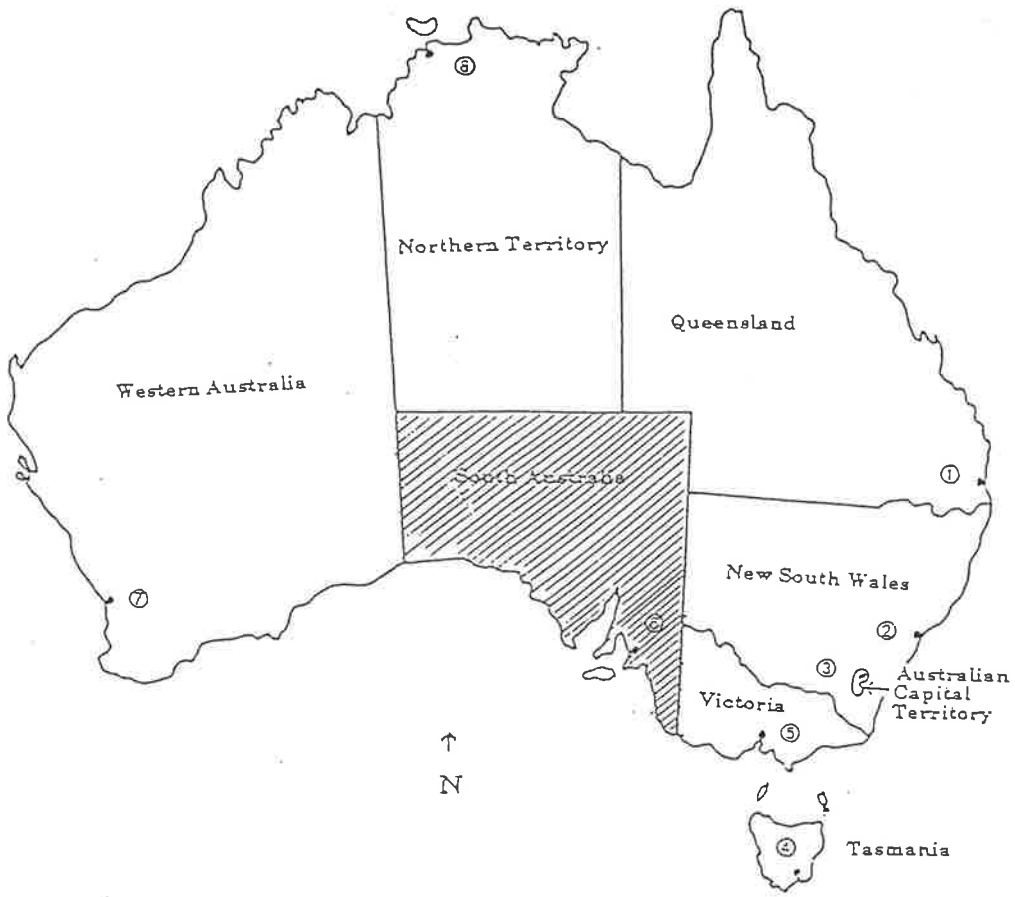
1. *Australian Agriculture: The Complete Reference on Rural Industry* (1993/1994, p.9). National Farmers Federation, Morescope Pty Ltd. Fourth edition.
2. *Ibid.*
3. *Ibid.*



1. Brisbane
2. Sydney
3. Canberra
4. Hobart
5. Melbourne
6. Adelaide
7. Perth
8. Darwin

South Australia

Figure 27: Australia.

Source: Writer's drawing and compilation from Jacaranda Atlas Programme, 1984.

Despite the vastness, many urban services, facilities and opportunities are available to rural people and also to those who live in more remote areas. In fact, it is due to the efforts of special institutions and organisations, such as: the Royal Flying Doctor Service, the Department of Employment, Training and Further Education (DETAFE), the Australian Farmers Federation and rural community and farmers organisations and similar agencies, that such equal opportunities have come to exist.

The Rural Education Research and Development Centre (RERDC) is another example of services delived to rural Australia. McSwan (1994) remarks that the RERDC is a national centre which is devoted to research in rural education. It provides services and facilities for the educational needs of rural students and teachers at all levels particularly specialist tertiary courses. The RERDC trains teachers, researchers and other professionals to work in the rural field; it also conducts and facilitates conferences, seminars and workshops on rural education.

> RERDC has sought to develop as a multidisciplinary centre with a diverse range of functions related directly to the needs and problems of people in rural and remote areas. This mix of disciplines and professions is seen by many practitioners, researchers and rural residents as an important innovation capable of fresh approaches to research and development in rural areas. In doing this the centre has attracted national and international interest and support by way of visitation, communication, and financial assistance (McSwan, 1994:47).

The availability of services of this kind manifests one of the institutional efforts for reducing the rural-urban disparities in Australia.

It should be emphasised that, unlike developing countries, in Australia there are few socio-economic differences and disparities between rural and urban communities. The standard of living is quite similar and there exists an almost even distribution of infrastructures and basic services. Health care, education, communication, transportation, entertainment and recreational facilities are available

in both. There may be a few minor but reasonable differences between the size and physical features of these facilities, but not in the quality of their service delivery systems.

In the opinion of Jan Huckel (interview, May 1993), a community health worker at Wallaroo Hospital on the Yorke Peninsula, the hospital is smaller than the Royal Adelaide Hospital but not in regard to the standard of the service delivery system. Professor Neville Hicks, Head, and Dr Mohammad Afzal a staff member, of the Department of Community Medicine, Adelaide University; Mark Nangle and Leeanne Head, Officers, South Astralian Health Commission (interview, February 1995) held the same views regarding the quality of health services delivery in both large and small hospitals, not only in South Australia, but throughout Australia.

In contrast, in most developing countries many people in rural areas die due to the lack of medical services.

It is very interesting to note that many basic services and facilities are not even divided into rural and urban types. In the case of education, the national goals for schooling show that everybody - rural or urban - has equal opportunity in utilising the services and facilities all over Australia. The first three of these goals are:

1. To provide an excellent education for all young people, being one which develops their talents and capacities to full potential, and is relevant to the social, cultural and economic needs of the nation.

2. To enable all students to achieve high standards of learning and to develop self-confidence, optimism, high self-esteem, respect for others, and achievement of personal excellence.

3. To promote equality of educational opportunities, and to provide for groups with special learning requirements.[1]

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1. Education Department of South Australia. Policy Statement (1992). 4 February 1992, p.22.

For the same reason, students of both country and rural schools participate in extra curricular activities, such as visits to state museums, zoos, libraries, gaining work experience in large departments and organisations, to name a few.

Federal, state and local governments help rural communities by providing them with services and facilities similar to those in the cities. The Commonwealth Government gives financial assistance to people living in outback and remote areas to help cover special trips, such as job finding, attending interviews, taking tests, or to visit close relatives when they are sick in hospital.

By their efforts, governmental and non-governmental organisations have been able to minimise the rural-urban disparities such that rural people can enjoy the same feelings of security and confidence as urban people with regard to access to the services and facilities they need as well as to other aspects of their lives. Under such circumstances, both communities feel that they have important roles in the national well-being and socio-economic development of their country. They also feel that their government regards them both as active sectors in the way of development and, as a result, they feel that they are equal with their urban counterparts. The following can prove this claim:

> Country people are entitled to the same quality service from government and the same access to government services as anyone else. We have also directed the Public Service to pay much greater attention to the delivery of programs and services in rural areas and provincial centres.
>
> As a result of the establishment of the Rural and Provincial Affairs Unit in the Department of Primary Industries, administrators and decision-makers throughout the Public Service have constantly before them a reminder of the special needs and requirements of rural Australians.
>
> The unit is, for example, co-operating with other portfolios in their review of rural housing needs and policy, in examining the adequacy of post-secondary rural education, in examining the delivery of community services in remote areas, and in the trial of

> a completely new co-ordinated basis for delivery of information on government services in rural Australia.
>
> The Rural and Provincial Affairs Unit has also produced a comprehensive guide to major Federal programs and services relevant to rural Australians. It is a tangible sign of our determination to take the broad view of rural Australia (Hawke, 1987).

This emphasis on equality gives rural people psychological satisfaction, they feel that, in the eyes of everybody, they are just as respected as urban dwellers. Such a condition acts as a positive incentive in encouraging rural people to remain in their communities and continue their productive activities (i.e., farming, animal husbandry etc.) and not to migrate to the cities due to psychological initiatives.

In contrast, rural people in many developing countries are made to feel inferior because of many factors, the most important one being the urban bias policies practised in almost all of these countries thus reinforcing urban dwellers' feelings of superiority. As a result, many rural people move to the cities to overcome their sense of inferiority.

It should be mentioned that rural people in Australia do experience some difficulties - for example, farmers and those directly or indirectly engaged in the farming industry may have complaints about the Federal Government's price policies for agricultural products, but they are certainly not confronted by the serious problems evident in the rural communities of most developing countries, such as the lack of basic services and facilities and being ignored.

One should consider that if, in Australia, the prices of rural products are low in comparison with consumer goods and services in other sectors, the State and/or Federal Government as well as several non-governmental bodies, compensate for this by supporting rural communities in many ways.

It should be noted that, Australia, along with most other countries, has felt the impact of the current global recession. Some rural hospitals and schools have been forced to close down due to the lack of government funding. However, this does not mean that the communities are bereft of these services. There remain good communication facilities; ambulance services or the RFDS to transport the very sick; for non-emergencies there are good roads which enable people to drive, or travel by public transport, to another hospital.

With regard to education, if the distance is not too great school buses are provided to take the children to another school. When this is not possible, there is the School of the Air and, for older students, the Open Access College.

4.2 INSTITUTIONS WHICH SUPPORT RURAL AND REMOTE AREAS

4.2.1 Commonwealth health services

Medicare provides health insurance cover for all Australian residents. It is funded partly by the Commonwealth and partly through a levy on the taxable income of people with salaries above a certain level. Moreover, country people receive additional support in recognition of health problems associated with isolation:

- Funding is provided to meet some of the operating costs of the Royal Flying Doctor Service which is a non-profit organisation.
- Medical kits are available to people in radio or telephone contact with Royal Flying Doctor Service centres. The Commonwealth covers the cost of the contents and any replacements.

- Financial assistance is given to country patients who must travel to receive medical treatment. Since 1987 the Commonwealth has run a national scheme - the Isolated Patients Travel and Accommodation Assistance Scheme (IPTAAS) under which funds are paid to state and territory governments to enable them to establish their own programs relevant to their particular needs.
- Rural health and safety: a national conference 'Farmsafe 88' was held in July 1988. The conference, which was jointly sponsored by the Department of Primary Industries and Energy and Worksafe Australia, focused on the high incidence of accidents in farming areas. As a result, a number of recommendations are now being acted upon by the Commonwealth government. For example, a special ministerial advisory group on farm safety has been formed. This is chaired by Worksafe Australia in conjunction with the Department of Primary Industries and Energy. The group, which includes representatives from farmer organisations, the Australian Workers Union and a number of other bodies, will report on safety and the implementation of the Farmsafe recommendations. (Richard Smith, pers. com., 6/4/1993)

4.2.2 The Royal Flying Doctor Service (RFDS)

The RFDS is a non-governmental body which delivers very effective, high-quality medical services to people in remote areas.

In 1933 the Australian Aerial Medical Service was established, which later became the Royal Flying Doctor Service as it is known today[1]. It is an organisation of doctors, nurses, pilots, wireless operators and other helpers. Their practice covers some of the worst and most desolate flying country in the world. In 1992 there were 14 bases from which airborne doctors served the inhabitants of two-

[1] Royal Flying Doctor Service of Australia (Central Section) Incorporated, 55th Annual Report, 1990-1991.

thirds of the continent and Tasmania. At that time 33 aircraft flew over eight million kilometres each year, bringing medical attention to more than 100,000 patients, of whom over 9,000 were transported to hospital.

Urgent flights need no elaboration to establish their value. Bush people suffer from broken bones, acute appendicitis and other illnesses, just as city dwellers do. The combination of wireless communication and fast, comfortable transport by air saves many lives. Emergency flights are only part of the RFDS, routine monthly visits are made to isolated communities. Some of these have small hospitals for which resident medical officers cannot be obtained. The RFDS supervises many such hospitals over distances of up to 650 kilometres. Having a ready means of communication with the matron, patients can be admitted, treated and discharged, a doctor gives them a final check on the next routine visit.

Patients in the sparsely populated outback can receive medical care, advice or service from the RFDS by getting in touch *via* radio or telephone. If patients are seriously ill such that they cannot be cured by the flying doctor, and need to be taken to a hospital, the RFDS will do that by air ambulance. All of these services are provided free of charge.

Regular radio sessions are conducted to enable outposts to talk directly with a doctor. Advice is given in hundreds of cases in which the illness is not serious enough to warrant a flight. Mothers are advised regarding any problem with infant feeding and the treatment of minor ailments. According to their ability, relatives can be assisted to care for patients with fairly acute illnesses in their own homes. To facilitate home treatment, the RFDS supplies a standard medical kit which contains approximately 100 forms of medication and first-aid items. When a patient seeks advice the doctor, through skilful questioning, will diagnose the condition and may

prescribe a course of treatment from the kit. Hundreds of these are kept at homesteads, police stations, missions, lighthouses and so forth.

Each RFDS section is a non-profit, non-denominational organisation, incorporated in its own State of the Commonwealth and is autonomous in the administration of its own affairs. The service depends mainly on public donations and government assistance (Bob Cooter, interview, 2/2/1993).

4.2.3 Countrylink

Countrylink is a service run by the Department of Primary Industries and Energy which links rural and urban areas through an informational network. The former Minister for Primary Industries and Energy stated:

> For the more than 5 million Australians whose home is outside Australia's major cities, isolation can be a part of everyday life.
>
> People living on farms or in country towns do not always have ready access to services which are available in metropolitan areas. Many have to travel long distances for their basic needs, such as medical care or schooling.
>
> In addition, information about the many Federal Government benefits which may be available to rural Australians can be difficult to find.
>
> COUNTRYLINK, a new information service from the Department of Primary Industries and Energy, can help people in rural communities to help themselves. Through COUNTRYLINK, rural Australians can find out about the range of Commonwealth Government services available to them and how they can gain access to them. (Kerin, 1988)

Countrylink offers five major services:

1) the Answer Line 008 026222 which, for the cost of a local call, assists rural people with their questions regarding Commonwealth Government services;

2) a shopfront/display travelling to country shows and field days;

3) booklets and brochures to aid community groups and other organisations that

wish to become involved in distributing information;

4) a database available at Commonwealth offices in country towns with information on all Commonwealth services; and

5) *The Rural Book*, a guide to Commonwealth services and programs.

The Rural Book contains information of help to all Australians but it is mainly directed at country people, concentrating on services and programs providing assistance to individuals and communities in rural and provincial areas. It covers a broad range of activities, from programs which specifically assist agriculture to general social, welfare and educational support measures.

4.2.4 Education

The six states and the Northern Territory are responsible for providing educational services for their residents, rural and isolated areas are entitled to extra advantages from some especial assistance programs. The Commonwealth's specific purpose program provides additional resources for schools to support the educational needs of particular groups of students and to enhance educational outcomes for students from disadvantaged groups. One of these is the Country Areas Program whose aim is to alleviate the disadvantages suffered by country children which stem from restricted access to social, cultural and educational services and activities. Rural and isolated areas which exist in about 70% of Australia are eligible for funding which may be used for such things as curriculum development, school visits, purchase of books and equipment and minor capital works. The number and geographical boundaries of the areas eligible to participate in the program are determined by the Departments for Education in each state and the Northern Territory. The program, administered by State Education Departments, covers government and non-government schools.

Rural schools declared to be disadvantaged by state or territory educational authorities may also receive funding under the Disadvantaged Schools Program. This supports activities such as curriculum innovation, basic skills programs, activities to give students access to a number of branches of arts and school/community interaction projects.

4.2.5 Other schemes designed to assist rural people

The Federal Government allocates funds each year to give rural Australians more opportunities to participate in the education and training relevant to their needs. For example:

- A community-based educational program that helps local groups to plan, organise and co-ordinate educational and training activities which meet the communities' needs.
- The Rural Women's Access Grants (RWAG) supports projects which provide rural women with improved access to education and training and which recognises the important role that women can play in upgrading the skills base of rural enterprises.

Since 1988 the Federal Government has established two programs to encourage people in rural areas to participate in training and education:

1) The Rural Education Access Program (REAP) is aimed at encouraging non-profit, community-based group involvement in education and training. Particular attention is directed towards improving the accessibility and relevance of education and training courses at the local level. Emphasis is placed on overcoming barriers for participation and increasing the knowledge and skills of rural people.
2) The Innovative Rural Education and Training Program (IRETP) encourages industry-based organisations, educational institutions and other interested

> bodies to undertake innovative educational and training projects of direct relevance to rural industries and the community. Projects supported under the program are those which go beyond the existing educational services. Preference is given to activities having industry involvement and support and are linked to identified regional needs.[1]

Other direct actions taken include a special arrangement with the Department of Employment, Training and Further Education (DETAFE) which allows people in country areas to do the first year of a college or university level course at a local TAFE college. It is TAFE's policy that students should not be barred from study because they are unable to attend classes. Students living in small country towns or remote areas can have access to learning resources through inter-library loan facilities and the Open Learning Program. In fact, TAFE accepts the responsibility of providing technical, vocational, general and personal education for the adult community throughout Australia. The courses cover many subjects, including rural studies and community services. In 1992, in South Australia alone, TAFE provided 290 tertiary education courses for about 100,000 people, approximately seven per cent of the state's population.[2]

4.2.6 Housing

Generally low-to middle-income earners can take advantage of the First Home Owners Scheme (FHOS) which helps them to buy or build their first home. It provides eligible first home owners with a benefit in the form of a subsidy.

In addition to the above there exist other avenues of rural housing assistance. For example, in 1987 the Department of Community Services and Health engaged a

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[1] *The Introductory Pamphlet of DETAFE (1992).* TAFE Information Centre. Adelaide, South Australia, June 1992.

[2] *Ibid.*

research company to undertake a study of rural housing. The study examined the nature of rural housing problems, compared them with city problems and assessed the effectiveness of current housing policies and programs in dealing with the problems in rural areas.[1]

4.2.7 Job-finding

The Commonwealth Employment Service (CES) is a national agency established by the Federal Government as part of the Department of Employment, Education and Training. It assists people seeking work and liaises with employers through a network of centres throughout urban and rural Australia. There are many other governmental institutions and programs that provide assistance to people seeking work, for example:

- financial aid to attend interviews and take up jobs;
- training programs to improve job skills;
- youth training program;
- job search training program;
- job search allowance (JSA);
- financial assistance for people who are training;
- income support for people who are unemployed (unemployment benefits);
- community-based programs, under which financial assistance is provided to community bodies to create training opportunities and give support to unemployed people;
- living away from home allowance;
- fares assistance to attend training programs; and
- remote area allowance.

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[1] *The Rural Book (1989): a guide to major Commonwealth services and programs for people who ive away from capital cities.* Produced by Rural and Provincial Affairs Branch, Dept. of Primary Industries and Energy, 3rd ed. Canberra: Australian Government Publishing Service.

4.2.8 Finance

Generally, finance for primary production is provided by banks, finance companies and pastoral houses. However, the Federal Government has established the Commonwealth Development Bank (CDB) specifically to provide finance for businesses relating to primary production. A number of other schemes are as follows:

1. Rural Adjustment Scheme (RAS)

i) Help to return to viability

Under this, concession interest loans or interest subsidies on existing loans are provided to farmers who are not able to obtain loans at reasonable rates from commercial sources, and whose businesses have been assessed as having good, long-term prospects. This assistance may be used:

- to improve or expand farm operations;
- to restructure farm debts so that they are more manageable; or
- to allow farms to continue operating when there are temporary, severe downturns in the industry other than those caused by drought or natural disaster when the Commonwealth and State Governments agree special aid is needed.

ii) Income support in times of severe financial hardship

Under the household support and rehabilitation components of the RAS, assistance is available to farmers experiencing hardship, whose farms are assessed as not having viable, long-term prospects.

Assistance is in the form of a regular allowance, equivalent to unemployment benefits, paid quarterly in advance for up to three years. People receiving this

support do not have to leave or sell their farms for the first 12 months. However, to continue to receive it after this time they must make a genuine effort to sell the farm. A farmer who still faces financial hardship after selling may be eligible for a rehabilitation grant of up to $28,000. However, this is subject to an assets test.

2. Counselling services

The Rural Counselling Program was established to provide funds to local community groups to assist with the employment of financial counsellors in rural areas experiencing severe economic stress. The counsellors give free advice to farm families on the financial options available according to their circumstances. Counsellors are responsive to personal difficulties arising from farm families' financial problems and seek the assistance of other agencies, such as: Social Security, Family and Community Services or psychiatric help where appropriate.

3. National Brucellosis and Tuberculosis Eradication Campaign (BTEC)

Farmers who participate in the BTEC may be eligible for:

- compensation for cattle slaughtered on a compulsory basis as part of BTEC;
- grants to cover the additional costs incurred for holding, handling or feeding cattle during tuberculosis testing;
- low interest loans to assist with any necessary capital improvements and property maintenance; and
- subsidies to help cover the interest paid by producers on commercial loans made necessary by BTEC participation.

4. Bounties

Bounties are paid to suppliers of some farming equipment and materials - such as grain harvesters, soil cultivators and locally-produced fertilisers - and for certain fittings used on large fishing vessels. While primary producers are not directly assisted under these arrangements, they receive a benefit in the form of reduced prices for the items purchased.

5. Sales tax exemptions

These are available on most machinery, equipment and materials used in primary production and on livestock imported solely for breeding purposes. Furthermore, concessions are available for projects to:

- eradicate animal and insect pests;
- connect telephone lines and mains electricity;
- prevent or combat land degradation;
- construct access roads to timber mills;
- construct surface or sub-surface drainage works to control salinity or assist drainage control; and
- conserve or convey water.

6. Price stabilisation

Arrangements in the dried, vine fruits industry ensure the same return to producers whether they export their product or not. This reduces the impact of low international prices. New marketing strategies in the dairy industry provide support on exports to underpin domestic prices at a level higher than export prices.

7. Price underwriting

Price underwriting operates in the wheat, dairy, sugar and dried fruits industries, reducing the effect of sharp and sudden price falls. Although the form of underwriting varies significantly, the guaranteed minimum price paid to producers or processors is based on average price movements and closely linked to long-term price trends. Commonwealth assistance is triggered when the market price falls below the underwritten price.

8. Roads

Grants to build, maintain and upgrade roads are provided under the Australian Bicentennial Road Development Program (ABRDP) and the Australian Land Transport Program (ALTP). These provide funding for the national highway system, the major arteries linking rural markets to the cities and export outlets, as well as contributing to urban and rural arterial roads, which are the responsibility of state governments.

9. Air service subsidies

The Commonwealth subsidises air services to communities in remote areas which guarantee a minimum level of service throughout the year by regular deliveries of mail, fresh food, educational materials, medical supplies and general freight and ensuring access to passenger services.

4.2.9 Rural research

Commonwealth and state government involvement in rural research and development has traditionally been higher than in other sectors because rural

industries are composed of many relatively small producers who cannot carry the cost of research either individually or as groups. The Commonwealth directly funds research institutions such as the Commonwealth Scientific and Industrial Research Organization (CSIRO), the Australian Bureau of Agriculture and Resource Economics (ABARE) and the Bureau of Rural Research (BRR). The Commonwealth also allocates money to special councils conducting rural research on a match dollar-for-dollar basis with industry, and indirectly funds rural research through universities and colleges of advanced education.

The ABARE enhances prosperity and economic growth by carrying out high-quality, independent and objective research and analysis relevant to the agricultural, forestry, fishing, minerals and energy sectors and by disseminating this research widely in Australia and overseas.

Farmers throughout Australia co-operate with ABARE's regular surveys to collect extensive data on the performance of farms; in like manner, ABARE surveys end-users of energy in Australia. The data provide the basis for many ABARE research projects and commodity analysis. Much of the Bureau's work over the years has had a profound impact on national attitudes, policy development and the ultimate prosperity of Australian industry.

As well as reports on specific research projects, which are published as monographs, occasional papers or discussion papers, ABARE has several regular publications which include the *Quarterly Review of the Rural Economy;* the *Commodity Statistical Bulletin;* the *Farm Surveys Report;* the *Crop Report;* and *Resource Trends* which provides information on the minerals and energy sectors.

ABARE convenes the annual National Agricultural Outlook Conference (NAOC), the leading Australian forum for discussing the prospects of the

agricultural, forestry and fisheries industries and international trade; NAOC sessions receive extensive ABC TV and other media coverage.

The BRR was established in October 1986. Its role is to collect and analyse information to provide independent and objective scientific and technical advice on issues affecting Australia's agricultural, forestry and fishing industries and the management of natural resources. Moreover, the Bureau is responsible for Agricultural and Veterinary Chemicals, the National Residue Survey, the National Database, the Plant Variety Rights Scheme, Rural Industry Research Secretariats, Foreign Disease Preparedness and the Brucellosis and Tuberculosis Eradication Campaign and the Australian Plague Locust Commission (APLC) which was established in 1974 to combat outbreaks or potential outbreaks of plague locusts in New South Wales, Victoria, South Australia and Queensland which could cause damage to rural industries.

The National Resource Information Centre (NRIC) was established within the Department of Primary Industries and Energy as a joint facility of the BRR and the Bureau of Mineral Resources (BMR). The primary aims of the NRIC are to:

- maximise the availability of information relating to Australia's natural resources;
- minimise the time and cost of information retrieval; and
- respond to requests for information to satisfy both strategic needs and more reactive projects.

4.2.10 Australian Rural Research in Progress (ARRIP) database

- The ARRIP database is a collection of descriptions of Australian rural research projects;

- The database is produced by the CSIRO's Information Service Unit on behalf of the Department of Primary Industries and Energy ;
- Information on projects is obtained from the organisations conducting the research;
- It is a communication tool for the research community whereby information on rural research being carried out in Australia, by whom, where and other project details, is readily available to the public.
- Coverage includes research in fields of interest to the Rural Industry and Fishing Industry Research Councils (barley, chicken meat, cotton, dairy, dried fruits, fishing, grains, legumes, grapes, honey, meat, oil seeds, poultry, sugar, tobacco, wheat and wool), the Australian Special Rural Research Scheme and the State Barley and Wheat Committees.
- The database is accessible *via* CSIRONET's computers at any time to anywhere in Australia.

4.2.11 Natural resources and energy: soil and water conservation programs

These have been established to provide financial, technical and scientific assistance for soil and water conservation throughout Australia. They are directed specifically at the rural sector as an incentive for improving soil and water conservation systems.

4.2.12 Communications

- Rural and Remote Areas Program (RRAP)

The RRAP is a Telecom initiative to efficiently provide wider access to modern automatic telecommunication services throughout Australia's sparsely settled areas.

- Australia Post: mail services

Australia Post has always recognised the special needs of people living in rural and remote areas, under the terms of the *Postal Services Act.* Mail collected from, and delivered to, these areas is charged at the standard rates applicable in Australia, the considerably higher costs involved in servicing rural areas are subsidised by other users so that rural people are not penalised financially. Most rural areas receive daily mail deliveries, however, communities in more remote regions receive biweekly deliveries.

- Radio and television

The Federal Government has placed great emphasis on the provision of radio and television services throughout Australia. Those areas which do not receive adequate signals because they are too far from a transmitter, or because of natural obstacles, receive the services via satellite. In addition to this, each state has special programs to support rural areas. In South Australia, for example, four of these programs are:

i) South Australian Rural Advisory Council (SARAC)

The SARAC provides a communication link between the Minister of Agriculture and rural communities. It addresses matters that have social, economic and environmental significance for country people, such as: education, health and welfare, transport and communications, environmental management, community services and economic and community development. A major focus is on the provision of services and equity of access, SARAC also gives country people - farm families, rural workers and town residents - a say in the decision-making processes that affect life in rural South Australia.

ii) United Farmers and Stockowners of South Australia (UF&S)

The UF&S is an association of farmers and graziers which aims to protect the interests of primary producers and to represent the views of rural producers on a wide range of issues. Through its Head Office Secretariat the UF&S offers an extensive range of services on commodity and general matters facilitated by field officers and an extensive committee, zone and branch structure. Apart from commodity matters, advice and assistance are available with regard to issues such as planning, land tenure, education, transport and welfare.

iii) Agricultural Education Service

This service is administered by the Education Department of South Australia to provide agricultural education for secondary school students. A co-educational certificate course in agriculture is offered at four state schools. Three are in the country and one is in the metropolitan area. Agriculture is also offered as a subject at most country secondary schools and at a small number of metropolitan schools.

iv) Open Access College

The college provides through distance education a complete range of educational programs from inception to year 12. Priority is given to students from remote areas although school-based rural and metropolitan students also have access. They are offered courses and receive learning packages consisting of printed and, in most cases, audio-visual materials. Teachers support students by marking work as well as maintaining contact by radio (School of the Air) or telephone. Teachers visit students at least once a year. An itinerant teacher visits students in remote regions each term.

4.3 THE IMPACT OF RURAL-SUPPORTING INSTITUTIONS ON RURAL LIFE: the Yorke Peninsula as an Australian example

The study area is located in South Australia, north-west and west of metropolitan Adelaide (Fig. 28). It comprises all of the rural and urban settlements of the Yorke Peninsula which has an area of 8,146 square kilometres. There are 34 towns which act as service centres for the 900 surrounding farms, the size of each varies from 250 to 3,000 hectares. Kadina, which is about 170 kilometres from Adelaide, is the 'capital town' or 'administrative centre' of the Peninsula. Other important towns are: Bute, Maitland, Minlaton, Moonta, Port Broughton, Wallaroo, Warooka and Yorketown (Fig. 29). In 1991, the Peninsula had a total population of 23,960 of which more than one-third lived in the triangle towns of Kadina, Moonta and Wallaroo (Fig. 30).

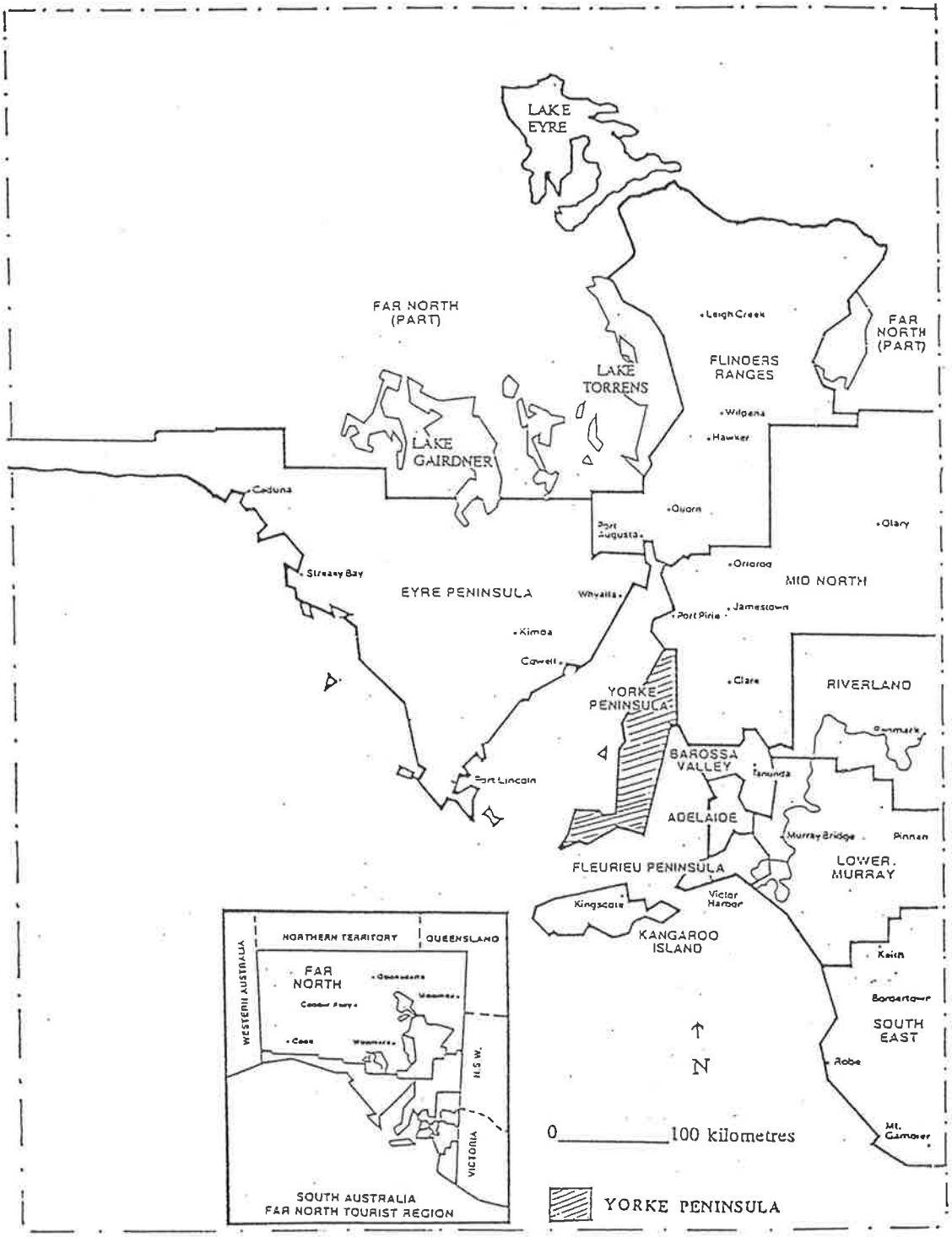

Figure 28: South Australia and the location of the Yorke Peninsula.

Source: Writer's drawing and compilation from Atlas of South Australia, 1986.

Figure 29

Yorke Peninsula

Major towns

Source: Writer's drawing and compilation from Atlas of South Australia, 1986.

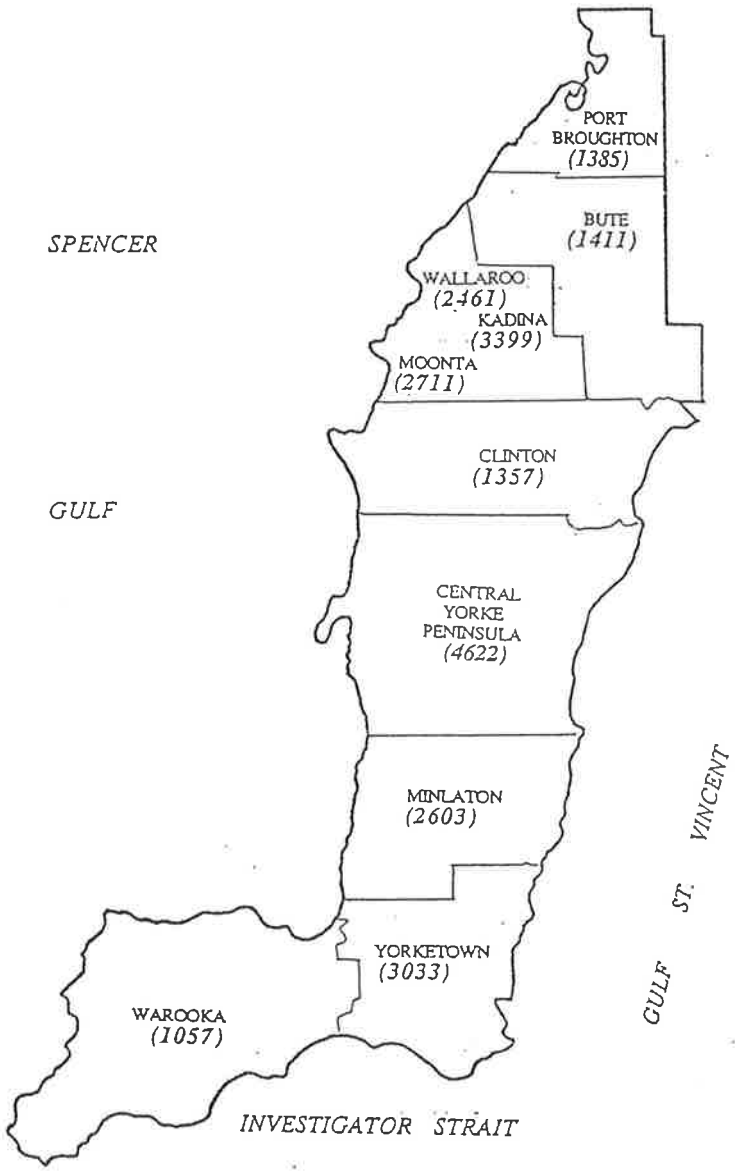

Figure 30

Yorke Peninsula

Major localities and populations

Source: Writer's drawing and compilation from Fig. 29 and South Australian Year Book, 1993.

The research on the Yorke Peninsula highlights the effect of a number of institutions' activities in minimising rural-urban disparities and inequalities, on the one hand, and generating rural-urban socio-economic linkages and keeping rural areas dynamic and vital, on the other.

One of the main reasons for the success of the Australian rural sector is the availability of infrastructure and other services, as well as many socio-economic opportunities. Under the Australian service delivery system, organisations such as the RFDS, SARAC and TAFE, for example, attempt to provide a comfortable environment for rural people to enjoy with the same satisfaction, security and confidence as urban people. The role of these agencies has been significant in bringing about rural-urban, socio-economic integration.

The institutions and organisations which deliver essential services, such as: medical and health care, education, transport and communication, are mainly responsible for the strong socio-economic ties between the urban and rural communities on the Peninsula and also between the Peninsula and metropolitan Adelaide. They also help to keep the standard of living in rural Australia very high. It may not be quite as high as in the cities but it is high enough for the majority of farming people to remain on the land.

Samuel Hogg, a South Australian Rural Counselling Liaison Officer (pers. comm., June 1993), pointed out that for farmers on the Peninsula there had been a steady emigration rate of 5% to 6% a year, usually by farmers whose properties are not profitable. He added that, as there were no large secondary industries in the region to absorb them, they went to the cities where there existed more employment opportunities. In response to the question - Do you think that some rural people move to the cities because they do not have access to the essential services and facilities? - he explained that farmers might leave because of non-economic motives,

such as to live in a bigger society, to have more socio-cultural or political contacts or for other reasons of this kind but as they already had access to most of the essential services, it would be the least likely cause for them to leave. However, he did say that there were some other services that many rural people would like access to, particularly for their children, such as child-care and university.

Figures for the average rate of population increase for South Australia and the Yorke Peninsula from 1971 to 1991 were very close - 0.96% and 0.97%, respectively (Table 26b and Fig. 31). This indicates that there has not been a great difference between the factors of population change (i.e., migration, birthrate, death-rate, ...) in the Yorke Peninsula as a rural region and the rest of the state which is more than 90% urbanised.

There is usually a percentage of young people on the Peninsula who go to the cities for various reasons, such as: the hope of better employment opportunities; to attend university; they have no desire to farm, therefore they seek alternative careers; to experience a different life style. Whether in developed or developing countries, cities tend to attract young people.

Table 26a: Intercensual population growth rates (PGR) for South Australia and the Yorke Peninsula 1971-1991.

Year	South Australia (persons)	PGR (%)	Yorke Peninsula (persons)	PGR (%)
1971-1976	1,200,114-1,274,070	1.23	23,050-23,308	1.12
1976-1981	1,274,070-1,318,769	0.69	23,308-23,517	0.90
1981-1986	1,318,769-1,382,550	0.95	23,517-23,742	0.95
1986-1991	1,382,550-1,446,299	0.91	23,742-23,960	0.92

Source: Writer's compilation from the Australian Bureau of Statistics, Cat. 32, Vol.4, 1992 and the South Australian Year Book 1994, p.51.

Table 26b: Table 26a simplified.

Year	S.A. PGR (%)	Y.P. PGR (%)
1971-1976	1.23	1.12
1976-1981	0.69	0.90
1981-1986	0.95	0.95
1986-1991	0.91	0.92
Average (1971-1991)	0.96	0.97

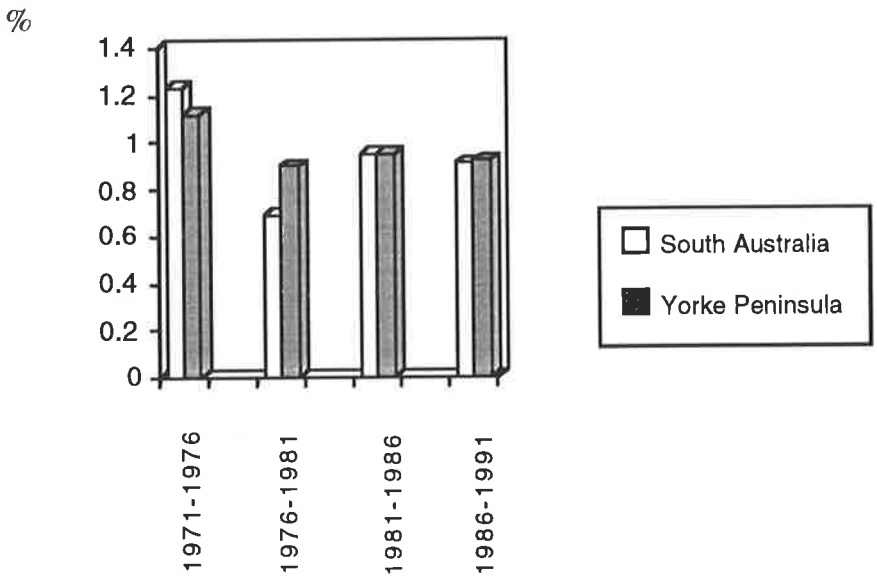

Figure 31: Intercensual population growth rates for South Australia and the Yorke Peninsula, 1971-1991.

Source: Compiled from Table 26b.

In May 1993, the writer was fortunate to be invited by Allan McMahon, the (then) Rural Counsellor for the region, to sit in on one of the quarterly rural counselling meetings. Fifteen of the Peninsula's 22 farmers' representatives, a

representative from the Kadina branch of the Department of Primary Industries and a representative from the Kadina City Council attended.

Appendix B contains a list of key questions which were prepared by the writer before the meeting and the answers obtained from various people at the meeting. The following is a summary of a number of farmers and local authorities' responses to related issues.

To the question what are your thoughts regarding living in a big city rather than in a small country town like Moonta? the respondent replied:

> Today we have a good road system. If I want to go to Adelaide it only takes two hours, 50 years ago it would have been a full day's journey by steam train. Similarly with communication, if I want to talk to someone in Adelaide, I pick up the phone and get through immediately and *vice versa,* of course.
>
> Mail, is overnight from here to Adelaide ... electronic mail, immediately. Newspapers, such as *The Advertiser* are distributed all over the state overnight ... people in the country read the same paper at their breakfast table as people in the metropolitan area.
>
> There is a network of radio stations across the State ... it all comes down to improved transport and means of communication.

One of the farmers believed that they should be supported somehow,

> ... by subsidies, by price stabilisation, by tax incentives, or similar policies. The majority of farmers love farming, but not under any condition. Many of us suffer because of the low market prices for our crops in recent years ... produce does not return enough money due to the government's open trade policy. Australia imports everything from everywhere, cheese from New Zealand, orange juice from Chile and tomatoes from Italy, while Australian farmers produce a lot of these items, so there is a surplus.

Another farmer said almost the same thing,

> It is the right of any farmer to be given the opportunity to earn a decent living. ... the price of agricultural products is very low ... the cost of production is very high ... our purchasing power is now very low. A few years ago, I could buy a new car or TV set out of my income from the farm. I can't now because I receive almost nothing. ... trade policy and trade prices ... most important factors ... can restore Australian farmers to a state of independence and prosperity.

Trevor Dillon, Officer in Charge, Department of Primary Industries at Kadina, in response to the question: Do you think that farmers on the Yorke Peninsula perceive themselves to be socially and economically underserviced? stated:

> Socially no, economically yes. In fact, the farmers here on Yorke Peninsula, like many other Australian farmers, are mostly negative to the government based on their expectations. They say that they are providing about 40% of Australia's export revenue while the government doesn't do much for them. They believe that the government should help them by subsidies, tax incentives, guaranteed fixed floor prices, and similar programs and policies.

Allan McMahon emphasised that the farmers' complaints did not necessarily mean that economically or socially they were in a bad condition, but they did expect more support due to their hard work in comparison with other sectors.

John Shane, Chief Executive Officer of the Kadina City Council in response to the question: Do you think that in Australia like in developing countries rural people are under the control of urban people and authorities in urban areas make decisions for rural communities? answered:

> No, there is a strong system of local government in this state. Each state in Australia has similarly developed systems of local government, which are the creation of each state government. Matters of local interest are decided upon locally without interference from the state.

Country people are independent and free to take part in decision-making and other issues. They enjoy a standard of living similar to that of urban dwellers, moreover they prefer their life style, considering it better than that of the cities. There is not the high incidence of crime, the cost of living is lower, life is more leisurely, they do not have to tolerate the noise and traffic pollution of the cities and the annual family income is at a reasonable level in comparison with that of the state (Table 27b and Figure 32).

Table 27a: A comparison of the annual family income on the Yorke Peninsula and S.A., 1991.

Income (p.a.)	Yorke Peninsula		South Australia	
($ Aus.)	Family	Prop. (%)	Family	Prop. (%)
Nil	713	.7	2070	.6
1- 2000	399	.6	1283	.3
2001- 4000	487	.2	750	.2
4001- 5000	2267	2.7	6169	1.7
6001- 9000	1112	4.6	14225	3.8
9001-12000	756	19.7	45165	12.2
12001-15000	704	13.0	29501	8.0
15001-18000	619	7.4	24670	6.7
18001-22000	432	9.5	36812	9.9
22001-26000	246	5.8	27177	7.3
26001-32000	196	10.0	44214	11.9
32001-40000	93	7.1	43001	11.6
40001-50000	25	4.3	29104	7.8
50001 & Over	25	3.4	28084	7.6
Not stated	407	8.2	29546	8.0
Spouses temporarily absent	120	2.7	9306	2.4
Total	8601	100.0	371077	100.0

Table 27b: Table 27a simplified.

Income (p.a.)	Yorke Peninsula	South Australia
($ Aus.)	Family Proportion (%)	Family Proportion (%)
Nil	.7	.6
1 - 2000	.6	.3
2001- 4000	.2	.2
4001- 5000	2.7	1.7
6001- 9000	4.6	3.8
9001-12000	19.7	12.2
12001-15000	13.0	8.0
15001-18000	7.4	6.7
18001-22000	9.5	9.9
22001-26000	5.8	7.3
26001-32000	10.0	11.9
32001-40000	7.1	11.6
40001-50000	4.3	7.8
50001 & Over	3.4	7.6
Not stated	8.2	8.0
Spouses temporarily absent	2.7	2.4
Total	100.0	100.0

Source: Compiled from the Australian Bureau of Statistics, Year Book 1992 and South Australian Year Book 1994.

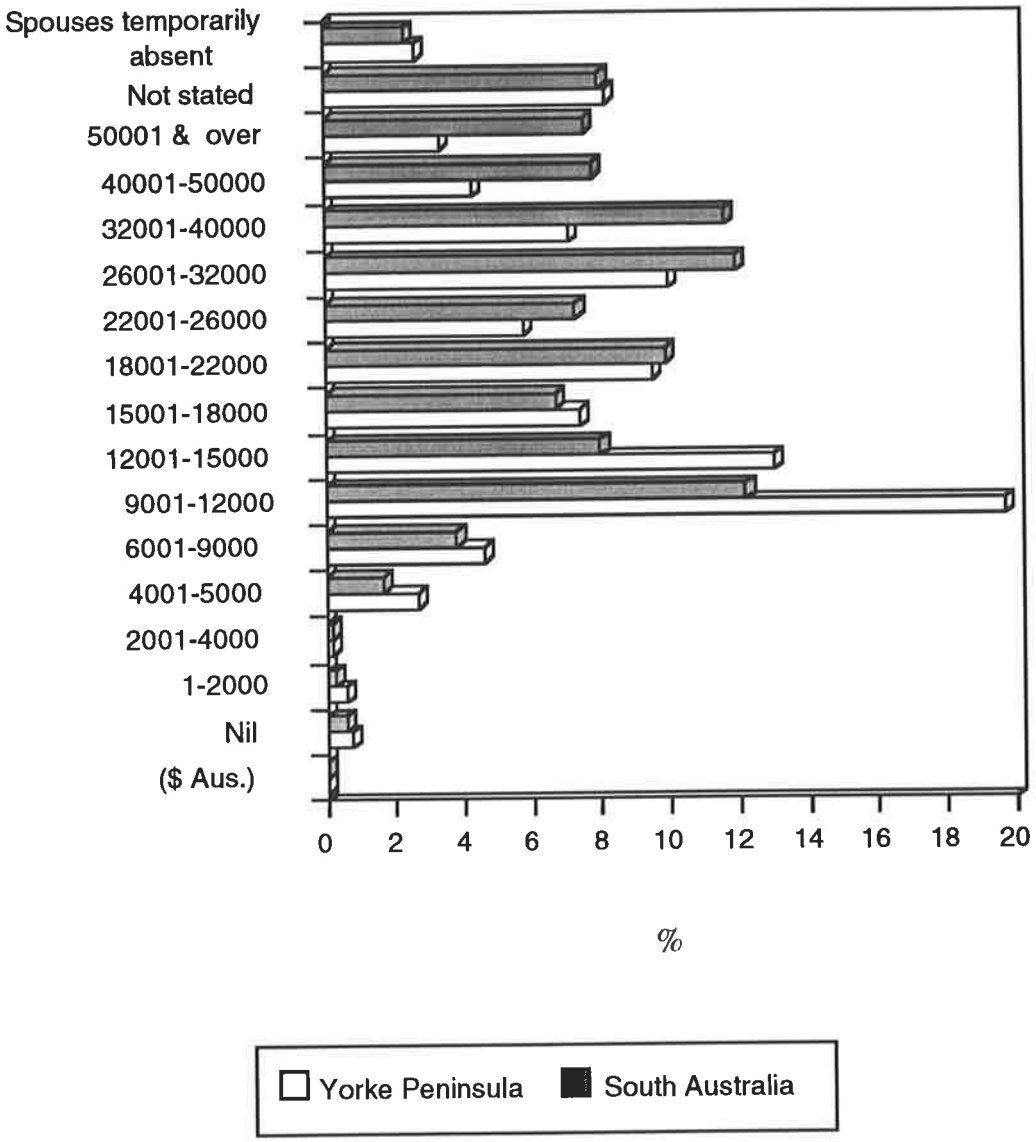

Figure 32: A comparison of the annual family incomes on the Yorke Peninsula and South Australia, 1991.

Source: Writer's drawing from Table 27b.

4.4 SERVICES AND FACILITIES ON THE YORKE PENINSULA

In 1993 there were three TAFE campuses which were located in Kadina, Narunnga and Yorketown. The manager of the Kadina campus, John Woolven (interview, June 1993) stated that these campuses were not only the providers of tertiary education on the Peninsula but also the educational bridges between the rural and urban communities. He added that 300 full- and part-time students attended the college, most of them were young farmers who would get their certificates in farm practice and farm management after two years.

Robert Duncan the Manager of the Yorketown campus (pers. comm., June 1993) stated that beside the regular students there was a large number of informal or temporary students who usually sought advice - by telephone or letter - regarding their areas of interest, and many farmers attended one- or two-day courses covering areas such as the use of chemicals (e.g., fertilisers, herbicides, pesticides, insecticides and so forth).

Another important factor linking rural and urban communities on the Peninsula, like other parts of Australia, is the network of good asphalt roads and the availability of public transport giving rural and urban people access to one another's community services (Figs. 33 and 34). Almost all rural people have their own cars which enable them to reach the nearest town in reasonably short time and for the children school buses are usually provided.

Jan Huckel (interview, May 1993) stated that everyone on the Peninsula had good access to medical care. There are eight hospitals seven of which are private. Wallaroo Hospital which is public and of course bigger, has 27 beds, is very well equipped and 15 specialists in different branches of medicine attend. There are ambulance services to transport very sick patients and accident victims. All of the

hospitals observe the same standard of care to be found in Adelaide hospitals. Included in the health care facilities are some nursing homes and homes for the aged (Fig. 35).

Regarding the educational facilities in the region there are six kindergartens, 21 primary schools, one combined primary and secondary school, four area schools, four rural schools, three high schools, an Aboriginal school, and a TAFE college which is very active and offers various courses (Fig. 36).

The people on the Peninsula have many of the social facilities that the residents of Adelaide enjoy, though usually on a smaller scale, there are hotels, clubs, halls, libraries, cinemas, churches, community centres and so forth.

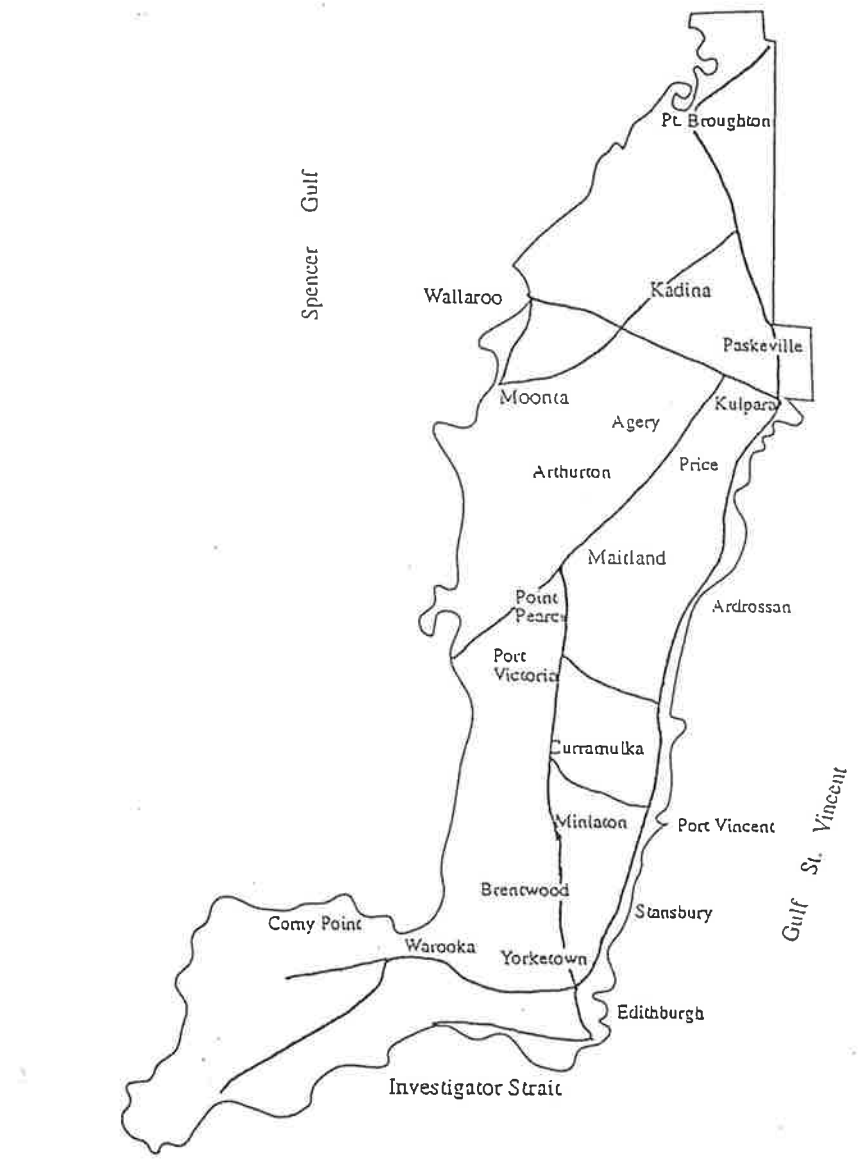

Figure 33

Yorke Peninsula

Public bus route.

Source: Writer's drawing and compilation from Highways Department of South Australia, 1993.

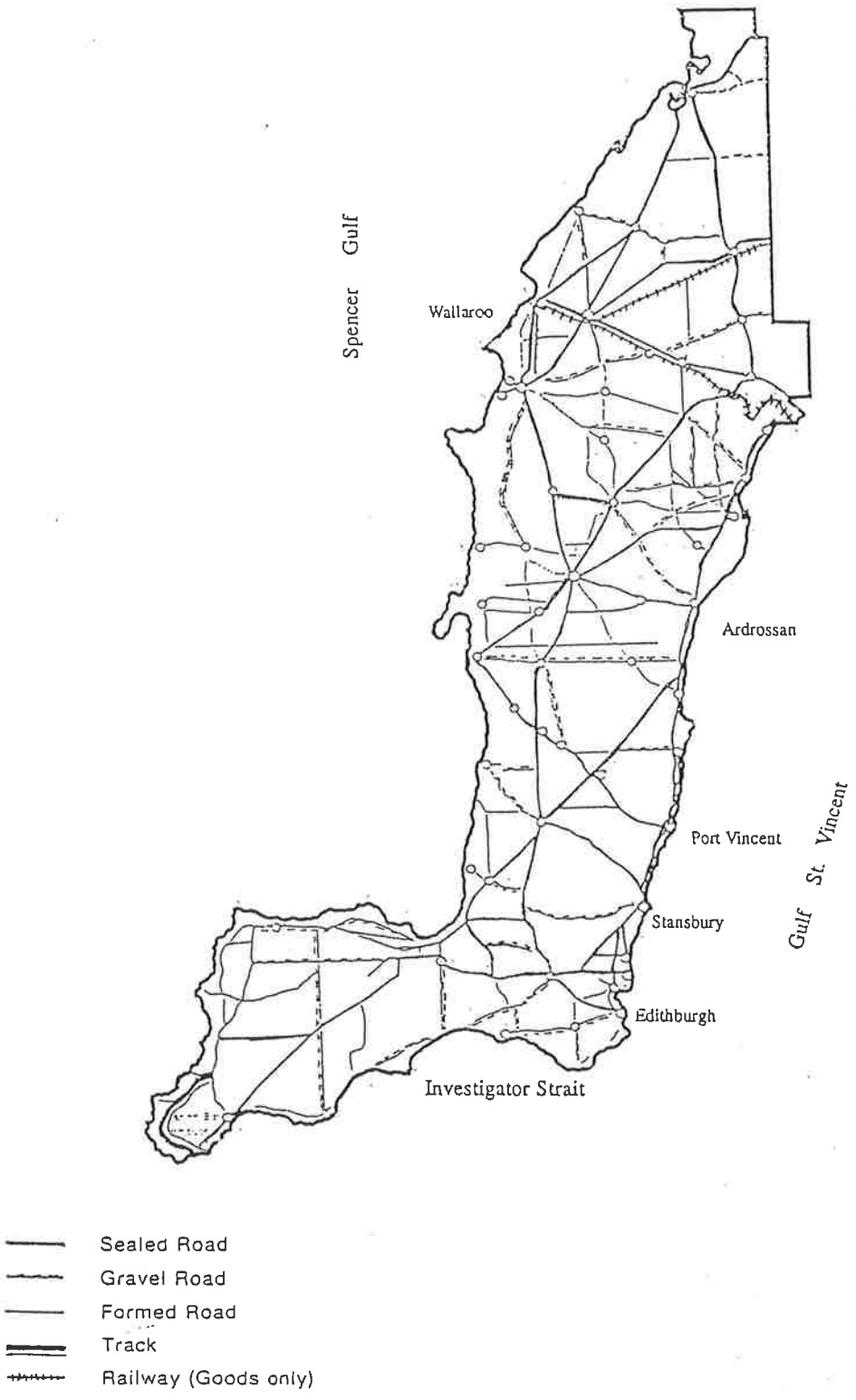

Figure 34

Yorke Peninsula

Roads and railways.

Source: Writer's drawing and compilation from Highways Department of South Australia, 1993.

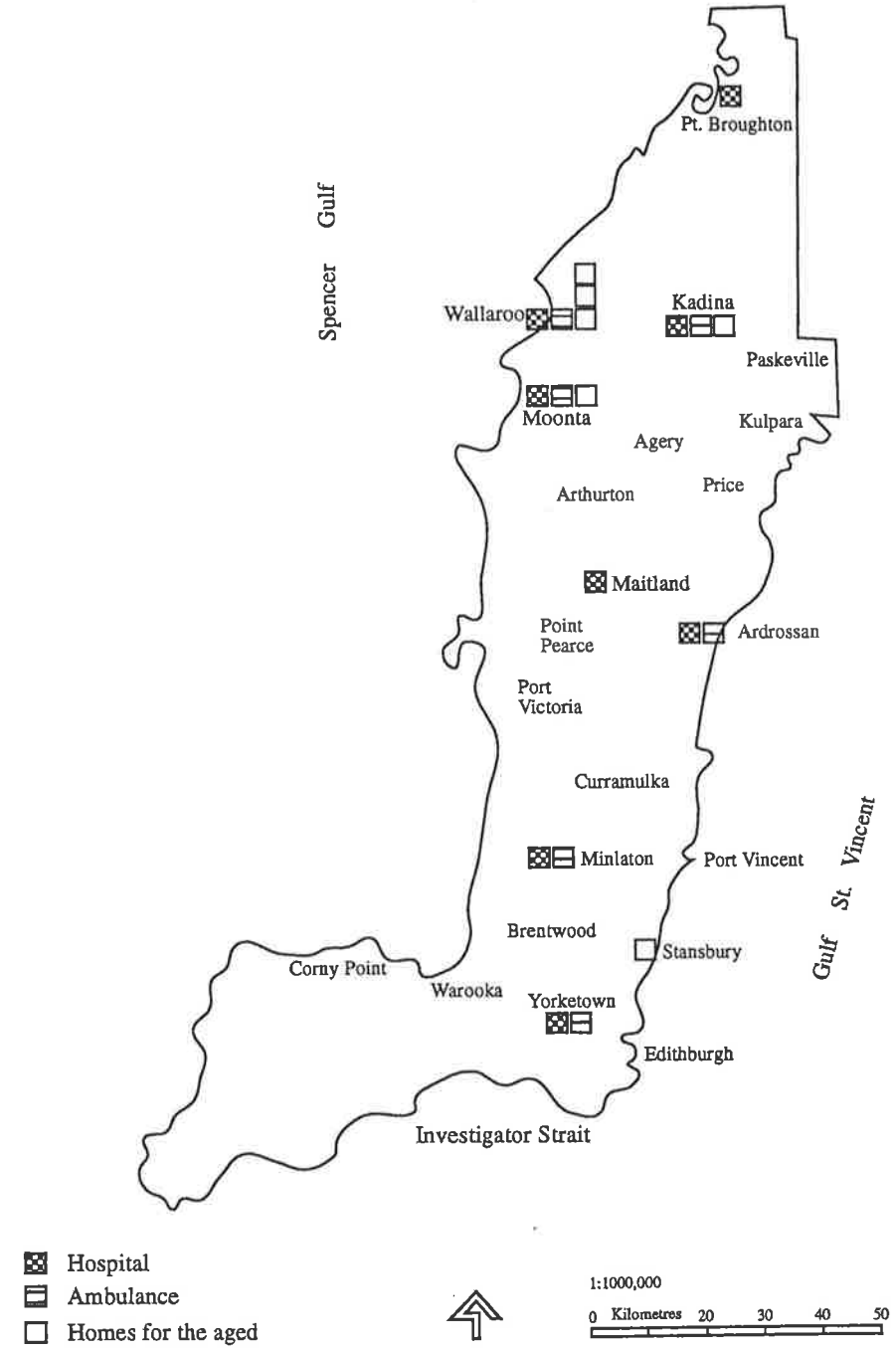

Figure 35

Yorke Peninsula

Health facilities.

Source: Writer's drawing and compilation from Fig. 29 and South Australian Health Commission, 1993.

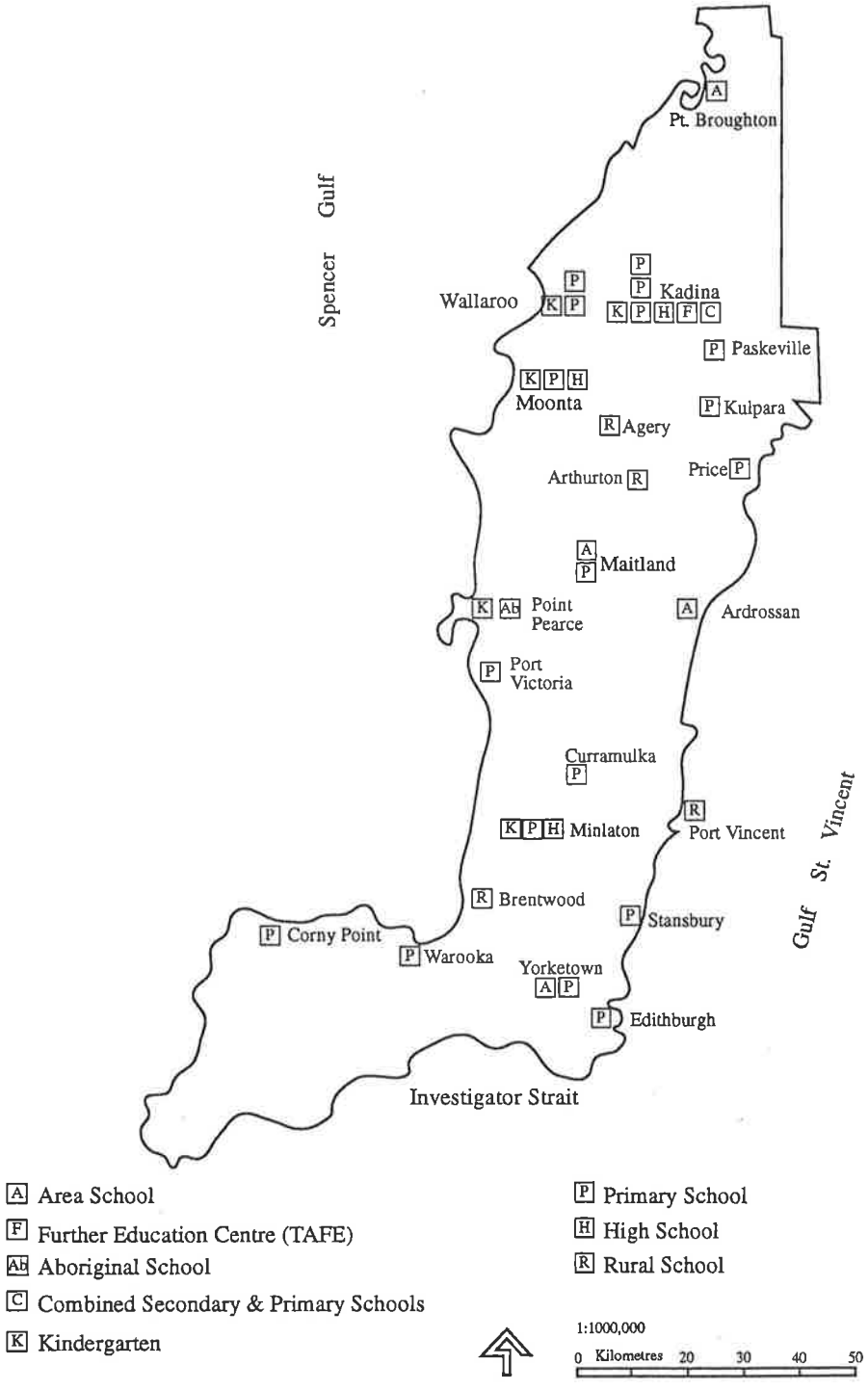

Figure 3 6

Yorke Peninsula
Schools

Source: Writer's drawing and compilation from Fig. 29 and Education Department of South Australia, 1993.

4.5 CONCLUSIONS

People on the Yorke Peninsula live in similar conditions as urban residents regarding having access to most types of essential services and facilities. The families in the region like many others throughout Australia owe much of their high standard of living to many supporting governmental and non-governmental institutions and organisations. Such a condition brings rural residents a sense of confidence. However, natural disasters, such as drought or flood which often happen, are the farmers' common problems, the Federal Government's support on such occasions covers only a part of the losses. A major disadvantage on the Peninsula, particularly for the young, is the shortage of job opportunities. This has been the main reason behind rural-to-urban migration. On the whole, everything goes very well in the region and the people really enjoy their lives being close to the beautiful coast and other natural endowments.

The systems of delivering basic services and facilities to the Peninsula and to the rural areas in most parts of the continent can serve as exemplars towards an effective strategy to reduce rural-urban disparities in developing countries. These countries can take advantage of the Australian experience and through some measures of synthesis and adaptation make it suitable for their own countries according to their socio-cultural, economic and political situations. In the case of Iran, for example, the model - after some adjustments - can become a compatible one to be adopted.

CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

5.1 BACKGROUND

The research at hand has explored the hypothesis that: *the provision of basic services and facilities, such as health care, education, water supply, electricity, transportation and communications in rural areas may significantly contribute to reducing rural-urban disparities and inequalities.*

The theoretical and practical components of this study, that is the literature review and observations derived there, and the longitudinal action research undertaken in the Korbal rural region of Iran, supplemented by the South Australian example, indicate a way forward.

In Iran due to the dispersed settlement pattern and the limitation of resources and possibilities, the provision of basic services and facilities in rural communities can be an effective way to cope with rural backwardness. However, providing services and facilities for every single village and small settlement is not possible. Therefore, there is a great need for finding a suitable strategy that can bring about equitable growth and balanced development throughout the country such that the present socio-economic gap between rural and urban areas gradually decreases and eventually disappears.

The service delivery approach which is proposed in this research seems to be appropriate for this purpose. It is proposed that services and facilities be provided in key areas based on a hierarchy of settlements which begins with central villages and ends with metropolitan areas. This will help: a) link rural areas and small towns

to the different levels and hierarchy of decision making; b) expand the network of infrastructure throughout rural areas; c) attract the private sector to invest in rural areas in order to establish industries and generate new employment opportunities; d) mobilise the rural-urban, governmental and non-governmental institutions and organisations into mutual socio-economic relationships; e) reduce rural-urban disparities; f) facilitate integrated, rural-urban development; and g) bring about sustainable development for the whole nation. Clearly to achieve these aims the direct intervention of government at all levels and the participation and contribution of people is necessary.

The approach is a derivation or synthesis from Central Place Theory, Growth Pole Approach, Basic Human Needs Approach, and the Approach of Hierarchies of Settlements (central villages, service centres, rural or market towns, intermediate or secondary cities, and metropolitan areas) for bringing "urban function in rural areas". Services and facilities are provided on the basis of a hierarchy of settlements. Under this arrangement, each community can fulfil some or all of its needs in the nearest settlement which is at a higher level in regard to the accepted hierarchical criteria. As a result, every single village or small settlement which did not have access to some services and facilities before, under the new system will be able to have access to them. China, India, Indonesia, Korea, Malaysia and Taiwan have practised a similar strategy and have achieved successful results.

It is now appropriate to summarise the research and proceed to some conclusions and recommendations.

Summary of the research processes

This study has: (1) examined the rural-urban socio-economic disparities in developing countries with particular reference to Iran, this has been done to draw a

clear picture of rural areas' situation in these countries; (2) reviewed the contemporary theories, approaches and ideas regarding rural-urban relationships and rural-urban development in order to seek the most appropriate policies and strategies to overcome the spatial disparities; (3) identified the factors contributing to rural-urban disparities; (4) discussed an action research program which tested the provision of basic services and facilities on reducing rural-urban disparities in the Korbal rural region; (5) investigated rural communities in South Australia, their problems, their living conditions and their relationship with their urban counterparts in order to learn lessons of experience from a developed country in coping with rural-urban disparities.

With respect to rural-urban disparities, the study has sought to provide information on the socio-economic conditions which exist in a number of developing and developed countries and the measures that have been taken so far to reduce the rural-urban disparities in those societies in order to achieve integrated as well as equitable rural-urban growth and development. From the literature review two significant points emerged. Firstly, many scholars, policy-makers and planners have considered urban development and rural development as two separate issues and it is only recently that some writers have looked at the two communities as complementary to each other in the process of national development. Therefore, this may be the first time that the issue has been studied, specifically, under the title of 'reducing rural-urban disparities to achieve integrated rural-urban development' in developing countries. Secondly, the literature indicates that rural areas, particularly in developing nations, lag behind urban areas regarding access to basic services and facilities and other socio-economic opportunities. Several examples are given to illustrate the situations in a number of developed and developing nations and their specific strategies which have been practised to cope with filling the gap between the two communities.

With respect to reviewing the contemporary theories, the study sought to explain, compare and analyse the ideas and issues regarding rural-urban disparities, spatial development and particularly integrated, rural-urban development in both developed and developing countries.

Next, the role of various physical, geographic, environmental, socio-cultural, economic and political factors which contribute, in one way or another, to bringing about rural-urban disparities was discussed.

This was followed by a specific case study which demonstrated how the involvement of rural communities can be an important and effective step in the improvement of their living conditions and thus reduce rural-urban disparities. A comparative analysis was carried out to test the effectiveness of the delivered services and facilities on the socio-economic conditions of nearly one-third of the villages in the region under study. The decrease in the differences between the selected criteria: literacy ratio, infant mortality rate and annual household income indicates the improvement of living conditions in the villages and the reduction of disparities between them and urban areas. In other words, the closer the quantities or values of the socio-economic indicators in rural and urban societies are to each other, the fewer the socio-economic disparities and inequalities will exist between the two communities.

The strategy of providing basic services and facilities in the KRR through the action research contributed to reducing rural-urban disparities and indicated that such programs could be a prerequisite for integrated, rural-urban development in Iran. It is hoped that such strategies will assist in:

1) linking rural and urban areas to each other through the spatial hierarchies of the existing institutions and act as a basis for establishing new institutions if it is necessary to do so;
2) changing the one-sided, rural-urban (inter-colonial) relationship to one that is mutual in all aspects of social, economic and political points of view;
3) reducing rural-to urban migration; and
4) encouraging rural-urban equitable growth and balanced development in the region and in the country as a whole.

The study of the Yorke Peninsula illustrated how local, state and federal governments in a developed society combine efforts with non-governmental agencies to minimise the spatial disparities and inequalities.

Discussions and interviews with rural people and local authorities on the Yorke Peninsula drew a clear picture of the characteristics of rural communities and their living conditions. The availability of basic services and facilities, efficient infrastructure and modern means of communication are some of the major factors in minimising the rural-urban disparities throughout the Yorke Peninsula and Australia generally.

5.2 CONCLUSIONS

The conclusions are summarised in three sections: (1) rural-urban disparities, (2) factors contributing to rural-urban disparities, and (3) the impact of providing basic services and infrastructure facilities on reducing rural-urban disparities.

1. Rural-urban disparities

The relationship between rural and urban areas in Iran and other developing countries has been one-sided and based on rural exploitation. It was the policy of national governments to allow the domination of urban over rural interests and industry over agriculture. Specifically, during the 1950s and 1960s, most of the development programs and projects were sectorally orientated. In that time developing nations placed more emphasis on industry to pursue growth and expansion objectives. This widened the regional/spatial disparities and inequalities, especially between rural and urban communities. As a result, poverty became widespread in these countries particularly in the rural areas. At that time due to administrative problems there were no effective macroeconomic mechanisms available to these nations to address the issues of inequality and disparities. Even some of the macroeconomic measures which were generally used exacerbated the economic and social problems faced by the rural people.

In the early 1970s, while the rate of economic growth might have been high in these countries, the regional disparities widened and equity problems worsened. People in different sectors did not benefit from the development programs to the same extent, some suffered as a result of them, particularly with regard to the gap between rural and urban incomes. Employment opportunities increased in expansion programs in large urban areas, but these opportunities were not sufficient to absorb the surplus rural labour force. Governments began to redirect their development efforts towards the rural people in order to improve their economic and social well being. However, it was too late because by 1970 in the majority of developing countries rapid urbanisation, on the one hand, and rural depopulation, on the other, had brought about dramatic changes in the people's expectation of life style.

Since the mid-1960s it has been a general trend for the majority of the people in these nations to live in the national capital or other metropolitan areas. This has been a unique phenomenon throughout the world, though at different rates: very rapid in Asia, and slower in Africa and Latin America. People prefer to live in large cities because of the advantages that can be found there. This condition proves that these advantages cannot be found in rural areas and/or small towns. It means that in developing countries socio-economic advantages and opportunities are not equally distributed between urban and rural communities. It means that the governments and those who are responsible for bringing about equity, equality and social justice have not managed their duties properly towards more just and healthy societies. It means that the people themselves have very little knowledge of human rights and equal opportunities. It means that many elites, planners, policy-makers, politicians, authorities, and naturally the powers in the private sector, have been more concerned about their own places of living, which are the large cities, and have had little concern for other places especially remote rural settlements.

Another interpretation of the problem may be that the policy-makers and authorities in developing nations might have been interested in making a just society with more equity and human dignity but they could not find suitable and practical strategies. Whatever the truth may be, the fact is that if the present trend continues, these countries will face increasing socio-economic and political problems. Solving them in the future will be a far more difficult task than preventing and controlling them at the present time. Rural-urban disparities should be ameliorated by rural-urban equitable growth and balanced development if developing countries are going to aspire to the sort of socio-economic, sustainable development now sought by developed countries.

Fortunately, nowadays, a number of developing countries believe that integrated, rural-urban development programs are essential to the economic and social development of their nations. They have comprehensive economic and social development plans and programs with multiple objectives to increase production, expand employment opportunities, reduce the rate of population growth and provide adequate education and health services. China, Korea, Indonesia, Malaysia and Turkey have been successful to a great extent in this regard, and thus may act as good reference points for other developing countries which may still be in doubt with regard to incorporating the rural sector as a major factor in the process of national sustainable development.

2. Factors contributing to rural-urban disparities

There are a number of geographic, environmental, socio-economic and political factors which have contributed to the rural-urban disparities in developing countries.

Geographic factors cover the differences between the natural condition and physical locations of different communities. Those locations which have plenty of water, good climatic conditions, fertile lands and other natural endowments attract more people and thus grow faster as central locations, towns or cities. Whereas, other places with fewer resources and potential remain underdeveloped with limited socio-economic and political activities.

Socio-economic and political factors are interrelated with the geographic factors as large communities are the centres of trade, administration and decision-making. They are also provided with different services and facilities not to be found in small societies. The availability of facilities enhances the conditions which are needed for all types of socio-economic and political activities on a larger scale and at the same

time deprive the surrounding smaller communities. In Iran, for example, most specialised services and possibilities have been allocated to Tehran, the capital city. Therefore, as the main centre of government, business and decision-making, people from all provinces need to travel to Tehran several times a year if they wish to conduct various forms of business, seek permission for certain provincial activities and/or access to the specialised services. No important decision can be made in any of the other cities because of the dominant role of Tehran in all aspects. This is mostly because of the centralised system of government. Such a situation undermines not only rural but also urban areas and particularly aggravates rural-urban disparities and rural backwardness. In summary, what the writer concludes from the literature in the field of rural-urban inequalities and the related issues are as follows:

i) rural backwardness is the result of rural-urban disparities and inequalities (i.e., lack of social, physical, economic, and administrative services, facilities and opportunities in rural areas, and availability of these facilities in urban areas);

ii) these disparities and inequalities lead to rural-urban duality;

iii) rural-urban duality brings about a 'rural-urban inter-colonial relationship'. A one-sided relationship through which rural resources (human, natural, capital) instead of being allocated and efficiently utilised in rural areas - thus facilitating rural development - are transferred to the urban areas in the shape of very cheap raw materials.

iv) this state of 'inter-colonial relationship' acts as a strong 'push factor' in the process of rapid rural-to-urban migration in developing countries.

v) this type of migration generates inequitable growth and creates an imbalance in rural-urban development (e.g., vacated villages, overpopulated cities, urban

sprawl, unemployment, high incidence of crime and deviant behaviour), which is synonymous with rural and urban underdevelopment, the unique feature of the majority of developing countries.

3. The impact of the provision of basic services and infrastructure facilities on reducing rural-urban disparities.

Reducing rural-urban disparities and integrating rural and urban communities and their productive activities into a national economy is generally the major objective of development planning in any country, especially in developing ones. Neither the goals of increased productivity and income expansion nor those of greater equity in income distribution can be attained without increasing interaction among villages, market towns, intermediate cities and metropolitan areas in developing nations and without integrating urban and rural functions into a national spatial system. Integration reduces spatial disparities and promotes different relationships at every level of the spatial hierarchy (i.e., central villages, service centres, rural/or market towns, secondary cities and metropolitan areas) and at every stage of a nation's development.

This research like similar studies in this field - referred to in Chapters I and II - confirms that the availability of basic services and facilities and infrastructure in rural centres can impress on developing countries a basis for sustainable development that influences not only the rate and distribution of national growth but also the quality of life in local communities and individual access to opportunities.

The provision of these services is so important that they can shape development in many ways. Regions differ in their attractiveness and suitability for any kind of development and thus in their ability to compete for national resources. Any region that has public services, facilities and infrastructure will attract and be supported by

both public and private investment. Although suitable natural resources, such as land, water and mineral endowments must be available, man-made facilities are crucial. For example, the existence of a good transport system determines the cost of moving raw materials from supply sources to points of production and finished goods to distributors and final markets. The availability of services and facilities can contribute to the quality of human resources and to general standards of living in a community. Locating services and facilities in central places can have important impacts on the pattern of production exchange and concentration of social and economic activities.

The appropriate location of services and facilities is particularly important, because of the scarcity of resources, limited administrative capability and increasingly urgent needs to expand food production and manufacturing. Proper distribution of services and facilities is very important not only for promoting economic growth, but also in increasing social equity and in improving the quality of life. Disparities in economic and social well-being are often measured by the number and diversity of productive and social activities and various services and facilities located within a community. The gap between rural and urban communities in developing countries is largely attributable to inequitable access to productive activities and essential or basic services and facilities. This is one of the reasons why most developing countries are dealing with a major development planning issue which is under discussion as a fundamental planning question: How may widespread and equitable growth and balanced development be promoted so that the majority of people living in rural areas can participate more effectively in fulfilling and sustaining socio-economic activities and obtain greater benefits from integrated, rural-urban development processes?

This research contributes to the answering of this question through its examination of the hypothesis that: *the provision of basic services and facilities such as health care, education, water supply, electricity, transportation and communications in rural areas may significantly contribute to reducing rural-urban disparities and inequalities.* The fruitfulness of a planning development strategy based on this hypothesis has been tested in the Korbal rural region as before-and-after studies, from 1973 to 1992. Twenty-one villages in the region were provided with basic services and infrastructure facilities. The impacts were a reduction in rural-urban disparities and the improvement in living conditions in the villages and their surrounding areas, as stated in Chapter III.

Before and after the provision of the basic services and facilities, the socio-economic situation of the villages was compared and analysed. Groups A and B villages, which were provided with the services and facilities, grew faster with a higher literacy ratio, higher annual household income and lower infant mortality ratc. On the other hand, Group C villages which had not received those services and facilities gradually lost their population and their other development indicators lagged far behind Groups A and B villages. This supports the contention that appropriate intervention improves living conditions in rural communities and reduces rural-urban disparities and inequalities. Government should create the preconditions for development and prosperity in rural and remote, underdeveloped areas. In the absence of a viable government investment policy, for instance, to generate employment and to provide public services and infrastructure, rural and remote areas tend to have declining standards of living, whereas adopting long-term integrated rural-urban development plans will bring balanced and equitable growth and 'sustainable development'.

Finally, the writer feels prepared to put forward a number of recommendations in this regard but, before starting, two points should be emphasised: 1) although the research at hand is supported by a strong theoretical background, it is more practical and pragmatic rather than theoretical and 2) it it was the financial and academic support of Shiraz University, the administrative and technical assistance of a number of provincial organisations and institutions, the encouragement of local authorities and the effective participation of the villagers that gave the writer an exceptional opportunity to sow a seed and follow up its growth over a period of more than 20 years. Others may continue the strategy or expand and generalise it on a broader scale to reduce rural-urban disparities at the national and international levels as a simple and practical planning and development strategy which can be carried out by rural people with minor help and intervention from outside their communities. There are similar strategies for the provision of basic services and facilities but most of them have been too complicated for many developing countries to implement. Therefore, the two advantageous characteristics of this strategy - which in their turn may be but a small contribution to knowledge - are its simplicity and practicality, two major factors which could encourage people to put the theories into action, as happened in the KRR.

5.3 RECOMMENDATIONS

- To cope with rural-urban disparities, both communities should be linked to each other socially and economically. The strategy to achieve this is based on decreasing the existing rural-urban inequalities through integrated, rural-urban development programs. The successful implementation of such a comprehensive policy calls for a nationwide mobilisation of both governmental and non-governmental institutions and organisations as well as people participation. The provision of basic services and infrastructure facilities and

new socio-economic opportunities and productive activities in both rural and urban areas concomitantly are examples.It should be emphasised that expanding, facilitating, and improving the activities of the different branches of the related institutions and organisations - for providing the appropriate conditions and environment for rural-urban, socio-economic integration - is based on the extent of the direct support and contribution of local, state, and national governments.

- Governments in developing countries should avoid centralised and top-down planning policies as they usually accelerate the growth of certain large urban industrial centres and deprive other regions particularly remote areas in the country. The governments should, instead, introduce and encourage participatory and relatively autonomous decision-making units at each level of settlement hierarchy: central villages, rural service centres, market towns, cities, secondary cities and metropolitan areas. This will bring about conditions for national 'sustainable development'.

- National governments in the developing world should carry out an important duty, that is providing financial and technical assistance for the provincial and local planning agencies in order to facilitate co-ordination between people and planning agencies at the different levels. This will also help the equalisation of development projects throughout developing nations.

- Looking at the institutions and organisations which support Australia's rural areas and remote settlements, in particular the service delivery system on the Yorke Peninsula, bring to mind this idea that, because of the existence of efficient managerial and administrative systems; excellent communication facilities; the availability of basic services and facilities, especially health, education, communication and transportation, everywhere in the country is

linked to each other; and people enjoy equal opportunities. It should be noted that in Australia, like many other developed countries, there may be certain disparities between rural and urban areas. In other words the existence of a number of socio-economic disparities - to some extent - between rural and urban areas in any nation is inevitable. Especially that in this research the terms 'disparity' and 'inequality' are used as relative rather than absolute concepts. Therefore, we may argue that, despite the existence of a number of rural-urban disparities in the developed countries, including Australia, rural communities in these nations live in much better living conditions in comparison with the rural societies in Iran and other developing countries.

In Australia like other developed countries there is no rural-urban colonial relationship. Therefore, rural resources are used for the improvement and betterment of the general condition of living in rural areas. It is recommended that the Australian rural support and service delivery system should be studied and analysed by the planners and policy-makers in developing countries in order to learn lessons of experience in improving living conditions in rural areas in the developing world.

One of the best ways to reach this aim is by developing a reasonable distribution of suitable hierarchies of spatial settlements with their related organisations and institutions throughout the country. Establishing rural supporting agencies should also be encouraged. These agencies help bring about a rational and dynamic system of decision-making and mutual relationship between the smallest rural settlements and biggest cities through hierarchical inter-relationship.

- The availability of modern infrastructure and essential services and facilities in company with relevant policies of economic development play the most

important role in the success of any integrated rural-urban development strategy. By implementing this strategy new linkages and networks will emerge between rural and urban areas. The previous gaps will be filled out gradually by such a dynamic relationship. The fruits of this policy will be sustainable development accompanied by social justice, equitable growth, a stronger state of real democracy, more job opportunities, a higher level of living, and generally a much better environment for a more productive and more fruitful life for everybody both in rural and urban communities. In that case there will be no reason for rural people to leave their villages for big cities or metropolitan areas. They will remain and work on their lands, and those who do not have enough land to grow agricultural products can find jobs in other sectors, such as services, mining, large or small industries, handicrafts, or similar places in their vicinity.

- To encourage urban people with expertise to work in rural areas and small settlements, national governments in developing countries should arrange work incentives and intensive governmental aid programs especially for the provision of basic service facilities and infrastructure. Any effort must be done in the very first stage of the implementation phase of these types of policy, otherwise people may be reluctant to work in the small settlements.

The results of the implementation of these kinds of policy will be the increase in agricultural production, rural development and good conditions of living in both rural and urban areas, similar to the situation which exists in rural communities in developed countries. If local and national governments of developing countries preferably avoid, or at least put a limit on, the implementation of urban bias policies, they will be able to put an end to the present rural-urban dualism.

The methods and ways to deal with the problems and issues in different phases and processes of integrated, rural-urban development plans, and how to encourage both public and private sectors to participate in the different stages, have the most important role in achieving success in policy implementation, because each nation and even each single region in any nation may have its own specific socio-cultural, economic and political conditions. This needs very deep, comprehensive, practical, institutionalised original reforms or changes in cultural, behavioural, administrative, and management patterns among local, provincial, and national governments, on the one hand, and between these authorities and people, on the other. The success of any strategy in this regard is based on population participation and governmental co-operation at all levels.

From the above points it is possible to develop some specific recommendations for Iran, such as the following:

- Planners and policy-makers - after ensuring that they know enough about rural-urban problems and difficulties and, in particular, rural-urban disparities - should aim to minimise these disparities and solve the associated problems in order to promote national equitable growth and integrated, rural-urban development. In this regard they should encourage rural communities to fulfil their needs and to improve their living conditions through mutual relationship and self-help activities by establishing non-governmental organisations instead of expecting their government to perform every single program for them. Government is usually too busy and its capacity is too limited to be able to accept an infinite number of appeals of various kinds from the villages and the cities. Self-help activities will guarantee the sustainability of socio-economic development all over the nation. This will also help different communities to stand on their own feet, rely upon themselves and be self-sufficient in many

community issues. This would allow government time to address more serious issues and manage and organise government departments to function more effectively.

- The inadequate number of experts and specialists in the professional fields, as well as many other shortages, particularly the scarcity of investment in Iran, make it impossible to introduce complicated and sophisticated socio-economic plans for the lower levels of the hierarchical settlements. Small communities can improve their conditions by adopting simple plans and strategies. Advanced methods and techniques in planning, such as those introduced by Rietveld *et al.* (1980) are relevant to large and multi-function cities, not for small rural communities. Projects, such as laying a pavement between houses, providing potable water, electricity, schools, health care and building simple houses for the villagers do not involve complicated techniques. Most of these services and facilities can be provided in the villages through people participation and self-help activities. Ingemann and Rodger (1989:1) contend that, in both developing and developed countries, including Australia, "Self-Help or Do-It-Yourself housing" is increasingly being recognised as a desirable strategy. When people can build their houses by themselves, why not do similar projects for the betterment of their environment? The action research in the KRR was based on this kind of strategy. Some projects, such as schools, public baths, public libraries, rural roads and bridges and so forth were carried out through people participation and others, like making sanitary toilets, digging a sewerage system, paving courtyards and backyards and building walls for the houses were done as self-help projects. Thus, it is really the time for the planners and policy-makers in the developing world to mobilise people to improve their living environment and their living conditions especially in the small communities rather than waiting to be served or helped by others.

An important point which may well be mentioned here is to consider the crucial role of maintenance of the implemented projects. No project is finished after the implementation. A major step which needs to be taken to ensure that real improvement or development will take place is to instil feelings of responsibility in the users to pay attention to the feedback as well as the socio-physical maintenance, vitality and congeniality of the implemented projects.

- As the expansion of the agricultural sector is limited by natural constraints, particularly agricultural land and water shortages, the government should find alternative modes of employment to prevent the present rapid rural emigration. One of these can be promoting rural industries. This may be able to play an important role in the diversification of the rural economy and reduction of rural-urban income disparities. Establishing dairies, sugar beet factories, rice-pounding factories, fruit-packing factories, canneries and rural handicraft industries such as carpet, geleem and jajeem weaving, traditional cloth, ceramics, potteries are some examples.

- Generally, in any economic growth policy, the government should give priority to the rural sector. The national resources should first be used for agricultural development to cope with the present dependency on food imports. Expanding small industries, services and infrastructure facilities in rural areas can help the nation to reach a state of self-sufficiency in food production. In other words, paying more attention to the rural sector is the key to gaining 'real independence'.

- A specific recommendation for the KRR is to make Rahmatabad village a regional service centre and market town for the following reasons:

    1) its location - in the middle of the region - is accessible to all;

2) the population is higher than the surrounding villages;
3) it is in a much better situation than other villages regarding the availability of services and facilities; and
4) it has been serving the surrounding areas for more than 15 years.

Rahmatabad's existing services and facilities are: two primary and two secondary schools, a mosque, a public bath, a sub-post and telephone office, a rural council office, a health house, a public library, a bakery shop, a barber shop, piped drinking water, electricity, very good gravelled road and a minibus line to Marvdasht.

The additional services and facilities needed for Rahmatabad to become a service centre and market town are:

- two high schools (one boys', one girls');
- two modern public baths;
- a health centre (as proposed in Appendix C);
- a sealed road to join Rahmatabad to Marvdasht and to the central villages;
- a rural-urban co-operative shopping centre;
- a post and telephone office;
- a small rural police station;
- a repair shop for agricultural machinery;
- a public library;
- a public park with playgrounds;
- a small service station;
- a regular coach-line between Rahmatabad and Marvdasht;
- a large well-equipped central market for the whole region;
- a large carpet-weaving and other handicrafts co-operative production centre for the region.

Reading, writing, thinking and analysing contemporary issues regarding 'real development', now referred to as 'sustainable development', brought the writer to this point that, such a congenial and humanitarian process is really expected to be followed by the human societies instantaneously. The leaders of this international movement are expected to be the developed countries. Those who have been enjoying socio-economic and political stability and comfort due to their efforts and endowments. Those who are aware of the present, huge socio-economic gap between them and developing nations. Those who know that sustainable development is more meaningful only when it is global rather than regional.

Huge networks of international communication facilities have recently linked nations to each other and made global, mutual relationships easier and faster than the past. One would expect to see more positive impacts of these technological advancements on human societies.

Undoubtedly the outcome of scientific inventions and discoveries of thinkers, philosophers, policy-makers, planners and other educated people in other fields throughout modern human history should be something beyond nationalistic and/or racial affairs. Those who just are concerned with "feathering their nest" and do not care about the others, cannot be considered as civilised people and have to change their minds and join the global family if they wish to achieve 'sustainable development'.

Therefore, it is time for all nations to mobilise their efforts nationally and internationally to help themselves and others through adopting humanistic planning development strategies which can bring about both national and global 'sustainable development'.

Reducing socio-economic disparities among human societies through providing essential services and facilities - in different spatial scales, rural-urban communities within a nation and developed - developing nations at the global level - may be one of those effective and efficient strategies to achieve the qualification to locate human communities in the preliminary stages in the chain of 'sustainable development'.

The successful experience of the Iranian example, proved the validity and the effectiveness of this strategy in reducing spatial (rural-urban) disparities and bringing about integrated spatial (rural-urban) development which can be a prerequisite to 'sustainable development'.

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APPENDIX A

KORBAL RURAL REGION QUESTIONNAIRE

May 1992

Part I. Village

1. Name of village .....

2. Location: .....

2.1 How far is this village from the nearest town? ..... kilometres.

2.2 How far is this village from Shiraz? ..... kilometres.

3. What is the area of this village? ..... square kilometres.

4. What is the total area of arable land in hectares?

Irrigated farming ..... hectares

Dry farming ..... hectares

Fallow ..... hectares

Garden ..... hectares

5. What are the main crops?

- wheat
- barley
- rice
- sugar beets
- alfalfa
- other

6. How much agricultural machinery is there in this village?

- tractor
- combine
- other

7. What are the major sources of irrigation?

- river
- deep well
- semi-deep well
- qanat
- other

8. What are the major income-earning activities?

- crop production
- animal husbandry
- small industries
- mining
- handicrafts
- others

9. What is the population? ..... persons.

10. How many households? ..... .

11. What are the basic services and infrastructure?

Roads

- asphalt ..... kilometres
- gravelled ..... kilometres
- formed ..... kilometres

Means of transportation

- bus
- minibus

- automobile
- motorcycle
- other

Health care facilities?

- health house (type and number of staff)
- health clinic (type and number of staff)
- doctors visiting intervals (per month)
- other

Public bath

Ghassalkhaneh (funeral parlour)

Electricity

Schools

- type and number (elementary, secondary, girls', boys')
- number of students and staff for each type
- number of staff for each type

Mosque

Public library

Post box

Telephone

Radio, TV, newspaper

Agricultural machinery repair shop

Private shops

- type
- number

Co-operative shops

- type
- number

Other facilities

Part II. Household

1. How large is your farm? .....

2. Do you own the land? Yes ..... No .....

3. If not, do you hire the land from: Owqaf .... landlord ..... other ....

4. How much is the annual rent per hectare? ..... Rials or what proportion of the annual product? .....

5. How many people help you in farming activities? .....

6. Are all these people from your household? Yes ..... No .....

7. If not, how many workers (beside your household members) do you need to hire to help you each year, and for what sort of activities?

8. Please answer the following questions regarding age, sex and education:

Table 1: Household demographic characteristics.

	Age	Sex	Level of education						
			R&W	C.E.S	C.S.S	C.H.S	T.Q/C	Tertiary	Other
The Head									
Spouse									
1st. child									
2nd.									
3rd.									
4th.									
5th.									
6th.									
7th.									
mother									
father									
mother-in-law									
father-in-law									
other relative									
not related									

R&W = Reading and writing without an official certificate.

C.E.S = Completed elementary school (year 5).

C.S.S = Completed secondary school (year 9).

C.H.S = Completed high school (year 12).

T.Q/C = Technical qualification or certificate.

Tertiary = University qualification.

17-24. Please help to complete the following table:

Table 2: Household earnings.

	Occupation							
	Major or permanent				Minor or temporary			
	Type	Loc.	Time	W: Rls/hr	Type	Loc.	Time	W: Rls/hr
The Head								
Spouse								
1st. child								
2nd.								
3rd.								
4th.								
5th.								
6th.								
7th.								
mother								
father								
mother-in-law								
father-in-law								
other relative								
not related								

Loc. = Location of job (rural or urban area). For the major occupation the location of job is their village but for temporary occupations it may be elsewhere.

W: Rls/hr = Wage in rials per hour.

Time = Date and number of hours spent working in permanent or temporary jobs.

25. Which of the following does your household produce? Please specify how much and/or many of each?

    Wheat ..., barley ..., rice ..., sugar beet ... , alfalfa ... , cotton ... , grain legumes ... , horticulture ... , lamb ... , sheep ..., dairy ... , chicken ..., products (handicrafts)..., other?

26. What was the household income for last year?

27. How much of the income came from each of the produce in question number 25?

28. Please help to complete the following table.

Table 3: Household monthly food expenditure.

Item	Quantity	Cost/ unit	Total
Flour/ bread			
Meat			
Rice			
Cereals			
Oil			
Eggs			
Dairy products			
Fruit & vegetables			
Other			

29. Please help to complete the following table.

Table 4: Household annual expenditure.

Item	Rls./year
Food	
Clothes	
Health & hygiene	
Travelling	
Others	
Total	

30. Please help to complete the following table.

Table 5: Production costs per hectare, in rials, for the major crops in the KRR in 1992.

Activities	Wheat	Barley	Rice	Sugar beets	Alfalfa
Seed bed preparation					
Sowing					
Fertilisers					
Pest control					
Tillage					
Irrigation					
Harvesting					
Transportation					
Other costs					
Total cost/hec.					

31. Please help to complete the following table.

Table 6: The average production in kilograms per hectare for crops in 1992.

Crop	Production: kg/hectare
Wheat Barley Rice Sugar beets Alfalfa	
Other	

32. Please help to complete the following table.

Table 13: The average cost/benefit in rials for each crop per hectare in 1992.

Crops	Cost, R/hec.	Income, R/hec.	Net benefit, R/hec.
Wheat Barley Rice Alfalfa Sugar beets			

33. How do you like your job? Very much .... Not very much .... Do not like it ....

34. Please give reasons? (in each of the above cases)

35. Would you prefer to live in a city rather than in a village? Yes .... No ....

36. Please explain your reasons in either case.

37. Has anybody from your household left your village to live in another place? Yes... No .....

38. If yes please specify: Where? .... When? ..... and Why? .....

39. Your village does not have some of the following services, facilities and/or opportunities, providing them may be imperative in encouraging the villagers to remain in their village rather than migrating to the cities. Of the following, which five do you consider to be the most vital for your village ? Please indicate the priorities by figures 1 to 5 (1 for the highest and 5 for the lowest rank).

health and medical care
primary school
secondary school
high school
transportation facilities
sealed roads
potable water
electricity
telephone
post office
public library
mosque
gassalkhaneh (funeral parlour)
entertainment facilities
other basic services and facilities
co-operative shops
markets
silage and other agricultural facilities
farm machinery
drainage system
irrigation canals
job opportunities
access to a bank
other (please specify)

40. What do you do when a member of your household has an accident or becomes ill?

41. What happens if the sickness is very serious and the patient needs to see a doctor?

42. Did anybody in your household get sick last year? Yes ..... No .....

43. If yes, how many and what sort of illness?

44. Has anybody in your household died during the past five years?
Yes .... No .....

45. If yes please explain why and when.

46. What are your suggestions regarding the improvement of living conditions in your village?

APPENDIX B

YORKE PENINSULA FARMERS' QUESTIONNAIRE

Key Questions and Answers:

Q. How many farms are there on the Peninsula?

A. 900.

Q. What types of farm?

A. All broadacre, about 80% of them are mixed - livestock-crops, the rest grow wheat and other crops.

Q. What is the average size of a farm?

A. 1,400 hectares.

Q. How many people does it take to run the average farm?

A. 3.5 persons.

Q. What is considered to be the minimum value of a farm?

A. For a family farm the worth of the land, machinery and buildings should not be less than $800,000 to be economically viable.

Q. What would be the average annual income for a farm in the region?

A. $25,000.

Q. Does everyone have access to the basic services and facilities, such as: schools, medical and health care, electricity, transportation, communication and so forth?

A. Yes. We don't have any problems in this regard [unanimous response]. There are good roads and all of us have our own cars and can get to town quite quickly.

DETAFE has a lot of tertiary level courses but it is no substitute for a university ... people send their kids down to the city.

Q. What are farmers' major problems?

A. - low prices for agricultural products;
- lack of solid farm policies; and
- drought.

Q. Are farmers really interested in farming or do they do it because they have no other choice?

A. There might be a few who would like to have other jobs ... most of us love farming ... based on heritage values ... being self-employed, no boss ... working in the fresh air, like being productive ...

Q. How many farm families have migrated to the cities since 1990 and why?

A. Five ... the banks refused to lend money to three of them ... the farms were not economic ... the other two retired.

Q. What are farmers' expectations of national and state governments?

A. To support us by subsidies and other policies similar to those of the United States and Canada.

APPENDIX C

A PROPOSED HEALTH CARE SYSTEM FOR THE KORBAL RURAL REGION

It is beyond the power of either the public or private sector to provide basic medical and health care services for all of the rural regions in Iran, yet finding a practical solution to the problem is of great importance. Therefore, a simple and appropriate system of delivering medical and health care in the KRR is proposed.

Based on the Province's potential, a health centre can be established in the village of Rahmatabad to serve all of the villages in the region. It is envisioned that the functions of the centre would include: the early diagnosis and prevention of diseases; minor surgery; short-term rehabilitation to aid recovery; the treatment of minor illnesses and simple disorders as well as primary medical services such as first aid and the dispensation of medicine and an ambulance service.

The goals of the health centre: 1) to increase availability of and access to the care and services for every individual, family and village; 2) upgrade and maintain the knowledge and skills of paramedical aids in the home and clinics; 3) provide precision and co-ordination in response to varying continuous and emergency conditions. This home/clinic system in the KRR, to some extent, will help reduce the number of patients in and relieve the pressure on Marvdasht, Kherameh and Shiraz hospitals.

The subsequent objectives for: 1) the identification and determination of needs, 2) personnel required, 3) the specification of facilities and equipment and 4) the provision of health services delivered to the rural recipients, are determined to be minimal in Rahmatabad Health Centre.

1. DETERMINATION OF NEEDS

- identify the general health problems of the Korbal villagers;
- identify the type and number of personnel required for administering and dispensing direct health services and those for the support system of the health service;
- project needs inventory of health services facilities, manpower and transportation for continual updating, analysis and evaluation of the regional health system.

2. PERSONNEL REQUIRED

The characteristics, qualifications and duties prescribed for each type of health personnel will be differentiated by training and location of assignment.

3.1 Family Health Worker (FHW)

1. Characteristics:

A FHW is an adult member of any family who is elected by the other members of his/her family based on the following:

Literacy (optional factor),

Ability to handle the usual as well as unusual problems and difficulties of daily life, and

Readiness to accept the responsibility of a FHW.

2. Functions and duties:

- He/she is responsible for the health care of the family. In this regard the FHW should encourage the family members to keep themselves and their house as clean and neat as possible.

- He/she is responsible for arranging the vaccinations of his/her family members.
- He/she is responsible to introduce the sick member to the village health worker.

3.2 Village Health Worker (VHW)

1. Characteristics:

A VHW is one of the villagers who is elected by the people of his/her village based on the following qualifications:

- literacy (a required factor);
- age: traditionally, mature-age people are more respected in rural areas although the VHWs should not be so old that they lack physical strength; and
- personality: (to be even-tempered and known to the villagers as a person who can be trusted.

2. Functions and duties:

- to train the family health workers;
- to encourage the villagers to keep their village clean;
- to arrange monthly meetings with the villagers to ask for their effective participation and contribution in carrying out small projects for improving the hygiene of their village, such as building public baths, sanitary toilets and sewage disposal system; other small projects which would improve the environment and/living conditions; and
- to give first aid. In cases where the villagers get sick, the VHW should try to treat them with the simple pills and drugs (which exist in the village medicine box). If the patients need treatment, they should be taken to the central village clinic.

3.3 Central village health worker (CVHW)

1. Characteristics:

- must have the two-year degree of Rural Health and Basic Medical Care Practitioner or the equivalent;
- should not be so young as to lose composure in natural disasters such as earthquakes, floods, hailstorms and similar events;
- must have the qualities of a good teacher for the VHWs and as the health leader of the central village;
- preferably rural-born or fully committed to working in rural areas and love rural people; and
- be able to communicate with the rural people like a villager.

2. Functions and duties:

- to train the VHWs;
- to improve the living conditions by promoting the environmental hygiene practices;
- to supervise the work of VHWs;
- to treat illnesses within the scope of to his/her knowledge. In cases where the patients need treatment by a more qualified person, the CVHW should introduce them to the central village clinic. He/she can ask for an ambulance from the Rahmatabad Health Centre in emergency cases; and
- organise a filing information system (each member of the family of villagers and the family as a whole, should have its own file covering all health events).

3.4 Rural physician (RP)

1. Characteristics:

- must have the degree of rural health physician or the equivalent degree;
- preferably rural-born or fully committed to working in rural areas and love rural people; and
- be a sincere and kind person to be liked and trusted by the rural people.

2. Functions and duties:

- treating patients who could not be treated by the CVHWs;
- to send the patients who need more specialised treatment or surgery to the nearest hospital;
- supervising and evaluating the health, sanitary and curative works of the CVHWs; make frequent visits to the villages and hold periodic meetings with those responsible for the hygiene of the villages to be sure that their work is not below the norms laid down;
- distributing adequate drugs, both new and traditional ones and encouraging the villagers to plant herbs for the treatment of the common diseases; and
- supervising maternal and child health services; pregnancy, delivery and family planning affairs, perform regular examinations during pregnancy, manage normal deliveries and refer difficult cases to the nearest hospital.

The proposed number of personnel in each category of health services to be provided in the Korbal rural region is as follows:

Category	Number
FHW	9000
VHW	67
CVHW	2
RP	1

In addition to the above the health centre will need a number of support personnel: two midwives, two nurses, a pharmacist, a laboratory technician, a typist, a secretary, two drivers and a caretaker.

3.5 Specification of health facilities and equipment

1. Home:

- Facilities - a small room and bed in which to care for an infirmed member of the family, at least in the case of highly communicable diseases or short-term minor surgery and other illnesses.
- Equipment - medicines - prescription or proprietary, thermometers, bandages, first-aid kits, etc. should be available and stored in a locked, child-proof cabinet. Provision for sterilisation, particularly hot water, laundry and so forth to be included.

2. Village clinic (VC):

- Facilities - one of the rooms of the elementary school may be equipped for this purpose. If the village does not have an elementary school or any other suitable place in which to locate the village clinic, a small building should be built with the help of the villagers.
- Equipment - sterilising equipment, first-aid equipment including minor surgical supplies, dry storage to keep those types of medicine and

first-aid items which need to be kept in dry conditions, such as band-aids, tablets and the like. Any type of equipment which can be used as a cool place for those types of medicine items that should be kept cool.

3. Central village clinic (CVC):

    1. Facilities - the CVC needs a larger place than the VC due to its functions and duties; and preferably an independent place isolated from other public places.
    2. Equipment - the equipment of this unit is more advanced and complicated than that of the VC, such as elementary laboratory apparatus and a number of medical instruments.

4. Rahmatabad Health Centre:

    1. Facilities - the centre should have a minimum of six rooms, and the necessary health aids and equipment. The centre should make provision for 24-hour monitoring of patients by skilled health personnel. Other considerations of space needs are: waiting room, physician-patient examination room, delivery and minor surgery room, pharmacy, filing room, office, reception, kitchen, storage, restrooms, garage, etc.
    2. Equipment - surgical and sterilisation equipment, testing devices for blood and urine samples and other equipment which facilitates the utilisation of the rural physician's expertise in monitoring short-term and long-term rehabilitation and recuperation. Other equipment: refrigerators, dry storage, an ambulance and a four-wheel-drive vehicle.

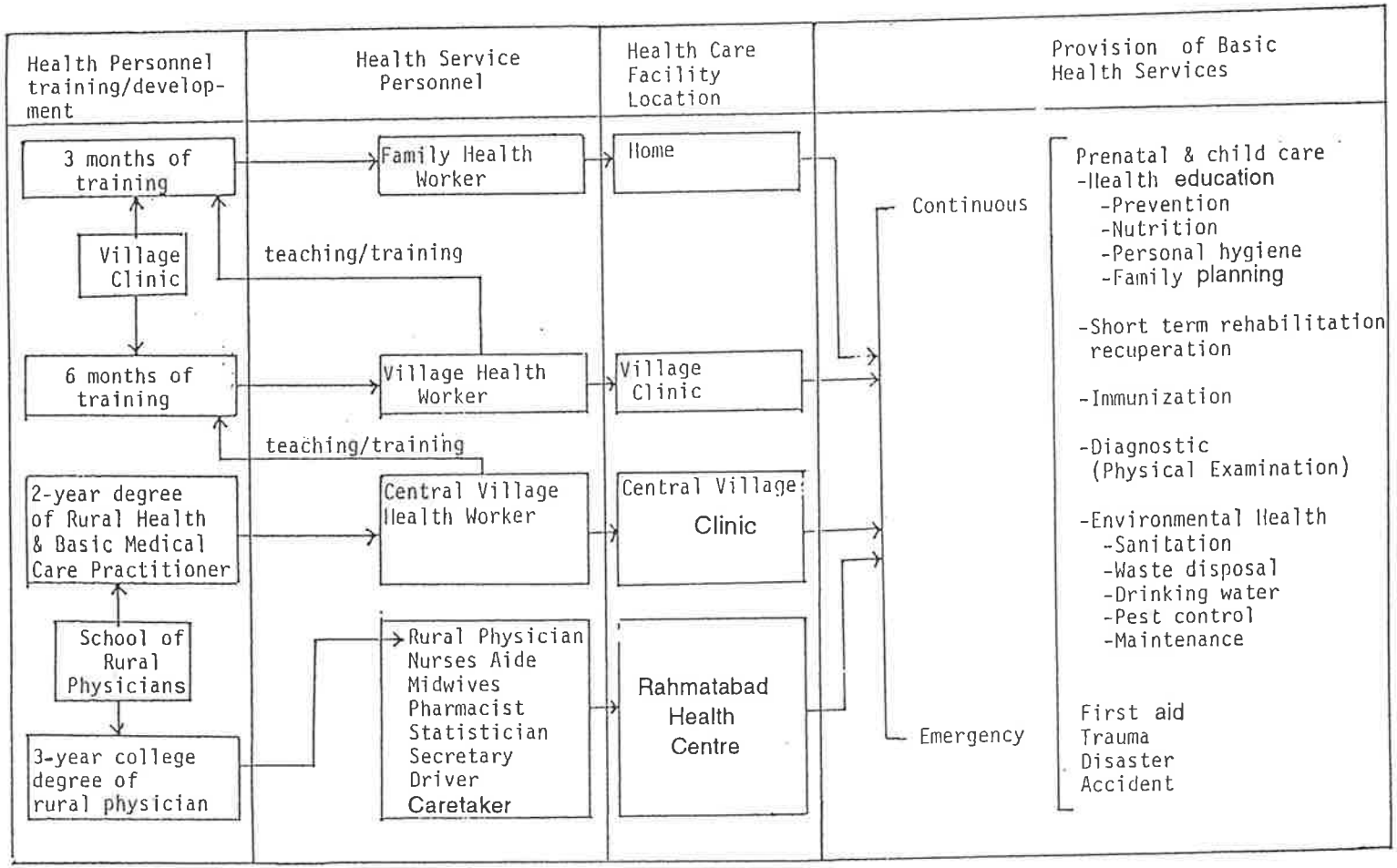
4. PROVISION OF SERVICES FOR THE RECIPIENTS

    1. Continuous - the services that should be delivered to the people permanently, such as:

- maternity and child care,
- health education (prevention, nutrition, personal hygiene, family planning),
- short-term rehabilitation and recuperation,
- immunisation,
- diagnostic (physical examination),
- environmental health (sanitation, waste disposal, drinking water, pest control, maintenance).

2. Emergency - the services that should be delivered occasionally, such as:
   - trauma
   - first aid
   - disaster
   - accident

The objectives specified above will be accomplished through a scheduled plan of implementation at the various administrative levels which are illustrated in the following chart.



Flow chart of proposed health service system for the Korbal rural region.