

## CHAPTER 2

### CONCEPTUAL FRAMEWORK



Two features are presented in the conceptual framework, the research framework and a review of prior work relating to the issues of concern.

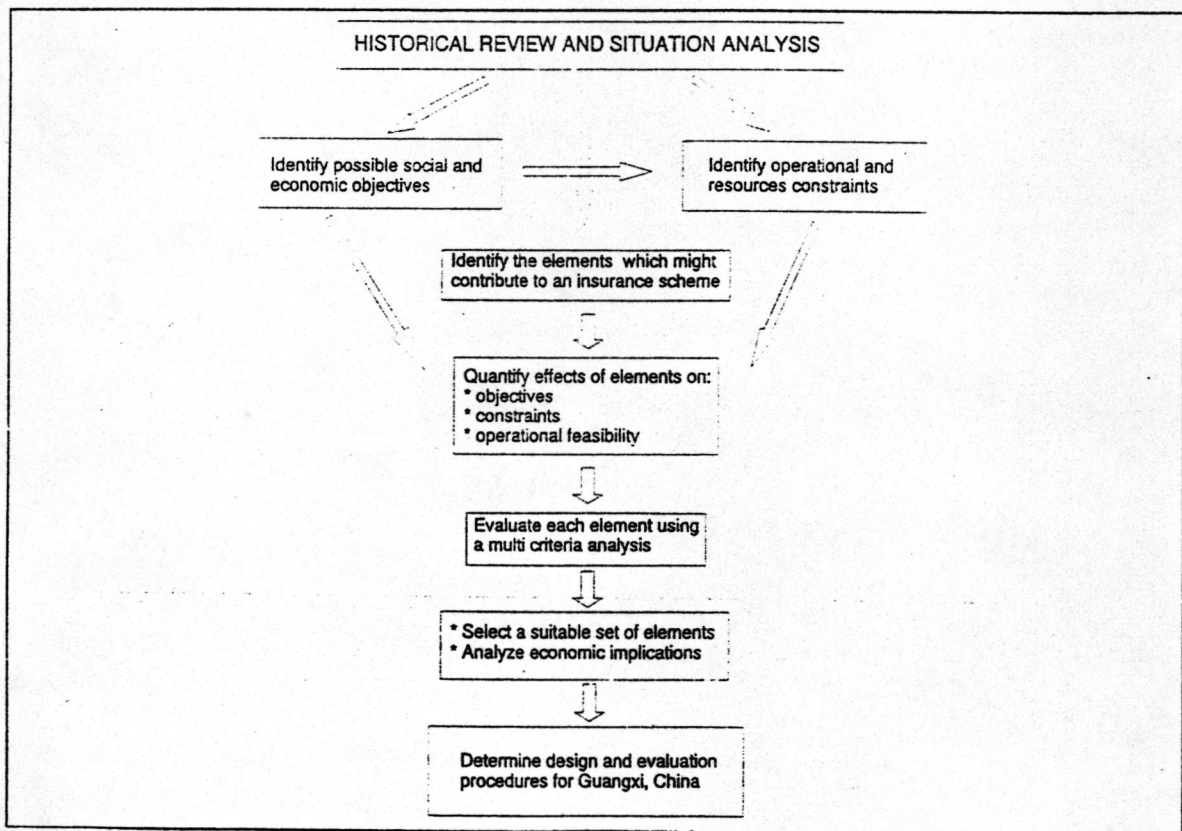
#### 2.1 Framework

The research is concerned with identifying procedures which could be used by decision makers for choosing among alternative elements which could be considered in a health insurance scheme. As a matter of necessity the procedures have to be:

1. simple to understand and apply
2. responsive to the value concerns of decision makers which may be operationally and/or politically determined

The seven stages to the research are outlined in Figure 2.1.

Figure 2.1 Framework for the Research



The major activities are to:

1. identify and define the social and economic objectives to be achieved through introducing an insurance scheme for the rural population in Guangxi
2. identify and define the operational and feasibility constraints which must be considered when introducing an insurance scheme for the rural population in Guangxi
3. identify the elements which might contribute to an insurance scheme
4. quantify the extent to which elements should:
  - achieve a set of selected objectives
  - be constrained by operational and feasibility factors
5. evaluate the elements using a selected multi criteria analysis
6. select a set of elements which, by virtue of their performance in the multi criteria analysis, could constitute an insurance scheme and analyze the implications for Guangxi province, P.R. China.

## 2.2. Literature Review

In health insurance the insurer collects regular payments from individuals and/or employers and uses the funds to meet the cost (in part or in full) of the health care consumed by each insured person. The general history of health insurance (Abel-Smith, 1992) reveals a variety of objectives, resource and operational constraints but little literature on methods for evaluating alternative systems and approaches.

### 2.2.1 Social objectives

Health insurance provides the means by which the costs incurred by an insured person, in the consumption of health care due to uncertain events, are shared among many people. From a welfare perspective health insurance can have many objectives.

Ramsis (1987) claimed it was a way of realizing social justice because it is based on solidarity and cooperation between the well and the ill, the rich and the poor and the employers and employees. It is a means to achieve the health goal of 'health for all' (Abel-Smith 1990) and a means of funding the provision of care.

Kutzin and Barnum (1992) argue that health insurance can improve efficiency and equity in access to care although the precise meaning of these terms remains unclear. Equally important health insurance can relieve the economic burden encountered when one is sick, particularly the poor (Jajoo, 1992)

### 2.2.2 Resource and operational constraints

While there can be little doubt that health insurance can improve access to care it can be argued that it is inequitable in placing an unreasonable burden on the poor. For this reason Stinson (1984) argued that health care, a 'public good' should be nationally financed from taxation revenues. However a government financed and managed insurance system does not, of necessity lead to the achievement of socially desirable objectives such as equal access to care and consumption in relation to normative need. Evidence of these deficiencies is to be found in most countries in regional disparities in supply and the inability to link supply to demand. This is particularly true where services may be provided in politically influential areas.

Other resource constraints frequently referred to in the literature include administrative infrastructure both for collection of premiums and disbursement of payments, the level of supply, both with respect to facilities and manpower and the quality of care provided which is influenced by resources available and the provision of suitable training.

There is a vast array of operational mechanisms and features, which may be both a means and a constraint to the achievement of the social objectives. Health insurance may be voluntary or compulsory. It can arise as an independent operation or as part of a more comprehensive social welfare system. The system may be publicly or privately managed. The system may meet the costs incurred in consuming public or private health care. And, with respect to goals, it may be operated to provide profit or no profit for the operators of the scheme.

Abel-Smith (1992) argued that it is not possible to make a comprehensive typology of systems for organizing national health insurance since most are a complex mix of different types of provision. The major systems differ in their approach to payment for service and the supply of service. The 'direct system', with state hospitals and salaried medical employees is used in, Eastern Europe, Greece, Portugal, Spain and many countries in Latin America. In the 'indirect system' (Belgium, France, Canada, Germany and Japan) private doctors are paid on a fee-for service basis. An alternative indirect system is to be found in Denmark, the Netherlands, Italy and the U.K. with general practitioners paid on a per capita basis.

A further operational constraint encountered in the set of alternatives is the sources of fees and acceptable level of contributions. Sources of revenue for insurance organizations may include payment by the insured, contributions from employers, contributions from the state, and income arising from the use of premiums in funding development. The level of contributions required may depend upon:

- \* the scope and nature of the benefits provided

- \* the organization of medical care benefits
- \* the level of earnings
- \* the extent of state subsidies and the way such subsidies arise
- \* economic and market conditions relevant to the health care sector
- \* the system for paying for services

The outcomes from a health insurance system are, ideally a general improvement in health, equity in consumption and improved quality and supply of health care. On the down side three major operational constraints are escalating costs due to two factors. Firstly consumer expectations and demand increase where there is no payment on consumption of care. Secondly on the supply side improved technology and supplier induced consumption can yield over consumption of care.

### 2.2.3 Evaluation of alternatives

Many health insurance schemes in developed and developing countries have been evaluated. For example, Kutzin and Barnum (1992) examined the relationship between four critical institutional characteristics and their impact on efficiency and equity in Brazil, China, Korea and Zaire. Characteristics of concern were; reimbursement system, services covered, insurer role, cost sharing and population covered. Abel-Smith (1992) examined the lessons to be learned about effective health insurance from the MOH role, insurance contribution, taxation, the provision of services and national realities. Hsiao (1990, 1992) also evaluated health insurance with respect to coverage, sources of funds and cost issues.

Such evaluations provide valuable information on issues and probable outcomes but do not provide a mechanism to evaluate the probable impact of alternative practices before they are implemented. What is required is a method of structuring the problem and selecting among alternatives given a multitude of criteria of differing importance.

Nijkamp (1990) maintains that there is considerable agreement among planners and decision makers that structured evaluation methods can have benefit through clarifying objectives and constraints, making values more transparent and choices more explicit. However there is no single evaluation method or procedure which is able to deal with the wide variety of public planning and decision making. This is partly because the aims of the evaluation depend upon institutional and administrative interests. This is reflected in the three broad categories of behavioral paradigms which are evident in public decision making:

1. "optimizing" behavior (the conventional economic paradigm in which the best actions are determined) This is the focus of most formal evaluation techniques
2. "satisficing" behavior (the behavioral decision makers paradigm in which an acceptable solution can be identified)
3. "justifying" behavior (the pragmatic policy makers paradigm in which justification can be found for a decision which has been made)

The early history of plan and project analysis (before and during World War II) was based upon financial trade off analysis. From the seventies onward a new class of evaluations termed multi criteria analysis (MCA) emerged. The reasons for the increased influence of MCA (Nijkamp 1990) are:

- the impossibility of including intangible and incommensurable effects in conventional evaluation techniques
- the conflict nature of modern decision making using multi level formal and informal interactions
- the shift from pseudo 'one shot' optimizing procedures to decision making where institutional and political perspectives play a major role
- the desire in public decision analysis not to be confronted with a single 'forced' solution but with a spectrum of feasible solutions.

Multi criteria methods are always marked by two types of information (Jansen, 1993); the effect score matrix (i.e. the numerical assessment of all relevant impacts of a set of alternatives which are each measured on their own dimension) and the preference or weight vector (i.e. the numerical assessment of the relative priority attached to each of the decision criteria considered in the effect score matrix). Some 40 different procedures have been identified.

Nijkamp (1990), maintains that the satisficing paradigm, identifying multiple alternatives is appropriate to multi criteria problems where the problem is ill defined, the required information is incomplete and or it is difficult to measure the extent to which criteria will be achieved.

All of these conditions are encountered in trying to select health insurance elements and schemes.