CHAPTER VII
CONCLUSION

Of all odds and vicissitudes of life, the sexual and reproductive dimensions and the processes attract untamed attention in the case of humans. This study, conducted in an interior tribal settlement inside the reserved forests of Idukki district in Kerala, has attempted to explore the unique sexual and reproductive health practices prevalent among the Muthuvars. In January 2010, towards the last phase of this study, the Government of Kerala declared Edamalakudy, as the first tribal panchayat of the state. Muthuvan that lives in the secluded hills of Idukki district holds on to different cultural practices, especially in the spheres of sexual and reproductive health. The thinnaveedu and chavadi are the two ostensible examples of their loyalty to 'tradition' and practices.

In the beginning of the study, there were certain grey areas regarding the process of interaction of indigenous people. Gradually the layers of confusion unravelled and it is understood that the process of interaction is continuously changing and these changes are based on historical, political, social and economic paradigms. Accordingly, the theoretical understanding of the concepts like health, health culture and medical sociology became the focus of the literature review. This led to an extended analysis of various studies taken place in the area of health and health culture. Against this background, the researcher set the objectives of the study as following:

To explore the role of cultural components in sexual and reproductive health practices of Muthuvan women. Sexual and reproductive health practices of an indigenous community are important to understand their conceptualisation of each practice and ritual associated in this area. An attempt was made to capture these interactions and to examine the various implications in their everyday life.

To analyse the dynamics of change in sexual and reproductive health practices among Muthuvan women. Due to the influence of external bodies their cultural practices related to sexual and reproductive health are undergoing changes. In the interface with external world, their local practices are changing and women face challenges in their sexual and reproductive health practices.

To examine the response of Muthuvan women in the context of changes happening in their sexual and reproductive health practices. It is important to understand their response and standpoint in the context of change.
Based on the objectives the researcher chose ethnography as the method to effectively capture the day-today life and indigenous culture and thereby understand the nuances of their sexual and reproductive health practices. The methodological approach of the study was formed by the ontological assumption that the process of understanding relationships and linkages of people, beliefs and symbols is attached with. Qualitative paradigm was selected for the study keeping its epistemological premises. The symbolic interactionism and ethnomethodological position in the research process helped to understand meaning people attach with objects, language and symbols in their world. Based on ontological and epistemological position the data was collected through ethnographic fieldwork in which the researcher was an insider attempting to participate in their daily life activities. The research followed an interpretive, actor-centred approach and it examined the socially constructed notions of sexual and reproductive health prevalent in Edamalakudy from a social medicine context. It explored, how the Muthuvans attach meaning to symbols and how these meanings are perceived and applied in their lives. In other way, the study examined the entry of contemporary institutions or changes into and their influences on the indigenous life and its surroundings. The interface of 'tradition' and 'modernity' presents confusions, fear and guilt in the lives of Muthuvans and it poses new challenges. Muthuvan women’s response to these dynamics and challenges they face are the main focus of this study. What interested the researcher were the changes happening in the sexual and reproductive health practices of Muthuvans and how these changes were influencing the position of women in their traditional society. Further, the study had tried to understand how different members of the tribal community, of different age groups with different levels of exposure to the external world respond to the changes in sexual and reproductive practices.

The fieldwork for gathering the data was done in two sites of Edamalakudy, namely Andavankudy and Ampalapadikudy. The researcher also visited other surrounding kudys of these selected sites. The researcher further went to Muthuvan kudy in Marayoor to understand the differences in their practices. These exercises helped to get a deeper understanding of Muthuvan’s SRH practices and the response of Muthuvan women in the context of changes happening in those practices.

Muthuvan community is rich with 'traditions' and rituals. It is interesting to note that every girl before marriage goes through three ritual ceremonies. From childhood on, girls understand the marriage customs and the importance of clan system in it. Her concepts about marriage and motherhood are developed from childhood. She is trained from her childhood to make mats, to produce their staple food items, do agricultural works, to collect firewood, to understand basics of making house and the norms of the kudy and their clan system. It is not only the duty of the parents but also the people in the kudy to restrict her sexual relationship
Appendix II

EDAMALAKUDY SOCIAL MAP
vessel that holds together each drop of blood dropped from her body every day. That vessel, uterus, has the capacity to hold thirty drops of blood in total. When it is full, that blood begins to flow from the vessel to the outside, which they consider as menstruation. Depending on a person’s height and weight, the size of the vessel also varies. When one is pregnant that blood is used by the baby so that one does not bleed that time. After delivery the vessel becomes wider due to baby's size and it give more storage capacity. That is the reason why one gets menstruation only two years after delivery. These concepts related to their body functions help to understand the meaning they attach with body and its functions. Here, one interesting factor is that only when the blood comes out is it attached with pollution. Otherwise it is held in the stomach which is used for the growth of baby and does not lead to pollution.

The meaning they have constructed on fatherhood and motherhood is that woman can get pregnant, but the man carries the baby, which he eventually passes on to a woman's womb. If it is a conducive environment, that is, if the woman is healthy then the baby will grow there. “No woman can produce a baby alone”. Sometimes women's body may not be healthy enough to receive the baby, but later if the woman becomes healthy, the baby will grow in her womb'. These concepts related to menstruation, motherhood and fatherhood show the meanings they have attached to each system is different. In the event of conception, Muthuvan emphasise the role of father too. Here one can see the construction and meaning attached with fatherhood and motherhood is related to what Rosaldo (1980) calls 'people's meaning' and Moore (1988) 'culturally given definitions'.

**Changing Predilections of Health Behaviour**

Most of the Indians who live in rural areas at some point of time in their life must have taken recourse to folk or herbal medicines to treat various ailments. These medicines did not come from outside, but from the rich 'traditions' they have inherited from their ancestors. In the domain of sexual and reproductive health, there exists plenty of culture-specific methods and remedies. Often conflicts arise between the practices of western allopathic medicine and the belief systems behind the ethnomedical practices. In the case of Muthuvan women at Edamalakudy, acceptance of nontraditional (mostly allopathic) medicine depends on specific health situations and affordability, which is interpreted in terms of support for treatment outside the forest. But, the life of Muthuvan in Marayoor, another site that comes under the purview of the field study, is different. There, I could see that most deliveries are taking place in the kudy, even when they have sufficient support systems of modern medicine, with the nearest Community Health Centre (CHC) only at a distance of five kilometers. They prefer to deliver in the kudy due to familiar surroundings and procedures. Therefore, the hospital deliveries are very few in number. In the case of Edamalakudy one should have sufficient logistic support in order to go outside the forest and arrange hospital delivery. Living almost
five to six months outside their home is not acceptable for women. They prefer being in the familiar atmosphere, in one’s own kudy and people during that special period in life. The cultural aspects of delivery is more important for them, which include the mud floor of the thinnaveedu, fire from the floor hearth, and the twenty first day ritual and purification before taking the role of wife and the household chores back after delivery.

Visibility and Invisibility of Pollution

The importance that this particular tribe of Muthuvan attaches to the concept of pollution is evident from their norms and customs connected to menstruation, delivery and death. Muthuvan's living system is different from other tribes in Kerala. The separate dormitory system of chavadi and thinnaveedu is an important evidence for this cultural variation. Sex-based separation of children makes gender difference clearly spelt out among them at an early period in life. The separation of children during night and sex wise arrangement for sleeping limits interaction between opposite sexes. Their strong clan system and strict observation of norms in the kudy also uphold and further reinforce sexual segregation. As a result, peer group interaction is well established among boys and girls through the chavadi/thinnaveedu system; among the young Muthuvans, there exists a strong bond between friends of the same sex. They give value to their peer's opinion when it comes to decision-making.

Most of the indigenous communities associate pollution with menstruation, delivery and death. There are contemporary practices even among the general population where some people do not enter kitchen and do not go to temple or other places of worship during menstruation, though in recent times such strictures are less frequently observed. Among two groups of Christians in Kerala, namely Orthodox and Jacobites, women would not go to church during the time of menstruation. Even if they go, they would not go up to the front side where the faithful receive the ‘holy Communion’ during mass. When it comes to Muslims, they also follow pollution norms during the season of fasting, where menstruating women cannot carry on with fasting and prayers. In contemporary times, religious restrictions regarding pollution are being relaxed, are flexible and are left to the decision of each individual. Whereas in an indigenous community, pollution norms are strict and rigid, and individual control over these practices is quite limited. Among the indigenous populations, negotiation with the bonds of the traditional culture is not as smooth as that is among general population. Shame and pollution are two prominent aspects attached to delivery. Shame means that a woman should deliver in silence and fight back her pain, in order to not to attract attention. But pollution is inevitable and new mother considered is impure. Pregnancy and childbirth are regarded as natural rather than medical events.

Usually, for women in general, the first menstruation is a frightening event and sometimes the
girls are not aware about this body mechanism and may face this traumatically. Whereas in Edamalakudy, children are well equipped with the knowledge of it and have more exposure from the community itself, which enables them to face the situation. The situation is same with the delivery as well. Girls observe delivery from childhood and see the pain in it, which empower each girl's womanhood. She is capable to deliver even if she is alone. When the girl is brought up with restrictions, she will be instructed to obey the pollution norms and clan rules. Girls get to understand the social and cultural meaning of their body through observation and participation in the rituals and events in the kudy, like delivery, maternal death, marriage and thalemuttu. The symbolic meanings attached to some of these rituals are expressed through ashapattu. They sing songs, teasing each other and playing in between, an exercise that makes a grounded understanding of the symbolic meaning attached with it. Marital relationship is maintained within the boundary of a clan. Therefore, their movements, language and relationship are controlled with opposite gender through the kudy system. But during the time of marriage both groups play together and sing ashapattu but not face to face.

The song's meaning is physical maturity and beauty of girl which is symbolised with their surrounding resources like a budding flower. These songs and its symbols make her understand the roles she is going to handle and what is expected to be done by the kudy. Further the teasing and plays make the girl accept new role and also be bold enough to face the harsh situations ahead. Throughout a girl's life, the parents would prepare her for the inevitable institution of marriage. These norms are constantly constructed and enforced through the elders in the kudy. Vast majority of marriages are with the marriageable cousin. There is no dowry system among them and women have equal property rights along with their brothers. The life cycles of women are crucially encoded with the kudy restrictions and limitation in movement and relationship. Some women give up their marital bonds (some before marriage) and elope with their elder sister's husband. It is also a hint to their childhood restriction on relationships within a particular clan. Most of the boys and the girls know who are the marriageable cousins from childhood onwards and may be from one family itself two girls will look at the same groom. Eventually one will marry him with the selection of parents and later the younger one also get chance to be attached to him and that result in running away later.

Marriage: Transitions in the Social Construction of Relations
Thurston (1909) reports that Muthuvans were following polygamy and polyandry. He further, says in the cardamom hills which include the Edamalakudy area Muthuvans are monogamous and express abhorrence of both the polygamous and polyandrous conditions, though they admit, with affectation of amused disgust, that both are practices by their brethren on the high lands. In Edamalakudy, the present old generation is monogamous and interestingly a few
from the young generation shows a tendency towards polygamy. The family members of the Muthuvan who is involved in a polygamous relation faces stigma. Some of the community members communicate the feeling that they are 'morally wrong'. This notion of morality is a recent phenomenon and which is something that entered from outside. Among people from the same generation, one group shows a tendency towards polygamy and the other group says it is 'morally wrong'; this clearly indicates a transition taking place in their marriage system.

Thurston (1909) reports that Muthuvan women used to enjoy the freedom of decision making in family and their husbands also worked along with them inside the house and in the field. They enjoyed the matrilineal status and privileges that they inherited. Over a time, changes have occurred in the position of women in the kudy. The power went to men's hand and taking care of the household and agricultural work fell on women’s shoulders. Thus, the earlier rhythm of life was disturbed. The sharing of household work is not much observable. The power hierarchy is maintained by men and most of them simply want to enjoy freedom. Men support the contraceptive intake of women in view of blocking menstruation. They do not bother about the health consequences caused to women by this type of diversification of a contraceptive. On the other side, Men do not want to break their freedom and enjoyment at home. If the wife is in thinaveedu the husband has to take care of the children and prepare food for himself. In case of Edamalakudy the autonomy of women is restricted and bounded with pollution practices. Women cannot travel outside in case of any emergency which occur at the time of menstruation or delivery. They find themselves helpless in such situations. A recent phenomenon is the consumption of the contraceptive Mala-D, by which they try to modify their bodily rhythm of menstruation according to the convenience of her husband and family responsibilities including the timing of agricultural work. Some men are exposed to porn movies which is also a recent entry into Muthuvan's life. Women tend to becomes depressive and have suicidal tendencies. Excess intake of hormonal contraceptives will change women’s mood and temperament and the situation become worse. Studies show that (Pitula 1995) women may be vulnerable to depression during phases of hormonal changes and these hormonal imbalances can play a serious role in depression.

The Biological and Social Body
The question of body politics is significant in this context. Biological reproduction is an area in which women and men are unequal. Women only have the capacity to menstruate, become pregnant and give birth to children. By rooting gender inequality in biological reproduction, one should overlook the social and cultural frame work in which women bear children. The female identity, strength, and status are questioned in numerous ways like to change of her dress code at different locations and stages of life. Comments like the following affirms the above argument, ‘It does not matter whoever one may marry, let him give her a child and go'.
Importantly, to argue that the critique of reproductive interventions needs to go beyond the liberal notion of autonomy does not necessarily mean that one abandons the area of body politics and it is necessary to fall back upon essentialisms, 'discursive' (Fuss 1989) or biological or be satisfied with theorising the body as a metaphor.

Implementing programmes without understanding the culture may lead to demolish a community itself. It is noticed that the population of Edamalakudy is declining and the number of infertility cases are increasing. “Social life is composed of multiple realities, which are, as it were, constructed and confirmed primarily through experience” (Long 2001: 51). The cultural association and its importance in daily life vary from culture to culture. The basic insight from this perspective is that when actors with diverse values, interest and power come together continuities and discontinuities in sexual and reproductive health practices emerge.

A woman in the Muthuvan community in Edamalakudy is at the lower end of the power structure and autonomy (which are mainly male dominated). The components of culture actually mediate in their limitations and struggle. Muthuvans, especially women, appropriate the modern schemes, facilities and services in ways that suit their felt needs. The responses to outside world are important for their survival. Therefore a negotiation takes place; they hold on to the 'tradition' and at the same time strive to adapt to contemporary changes. Social aspects of medicine are constructed through the articulation of power. It varies on people, place and context. Hence the medical discourse takes a dominant role over the health and related area (Lupton 1984). In the trajectory of the history of reproductive health, one can see different perspectives and agenda of the state. According to these visions the reproductive health programmes were modified and most of them were target oriented rather than social oriented. In the context of SRH of indigenous communities the biomedical aspects cannot stand alone. It is interlinked with cultural and social aspects of community. Therefore, understanding their culture and practice is important before implementing any programme for them. Social medicine and biomedicine are two different systems but equally important in the context of general health care especially for indigenous community.

**Woman’s Status**

Muthuvan follow matrilineal lineage and are a matrilineal society which gives more respect to women. At the same time, they hold on to customary notions of purity and other characteristics of patriarchy. In the kudy men coordinate and control the norms and rules that affect women. Women never question 'traditions', customs and norms, but carries on with their multiple roles. Men enjoy power, freedom and in many cases exposure to ‘outside world’. Women never sense the patriarchy in the system but they mutually understand and accept the rules, norms and taboos in the kudy. They accept the role of their men in
conception and their role in motherhood. The Muthuvan norms, taboos and beliefs system clearly show the characteristics of patriarchy. That the women never sense the role of patriarchy does not mean that the community is not patriarchal. The different gender positioning is based on the status of men and women in the public and private sphere. Among the Muthuvans too, men can go anywhere alone and if a woman happened to go anywhere alone, she is asked to make statements in front of kudy people regarding her purity. Women are supposed to carry the burden of the 'tradition'.

Muthuvan women 'agree' to discontinue their studies and give 'consent' to get married and have sex, 'decide' to become pregnant and 'prefer' to neglect their own health and nutrition. Their life starts and goes on in a rhythm that reinforces the typical notions of who a woman is and should be. Traditional fables, folk songs, common sayings, idioms- all create a feeling that women are somehow less important and less intelligent than men. Although she may be a breadwinner to the family, working in the agricultural field from dawn to dusk, doing all household work and taking care of the children, she is controlled by the kudy system and its norms. These realities challenge the status of women showcased in the Kerala model development. Still women are dying of problems associated with delivery at home and infants are dying for not getting treatment for common illness like diarrhea. As per Bhore committee report (1946), if it is a tribal and hilly area and the population is more than 3000, there should be a health sub centre with female and male auxiliary nurse, whereas no regular health service is available within the 35 kilometers periphery of Edamalakudy.

**The World of Contraceptives**

The changes happening in the areas of sexual and reproductive health practices among Muthuvans are rather slow due to the isolation. Further, the changes brought into their culture which is a substitute for their discomfort, are accepted fully. The experiments and innovations are manipulated and utilized through external agents. Certain changes are brought into the Muthuvan kudy which are seen as a diversification of the original intent of the external institutions or agencies.

Another side of this story, as the literature shows is that in Asia, population control programmes are often coercive and target driven (Devika 2008). This coerciveness makes people more vulnerable and the target remains incomplete. In Edamalakudy the tribal people have been the beneficiaries of contraceptives supplied by the Government Health Department since 1995. Initially Muthuvans did not understand what birth control was meant to be. In general, this tribal population maintains a good birth gap naturally through prolonged period of breastfeeding and they get late onset of menstruation in the post-delivery period. The health department officials failed to understand if there is any need for a contraceptive for this
tribal population to maintain a birth interval. They also failed to explain the purpose of the contraceptive to a community that has been living totally away from the ‘modern, civilised’ world.

Gradually, when ample supply of Mala-D started flowing into the kudy, Muthuvan women identified hitherto an unexpected use for Mala-D but, very specific to their culture and circumstances. A major diversification occurred there, whereby birth control got shifted as a menstruation control method. All women irrespective of marital status and fertility status (sterilized mothers too) started using this oral contraceptive for controlling their menstruation as per their convenience. Slowly, that became part of their daily life practice. The meaning that the policy makers attached to Mala-D was quite different from the way these Muthuvan women diverted it into. The ‘symbolic’ meaning that the Muthuvan women attach to Mala-D maybe shocking to the policy-makers and implementers of the health projects. But interestingly and unfortunately, so far the health department has not conducted a study on this shift or taken any preventive measures to control the excess, erroneous use of Mala-D.

Mala-D was promoted in the early phases of the health department’s birth control programme, but Muthuvan women were pushed into the use of Mala-D by state propaganda in a frantic effort to comprise birth rates. State government cannot be condoned from its responsibility of forcible distribution of Mala-D among these tribal women without making any efforts to understand their ‘tradition’, cultural practices and normal ways of controlling birth gaps prevalent among them. Of late, the role of the State in birth control is reduced and that role is taken over by the market. The State had introduced and pushed forward with its birth control policy, but later it withdrew without taking any interest in rectifying the negative impact of the diversified use of this oral contraceptive. It is evident from the fact that cartons of Mala-D are still flowing in plenty to each Muthuvan kudy in Idukki district. This study strongly recommends that the government should take emergency steps towards the protection of Muthuvans from the excess and erroneous usage of Mala-D.

Social change often has contradictory and double-edged effects in sexual and reproductive health. I argue that the usage of contraceptive Mala-D is not a personal or medical issue; it is a grave social concern. Once the natural rhythm of a kudy is tampered through an external device, the people get tuned with that and it challenges the harmonious system in the kudy. I respect their choice to control their body, but at the same time there is concern about the consequences of an artificially induced control mechanism. The health department in this case went wrong in two ways: first they introduced an external object without understanding the cultural practices of a tribal community and they could not anticipate the role this object was going to play in the community. Secondly, once an external device or object is introduced to a culturally different group, a constant evaluation is required on the part of the health
department to understand the impact of that object in the community.

**The Politics of Contraceptives**

Government of India has promoted population control as one of its top-priority agendas. Naturally, indigenous and tribal populations are viewed as groups easily susceptible to government offers and promotions. In reality, the state is exploiting these less privileged people, who are apparently ignorant and illiterate and so does not pose any danger of open confrontation. Further, the government never bothers how the promotional programmes it imposes on the vulnerable sections of the society actually affect those people. The state also fails to monitor the usage of an external device or object, like the contraceptive Mala-D, to verify if there occurs any involuntary/purposeful diversification of the object introduced by the government. Rao (2010: 108) points out the case of Eugenics that set out to improve the human race through two policy prescriptions: decreasing unwanted populations through negative eugenics, that is, not permitting populations that exhibited undesirable characteristics to breed; and providing incentives to the best and brightest to breed through positive eugenics. The victims of the negative eugenics have been the poor and black 'feeble minded'. The sexual and reproductive practices among Muthuvan in the changed circumstances should find a critical space in these discussions, raising the questions of rights as an individual, as a citizen and as a consumer.

Women in most cultures supposedly control their body functions and modify their daily life routine according to convenience. This control may be considered as their freedom or command over their body or could be a question of comfort. In the case of Muthuvan women in Edamalakudy it is not freedom nor command nor comfort, but is a matter of survival. For them there is no other way to avoid the stay in the thinnaveedu, but to use Mala-D and stay away from menstruation. They do not fully know the content, purpose, consequences, and contraindications of this hormonal contraceptive. The knowledge before the continuous intake of an 'external/foreign' substance is blank here. This amounts to violating the basic rights, dignity and freedom of Muthuvan women, who are left alone to face the consequences of a plan initiated by the government, without further review or support.

**Past, Present and the Process of ‘Modernization’**

Interface between 'tradition' and 'modernity' has been observed to be causing catastrophic effect in the Muthuvan culture. Agency and power depend crucially upon the emergence of a network of actors who became partially, though hardly ever completely, enrolled in the project of some other person or institution. Agency then entails the generation and use or manipulation of networks of social relations and the channeling of specific items (such as claims, order, goods, instruments and information) through certain nodal points of
interpretation and interaction. Hence, it is essential to take account of the ways in which social actors engage in or are locked into struggle over the attribution of social meanings to particular events, actions and ideas (Long 201:17). Considering the relation of actor and structure, Giddens (1987:11) argues that the constitution of social structures, which have both a constraining and an enabling effect on social behaviour, cannot be comprehended without allowing for human agency. Each individual’s action represents the community and that became adopted by others and became an integral part of that community. Any changes in the community brought by ‘modernity’ are adopted by the actors of the community. These changes which define the future of the community often result in both positive and negative effects.

The discursive and organisational strategies they (actors) devise and the types of interactions that evolve between them and the intervening parties and a give shape to the ongoing nature and outcomes of such intervention (ibid). In this process, these external interventions enter the life-worlds of the individuals and groups that get affected and thus come to form part of the resources and constraints of the social strategies and interpretive frames they develop. In this way, so called 'external' factors became 'internalised' and often come to signify quite different things to different interest groups or to the different individual actors, whether implementers, clients or bystanders (Long 2001:25). Mala-D became internalised and became part of women’s daily life practices.

Maintaining a Panchayath only for this much population without adequate basic facilities raises some questions, but still the government systems fail even to offer proper support system to such a small geographical area. For example, children dying with diarrhea are still common here. Recent incident (January 2012) of death from diarrhea of two children below two years, shows the lack of proper health facilities. Government and all politicians give many excuses regarding the difficulty in making staff and facilities available to such a geographically isolated area. But can we deny this Muthuvan population’s right to live? It is necessary to identify people from health department who are willing to stay and work in this forest for the health of this people. But it is pathetic to see that no step has been taken in this regard from the part of government.

Synergisation of various departments and agencies like health department, tribal development department and forest department is very essential to plan the welfare programmes. The protection of reserve forest and the welfare of Edamalakudy with an understanding of cultural and social perspectives should be possible through such a coordinated effort and not isolated ones. The multidisciplinary team to plan for development of Edamalakudy should consist of an anthropologist, social worker, health personnel and environmentalist. Understanding development from the view point of the actors is important and is needed to preserve and
retrieve their ancient wisdom of agriculture and ethno medicine. They were self-sufficient in terms of development. At present they have now lost the age old system of practices. Kerala, called as God's own country, has great potential for cultural tourism for which preserving the ancient tribal cultural wisdom and heritage is imperative. I am not arguing against welfare or development, but I am specifically emphasizing the need for a cultural specific approach in context of dealing with a community that is uniquely different from the mainstream society.

There is a burgeoning need to critically examine the research in the area of sexual and reproductive health. Most importantly, it is necessary to conduct extensive research in this area with the right framework of epistemologies and methods from critical social, cultural perspectives that would definitely include emic approach. Unless state institution of health department emerges with an in house mechanism to address this retrospective and reflective criticism levelled against its schemes and programmes, any degree of superficial organisational re-structuring and remedial policy making will be ineffective. What is needed is to add more culture-specific health programmes and ensure the support of the Muthuvans, re-modifying the existing programmes and making it more actor-oriented.

Thus instead of conclusive statement with policy suggestions, the research suggests for imperative needs for further research on the effects and impacts of contemporary changes to the cultural and social domain of Muthuvans. Such studies would invariably address the reasons behind the low birth rate and adapt interdisciplinary perspectives using innovative combinations of various research methods and at interconnected scales from local to global including the institutions of community, market and state. As the reasons behind the lower sex ratio are less explored in this study, it gives further scope of research. For instance, this research itself could be supplemented by quantitative and survey techniques and also through a deeper, non utilitarian cultural interpretation of practices related to health and reproductive practices, in terms of beliefs, rituals and modernity for improving the understanding of interconnections between systems and sexual and reproductive health practices. The present study opens up vistas for such explorations, which, though would be done in specific sectors, would be detrimental to the existence of Muthuvans and Edamalakudy per se.