Chapter 8. Application of the model: the case of India

8.1. Conceptual and contextual orientation

8.1.1. Organisation of theoretical concepts

This chapter applies the conceptual framework of fertility to a concrete situation, namely that in India. The main purpose is to illustrate the model and to demonstrate the underlying interpretative approach to fertility behaviour. To achieve this, the case study relies on the interpretation of existing material about fertility. In the model application, family planning and reproductive health will be the specific areas of interest.

There are two particular considerations to select India and these specific policy areas. First, past evaluations have concluded that the Indian family planning and health programme can be significantly improved in terms of effectiveness (e.g. UNFPA 1991b) and the Indian government undertakes considerable effort to do so (Ministry of Health and Family Welfare 1992, World Bank 1995). The development of a behavioural perspective, such as offered by this conceptual framework, is expected to contribute further improvements. Second, the focus on India fits into the scope of the research programme on reproductive health of the Population Research Centre, Groningen and the Netherlands Interdisciplinary Demographic Institute, which offers the possibility of follow-up research.

For a number of reasons the application of the model in this chapter will be restricted to a considerable extent. The number of dimensions covered by the model is too large to allow extensive elaboration within the scope of this book. Additionally, several dimensions have not, or only to a limited extent, been explored in the field of Indian fertility or have only been conceptualised in ways that do not fit the framework’s approach. Furthermore, the Indian situation is so diverse and so complex that a comprehensive examination would go beyond the scope of this study, or indeed any study. Lastly, social and demographic change has been very rapid the last few years as, for instance, indicated by the 1992-93 National Family Health Survey (NFHS).

For these reasons, any suggestion of a fully representative, up-to-date or conclusive picture must be avoided. Rather, the purpose of this exercise is to demonstrate the value of the integrated approach and analytical tools offered by the conceptual framework for the understanding of fertility.

The components of the conceptual framework as presented in Figure 7.1 of the previous chapter structures the discussion of fertility behaviour in India. The case study will concentrate on a limited number of these components: the interpretation of the embedding social context of reproductive considerations, their evolvement against the background of life course development and with specific reference to the intermediate fertility determinants.
Figure 8.1 highlights the elements considered in the subsequent sections of the case study. The second part of this introductory section (Section 8.1.2) briefly describes India as the research setting and dwells on its social and cultural diversity. In addition, it identifies the position of the conceptual approach adopted here among other current studies of fertility in India. The different conceptual components that constitute the explanatory complex of the approach are addressed in Sections 8.2 to 8.4 and are summarised in Section 8.5. The concluding Section 8.6 assesses the Indian Family Welfare Programme in this study’s behavioural perspective by recapturing it in terms of the conceptual components. The section further proceeds to explain how such analysis could serve to as an orientation to identify relevant areas for intervention.

8.1.2. India as a research setting

Population development is recognised as one of the most important social issues confronting the state of India (cf. Gandhi 1989). Notwithstanding the centrality of the issue, it is hardly possible to discuss unequivocally the various components of population development for India as a whole. As a country of ‘unity in diversity’ it is characterised by segmentation by region, by religious tradition and by position in the social hierarchy (Dyson and Moore 1983, Cohn 1971, Mandelbaum 1970) and encompasses a whole range of socioeconomic and socio-cultural phenomena.

Figure 8.1. Case study model components

![Case study model components](image)

This religious, ethnic, linguistic and economic diversity of Indian society is one of the most
important causes of the successes and failures of successive programmes in the history of national population policy (Pai Panandiker and Umashankar 1994).

Various studies addressing India’s macro diversity point out the differences between the northern and southern states of the country (Basu 1992, Boserup 1970, Cohn 1971, Dyson and Moore 1983, Malhotra et al., 1995, Mandelbaum 1970, B.D. Miller 1981). But even within this dichotomy there are great differences between the individual states with respect to socio-demographic indicators; usually with Kerala at one end of the spectrum and the great northern states of Bihar, Madhya Pradesh, Rajasthan and Uttar Pradesh (the BIMARU) at the other. The highest recorded rates of, for instance, infant mortality, couple protection and total fertility are typically a multiple of the lowest. According to the 1992-93 National Family Health Survey (NFHS), the total fertility rate ranges from 4.8 in Uttar Pradesh to below replacement level in Kerala (2.0) and Goa (1.9) (IIPS 1995). The sex ratio reveals a significant variation as well, although it is generally low, with an average of 929 women per 1000 men. For large parts of northern India, especially districts in the states of Haryana, Madhya Pradesh and Rajasthan sex ratios of below 900 are encountered. In 44 districts, largely forming a contiguous belt in central Uttar Pradesh and northwestern Madhya Pradesh, even below 850. On the other hand a number of main southern states such as Tamil Nadu and Andhra Pradesh contrast more favourably, with Kerala (1040) the only state with a sex ratio of over 1000 (Registrar General & Census Commissioner 1991). One of the most disconcerting results of the 1991 India Census is that there has been a relapse in the sex ratio of India’s population, after a tentative rise in the preceding decade (Bose 1991). Compared with the census results, the NFHS (IIPS 1995) revealed a consistently higher sex ratio, but with an overall measure of 944 it remains very low.

Explanations for the adverse sex ratios include sex-specific mortality at later ages, in particular maternal mortality, and excessive female mortality at younger ages because of existing preferences for boys and discrimination against girls in terms of food, health care, attention and love (Boserup 1970, B.D. Miller 1981, UNICEF 1991, World Bank 1991). Basu (1992) emphasises that higher mortality among girls is not necessarily caused by discrimination against girls, but may (unintendedly) result from a desire to protect them from inauspicious influences of the outside world. The observed association between indicators of health, fertility, education and status of women, seem to attribute a crucial role to female education in this causal complex (cf. Castro Martín 1995, Jejeebhoy 1995, Mason 1984).

The abundant literature analysing such socioeconomic and socio-demographic variables for India offers good comparative results which point to considerable differences between regions, but also between socioeconomic and cultural population categories. On the other hand there is also a great amount of ethnographic and anthropological material which probes deeper than the usual standardised demographic surveys. Although these micro perspectives offer more insight into how people perceive their environment and into the various mechanisms underlying observed demographic patterns, they often represent unique situations at a very local level, and often lack a strong theoretical fundament ) especially one related to individual behaviour formation) and a structural research design which centres on demographic behaviour as a dependent variable (cf. Basu 1992, p. vii, McNicoll 1988). An excellent example of the possibility of combining quantitative and qualitative research techniques from a demographic point of view, is offered by the study on demographic change in Karnataka by Caldwell, Reddy and Caldwell (Caldwell et al., 1982a 1982b, 1985, 1988). Comparable work, however, remains scant and, in general, there is little attention to situating fertility behaviour in the perspective of
underlying processes of learning, rationality, personal control, decision making and life course development.

8.2. Institutional backgrounds of fertility

8.2.1. Introduction

Figure 8.2 highlights the social context as the specific subject of this section and indicates its relation to the other components of the framework. It is an unprofitable task to attempt a complete enumeration of the social institutions that bear relations to fertility. Following McNicoll (1994), however, such a listing would have to include the family, the local community, the local dimension of public administration, the stratification system and the
labour market (Section 5.4.3). Public administration is represented by legislation, family planning and health programmes and the education system. Religion has been distinguished McNicoll (1994), however, such a listing would have to include the family, the local community, the local dimension of public administration, the stratification system and the separately, as in the Indian setting it represents a ruling factor, especially as a meaning-giving and stratification system. The roles of a number of other, less central institutions ) like mass media, political parties or local organisations) are covered in the subsequent sections as well. Since institutions are not neatly classifiable, their enumeration under separate headings is not meant to imply a clear segmentation in empirical or cognitive terms, but only an analytical distinction. The rules implied by these institutions lend structure and content to the individuals’ personal considerations regarding pregnancies and children by their mental or tangible presence. Their precise influence, however, depends on the interaction between the institutions themselves, their specific local-defined interpretation and their evolvement in time (cf. Malhotra et al., 1995). The approach underlying the conceptual framework underscores the importance of the interpretation of institutions from an individual point of view. Although the following institutional analysis must frequently rely on a more macro interpretation, its intention remains to serve as a background for the individual assessment of information rules that create people’s mental frameworks.

From a policy point of view it is important to distinguish formal and informal institutions. The practical relevance of the distinction is that formal institutions, such as the family planning programme, legislation and education, offer relatively good opportunities for social engineering in the sense of designing and dispersing behavioural rules. They can be actively employed as tools in the efforts to generate behavioural change, whereas informal institutions are less susceptible to the directives of change agents. The distinction between formal and informal institutions is reflected in the division of Sections 8.2.2 and 8.2.3.

8.2.2. Non-formal institutions

Religion
Religion, and in particular Hinduism, is a very penetrating influence in Indian society, filtering through to almost every aspect of life. In daily life it serves as a main source of information about how to understand the social environment and individual lives and how to act in ways that harmonise with human or divine destination. As a coherent body of knowledge, its significance lies in the designation, explanation and definition of events, interactions, behaviours, objects and symbols, as well as in the prescribed rules, norms or guidelines for behaviour.

Through the centuries Hinduist notions have formed a fundamental basis for the social organisation of society and have been able to encapsulate new religious streams and place new social groups in the strict hierarchy of this organisation (Cohn 1971). The age-long influence of Hindu traditions and the absorbing character of the Hindu community make it extremely difficult to separate the significance of Hinduism from that of other social institutions, such as marriage and family systems, gender systems and body and health-related traditional belief systems. This strong interweave is enhanced by the facts that Hinduism is not based on one single source of either revealed or man-made truth, and that there is not much of a formal structure or religious hierarchy which can guard orthodoxy. There is no authority, vested in one person or a group of persons, which can provide answers to all theological or ethical
questions concerning the whole Hindu community. This means that throughout the course of history there has been room for a continual interaction between the ideas of the Great Tradition, articulated by specialists from the teaching Brahmin castes, and those of the Little Tradition, which have their roots in the specific socio-cultural background of the local population (Cohn 1971, p.63, Caldwell and Caldwell 1988, p.21). These considerations reflect that the understanding of religion as an institutional influence comprehends its development in historical time, its general and local-level representations and a broad array of affected life domains.

The Hindu inspired concept of dharma reflects that one’s actions should follow a pattern, and that it is one’s duty to follow the right action within the system of (religious) values. Social behaviour thus often gains a religious meaning, making life contingent upon divine or other supernatural forces. Dharma also provides the social environment with criteria for ethic and moral assessment of behaviour and a justification for possible sanctions. Adherence to rules for correct action and to rituals marking life events such as marriage, pregnancy, birth and death, creates the conditions to propitiate powers beyond the profane world, thus ensuring the prosperous course of subsequent events (Mandelbaum 1970, Kakar 1979). Despite the secularising impact of social change, the life domains of the family and health can still be characterised in terms of such ritual rules.

Several religious-institutional rules of meaning and prescription apply directly to fertility behaviour and its intermediate determinants, others more indirectly. A direct consideration is, for instance, the belief among Hindus that semen is a great source of strength for men and that coitus therefore causes loss of strength (dhat). Such ideas may be based on Hindu scriptures and philosophy, which emphasise moderation in sex because a man can supposedly gain not only physical but also moral strength by conserving his semen (Bang and Bang 1994, Kakar 1989, Mandelbaum 1970, Nag, 1995, Caldwell et al., 1982b). Decisions with regard to weaning are not always secular ones, but involve also religious and moral aspects (Caldwell and Caldwell 1985). Marriage dates are usually decided on the basis of astrological guidelines or ideas about auspicious days that rely on similar, but simpler views of grand, impersonal mechanisms which affect people’s lives (Caldwell et al., 1983, Mandelbaum 1970).

Religion also has a more indirect influence on fertility behaviour, through gender systems and the status of women, for example. Hinduism is a source of the different rules that apply for men and women: behavioural rules and functions (such as the execution of rituals at death) are gender dependent; men visit different temples and worship different gods than women, husbands are depicted as the providers and wives as caretakers, submission to the husband by the wife is glorified by Hindu religion: a wife should adhere to the scriptural ideal of being a Pativrata, one who follows her husband’s will and authority in all respects (Mandelbaum 1970, p. 39, ESCAP 1987b, p. 62, Karve, 1965 p. 30). The existence of such rules and the corresponding behaviour reinforces the strong sex segregation in Indian society and influences the personal considerations underlying decisions about having children or contraceptive use. In addition to its direct effect the religious system thus also supports other institutions which have a negative influence on the status of women and may even give them a religiously justifiable basis (Cain 1989, p. 186). The complex of these institutional rules results in low female status and autonomy, which is an important determinant of fertility (Basu 1992, Cain 1989, Dyson and Moore 1983, ESCAP 1987b).

Although the Muslim community is an integral part of the Hindu civilisation in India and its
culture is generally speaking very close to that of the Hindu population, there are some aspects in which Islam diverges from Hinduism as a religious institution. While Hindus in principle adopt a secular approach to family planning, Muslim attitudes are partly determined by rules from the Koran. Caldwell and associates pointed out that in their research area in rural south India, the local Muslim establishment believed that both abortion and sterilisation are forbidden by Islam. Their morality is divinely revealed, is immutable, and cannot be influenced by governments or bureaucracies. As Indian family planning programmes in the past have concentrated mainly on sterilisation, Muslim resistance to this programme is stronger and may have led to higher fertility among the Muslim population (Caldwell and Caldwell 1988, Caldwell et al., 1982b). Similarly in Indonesia, where Muslims and Hindus also live side by side, Warwick found that there are fewer problems in promoting IUD’s in Hindu areas than in Islamic areas. Part of this difference may be explained by Islamic religious prohibition of insertions by male doctors and other medical staff (Warwick 1988). Whereas Hindu traditions possibly emphasise moderation in sexual activity, Islam holds that ‘pleasures of the flesh’ are a God-given virtue and hence places less emphasis on moderation (Nag 1983, p. 188, Yadava and Rai 1989, p. 61).

Many ideas with regard to health and physiological mechanisms reside in Ayurveda, which is a medical body of knowledge that is closely linked to Hindu beliefs. As a kind of sub-institution, Ayurveda represents a system of rules that provide understanding of the body, disease processes, and guiding principles for maintaining health and for healing and curing physical and mental disorders (Kakar 1990). Ayurveda and other lay concepts of health and reproductive physiology, including extra-human or divine causation, are local medical knowledge systems that provide people with interpretative frameworks which influence their health-related behaviour, such as the use or non-use of contraceptives and health services, or food intake during and following pregnancy (Caldwell et al., 1982b, Hutter 1994, Jeffery et al., 1988b, MacCormack 1988, Warwick 1988). Information derived from these knowledge systems may therefore conflict with understanding that is produced by modern health and family planning institutions.

In part religious rules are based on the principle of purity and pollution, one of the core concepts in Hinduism. Many aspects directly related to the proximate determinants (marriage, sexual intercourse and abstinence, menstruation) are interpreted in terms of purity and pollution (meaning-giving rules). In the community, violation of normative rules pertaining to purity, particularly those organising the relations between groups, can ultimately be sanctioned by forms of excommunication: access to homes is denied, people refuse to share food, access to local employment is denied, services are withheld, contact is avoided and people are expelled from the family, jati or village. Transgressions of certain rules are regarded as serious offenses and sanctioned accordingly as they are sometimes conceived to affect the well-being of larger circles of the community (Caldwell et al., 1982a, Mandelbaum 1970, Norbeck 1974, Vlassoff 1982, see also Blanchet 1987).

**Family and kinship system in India**

For most people by far in the Indian subcontinent, kin relationships still constitute the prime avenue to the things they consider important in life: economic assistance, security, social interaction and status, information and emotional and political support (Dyson and Moore 1983, ESCAP 1987b, Freedman 1987). Due to the hierarchical caste relationships, a person’s
identity and opportunities in life are determined precisely by membership of the kin group he or she is born into. The main transitions during the life course are family celebrations, and the grand occasions in a person’s life are mainly those that occur in the context of the family. The family is, by and large, the locus of reproductive decision making as well as the major channel for information embedded in the social environment.

In general and particularly in the north, the Indian marriage and family system can be described as patrilocal and patriarchal. Family systems and, in close relation, marriage, kinship, inheritance and residence systems bear important rules about proper behaviour (normative) and about such concepts as gender, power in the household, chastity or having children (meaning-giving). Boserup’s economic development thesis (Boserup 1970, 1990) provides an interesting interpretation of such backgrounds. Her interpretation of the effects of plough cultivation in India emphasises the domestic role of women and the practice of veiling and (partial) seclusion (purdah) practised to ensure the fidelity of wives and the chastity of daughters. Despite the fact that seclusion curtails a woman’s status in terms of power, it can also constitute a gain in terms of the prestige component of social status (Mason 1984).

If women are secluded, wives and daughters cannot contribute much to household income and represent an economic burden. Therefore, dowries tend to be high and preference for sons is strong. As women are often mainly valued as mothers and not also as workers (a meaning-giving rule, cf. Khan and Singh 1987), their status is low and the motivation to bear children, especially sons, tends to be high. Moreover, in India sons represent a primary access to security in old age and insurance against any calamities in a high-risk environment like rural India (Cain 1981). The earlier a woman begins childbearing, the more likely she is to have a son old enough to support her should she be widowed or divorced; this is especially relevant in India because large age differences between spouses imply a high risk of early widowhood. Besides the fact that daughters represent an economic burden to a household, the family, and in particular fathers and brothers, are also responsible for their chastity. Many families still feel uneasy about having an unmarried, menstruating woman under their roof (Caldwell et al., 1982b, Caldwell et al., 1985, George 1994, Jeffery et al., 1988a, Khan and Singh 1987).

Schoolgirls are often withdrawn from education at menarche, unmarried girls are withdrawn from the fields and the need to find a suitable partner becomes acute. These considerations maintain the functional meaning of early female marriage, which, in turn, leads to young ages at first birth and, again, high school drop out rates among girls. An additional effect of early age at marriage is that the young brides-to-be and just-married girls have developed less will power to resist pressures for arranged marriage or childbearing than older women would have done. Indeed, the possibility to mould a young bride’s personality is sometimes mentioned as part of the motivation in India for early female marriage (Cohn 1971, p. 119, Caldwell et al., 1983, p. 345, Karve 1965, p. 73). Jejeebhoy (1991) concluded from a study on the relationship between women’s status and fertility in Tamil Nadu, that the considerable age difference between spouses is one aspect of female autonomy that consistently determines intervening fertility variables like duration of marriage, family size desire, knowledge of and spousal communication about fertility control (cf. Koenig and Foo 1992).

Family organisation in India tends to be characterised by highly autocratic morality and a pronounced age hierarchy, which defines who should pay respect to whom: fathers are dominant over their sons, men over women, older women ally with men in dominant positions, elder brothers dominate over younger, elder brothers’ wives over younger brothers’ wives (Boserup 1990, Caldwell et al., 1982b, Dyson and Moore 1983, ESCAP 1987b, Koenig and Foo 1992, Malhotra et al., 1995, Mandelbaum 1970). The young wife, thus, finds herself at the
bottom of this hierarchical system. This subordinate position in the early stages of her fertility career is often strengthened by marriage and residence rules involving patrilocality and village and kin exogamy which constrain or erode personal links between a married woman and her natal kin (e.g. Jeffery et al., 1988b, Koenig and Foo 1992, Lockwood 1995, Malhotra et al., 1995). Her position in the household is thus very vulnerable and very dependent, economically and socially as well as emotionally. While this relatively powerless position of wives extends to many areas of decision making, it is perhaps most pronounced in decisions related to fertility, sexuality and contraceptive use (Koenig and Foo 1992, cf. Khan and Singh 1987).

This description, of course, tends to overgeneralise the situation in India. It might be pointed out that tribal farming systems in India often concern shifting agriculture rather than plough cultivation, which may imply different behaviour-guiding and meaning-giving rules: a higher value of female labour, bride wealth in stead of dowry, and more autonomy for women (e.g. Boserup 1970). In Kerala and in some castes in southern India matrilocal family systems dominate, ensuring a better power base for married women as they remain in the circle of their natal kin (Cohn 1971). Karve’s classic study on kinship organisation illuminates the variation in meanings of family and kinship between regions and castes by means of a detailed account of nomenclature to define relationships between various household members (Karve 1965). It often symbolises the degree of freedom or constraint, closeness or obedience and functional value vested in personal relations such as those between husband and wife or daughter-in-law and mother-in-law, thus reflecting the rules inherent in family and kinship systems.

For the present purpose, such nuances are of less importance. It is sufficient to demonstrate how in principle complexes of rules related to family and kinship guide people in plotting a behavioural course and provide them with the definition of relevant concepts to interpret the world and the agent’s position. In India, such rules define that women have a chastity to protect, that gender is a legitimate criterium to enforce behaviour in a husband-wife relation or that having children is a means of securing an old-age insurance and a position in the family (meaning-giving rules); and that women should not expose themselves to the outside world, that the proper residence of a married girl is with her husband’s family, that delaying a first child after marriage is unacceptable or that daughters-in-law should obey their mothers-in-law (behaviour-guiding rules).

Employment and labour market structure
Female labour market participation is intricately connected to fertility behaviour. In this respect, the incompatibility of working and fertility or family careers is acknowledged (e.g. G.S. Becker 1981, Boserup 1990, Nag 1983), but the presumed relation often runs through women’s autonomy and its impact on childbearing-related decisions (Mason 1987, Safilios-Rothchild 1980). However, the direction of cause-and-effect links are complex and often remain obscure (Lloyd 1991, United Nations 1987, World Bank 1991). For the purpose and scope of this case study, a few observations about the connotation of women’s work in relation to the labour market as a social institution will be sufficient.

For many households in India, women’s labour market participation touches upon the dilemma between the protection of women against the exposure to outside world and the economic necessity of their contribution to family income. The effect of female employment is usually understood to include an increased autonomy in household decision making (including fertility decision making) through better control over economic resources. Thus, working increases women’s status in terms of autonomy, and probably prestige within the family, but decreases it

The extent to which women consider employment not only depends on the household situation, but also on the institutional structure of labour market opportunities and the nature of the village economy. The information that men receive substantially higher wages than women (Cain 1981, Epstein 1973), feeds the consideration to release men from work on the family farm for paid employment by confining the women to unpaid domestic labour (Desai and Jain 1994, Epstein 1962). The differentiation of wage level along gender lines is information that defines the economic value of women against that of men and guides decisions taken with respect to the distribution of labour in the family with implicit effects on female autonomy.

Local communities

Local settlements, such as villages, neighbourhoods and slums, are not usually considered as institutions although they may exhibit institutional characteristics (cf. Section 5.4.2). In Indian villages the *panchayat* system (originally a lineage or *jati*-based local council) and the *jajmani* system (the structural economic and ritualised exchange relations between families of food-producing *jatis* and families of *jatis* engaged in services and manufacturing activities) have in common with the community as an institution that they intentionally exploit the territorially bounded setting (Cohn 1971, Epstein 1973, Mandelbaum 1970). Whereas these community-level institutions do not represent specific meanings and norms about fertility-related behaviour itself, they may hold sanctioning powers that can be activated in the case of deviance from commonly shared rules about such behaviour.

In India, identification with the village still accounting for nearly three-quarters of the total population (Premi 1991) is important. Here, as in almost every developing country, local networks are emphasised by field researchers as a main source of information (e.g. Barker and Rich 1992, Beckman 1983, Caldwell et al., 1987b, Khan 1987, Limanonda 1993, Niehof 1992). Khan, for instance, found that to encourage a couple to practise family planning, two categories of local people were particularly important: friends and neighbours (often family), especially the wife’s peers, and siblings (Khan 1987). In line with this, Sathar found that these informal networks of local origin provide an important means of communication as they link illiterate and rural populations, who often do not have direct access to mass media and are unable to read posters or leaflets (Sathar 1993). For a very large proportion of Indian women, neighbours, relatives and friends are the most common channels of information about family planning services (see also Bashar 1993, Beckman 1983, Limanonda 1993, Mathai 1989).

More formalised versions of networks exist in the form of women’s groups and other voluntary groups (*Mandals*).

The network approach suggests that the degrees of isolation and homogeneity of local communities are important factors in the diversification of role models and information sources in general (Entwisle et al., 1996, Casterline 1985b, Retherford and Palmore 1983). Nag (1989), for instance, regards the accessible location of Kerala on the southwest coast of India as one of the factors that facilitated the spread of new knowledge and ideas and contributed to the rapid decline in the number of children women have.

8.2.3. Formal institutions
Family planning and health programme

The aim to include the family planning and health programme as a social institution in the analysis of fertility behaviour, is to assess the information that it intends to convey and disperses through actual performance, as well as the less explicit or unintended information that it feeds into people’s perception. The conclusion is that there is a significant discrepancy between people’s notion of the available services how they could benefit from them on the one hand, and the ideals, comprehension and documentation of the functioning of the institutional sector on the other. Nevertheless, the Indian family planning programme has been a major determinant of people’s considerations with respect to the availability of options to determine family size and the motivation for childbearing and pregnancy control. As such it provides an important substantiation of the institutional context of fertility in India as represented in Figure 8.2. The following discussion gives a brief overview of the efforts of India’s family planning and health programme since it was launched in 1951, in order to understand its present performance. During this discussion the focus will shift towards the perspective of the (potential) users of family planning and health services.

India has a long history of family planning and through the years, approaches have been changing. Faced with the consequences of a rapidly growing population, the government of India mobilised fieldworkers and mass media in order to create awareness and promote family planning. Although it must be recognised that since its inception, the family planning programme was also based on considerations of health and welfare of the family (Alok 1990), throughout its history the programme bore the typical characteristics of a target-oriented approach, aiming at reduction of population growth rather than at responsiveness to the daily needs of the people to whom the programme was directed.

A cafetaria approach has always been the official policy in India. However, during every period of the programme only one particular method was emphasised. During the 1950s and later during the 1977-1979 Janata government the programme much encouraged natural methods of family planning (rhythm, abstinence, withdrawal). With the introduction of the IUD, this method became the focus of the programme for a short period in the mid-1960s and especially in the 1970s, the programme was almost exclusively directed at sterilisation, first vasectomy then tubal sterilisation. A general observation is, however, that from the start, the main thrust of the family planning programme has been the provision of sterilisation, and that it is hard to change the direction toward spacing methods (Soni 1983, Srinivasan 1992). There appears to be an interlocking effect, since over-reliance on sterilisation leaves fewer resources for temporary methods and the lack of temporary methods leads to further use of sterilisation (Rajaretnam and Deshpande 1994, UNFPA 1991b). More recently, the Indian government made serious progress in redirecting policy aims toward the promoting reversible methods (Government of India 1992, Ministry of Health and Family Welfare 1992). Despite this recognition at policy level of the importance of reversible methods for spacing births, the implementation of the programme is still very much focused on sterilisation (World Bank 1995).

Whereas this predominant focus was not in accordance with the needs of those who wanted to postpone or space childbearing, or had to rely on alternative contraception for other reasons, the implementation of the programme also showed a repeated neglect of responsibility to the people concerned. The strategy to promote the IUD in 1965-1966 collapsed due to indiscriminate insertions and poor follow up: inadequate pre-insertion checks, medical complications and grossly exaggerated rumours about complications resulted in high
discontinuation rates. The programme was rushed through without sufficient preparation to cope with the known side effects. These turned out to be far more widespread than anticipated among the population of malnourished, anaemic women who were not forewarned about possible consequences of IUD use (P.S. Bhatia 1989, Soni 1983). Under the rules of Emergency (1975-1977) the national government formulated drastic strategies to promote sterilisation of men, which were rigorously and often excessively implemented at the state level. Again, this impetus collapsed following widespread reports of coercion, the sterilisation of ineligible men, post-operative complications and even deaths (Bhende and Kanitkar 1992, Soni 1983). The threat of disciplinary action, non-payment of salaries and even suspension helped to ensure that targets for recruitment of sterilisation candidates were met. Several benefits and sometimes even salaries of government employees were made conditional upon sterilisation after three children. Access to all kinds of basic services and goods were made available only upon production of a sterilisation certificate. In many cases men were forcibly taken away and sterilised and many deaths attributed to sterilisation were reported. In 1976-1977 alone more than eight million people (many unmarried, over-age or with fewer than two children) were sterilised (Soni 1983). Although after Emergency all forms of coercion were ruled out and the programme’s title was changed into ‘family welfare’ to make it more acceptable, the programme was still widely viewed with suspicion and fear (e.g. R. Simmons et al., 1986). Indeed it was not until 1980 that the programme recovered from the backlash effect of Emergency.

Whereas the ruthless campaigns during Emergency evoked extremely negative feelings among the population especially in the northern states of Uttar Pradesh, Rajasthan, Haryana, Bihar and Madhya Pradesh) one of the positive results maybe the existence of extensive awareness of the option of family planning (Caldwell et al., 1982b). Public knowledge and open discussion are now widespread and the large majority of the people even have favourable attitudes towards the idea of family planning (ESCAP 1987a, UNFPA 1991b, Vlassoff 1990b). The scope of people’s awareness, however, remained very restricted. In 1992-93 the knowledge about sterilisation involved no less then 98 per cent of the married women, but among rural women awareness of temporary methods, like IUD (53 per cent), the pill (59 per cent), condoms (50 per cent) and abortion was much less (IIPS 1995, cf. P.S. Bhatia 1989, also Khan and Rao 1989, Mathai 1989, Stevens and Stevens 1992, UNICEF 1991). Since the late 1980s, the Indian family planning programme has placed more emphasis on the reversible methods, but the long-standing focus on sterilisation produced a situation where people still associate family planning with just terminating childbearing and much less with the meaning of postponing and timing births (Khan and Rao 1989, Rajaretam and Deshpande 1994, UNFPA 1991b). A study on rural adolescent girls, however, showed that fewer than 10 per cent of those who were married knew anything at all about birth control. In general, few girls were informed by their parents on reproductive matters such as birth control, menstruation or childbearing (cf. George 1994, Mathai 1989, World Bank 1991). Recent data and estimates show that still around 70 per cent of all contraceptive users in India rely on sterilisation (Jejeebhoy and RamaRao 1992, Mauldin 1993, Ross 1992).

While general awareness of reversible methods is relatively low, survey results show that specific knowledge about temporary contraception ) like availability of methods, correct method use and understanding, advantages and disadvantages of methods, contra-indications of each contraceptive, side effects and complications, reliability of sustained advice, support and supply) is even much lower, both among the population and he staff of family planning programmes (Jamsheedji and Kokate 1990, Khan and Patel 1993, Khan and Rao 1989,
Rajaretnam and Deshpande 1994, UNFPA 1991b). Results of the 1992-93 NFHS indicated that over 60 per cent of the reasons for non-use of contraception among women who could be using family planning are related to misperceptions, misinformation and poor understanding of methods (World Bank 1995, p. 84).

One study points at the role of health worker’s own attitudes and knowledge: most of them were not convinced about most of the messages which they were expected to convey to the community and they shared the same inadequate knowledge and poor motivation as the public they served (Mathai 1989, p. 266; his emphasis).

Besides the issue of awareness of family planning and health services or the lack of it, a great number of other informational aspects are associated with the institution of the family planning programme. People’s perceptions refer to costs and problematic accessibility of services, repeated absence of staff, the unavailability of female personnel, a lack of proper attention, concern and sympathy or the perceived hazards of being exposed to evil forces when leaving the house for delivery or medical checkups in the period around childbirth (Caldwell et al., 1982b, Hutter 1994, Khan et al., 1989, Kanitkar and Sinha 1989, Rajaretnam and Deshpande 1994).

Many of these considerations refer to the quality dimension of interpersonal relations between clients and staff; not only the accuracy and the formal content of counselling but also the affective dimension and client perception of both the personal interaction and its contents. This involves service workers’ attitudes and orientations in the client-staff encounter, such as openness, understanding, reliability and respect (Bruce 1990, R. Simmons et al., 1986). And it concerns the responsiveness to the clients’ needs and comprehension of fertility, health and family planning that refers to underlying considerations, such as the value of children and child mortality, the morality about gender aspects in worker-client interaction or about interference in the processes of childbearing, circulating rumours about side effects of contraceptive methods and the indigenous understanding of physiology and fertility. Warwick (1988) and Caldwell et al., (1987b), for example, refer to the appropriateness of modern contraceptives in terms of heating and cooling effects, an ethnophysiological distinction also observed in India (cf. Shedlin and Hollerbach 1981). These and other studies illustrate the potential conflict between modern, allopathic concepts and understanding derived from traditional knowledge systems on body and health, which can lead to a perception of risks of side effects and rejection of certain intervention strategies.

Reports from the early 1980s revealed that worker-client relations in India were poor and even that family planning workers were hated or ridiculed (cf. R. Simmons et al., 1986). But more recent studies (cf. UNFPA 1991b) also demonstrate that villagers feel they are treated as targets rather than as human beings, that they feel uncomfortable in clinics and among field staff (especially in the case of male workers and female clients), that they are lectured and bullied without empathy for their own needs, that the messages carried by extension workers are not understood or that their activities stir fears about personal welfare. It is in the interpersonal relationships that the weakness of the top-down target-oriented approach of the Indian family planning and health programme is most clearly articulated.

Enhancing the quality of services and responsiveness to clients’ needs are, therefore, important issues in the effort to formulate a more effective programme. The apparent gap in perception between those who design and implement family planning and health programmes and those who use or want to use birth control methods emphasises the need for investigation and incorporation of the clients’ perspectives in the design of a new programme or the redirection of the existing one (cf. Zeidenstein 1980).
Education
The factor that is most consistently found to influence fertility and women’s status in developing countries, is female education. With respect to the causal mechanisms, several practical issues are involved, such as the costs to parents for educating children or the incompatibility of the educational and the fertility (and the implied marital) careers. But the educational system as a socialising institution is also important in creating a world view, including perceptions on family, fertility and health, cause-and-effect patterns and locus of control, as well as in creating different goals, awareness and improved information processing skills (e.g. Cochrane 1979, Basu 1992, Handwerker 1986a, Jejeebhoy 1991, Mason 1984, Sears 1987, United Nations 1987).

Most of the literature concerning female education focuses on quantitative aspects: literacy rates, the proportion of girls attending school and the duration of the educational career. It is tacitly assumed that school attendance helps to change fertility behaviour and improve women’s status whatever the ideational content of the curriculum. This underestimates educational content as an important causal link between education and fertility which operates through changes in attitudes, self-perception and the evaluation of human capital. If the curriculum includes conservative elements, such as taboos on sexuality or female inferiority, the influence of school attendance on the considerations with regard to fertility behaviour of those passing through the system is not what might be hoped for (cf. Boserup 1990, p. 57, United Nation 1987, p. 214 ff.). For instance, traditions of temple education or Koranic schooling would not necessarily lead to required attitudes with regard to fertility or women’s status (cf. Lesthaeghe and Eelens 1989). The specific content of the messages disseminated through educational channels, as well as other school system features (didactics, teacher quality, facilities, etcetera) can make a lot of difference if the impact of education on fertility is considered, or on the development in human capital in general (Baker 1988, UNICEF 1991).

Evidence from studies in India on the relationship between education and fertility tends to support in various degrees the commonly hypothesised causal mechanisms (e.g. Caldwell et al., 1985, Castro Martín 1995, Jain and Nag 1985, Jejeebhoy 1991, United Nations 1993). The value of children seems to change with educational status and higher educated parents are inclined to desire fewer children and to invest more in their offspring. Knowledge of family planning methods increases with education, as well as the capacity to reconcile fertility intentions with actual outcomes. The relationship between education and age at marriage is particularly strong although the causal connection between the two is not always straightforward.

Although both the Indian government and parents seem to be convinced that educating children contributes to the development of skills for life, the present school system does not fulfil its whole potential in this respect. At least from a health and family planning perspective, there is room for significant improvement in terms of conveying relevant information to those who attend school. UNICEF’s (1991) Situational Analysis, for instance, assesses that in order to attain a higher level of ‘human development’ in the population, including improvement of literacy and education levels, the quality and quantity of teachers and facilities need to be enhanced. But also the content of the curriculum should be more geared towards socially relevant learning, whereas now primary level schooling is mainly a preparatory stage for higher education. The curriculum is considered to reflect obsolete stereotypes of division of labour.
between the sexes, so that conscious interventions for change are needed to promote the value of equality of boys and girls and to create conditions in which both are able to derive the full benefit from education. Similarly, a major evaluation of the formal population education programme revealed that textbooks perpetuate sex-stereotypes by depicting traditional gender-based divisions of work in the family (UNFPA 1991b, World Bank 1991). Lastly, the element of preparation for entering the world of work is considered feeble, and there is little guidance for life in the family, and for responsible parenthood in particular (UNICEF 1991, p. 174). With respect to content of schooling, it can therefore be concluded that at present, the Indian education system does not hold the kind of curriculum that represents and disseminates the most favourable behavioural rules and optimal information for coping with the decision problems that confront young people with regard to sexuality, pregnancies, contraception and childbearing.

Legislation

On several points, national law contributes to the context of considerations with regard to fertility and its proximate determinants. Legislation as an institution is specifically made up of complexes of behaviour-guiding or normative rules. It prescribes appropriate behaviour in various domains of activity and it is, in principle, ultimately backed up by the power of the state.

Among the laws that are relevant for reproductive health and fertility, the 1971 Act on Medical Termination of Pregnancy must be mentioned, which largely legalised abortion. Various studies show that there is a great need for this service, and that reasons to resort to induced abortion are mainly contraceptive failure (Chhabra and Nuna 1994, Mathai 1989), but also the need for birth spacing methods in the perceived absence of temporary methods and the need to terminate unacceptable extra-marital pregnancies (Caldwell et al., 1982b).

A main area where legislation sets rules for fertility related behaviour is marriage. Over the years, the government of India has enacted several laws and amendments with regard to the minimum age at marriage. Subsequently, the officially permitted age at marriage for girls increased from 14 (after the 1929 Sarda Act) to 18 after the most recent Law, and from 18 to 21 respectively for men. The Hindu Marriage Act of 1955 also prohibits polygamous marriages. The actual situation with regard to age at marriage is not concomitant with national law. A World Bank study on the position of women in India reported that as many as eight per cent of girls aged 10-14 and 44 per cent of those aged 15-19 are already married, which indicates that a large proportion of all women are married before the legal age (World Bank 1991, cf. Jejeebhoy and RamaRao 1992).

The enactment of laws alone can do little to change a situation, although it is important because it signals the intent and direction of state policy. Awareness of legislative rules is a first prerequisite for compliance with a law and in this respect, the situation in India is far from ideal. Few women are aware of the possibility of legal abortion, and knowledge of a legal minimum age at marriage is equally poor (Mathai 1989, Saxena 1989, UNICEF 1991). Moreover, registration of marriage is not compulsory and sanctioning efforts by state governments are limited: penalties are not severe, measures do not invalidate illegal marriages and sanctions are applied with reserve because of the sensitivity of the subject (Surendeer, no date). In this respect, rules provided by institutionalised law seem to have little effect on individuals’ considerations compared with the impact of information derived from other socio-cultural sources.
8.2.4. Summary: institutions in individual perspective

The social context interpreted as a coexistence of social institutions represents a complex, but structured pool of information which is selectively tapped by individuals who consider behaviour related to the proximate determinants of fertility and fertility itself. People interpret and combine this specific information and act accordingly, thereby maintaining or adjusting the meaning or significance of social institutions. Added to this decision process are considerations rooted in the specific individual history, partly reflecting rules internalised at earlier stages in the life course, partly reflecting genuine individual experiences. In a typical rural Indian situation, the family and people of the local community serve as main agents or channels for sanctioning behaviour and conveying information that is organised in institutions like Hinduism, Ayurveda, local labour markets, marriage- and kinship systems, or local representations of health and education systems. Some of these sources are locally based, others have a much wider scope, reflecting the hierarchical structure of the social environment. Many impart information along the same lines, while many also advance contradictory rules. Some of the institutions have emerged recently, others originated in a distant past and reflect a long process of adaptation within the confines set by their evolutionary development.

The intricate coexistence of normative and interpretative rules reveals some general considerations about health, childbearing and proximate fertility determinants. These include a relatively high value of children, especially sons, because of their implied social status and support and ritual functions; an economic and social value of (early) marriage; understandings of physiology and health embedded in modern allopathic or in traditional knowledge systems; the influence of super-human forces versus individual control on health and fertility; gender ideas that restrain women’s decision making power and exposure to information from the outside world, for instance by attending schools, labour market participation or visiting clinics; and in particular, the power of men over women and older generations over younger, which leaves girls and young women with only a modest degree of control in decision making in domains such as marriage, sexuality, fertility and contraceptive use.

Concluding the section on social institutions in India, it can be asserted that the information stored in the societal organisation and experienced by the population is relatively unfavourable for behaviour that is carefully planned, controlled and implemented in accordance with women’s personal aspirations of good health and optimal family regulation. This is especially the case for women in rural areas and in northern India. Notwithstanding the explicit efforts through a number of formal institutions, the combined impact of information from the total social context results in a situation where personal aims of health and fertility control are made subordinate to other goals or where they are unattainable because of a lack of adequate knowledge and less than optimal quality of services.

8.3. Fertility in a dynamic perspective

8.3.1. Introduction
The information fuelling the personal considerations that underlie decisions with regard to fertility and the proximate determinants of fertility is not only influenced by the institutional organisation of the social environment. The personal background of more or less stable personal endowments and dynamic characteristics of life course development provide an additional information background. Following Bogue (1983), an elaboration of the component of personality traits is not pursued here, as the evidence of its effect on fertility behaviour, especially in developing countries, remains circumstantial and speculative. The dynamic or developmental aspect of the personal background, on the other hand, will receive more attention as it represents one of the main foci of this study. The central idea behind a dynamic perspective is that to considerable extent salient personal considerations and behaviours as arising from peoples mental schemes, are functions of the information that is represented by developments in different life careers (see Figure 8.3). This section focuses on the time-related aspects of reproductive behaviour and its most relevant intermediate behavioural determinants. Summarising this section, the developments in different careers (physical development, the educational, marital and reproductive careers) are interdependent through the meaning that is attributed to them. Developments on each of the lines can change the considerations contributing to the decisions that underlie developments in other careers. The interpretation of the fertility career as a staging process reveals considerable dynamics in a person’s considerations with regard to subsequent childbirth: changes with regard to the motivation to add another child or to postpone a next pregnancy, and consequently the motivation for birth control and specific method use, but also changes with regard to decision style and to the options and constraints and the perception of control to act in accordance with such aspirations. The concept of sequential decision making acknowledges these development-dependent considerations.
8.3.2. Reproductive behaviour in a life course perspective

Reproductive behaviour, its intermediate determinants and their underlying considerations demonstrate a clear life course profile. Forrest’s five-stage framework provides a relevant starting point for a dynamic interpretation of fertility-related behaviour and decision making (Forrest 1988, see Section 6.3.5). The stages she identifies are demarcated by a number of important life events (menarche, first sexual intercourse, marriage, first birth, completion of desired family and menopause). Each stage can be characterised by specific knowledge, childbearing motivation, contraceptive needs, autonomy, style of decision making, et cetera. The institutional rules (meaning-giving and behaviour-guiding) that impinge upon the biological baseline of individual development flesh out these stages of the reproductive career for the situations encountered in India. The subsequent sections elaborate women’s life course organisation with respect to reproductive behaviour.

Preamble to reproductive behaviour: education and marriage
Menarche indicates the onset of the capacity to bear children and often denotes a new status for adolescent girls. For large parts of the Indian population it does not seem essential to differentiate the pre-marital period in the stage between menarche and first sexual intercourse and that between first intercourse and marriage. Especially in rural and northern areas, any pre-marital sexual relations are strongly disapproved of given the value attached to women’s virginity, and rather improbable given the extensive control over their behaviour by others. Moreover, before marriage even possessing knowledge about family planning methods, or
reproductive matters in general, is considered incongruous with the ideas of female chastity (cf. Basu 1984, Mathai 1989, World Bank 1991). On the other hand, the period of adolescence is very important in terms of internalisation of adequate information and attitude formation about fertility, reproductive health and family planning. Schooling provides a potentially excellent channel to convey relevant information in this respect to groups in the pre-marital stages of the life course, especially in situations where there is little communication between parents and daughters about these matters (cf. George 1994, Mathai 1989, World Bank 1991). Notwithstanding strong social disapproval and control, engagement in pre-marital sexual relations may occur and perhaps even more than often suggested (Nag 1995). In these cases, the greatest demand is for easy accessible, reversible and effective means to prevent births and secrecy of services and delivery (Mosher and Bachrach 1987).

There is an intricate relationship between menarche, education, the period between menarche and marriage and various reproductive aspects after marriage. In some circumstances, menarche may denote a girl’s readiness for marriage or the sign to commence the search for a marriage partner (Caldwell et al., 1983). The anxiety to keep daughters chaste and preserve their virginity are reasons to withdraw them from school or work in the fields and contributes to the motivation for marrying them off at an early age (e.g. George 1994, Jeffery et al., 1988b, Khan and Singh 1987). Social change, however, is influencing the ideas with regard to age at marriage. Increased life expectancy, changed concepts of childhood and immaturity (as wife, mother or daughter-in-law), an increased need to obtain a degree of consent from the husband-to-be in matters of marriage, a waning feeling of religious or moral transgression in failing to marry a girl by menarche and the perceived high risks of physical impairment and death associated with early pregnancies, are some of the considerations to arrange a daughter’s marriage later now than in the past (Caldwell et al., 1983).

Girls’ education can be another, independent, source of considerations to postpone marriage. The marital and educational careers seem to be perceived as incompatible: in almost all cases women terminate their education before marriage (Jain and Nag 1985). Besides this incompatibility, a chief cause of marriage delay because of education is the greater difficulty in finding appropriate match for a girl with some educational qualifications (Caldwell et al., 1983, Jejeebhoy 1995). Another mechanism, possibly related to the duration of school attendance, which is hypothesised to postpone marriage, is that in becoming more educated the girl develops a less favourable attitude toward early marriage and at the same time increases her power to influence parental decision making (Jejeebhoy 1995). The causal direction between education and marriage, however, need not to be uni-directional. The increase in age at marriage that takes effect in India and the consequent habituation to a period of several years between menarche and marriage may, in time, result in a greater likelihood of girls staying on at school.

The impact of marriage postponement on women’s health and fertility later in life can be significant, especially if it corresponds with a longer educational career. It averts the risk of early pregnancies and it places a more mature, and therefore probably stronger, woman in the decision processes that take place within the family about number and timing of children and contraceptive use (Cohn 1971, Caldwell et al., 1983). Prolonged education usually strengthens this autonomy effect, besides having an independent impact on aspects of motivation, knowledge, understanding, efficacy and spousal communication with regard to the number and timing of having children, fertility regulation and health (e.g. Basu 1992, Jejeebhoy 1991, Mason 1984).
Establishing a position in society: the birth of a first child

The event of marriage marks one of the most important transitions in a woman’s life course. In a patrilineal marriage system she is transferred from her natal kin to her husband’s family and acquires a new status as wife and prospective mother. Sometimes the transition even may be considered as the obtainment of a complete new identity, indicated not only by the replacement of her father’s surname by that of her husband’s, but also by the change of her first name (cf. Hutter 1996).

Marriage (or more particularly, gauna) marks the transition to the third stage that Forrest (1988) identifies in the fertility career: reproductive motivation changes radically, from avoiding pregnancy at any cost to desiring a child at any cost and possibly as soon as possible (Rajaretnam and Deshpande 1994). In patriarchal and patrilineal contexts such as in India, a wife’s status is derived primarily from reproduction. It is only upon the birth of a child and of a son in particular that a young wife finds herself incorporated into the husband’s family (Koenig and Foo 1995). The foremost concern of everyone around her and even herself is when she will become pregnant and prove her fertility (Khan and Singh 1987, cf. Hutter 1994, Mahadevan and Jayasree 1989). As Khan and Singh (1987) described for the situation in Uttar Pradesh, if pregnancy fails to occur a woman can become ridiculed, debarred from participating in ritual performance, feared by women with children, completely lose her role in decision making in all kind of matters and may have to bear the presence of a second wife and the status of a mere servant. Such examples demonstrate girls and young wives the paramount meaning of childbearing and provide the motivation to become pregnant as soon as possible after marriage. Although not everywhere in India, the fate of barren women is so grim that there is usually little motivation for practising birth control during this third stage (e.g. Basu 1993). Moreover, adequate knowledge of reversible contraceptive methods is often insufficient (IIPS 1995, Jamshedji and Kokate 1990, Jejeebhoy and RamaRao 1992, Khan and Rao 1989, Mathai 1989, Rajaretnam and Deshpande 1994, UNFPA 1991b) and communication about reproductive matters is sometimes completely absent during early stages of marriage (Khan and Singh 1987).

Family completion: a different choice situation

The fourth stage covers the period between the first birth (or alternatively the birth of the first son) and a point in the life course where a desired family size is reached. Since family building is still incomplete in this stage, terminal contraceptive methods are irrelevant. Whereas first pregnancy and birth soon after marriage is common to the whole of India, the subsequent reproductive career and underlying considerations diverge to some extent. For instance, there is some differentiation in terms of the preferred length of the subsequent birth intervals (Rajaretnam and Deshpande 1994, cf. Hutter 1996).

Since for women an important task in the family has been fulfilled by producing (male) offspring, she can often be a little freer, especially in the confrontation with her mother-in-law. In general, several authors have noted that changes in the power or status of women occur over the life course (Khan 1987, Koenig and Foo 1992). This is not necessarily related to fertility, but also depends on age or marital duration (Mason 1984, Hollerbach 1983). Not only may women’s relative power change with marital duration or the number of children born, also the content of the influence and the categories of people who exert it (e.g. parents-in-law, other relatives, neighbours, friends, family planning and health workers) may change (Khan 1987). Similar developmental changes can be observed with other decision making elements: spousal communication or the intensity of discussion with regard to birth control (Beckman...
as well as styles of decision making regarding fertility (Hollerbach 1983, Hull 1983) may depend on the stage in the family building process. Moreover, effective knowledge about reversible family planning methods is likely to increase over the marital career. Married women are no longer denied this information on moral grounds and they are exposed to information of this kind during marriage through a number of channels (media, family planning and health services, people in their social environment). With regard to almost any of these decision making aspects, as well as on fertility-related motivation, educational attainment earlier in life is considered to be important (e.g. Jejeebhoy 1995).

There are indications that breastfeeding and frequency of intercourse have a personal-time-related character. However, surprisingly little is known about the considerations and mechanisms underlying these behaviours. World Fertility Survey data from other countries suggest that duration of breastfeeding may depend on developmental stages that are associated with parity or age of the mother (United Nations 1987). The effects, however, are not very consistent and were largely attenuated once modernisation variables such as education and residence were controlled (Jain and Bongaarts 1981). Other life course careers, such as educational and working careers, thus seem to have an impact on breastfeeding, although definitional problems and inconsistent findings produce a blurred picture (Lloyd 1991, United Nations 1987, World Bank 1991). World Fertility Survey studies also reveal that frequency of intercourse declines with age and marital duration (Blanc and Rutenberg 1991, Udry 1993). Similar life course trends have been observed for India (e.g. Yadava and Rai 1989), but there are also indications for a recent increase of intercourse frequency in early marital stages. Several time-related mechanisms may be at work here, such as declining periods of the family life cycle that used to be spent in extended families (suggesting limited freedom for sexual intercourse in early marriage), and a dwindling custom of sending just-married women frequently and often for long periods back to their parents’ home (Hutter 1996, cf. Basu 1993, Koenig and Foo 1992).

The end of childbearing: menopause and sterilisation
The last stage of a woman’s reproductive career is the period demarcated by family completion and menopause. Sometimes, completed family size is a status that is unintended and recognised only after the fact. Often, however, it can be identified with a point in life when people want to terminate childbearing. To a large extent, people in India have an idea of desired or ideal family size (cf. Khan and Rao 1989, Saxena 1989). This is at least partly due to the massive effort of India’s family planning programme, without implying that people’s family size norms also coincide with the programme’s (cf. Basu 1992, p. 109). Several studies suggest that rather than considering a desired family size, the desired number of sons is relevant (for a discussion on this matter, see Hutter et al., 1996, cf. Nag 1991, Rajaretanm and Deshpande 1994). This motivation to end the fertility career depends on a variety of reasons and life course developments: because a desired number of children or family composition is attained, because of financial implications of larger families (Vlassoff 1990b) or because further childbearing would conflict too much with developments in other careers such as work or health (Caldwell et al., 1985). Even life course development of others may be part of the motivation to refrain from additional children, as in the case where women feel uncomfortable when their own sons or daughters start bearing children (Caldwell and Caldwell 1985, Kakar 1989, Khan and Singh 1987, Nag 1983). At this stage in the reproductive career, sterilisation becomes an acceptable option alongside reversible methods. Additionally, people may rely on abortion (Chhabra and
8.4. Personal considerations

8.4.1. Introduction

Personal considerations pertain to the selective information that is organised in people’s mental schemes and that is salient at a certain moment in the reproductive career. These time-dependent considerations concern the learned and retained information that is derived from a variety of backgrounds. They reflect the various institutional domains (Section 8.2), but also the individual history and the position in the life course (Section 8.3). These subjective considerations are supposed to take shape in the form of a problem space, motivation, perceptions of control and decision styles. Due to mechanisms of selective attention, contradictory information backgrounds, uncertainties and life course development, such considerations may exhibit a certain degree of inconsistency, both across life domains and in temporal perspective.

The aspects of personal considerations, together with the complex of reproductive behaviour and its intermediate determinants will provide the structure of the following discussion. In Section 8.4.2 (and Figure 8.4), decision making with regard to fertility and pregnancy is the central issue, while Section 8.4.3 (and Figure 8.5) focuses on decision making with regard to the intermediate determinants of fertility. At present there are no studies on India that systematically address the proximate determinant complex of fertility behaviour from an integrated and dynamic choice perspective as developed here. There are, however, numerous studies that cover extensive areas of the aspects identified in the model of fertility behaviour.
The subsequent sections utilise the findings of these studies and try to interpret them in terms of the model’s conceptualisation.

8.4.2. Reproductive behaviour

Motivation and problem space

Childbearing is the prime avenue for the large majority of women in India to achieve fundamental goals such as affection, power and self-esteem, and in particular, social status and security and survival (e.g. Jejeebhoy and Kulkarni 1989). Especially in rural areas there are few alternative pathways to fulfil these basic needs. In the cultural context of India the major value of a woman is assessed in terms of her role as a mother, and therefore she can gain little respect, support and sympathy in the family or in the larger community if she fails to bear children, and more particularly sons (cf. Hutter 1994, Khan and Singh 1987, Koenig and Foo 1992). Her position at the onset of her childbearing career is especially vulnerable because an early marriage implies that she cannot obtain status on the basis of her age. Moreover, she has just entered an unfamiliar household where she finds no natural allies and where she has to start from scratch in terms of securing a decent position in the household hierarchy. It would be too simple, however, to narrow the picture down to the family as the only source of motivation to produce children. Women grow up in a social environment where much of the information contains positive messages about having children. This information which is importantly learned through observational experience (e.g. Khan and Singh 1987) implies elements of cultural definition (meaning-giving rules) that will
contribute to an intrinsic motivation for having children that should also be interpreted in terms of self-fulfilment rather than only in terms of social status and sanctions.

In the apparent absence of any alternative arrangement for old-age security, one important meaning of children is their expected support role. The old-age security motive is important, especially to women as their prospects to be self supporting are meagre in a social environment where they are confronted with behavioural rules that undermine female autonomy, and with labour market opportunities that signify a negative bias to women’s participation (cf. Cain 1981, Desai and Jain 1994, Dharmalingam 1994, Grover 1989, Jejeebhoy and Kulkarni 1989, Mahadevan and Jayasree 1989, United Nations 1993).

Although the expected support of children (economically and emotionally) remains an important and persistent factor underlying the demand for children, the actual support received in old age and the expectations of the reliability of children in this respect, seem to decrease (Dharmalingam 1994).

There may be a point in the reproductive career where these needs to safeguard security and status are fulfilled to an acceptable degree and where other goals in a dynamic Maslowian perspective may gain in importance. The birth of a first child, and more particularly the birth of a first son (and perhaps even more precisely: the first son surviving childhood) may mark this transition point (Forrest 1988, Khan 1987, Koenig and Foo 1992, Namboodiri 1983).

Figure 8.5. Choice and intermediate fertility determinants
Whether such a transition point exists at the first birth or at higher parity will probably depend on people’s awareness of the children’s survival chances. In communities with high infant and child mortality a motivational transition like this would occur only after a safe margin in terms of births has been attained. With respect to the ideal family size and gender composition of children, child deaths seem also to play a role: many people want at least three children but almost always on the condition that these include at least one or two sons in order to be sure of the survival of at least one (Khan and Prasad 1985, Khan and Rao 1989, Saxena 1989).

Security and status might be perceived as major motives for childbearing, but other expectations of fertility also enter the motivation structure. These include, for instance, affection or stimuli associated with children, the performance of religious ceremonies and continuation of the family line by children, the health effects (of mother and child) of pregnancy and childbearing (Caldwell et al., 1985), the time required for bearing and raising children or the costs associated with children, especially if this is connected to dowry requirements and ideas about the quality of children (e.g. in terms of their educational attainment or their prospects in life) (e.g. Caldwell et al., 1982b, 1985, Jejeebhoy and Kulkarni 1989, Mahadevan and Jayasree 1989, United Nations 1993, Vlassoff 1990a, 1990b, 1991). Formal institutions play an important role in communicating information related to several of these motives. The educational system promotes investment in schooling of sons and daughters and emphasises quality aspects of children, family welfare programmes address the causal links between fertility and maternal and child health, formal social security schemes loosen the perceived connection between children and survival in times of need.

Personal control

Representation of motivational statements often do not specify under which particular conditions the intended behaviour will actually be performed. Thus, the studies by Rajaretanam and Deshpande (1994) and by Vlassoff (1990b) revealed that despite expressed ideals about child spacing and family size respectively, many respondents failed to realise these particular intentions. A prerequisite to a person’s ability to effectively influence his or her reproductive behaviour is the knowledge about the instrumental connections between intermediate determinants and fertility. Also, the (perceived) availability of and access to means to influence pregnancies and births contributes an important element to the decision making process: the perceived ability to perform required action in terms of fertility regulation through any of the different proximate determinants (self-efficacy expectations). Aspects of awareness and effective knowledge about the functions of proximate determinants and availability and control over means to influence reproductive outcomes will be discussed in greater detail in Section 8.4.3, but here they are briefly considered in terms of their effect on personal control over fertility behaviour.

Contraceptive methods and abortion are the most direct and reliable options to regulate fertility. Although the option of sterilisation is common knowledge, awareness of reversible methods is inadequate, especially among rural women (IIPS 1995). Moreover, effective knowledge entails more than just knowing from hearsay and in this respect scores are even much lower (Jamshedji and Kokate 1990, Jejeebhoy and RamaRao 1992, Khan and Patel 1993, Khan and Rao 1989, Rajaretanam and Deshpande 1994, Stevens and Stevens 1992). This especially undermines people’s sense of control over the start of childbearing and the timing of pregnancies and births, implying that, with respect to reproductive matters, the two most involved formal institutions (the educational system and the family planning programme) have failed to effectively provide the population with relevant information (UNICEF 1991).
Furthermore, to the extent that conflicting indigenous beliefs prevail over accurate understanding of causal processes, they too undermine people’s perception of personal control (in the sense of outcome expectancy) and their willingness to undertake effective action. A point in case is the idea that fertility outcomes depend on the will of divine powers (Bogue 1983, Caldwell et al., 1982b, Jeffery et al., 1988b, Khan and Singh 1987).

The effects of the other intermediate determinants are sometimes acknowledged, but activity in these spheres is usually to a lesser extent aimed at influencing reproductive outcomes. Thus, effective knowledge about the effects of sexual intercourse - not only including frequency considerations, but also correct notions of timing during the menstrual cycle - has shown to be poor, especially among adolescent and recently married girls (e.g. Khan et al., 1989). The employment of terminal abstinence is, however, a widespread custom (Caldwell and Caldwell 1985, Nag 1983, Srinivasan 1989), and perhaps periodic abstinence and separation of spouses are not only adhered to because of social and religious meanings, but also because of their impact on reproduction (Basu 1993, Hutter 1996, Jeffery et al., 1989, Kakar 1989). The practice of breastfeeding is usually not part of the subjective representation of the causal complex underlying fertility. The causal connection between marriage and reproduction is not only obvious to the people, but also intended: procreation is one of the main reasons for marriage. Even the observed tendency to deliberately delay marriage timing has partly been ascribed to the perceived probability that early childbearing has repercussions in terms of reproductive health (Caldwell et al., 1983).

Even if accurate knowledge and understanding of the effects of the proximate determinants is asserted, people may encounter a number of constraints that inhibit appropriate control over pregnancies and childbearing. The position of women in the family and in society as derived from religious and family and marriage institutions is an important determinant in this respect. Many girls in India perceive their ability to influence marriage as virtually non-existent and a woman’s influence in the domain of contraception and sexual intercourse is usually subordinate to that of her husband and mother-in-law, which reduces her feeling of control (Dyson and Moore, ESCAP 1987b, Khan and Singh 1987, Koenig and Foo 1992).

Also people’s perception of family planning services in terms of method choice, ensured supply, proper support and appropriate qualities of service providers, probably contributes to the level of personal control. The history of the Indian family planning programme has been disappointing in this respect, especially if spacing behaviour is concerned.

Style of decision making
The decision style with regard to reproductive behaviour may be different, depending on whether it concerns the number of children and the sex composition, and depending on the life course related determination of starting, spacing and stopping childbearing (cf. Bulatao 1984, Bulatao and Fawcett 1981, Hollerbach 1980, Namboodiri 1983). An understanding of changing fertility decisions should distinguish between the changing calculus of choice (process), and changes in the alternative opportunities available to decision makers (content) (Hull 1986, cf. Bulatao 1984, Fawcett 1991). For a large proportion of women in India, at least at higher parities, reproductive behaviour is the result of purposive and explicit decision making, given the large awareness and high acceptance rates of sterilisation, the traditional custom of terminal abstinence and personal accounts of discontinuation of reproduction. On the other hand, accounts of the lack of autonomy in reproductive matters and insufficient knowledge and availability of reversible contraceptive methods, may suggest that for another large proportion of women, and particularly at lower parities, there is little involvement in
decision making, at least in the sense of free, deliberate and unconstrained choice. A decision making approach may, however, be applicable to these situations if choice is conceptualised in a broad sense and includes elements such as ignorance and uncertainty, social pressure and personal control, and institutional and passive styles of decision making (Bulatao 1984, Hollerbach 1983, Hull 1983, Leibenstein 1981).

Under circumstances such as at the onset of marriage, the restricted information available to a woman may be so much in favour of having children and arouse so much fear for failing to have children (Khan and Singh 1987) and may contain so few clues that there might be alternatives, that childbirth becomes the obvious path to choose. Any attempt to engage in procedures of search for alternatives and evaluating them seems useless, or even subject to negative sanctions, and is therefore discarded. The cognitive environment provides the ready-made satisfying solutions for difficult choice situations, and following the rules of institutional and satisficing decision making, individuals are released from the psychological burden of active deliberation and intensive search procedures.

Notwithstanding the possibility that childbirth and its timing concern deliberate choice, passive decision making is probably also a common style of decision making. Perhaps many couples have a child when they do not intend to, engage in sex without thinking through the consequences or raise families without ever considering any alternative (Bulatao 1984, cf. Montgomery 1996). Goals related to fertility (whether pertaining to the level of consequences of fertility or to the level of fertility behaviours themselves) need not explicitly articulated: people do not always have clear perceptions of the number of children they want (e.g. Jeffery et al., 1988b), although forced answers in survey questionnaires suggest that in fact they do (cf. Blake 1994). Moreover, spouses may be uncertain about each other’s fertility-related intentions because often couples cannot discuss topics like sexuality, reproductive health, menstrual cycle or certain specificities of contraceptive methods at ease (Beckman 1983, Bogue 1983, Hollerbach 1980, Khan and Singh 1987), whereas research has demonstrated that husband-wife concurrence can have an important effect on sustained contraceptive use (e.g. Biddlecom et al., 1996, Pariani et al., 1991). A restriction of spousal communication on sexual and reproductive matters that is also observed in India (Khan and Singh 1987, Koenig and Foo 1992), may cause feelings of ambivalence and uncertainty in the sphere of fertility motivation and in turn may lead to passive styles of fertility decision making (Limanonda 1993).

8.4.3. Intermediate determinants

Marriage

The large majority of marriages in India are arranged and can often be considered as contracts and exchanges between families, rather than agreements between spouses. Decision making in the sense of completely free, informed and calculating choice cannot be attributed to young daughters (Khan and Singh 1987, Koenig and Foo 1992). Decision making style is largely adaptive and follows prevailing institutional rules. In the strongly patriarchal context the exercise of marital decision making is largely located with the family and usually involves explicit and deliberate procedures of search for alternatives and clear evaluation criteria (e.g. timing of marriage ceremony, amount of dowry and personal or family characteristics like age, caste, schooling or occupation, village exogamy and personality characteristics) (Caldwell et al., 1983, Mandelbaum 1970). Ensuring a proper position of daughters within marriage,
controlling sexual relations, reducing financial liabilities and maintaining various functions of the family, especially through reproduction, are among the main considered motives (e.g. Basu 1992, Dyson and Moore 1983, Khan and Singh 1987). In the motivation structure, (children’s) fertility takes the position of expected outcome of marriage and expected means for more ultimate goals such as economic, social and religious aspirations. Maternal (and child) health has been reported as a reason to arrange daughters’ marriage at a later age) particularly, however, because of repercussions in terms subsequent fertility potential (Caldwell et al., 1983).

In the perspective of young brides-to-be, marriage is typically a choice situation where the consideration of personal control prevails over motivation. Motivational considerations with regard to marriage presumably hold positive and negative outcome associations. At least partly intentions correspond with those of their parents, either through exposure and adherence to similar information and rules from the institutional environment (internalised personal expectations), or through the motivation to comply with the parents’ ideas (normative expectations). In many situations, however, individual motivation seems irrelevant as within the family power structure and in the moral codes there is so little possibility to influence marriage timing or partner selection (e.g. ESCAP 1987b, Koenig and Foo 1992). Rephrasing Ajzen, personal motivation would be expected to determine individually-arranged marriage to the extent that the individual has personal control, and individually-arranged marriage should increase with behavioural control to the extent that the person is motivated to have such a marriage (Ajzen 1991, p. 183).

Contraceptive use and abortion
The use of birth control methods is the proximate determinant that is most directly, explicitly and intendedly connected to reproduction. In turn, the aim to prevent pregnancies or births is by far the most important and cognised aspect in the motivation structure with regard to contraception and abortion. Bulatao (1984), however, states rightly that decisions with regard to contraception can only be fully comprehended if they are situated in a broad and multi-level motivation structure. In addition to birth control, other outcome expectations associated with specific contraceptives or abortion (e.g. spousal opposition, side effects, financial costs) or with the process of getting them (e.g. time costs, unkind treatment by staff) may enter importantly into this motivation. But the motivation structure must also include ultimate consequences of reproductive behaviour, such as maternal health and (family) security.

With regard to motivation contents, monetary costs of family planning are, in principle, small in India. Although social marketing (mainly condoms and pills) works on a commercial basis, contraceptives and services are provided free through the governmental health structure. Nevertheless, acceptance of family planning involves such costs as travel expenses, loss of wage and extra food (cf. Khan et al., 1989) which is part of the family planning programme’s argument to maintain an incentive structure (cf. Stevens and Stevens 1992). Normative and psychic considerations (cf. Bogue 1983) are more significant elements in a person’s motivation structure. They include reservations with regard to discussing family planning, the need of consent of the partner and parents, pressure from family planning programme staff, acceptability and inconvenience of methods, fears of negative health consequences and uncertainties related to method use, problems related to service accessibility, and aversion of insensitive family planning workers or of contact with male service providers (e.g. Bhende et al., 1990, Caldwell and Caldwell 1988, Chhabra and Nuna 1994, Khan and Singh 1987, Khan et al., 1989, Koenig and Foo 1992, Rajaretnam and Deshpande, Stevens and Stevens 1992).
Many of these considerations are derived from the informational contents of the social environment and especially from religious and family-related institutions (cf. ESCAP 1987a) and the operation of the family planning programme. The health and family planning system, particularly its quality of care aspects, involves significant psychological constraints to the access to and the use of effective birth control methods.

Considerations of personal control with regard to family planning are related to many aspects that are also involved in motivational considerations and people’s knowledge level. They may take two different forms. The perceived ability for effective use of birth control methods (efficacy beliefs) may depend on the awareness of existing alternatives to do so. It may also depend on the perceived availability and supply reliability of methods and on the perceived access possibilities, but it crucially also depends on specific and effective knowledge on contraception and health (cf. World Bank 1995, p. 84). The belief in the role of external powers (such as a sovereign interference by God) in reproductive or health outcomes typically refers to the locus of control, rather than to expectations about competence to perform required actions to attain these outcomes (self-efficacy).

Research in India has indicated that for the majority of people information on reversible contraceptive methods is not as comprehensive as it needs to be to enable them to make an efficacious choice on family planning. Knowledge about reversible methods more often than not goes without the specifications such as availability of methods, correct method use, method working, advantages and disadvantages of methods, contra-indications, side effects and complications - that render it effective knowledge for reproductive decision making (e.g. Jamshedji and Kokate 1990, Jejeebhoy and RamaRao 1992, Khan and Rao 1989, Rajaretnam and Deshpande 1994, UNFPA 1991b).

Access involves aspects of distance to service outlets, the time needed to get there and the financial costs involved in obtaining services or products. Importantly, it also includes social and psychological constraints such as the level of freedom to travel and visit clinics and dispensaries, spousal control over family planning or the apprehension of dealing with unresponsive staff. As indicated above, such considerations not only enter decision making as motivational aspects, but most probably also as forms of perceived control. Research among teenage girls in the United States showed, for instance, that knowledge about reproduction and contraception, a lack of fear of parental reactions and experience of access to contraceptive methods were associated with higher self-efficacy considerations, and that girls with these characteristics were more likely to use contraceptive methods effectively, even under adverse circumstances (R.A. Levinson 1986). For a Maharashtra village, Vlassoff found with regard to sterilisation that women clearly felt confident that they could regulate family size, which she attributed to the high acceptance of sterilisation, the availability of operation services and the easy access (Vlassoff 1990b).

The analysis of institutions has pointed out that contents of information dispersed by the family planning programme and the style it operates are factors contributing to existing low levels of awareness of and effective knowledge about family planning. Moreover, the educational system in India does not seem to be particularly suited to contribute to personal understanding and action in reproductive matters (apart from the issue of low and short educational participation by girls). Nor has it been able to sufficiently challenge normative and meaning rules vested in cultural institutions about the subdued position of women in matters of reproductive decision making (Section 8.2.3). Knowledge systems including understanding the causes of fertility and health as derived from modern and scientific sources (such as the family
planning and health system or the educational system) may well exist side by side with other, possibly contradictory, bodies of knowledge such as religiously inspired beliefs about influences of divine forces or beliefs resulting from ethnophysiology or from more spontaneous local rumours (cf. Caldwell et al., 1982b, Jain and Nag 1985, Khan and Singh 1987, Koenig and Foo 1992). A person’s perceived control over fertility regulating actions will depend on the cognitive framework in which family planning and fertility or health is interpreted (Warwick 1988, p. 8). And this cognitive framework may, in turn, reflect the ambivalence represented by competing knowledge systems.

People or couples who apply any method of birth control have usually gone through an explicit process of decision making. Given the high value attributed in India to having children and the need for consent of partners and often parents (Caldwell et al., 1982b, 1983, Khan and Singh 1987, Koenig and Foo 1992), family planning adopters usually have clearly articulated motives for applying a method of birth control. Many studies point out that with regard to options for and consequences of family planning, the most important direct sources of information are not the formal institutions (the educational system, media and family planning and health programmes). Rather, information is acquired in the course of life through observation of and discussion with models in informal networks of local community members, especially household members, neighbours, relatives and friends (e.g. Bashar 1993, Khan 1987, Limanonda 1993, Mathai 1989). The observation of homogeneous contraceptive patterns in communities or regions in countries with a broad contraceptive mix available (Niehof 1994), may suggest that people often apply institutionalised decision rules in the sense that the search process for alternative contraceptive methods is stopped at an early stage and people adopt a standard solution that seems satisfactory to others.

Breastfeeding
In India, breastfeeding is almost universal, prolonged (around 20 months), and this duration of lactation usually implies full breastfeeding (cf. Kakar 1989, Prema and Ravindranath 1982, United Nations 1993). Generally, the conception-preventing effect of breastfeeding is not a consideration in the decision frame concerning breastfeeding behaviour, although there are situations where people are aware of the amenorrheic effects (Caldwell and Caldwell 1985, Nag 1983). The specific mechanisms that play a role in decisions about duration of lactation and particularly about patterns of breastfeeding, are scarcely addressed in the available literature and remain largely undetermined (e.g. Bulatao 1984, Huffman 1984, Nag 1983). Decision making with regard to breastfeeding is usually disposed of as complying with cultural custom. Nevertheless, people are usually sufficiently introspective to state health motives for extended breastfeeding which transfers the act from customary to intentional decision making (Ryder 1983). In India, as in other societies the primary purpose of breastfeeding is infant nourishment: lactation provides the best and cheapest food and usually the most certain source, especially in rural and deprived households.

Besides decisions concerning factors underlying breastfeeding practices (such as supplementation of the child’s diet, practice of scheduled feedings and night-time feedings, and use of feeding bottles) probably the most explicit decision with regard to lactation itself concerns the timing to stop breastfeeding. Caldwell and Caldwell (1985) suggest that formerly in India the weaning decision was determined either by fact of next pregnancy (a motivational consideration) or by the diminution of milk supply (a biological constraint). As far as breastfeeding was under behavioural control, weaning decisions are importantly although
decreasingly) influenced by mothers-in-law (Caldwell and Caldwell 1985, Caldwell et al., 1982a) and based on either practical (time, convenience) or ethical and ethnophysiological considerations.

Sexual intercourse
Another area that, until recently, received little attention in demographic research is decision making with regard to sexual relations between partners. In almost any social setting the connection between sexual intercourse and childbearing is part of people’s cognitive causal frames, but rarely is conception the direct and primary motive for coitus. Moreover, if people believe that conception depends on the will of divine forces (cf. Koenig and Foo 1992), sexual decision making involving considerations of pregnancy and childbearing become different in terms of personal control and responsibility than if coital outcomes are perceived as entirely dependent upon one’s own behaviour (Bogue 1983, Myntti 1988). In many cases, however, the choice for (unprotected) intercourse is independent of any reproductive implications, without necessarily implying that conception is unwelcome.

The situation may be different with regard to the choice for abstinence. Srinivasan (1989) distinguishes three types of sexual abstinence within marriage: terminal abstinence; abstinence during the postpartum period related to child health through birth spacing and poisoning effects of semen on breastmilk (e.g. Caldwell et al., 1982b); and periodical abstinence for various religious or social reasons related to religious festivals or phases of the moon (e.g. Kakar 1989). The first two of these will often explicitly relate to contraceptive considerations, and it should not be excluded that adherence to normative rules for abstinence may be employed for this purpose as well. Additionally, periodical abstination can be motivated on the basis of the menstrual cycle, which may include considerations about conception. This assumes a correct understanding of the menstrual cycle, but correct knowledge about the safe and unsafe periods seems limited. Khan et al., for instance, found consistently incorrect knowledge among couples in rural Uttar Pradesh who claimed that they used the safe period method to stop childbearing (Khan et al., 1989).

Decision making with regard to timing and frequency of intercourse are partly determined by the bargaining processes between husband and wife and sometimes by the influence of the husband’s mother (Jeffery et al., 1988b, cf. Caldwell et al., 1982a, Mandelbaum 1970, Karve 1965). Many studies indicate the frequently subordinate position of women in sexual decision making. In rural north India in particular, it was commonly reported that women were never consulted by their husbands in the matter of having sex, that they should always be responsive to their husbands’ desires, that their own pleasure should not be a consideration and that they never should take the initiative themselves (e.g. Jeffery et al., 1988a, Khan and Singh 1987, Koenig and Foo 1992, cf. George 1994, Kakar 1989). The internalisation and observance of such meanings and norms and the taboo on discussing sexuality severely restrict women’s control over pregnancies and births through control over sexual intercourse.

Biological determinants
There are a number of other intermediate determinants of fertility, such as spontaneous intrauterine mortality, onset of permanent sterility and natural fecundability, which lie largely beyond the domain of behavioural control. As such, they act as a kind of baseline in the ‘supply’ of fertility and do not require a behavioural explanation. However, biological proximate determinants can be influenced by behaviours that are subject to individual choice processes and institutional impact. Srinivasan, for example, suggests that the fecundity in India
has improved in the last decades as a result of better nutrition and health (Srinivasan 1989, 1992).

8.5. Summary: fertility in India from a dynamic micro-perspective

The previous sections related elements of individuals’ reproductive decisions to the institutional environment and to personal development. The analysis addressed the information that shapes the meaning of fertility behaviour and of each of the proximate determinants and that generates related personal considerations, such as motivation structure, decision style and perceived behavioural control. It revealed a myriad of personal considerations that induce the behavioural connections from the social context, via personal development to the proximate determinants and fertility behaviour and lastly to more ultimate goals. In the picture different elements of the proximate determinants and fertility complex are dealt with by different segments of the institutional background and they in turn cover different segments of a person’s motivation structure. It must be emphasised that the social environment comprehended in the sense of structured information cannot be equated with a sure and hard ‘given’. Although in India the role of many institutions seems adamant about determining individuals’ behaviour, their informational content is not unchangeable as they exist because of their interpretation by and (sanctioned) adherence of participants. Thus, although people may seem convinced of the role played by divine powers in cases of illness or fertility, no one is absolutely sure of the exact causes and principles involved, thus often allowing themselves room to search and try alternative behaviours (cf. Caldwell et al., 1982, p. 703b).

Embarking on a summary of the analysis, religion and the patriarchal family system, particularly through rules regarding gender roles, can be considered to influence to a large extent motivation, control and decision style with regard to marriage, sex composition of offspring and childbearing at low parity. For the Indian family, family and gender relations, religious belief systems, labour markets and rural communities define a crucial position in almost any aspect in life. In general, the family system and religion define family maintenance and continuation as the prime avenue for achieving the most important life goals, and therefore as a common motivational background for many proximate determinants and fertility aspects. For women in particular, there are few, if any, salient alternatives to childbearing that secure them a position in a family and which can give them some guarantee for fulfilment of the most basic needs, not only in terms of economic and physical security, but also in the sense of social status, respect and emotional satisfaction. Other goals such as maternal health or women’s professional careers, tend to be subdued or even excluded from contemplation against this towering causal complex. As long as women’s position and function in the household is primarily defined in terms of motherhood, the marriage and fertility careers represent the most important life domains and dominate other domains such as education or health. Hierarchical power structures in the family along age and gender lines define decision frames in which considerable weight is assigned to husbands and older generations. Thus with regard to marriage and contraceptive use, complying with such family members appears importantly in women’s motivation structure, while with regard to, for instance, breastfeeding normative freedom tends to be greater.
Education seems to have a profound impact on people’s considerations with regard to most of the intermediate determinants and reproductive behaviour. It should be stressed that not only the content of school curricula may contribute to better knowledge and different motivation structures, but that participation in the educational system also provides people with the means to acquire more information from the environment and use it more effectively and thus (indirectly) influence motivation, decision styles and feelings of personal control with regard to various life domains.

The Indian family planning programme provides important inputs for considerations on birth control. But until recently mainly with regard to the number of children rather than to onset and spacing in the fertility career, because of its emphasis on sterilisation. The recent transformation of India’s family welfare programme may signify a major shift from its previous low performance in terms of improvement of people’s ability to make optimal decisions about birth control, fertility behaviour, health and their life course in general. The contraceptive method supply and Information, Education and Communication (IEC) efforts in the past have met with considerable criticism because of their assessed lack of client perspective, insufficient audience research and little social scientific basis of design. In this respect, studies also revealed that the quality of interpersonal relations (usually considered to be the most important medium for communication, demand creation and delivery of services) have lacked basic aspects of responsiveness, privacy and respect.

Observation, communication and personal experience extract the informational rules embedded in various institutions and contribute to the mental frameworks from which motivational structures, perceived options and constraints or personal control arise. They direct the search procedures that are part of the choice processes involved in fertility behaviour. In Indian villages these learning mechanisms often address a relatively small scope of information. The direct reference groups and the local communities usually provide relatively homogenous behavioural models. Village life and labour are primarily centred around agriculture with more or less strict rules about rights and responsibilities that organise people’s lifestyles. Cultural institutional backgrounds, such as religion and family systems are shared to a large degree. Family planning and health facilities have sometimes little salience, education may be poorly accessible to girls and communication with the outside world through transport or media is often limited. Nevertheless, there is considerable social change in present-day India (even in the remote rural villages. Even if communication, education and health systems do not function optimally, they still provide principal channels for new information. And once messages have entered local communities, they can rapidly spread through the informal networks of family, neighbours and friends, and can be applied in innovative behaviour.

It is not only social change that gives some nuance to the picture of fertility behaviour in India; a life-time perspective also warrants a differentiation of considerations and behavioural mechanisms. Marriage timing, the ability to use contraception effectively or reproductive motivation may depend on attained level of education. Women’s personal voice in reproductive decision making seems to be dependent on the stage in the life course. In the early reproductive career, choice with regard to sexuality, childbearing and contraceptive use is often characterised by high social pressure and little effective knowledge and control, and decision styles are often characterised by institutional rule following and low levels of explicit calculation. In later stages knowledge and power tend to increase, and the design of the further reproductive career is to a greater degree a matter of explicit deliberation. The salience of reproductive health may become greater after personal experience of pregnancies and
deliveries, and women’s knowledge about contraceptive methods accumulates through exposure to sources of information such as media, family planning workers and observation and discussion in the local environment. The analysis of the contents of the information backgrounds, their dynamic character and the processes involved in their translation into personal considerations contribute to an understanding of how people decide on matters of fertility and proximate determinants. The understanding of these principles underlying fertility behaviour can provide suggestions for and underpinnings of family planning and health programmes. If it is known which information reaches people, how they learn it, from which sources and via which channels, and how they use it in further stages of the choice process, more effective and better specified interventions can be designed which will allow people to behave in accordance with their capacities and basic needs.

8.6. The Indian Family Welfare Programme in behavioural perspective

8.6.1. Preface: the individual and the global perspective

The Action Plan for Revamping the Family Welfare Programme (Ministry of Health and Family Welfare 1992) marked a major departure from the past orientation on population and development in India. Although population growth remains a major issue underlying the programme, it has now explicitly placed human beings at the centre of the activities related to population and development. The programme also more firmly situates family planning within the broader context of reproductive health. In this respect it is congruent with and considerably antedates the International Conference on Population and Development (ICPD) in Cairo 1994. The effectuation of any new orientation, however, requires considerable time and a recent evaluation of India’s family welfare programme by the World Bank (1995) found that the implementation still faces a number of unresolved issues, among which the shift to a client-centred approach.

The major conclusion of the Cairo Conference, which is supported by the Government of India, is that individual well-being in terms of reproductive health or the status of women and demographic objectives in the sense of fertility decline can be pursued simultaneously if the design and management of programmes is directed to the rights, needs and ambitions of individual men and women. These functional and normative considerations define individuals’ and couples’ decision making as the key issue in development. The micro-perspective of this study adds the behavioural-theoretical component to these considerations and thereby provides the scientific underpinning of the individual-based approach. The framework represents the individual perspective of reproductive behaviour: how and why do people make choices about having a child, about using contraception or about utilising services, within their social context and within their life course. As such it can be a helpful frame of reference to develop the client-centred direction in which the Indian family welfare programme wants to move.

This formulation responds to an acknowledged need for a stronger theoretical foundation to increase the efficiency and effectiveness of intervention programmes in the field of fertility and reproductive health. One of the main outcomes of a World Bank donor workshop on effective
family planning programmes expressed that in order to arrive at effective programmes, more information about and a better understanding of the social aspects of women’s health and reproductive behaviour will be needed (World Bank 1992). The workshop also called for better methodologies to be developed for studying people’s behaviour and choices concerning health and fertility. After an evaluation of several decades of family planning programmes, Tsui et al., (1992) arrive at similar recommendations about theory requirements (cf. ESCAP 1988, McNicoll 1992). Also for the particular case of India, the family planning programme and many IEC strategies have been criticised for the inadequacy of their social scientific underpinning (e.g. Bashar 1993, Jejeebhoy and RamaRao 1992, Shanmugam 1989).

8.6.2. Choice and information

The assessment of choice in terms of the notion of personal considerations would reveal people’s aspirations and functional values of fertility-related behaviours, the perceived options to realise these aspirations, the perceived control over actions required to realise them and the style of decision making involved in reproductive behaviour. Programme efforts should be directed to remove the various possible constraints associated with these considerations, which impede free, motivated and responsible choices and their effective implementation. Reproductive and health motivation, perception of and control over reproduction and health, and perhaps even decision styles may be seen as criteria for the identification of programme target groups.

Recommendations for programme efforts developed from a choice perspective would, of course, focus on expanding people’s perspectives through the provision of a broader range of contraceptives (in particular spacing methods) and of information about their availability. But IEC-activities would also include information that would allow people to position different contraceptive methods in their motivation structure in terms of relevant consequences of their use: financial and time costs, health risks, reliability, duration of effectiveness, the consent or cooperation of partners or a larger social environment, ethical or religious considerations, etcetera. Moreover, the provision of effective knowledge not only includes such motivational aspects, it also involves considerations of perceived control, which may determine how well people can successfully execute a behaviour required to implement choices with regard to contraceptive use or having children. New research is needed to establish the relevance of the concept of perceived control in family planning programmes and fill the gap of systematic knowledge about this aspect of reproductive choice. However, several efforts seem relevant if they are employed in the perspective of perceived control. These efforts would include the provision of accurate (physiological) knowledge about health, pregnancies and family planning methods, since lay concepts may represent incorrect ideas about intervention strategies or may lead to beliefs that desired outcomes are a matter of chance or fate; that they are unpredictable or under the control of other forces. Perceived control is likely to be a relevant concept in the sense that at present women may feel they have little influence in sexual, contraceptive or reproductive matters.

Although this will not be alleviated unless by broad social change, efforts might be directed to make those in the family with decision power more responsive to the needs of these women. Lastly, application of the notion of control in other study areas might suggest that aspects such as the ensured availability of contraceptive supplies or proper counselling and monitoring in service delivery may not only have practical implications for clients’ family planning and health
behaviour, but also consequences for the confidence and effectiveness with which they engage in contraceptive use.

A more deliberate style of decision making may be encouraged to allow women and couples to adjust their reproductive careers to other possible life goals such as good health, work or mobility. This might be established if spouses heed the consideration of timing (especially the first) pregnancy and birth, and if they engage in an explicit communication about the pros and cons of having a child or about related considerations such as contraception or sexual intercourse. IEC activities, therefore, should include messages that convey the idea that normative (institutionalised) patterns of marriage and childbearing are not necessarily those that would parallel the most desirable development of couples and individuals; the consideration of alternatives and spousal communication may reveal more suitable opportunities and provide people with real choice.

Responsiveness to people’s needs would require more than listening to what they say and providing solutions to identified concerns. The understanding of information processing and mental schemes that underlie decision making and behaviour, would also require that messages should ideally be phrased in idiom and concepts that are in line with their perception of reality. This underscores the need to adapt the design and organisation of IEC efforts to the local cultural context of the (potential) recipients (Bruce 1980, Warwick 1988). It should be recognised, however, that this may involve contradictions between on the one hand internalised mental frameworks, such as those derived from institutions like local knowledge systems about health and reproductive physiology, and on the other insights with a scientific and allopathic foundation. Similarly, girls’ and women’s position with regard to reproductive and health choices can and does arouse much dispute between institutional circles. Effective information and service strategies must somehow find a way out of this dilemma by carefully accommodating to people’s perceptions, without withholding essential messages and facilities from them. This does not necessarily imply an agreement with indigenous beliefs, but it does suggest an adequate knowledge of and connection to people’s mental frameworks.

Extensive audience research is required to assess both people’s representation of the choice situation and adequate programme responses by means of information and services. The analysis and interpretation of reproductive and health decision making in terms the framework’s personal considerations is a valuable contribution to the development of this audience research, which remains a deficient aspect of the IEC programme’s design (UNFPA 1991b, Shanmugam 1989, World Bank 1995).

8.6.3. Context and information

The incorporation of the institutional environment of individual considerations in the theoretical framework is a crucial provision with respect to a culturally sensitive formulation of IEC messages and services supply. It situates fertility and reproductive health in a broader perspective, not only culturally, but also socially, economically, politically and historically. An institutional analysis differentiates the sources of personal considerations and identifies their contents and influence, as well as their mutual and/or hierarchical interaction. Thus, it may embed local networks and community institutions in the multi-level context of, for instance, regional-based family systems and labour markets, national family planning and health programmes or nation-wide caste principles, and a global economic system, science or
consultative bodies (cf. Retherford and Palmore 1983, Watkins 1989). The contextual disentanglement not only provides essential understanding of the backgrounds of individual behaviour and the channels through which information reaches decision makers. It can also subsequently help to identify (and even design) the social institutions, in different sectors and at different levels, that can play a role in the achievement of the aim of providing people with the possibility of free, motivated and responsible choices.

The question then becomes how the needs and requirements of individuals can provide an input into national policies and programmes, or even into global actions and agreements (such as the ICPD Programme of Action or efforts in social-behavioural or medical sciences) and how the results in the form of services or messages can be transmitted to the people by transforming the institutional context at different levels and in different sectors. This need not be restricted to the public health sector at various levels, but may also involve the private sector (e.g. for provision of contraceptives, care at childbirth), the voluntary sector and NGO’s, as well as other public sectors, such as legislation or the educational system. Evaluations have pointed out that in India the educational curriculum can be improved by more attention to practical knowledge and skills for life, such as matters concerning health, basic ideas about conception and pregnancy, and the essentials about different contraceptive methods. Moreover, education can contribute to a general improvement of the status of girls and women if (implicit) adverse gender stereotypes in the curriculum are averted (UNFPA 1991b, UNICEF 1991, World Bank 1991).

Furthermore, support can be sought by representatives of more informal institutions. Thus, those exercising power in the family with regard to reproductive decisions (the husband, the mother-in-law) could be given specific information with regard to their contribution to the reproductive health of their wife or daughter-in-law. At the community level beyond the direct household or family circle, priests or imams could be invited to strengthen certain messages from a religious point of view. Other local institutions (women’s groups and mandals, folk groups, the panchayat system) can and have been used to plan and implement health and education activities, or to disseminate related information.

8.6.4. Life course and information

Health and childbearing can be situated not only contextually, but also in the dimension of life time. As with the position taken within a context, the position in the life course has a profound influence on perceptions of, motivation for and control over reproductive behaviour. It underpins the idea that target groups should not only be differentiated on the basis of situational or personal characteristics, but also on aspects that are connected to the successive stages in people’s lives (Bruce 1990, Irudaya Rajan, et al., 1993, Khan 1987). The strong emphasis on sterilisation in the history of India’s family planning programme focused on the last stage of the reproductive career and severely neglected the requirements of people before they wanted to stop having children, or on their possible role in later stages of life.

A life course approach provides an important criterium for the identification of target groups for the family welfare programme. A major implication in this respect would be the programmatic focus on adolescents and especially girls (before entering marriage). They should be provided with some basic knowledge to prepare them for their reproductive and marital careers and to allow them free and informed choices in these matters. But also in the broader perspective, the formative phase of adolescence is considered essential for further life development and general orientations. Education plays a crucial role in the perspective of
reproductive health and fertility. Not only because of the perceived incompatibility of the marital (and childbearing) and educational careers which prevents the risks of early childbearing but also of the educational effects in the sense of strengthening women’s position in the family and in the sense of improvement of decision processes: it may stimulate ways of thinking and information processing that involve more mental reflection, more initiative for information search, more accurate interpretations and higher confidence in personal capacities (Cochrane 1979, Basu 1992, Jejeebhoy 1991, Mason 1984, Sears 1987, United Nations 1987). The specific needs of adolescents would involve the demand for counselling and easily accessible, reversible and effective means to prevent births and secrecy of service and delivery. In subsequent stages of the reproductive career, the need for reversible family planning methods may become apparent, because of health considerations but probably also because of other reasons. Sustained availability and effective knowledge of such methods are prerequisites for a free and informed choice in this matter. At the end of the reproductive career sterilisation may be added as a viable alternative to the contraceptive mix. In India decision making on childbearing, contraceptive use, marriage, and sometimes also breastfeeding and sexual intercourse, is not entirely a private concern. Parents, parents-in-law (particularly mothers-in-law) and husbands often exert extensive influence over these decisions. Programmes can therefore be directed at such secondary target groups with the aim of sensitisation about health aspects of specific reproductive behaviour, enhancement of women’s position in the household and eliciting support for the reproductive choices of the primary target groups (cf. Ruzicka and Kane 1987, Shanmugam 1989).
8.6.5. Sources and channels of information

Information, education and communication strategies refer to the efforts to spread relevant information to the people. Apart from the question of which specific information is relevant and what is the target audience, such strategies also involve the question of how to convey such information effectively and efficiently. The choice of communication channels is, however, importantly dependent on the specific issue at which a campaign is directed and the specific target group for whom the campaign is designed. There are a number of avenues through which people become aware of relevant information which may influence their considerations underlying their reproductive behaviour.

In an overview article about interpersonal communication in family planning programmes in the ESCAP region, Limanonda distinguishes four categories of interpersonal communication:

1. Communication at the individual level which includes face-to-face communication, word-of-mouth, peer group discussions, interactions between neighbours, and personal contacts between ‘satisfied’ current users and the potential users, but also the negative rumours circulating in a community (cf. Entwisle et al., 1996, Freedman 1987, Khan 1987, Niehof 1992, Sathar 1993). A crucial social factor appears to be peer use (not simply peer approval) which clearly concurs with the ideas of social learning theory.

2. Communication at the family or household level includes husband-wife communication and interactions between family members. The strict segregation between male and female worlds in India impedes communication between husband and wife to a large extent (cf. Hollerbach 1983, Khan and Singh 1987, Koenig and Foo 1992).

3. Intra-programme communication involves the interaction between the different levels of the operational and management system, from the policy makers to the grassroots workers (e.g. Rajarethnam and Deshpande 1994).

4. Communication in the information and services providing process pertains to the interaction between family planning service providers or other change agents and service recipients or clients: contact with doctors, healthworkers, dais, but also with school-teachers, salespeople, performers in village theatre or puppet shows, et cetera.

Both theoretical studies (e.g. Bandura 1982, 1986) and empirical observations in the field of family planning (e.g. Bongaarts and Watkins 1996, Cleland 1987, Entwisle et al., 1996, Freedman 1987, Khan 1987, Niehof 1992, Sathar 1993, Watkins 1989) show that, apart from own experimenting, observing others’ behaviour and direct communication with family members and direct acquaintances represent the major sources and channels for learning. Despite this acknowledged importance, the means to utilise these informal information channels are limited. Nevertheless, knowledge of local networks and the function of behavioural models may help to identify target groups for IEC efforts. Another issue is, however, how relevant information gets into local networks in the first place, before it spreads through these channels (cf. Caldwell et al., 1987b).

Mass media, education, and the interface between (prospective) clients and service providers (doctors, health workers, extension workers, dais, et cetera) are main avenues to penetrate local conversation and disseminate information from various institutional backgrounds. Mass media can be exploited in IEC strategies, particularly in the sense of creating awareness among large audiences. The messages conveyed through mass media need to relate to people’s existing decision frameworks in order to generate adequate effect. This implies that messages
conveyed through mass media need to address specific issues, must be directed at specific target audiences and should be based on thorough audience research (cf. Bashar 1993). However, the potential of mass media to influence motivational aspects, personal control, or decision styles without support from other communication channels seems to be limited (Bashar 1993, Limanonda 1993, UNFPA 1991b). Research and communication experts indicate that interpersonal communication is necessary to change attitudes and opinions and to build up motivation to utilise reversible contraceptive methods or adopt family planning in general (Bashar 1993, Limanonda 1993, Rogers 1973, UNFPA 1991b). In that sense, mass media and interpersonal communication must be seen as complements, rather than as substitutes. Interpersonal staff-client relations are the most effective communication medium available for IEC strategies to influence people’s personal considerations. Under the condition that this direct interpersonal communication conforms to certain quality standards, it usually has a more profound impact on people’s motivation, sense of control and decision styles than communication through mass media.

Although schooling is not primarily developed for dispersing information about reproductive behaviour, part of the educational curriculum could be focused on matters concerning health, fertility and aspects of proximate determinants. This would involve basic ideas about conception and pregnancy and the essentials about different contraceptive methods. Furthermore, education seems to have fundamental effects on people’s motivation, awareness of behavioural options and skills to make decisions in accordance with their needs. The crucial importance of schooling is, moreover, emphasised by the notion that at the end of the period of adolescence in which children receive education, basic life orientations have sunk in and carry their impact throughout the rest of life. Education in forms other than formal schooling may consist of support of women’s groups or utilising the potential of local artists’ groups. This last form has the advantage of being very adaptive in the sense of its ability to implement information tasks in a culturally sensitive way and focusing on specific target groups within the population.

Lastly, information can be channelled into a community through messages by those who are considered important by relevant target groups in the community: religious leaders, panchayat members, central figures in local networks. Their identification, in turn, depends on a careful (institutional) analysis and their support must be sought, which may define them as secondary target groups for a IEC programme.
8.6.6. Conclusion

Contextual analysis and audience research concerning people’s considerations about reproductive behaviour and health are primary requirements to accomplish a client-centred family planning and health programme as envisaged by the Indian government. They are indispensable for the identification of target groups, the contents and channels of programme efforts, and the barriers to individuals’ free, informed, motivated and responsible reproductive decision making. They are similarly required to identify the institutional sectors and levels to focus practical and effective interventions. The framework’s analysis in terms of choice, institutional context, learning and life course can be viewed as providing important behavioural-theoretical starting points in this respect.