

# ECONOMIC REVIEW

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A People's Bank Publication

THE ECONOMICS OF MARRIAGE

## Wedding Ceremonies

The pictures here and on the inside back cover depict some aspects of the nature of wedding ceremonies in Sri Lankan society. They also indicate apart from the evolutionary character of Sri Lankan wedding ceremonies, how the outlook of such ceremonies differs between rich and poor and different ethnic groups namely the Sinhalese, the Tamils and the Muslims.

The wedding ceremony is generally considered to be an important event, for people at all levels, notwithstanding ethnic, religious or other differences relating to means. These ceremonies are associated with a set of customs specific to different ethnic groups and religions. Even among the same ethnic groups the customs vary at times, depending on the socio-cultural factors in different regions. A striking example is the Kandyan wedding ceremony which differs from the low-country wedding ceremony in terms of ceremonial and customs that are observed and also in dress of the bride and the bridegroom. The dress in particular, as seen in the picture of a Kandyan wedding, often conforms to the dress of Kandyan feudal families.

The wedding ceremony is generally an occasion where people eat, drink and enjoy at the expense of the bride's family. Although gifts are exchanged (in an urban wedding ceremony the most convenient form of gift is a few bank notes put in an envelope) they hardly compensate for the expenditure incurred by the host party on food, drink and various other items. A simple wedding ceremony according to present day norms is a gathering of family members and close relations of the two parties (in some cases a few friends close to the couple are also invited) where a minimum degree of customs, such as exchange of rings, is observed. Even a simple wedding ceremony of this kind ends up with unanticipated expenses. Those who have limited means but think of distributing them more rationally between alternative needs may contract a marriage, but have no wedding ceremony. Yet, such marriages attract the attention of those who are ceremony-conscious and like to gossip about "secret marriages" etc.

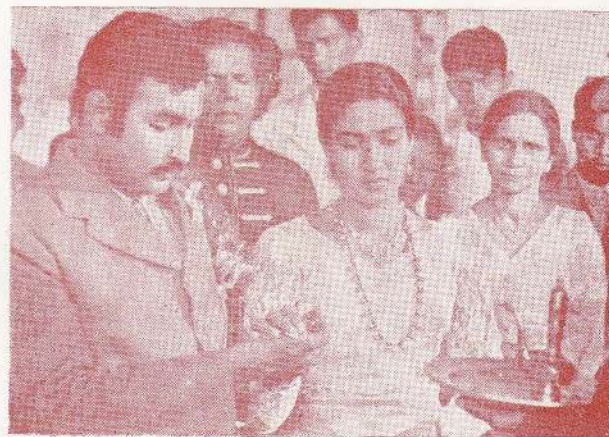
*(Continued on inside back cover)*



**Addendum:** At page 9 in para. 2 of the middle column, at the end of line 10 after "advertised by..." add "parents, particularly by the father. There were 29 (30%) self-advertised cases, while another 9 have been advertised by..."



*The traditional Kandyan wedding adopts elaborate ceremonial—the South Indian court influence in jewellery is apparent here.*



*An upper middle-class coastal wedding of 50 years ago—the hybrid dress is apparent here.*

*Traditional marriage customs of the Sinhalese. It is customary for the clasped hands of the bride and bridegroom to be washed with water poured from a vessel with a spout. At left are details from Saliimberama in Dodanduwa 19th century and right details from Sri Rabularama in Totagamuwa 19th century, as drawn by Manjusiri and reproduced from "Ceylon Yesterday, Sri Lanka Today", by kind permission of the Ceylon Tourist Board.*



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### COVER

- A composite view of the economics of marriage by Upali Herath, a creative student at the Institute of Aesthetic Studies, University of Sri Lanka.

THE ECONOMIC REVIEW is intended to promote knowledge of and interest in the economy and economic development process by a many sided presentation of views & reportage, facts and debate.

THE ECONOMIC REVIEW is a community service project of the People's Bank. Its contents, however, are the result of editorial considerations only and do not necessarily reflect Bank policies or the official viewpoint. Signed feature articles also are the personal views of the authors and do not represent the institutions to which they are attached. Similar contributions as well as comments and viewpoints are welcome.

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# DIARY OF EVENTS

## January

- 1 Problems faced by the poor nations repaying their debts of more than dollars are billions in such nations may be exaggerated, a new World Bank Study released in Washington indicated. It said inflation had been a two-edged sword not only had caused poor nations to borrow more, but which also might make it easier for them to repay their debts.
- A foundation stone for the proposed National Museum of Science and Technology to be sited at a cost of Rs. 1 million at the Colombo Museum premises, was laid by the Prime Minister.
- 3 A Banking Credit Guarantee Scheme for exporters was inaugurated by the Export Promotion Secretariat and will be implemented by the Development Finance Department of the Central Bank of Ceylon.
- 5 The Peruvian Military Government has decided to allow on the basis of a specific 'Peruvian Model' foreign capital investments in petroleum prospecting projects on the waste of the country's territory, it was announced in Lima.

- 6 The Soviet Agriculture Minister announced in Moscow a record grain harvest of 223.7 million tonnes for 1976, a jump of 86 million tonnes from the official yield of the previous year.
- 8 The 14th month of the People's Bank was named in Abrogama in the Cile District.
- 10 Central Bank Governors from leading industrial nations reached agreement on three billion dollar support scheme for sterling reserves held by foreign governments in London, official sources said. The cash contributors will be the United States, West Germany and Japan.

The 180th and 190th members of the People's Bank were opened in Olak in the Ampal district and Kilewanchikudi in the station district respectively.

- 11 An agreement was signed between the governments of Sri Lanka and Japan providing for a grant-in-aid of facilities equivalent to Japanese Yen 75,000,000 (Rs. 19,500,000) under the Food Aid Convention of the International Wheat Agreement.
- 12 An agreement was signed between the Government of Sri Lanka and the International Development Association providing for a loan of US \$ 5 million (Rs. 41.5 million) to finance a Bank Irrigation Modernisation Project.
- The United Khadija signed an agreement with Sri Lanka providing for an outright grant of \$4 million (Rs. 340 million) to finance the capital cost of a project to modernise five irrigation tanks.
- 14 The U.S. unemployment rate dropped to 7.5% of its 96 million labour force in December after going up to a high of 8.7% in November 1976. However prices at the wholesale level increased by 0.9% in December, it was announced in Washington.
- 16 New contracts for media granted by the Special Fund of OPEC for making it easier to developing countries to meet their balance of payment problems was signed in Vienna. A total of 11.6 million dollars was apportioned to 24 countries including Sri Lanka.

## January 24

The Government has approved a Rs. 200 million project for the electrification of the Colombo suburban rail network, it was announced in Colombo.

Involving a total track distance of 15 miles the electrification project will cover the lines between Colombo and Negombo, Weyangoda and Panadura which carry the heaviest loads of commuter traffic. (See column on page 10 & 19).

- 17 A meeting of leading natural rubber producing and consuming countries convened in Geneva to prepare for negotiations on an international agreement on rubber to stabilise rubber markets and prices under an "Integrated Commodity Programme".
- 20 The Ministry of Plantation Industry in collaboration with the People's Bank has approved a loan scheme to assist organisations or persons interested in modernising their rubber farms for production of crepe and other forms of rubber. It was announced in Colombo.
- 21 A 500 million dollar international commercial loan to Sri Lanka from American and European banks was formally signed in London. The seven year loan is to be used to finance development projects in Sri Lanka and meet a budget deficit caused by falling oil revenues.
- 22 The new headquarters building of the People's Bank was formally declared open by the Prime Minister in Colombo.
- 23 The 60th National Day celebration, marking 60 years of the State Lottery was held in Attanagalla.

Japanese Prime Minister Taken Fukushi unveiled a surprisingly stimulative budget of \$25 billion for the fiscal year beginning in April, to revitalize the ailing, Euraid whose prime goal in the past has always been to deepen deflation, was clearly responding to widespread demands abroad that Japan take more steps to spur the recovery of its economy.

25 Countries pressing for a six billion dollar (about 55 billion sterling) common fund to help Third World states with their exports were warning Germany that they still face a very road full of difficulties.

A three day conference of the Ministers of Economic Affairs of ASEAN countries (Association of South-east Asian Nations) ended in Manila after reaching agreement on the institutionalisation of preferential commercial and financial relations between member countries of this organisation.

A loan agreement was signed between the governments of Sri Lanka and the United States of America providing for US \$ 3.5 million (Rs. 29.5 million) to finance the foreign exchange costs of conducting the Research projects and Computing System Research project.

- 26 Sri Lanka's bank rate was revised upwards by two per centage points. The rate which was 12 per cent per annum from January, 1976 was increased to 14 per cent per annum with effect from January, 26.

British commercial banks took advantage of British interest rates to reduce their local lending base, by four percent to 12 percent.

- 27 Air Siam, the privately owned Thai Airlines whose discount fares make it popular with daily Asian travellers, has an accumulated debt of \$70 million, and had been losing more than \$2.4 million a month. Its operating losses has been suspended by the Thai Government and its bi-national, a Boeing 747, has been repossessed by KLM Royal Dutch Airlines, it was announced in Bangkok.

28 The Ganesha Corporation's new world complex in Attanagalla was officially declared open by the Prime Minister. This project was valued at a cost of Rs. 70 million in collaboration with Messrs. Doshi Co. Ltd. and Nishimatsu Co. Ltd. of Japan.

Marriage in Sri Lanka has been an important social institution not only in terms of present day values but also in terms of historic norms. The institution of marriage and its functioning in present society provides an interesting base for the study of the economic rationality of people in their social behaviour. After centuries of evolution marriage still preserves some of its traditional characteristics; namely caste, ethnic and religious considerations and transfer of property from one generation to the other or transactions (in money or property) between different families when marriage contracts are entered upon. Present day values of marriage tend to perpetuate some form of a 'social cost' which is reflected in several spheres. More clearly it can be identified in the consumption patterns of the elite groups who spend lavishly on such ceremonies for status reasons. People of all classes in Sri Lanka take their ceremonies, such as marriage ceremonies, very seriously; in fact so seriously that many end up in debt by over indulging in such luxuries'.

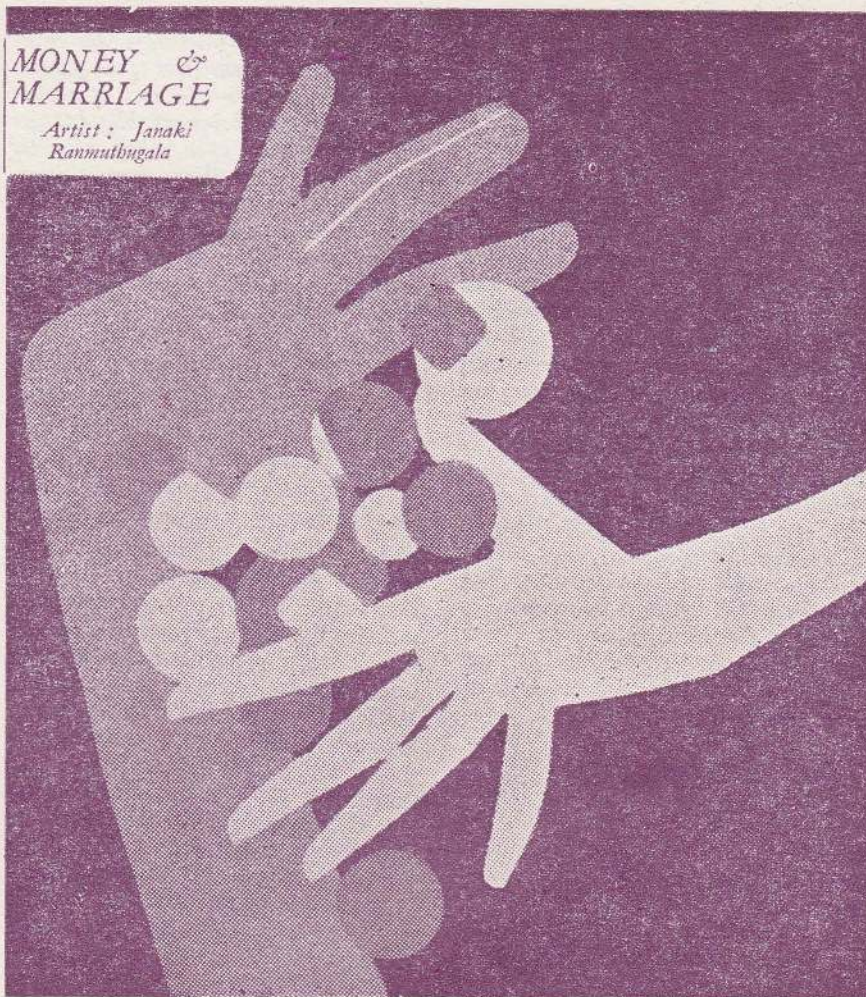
Another important feature of this 'social cost' is the dowry system that contributes to a widening of income inequalities. In addition, our marriages today tend to perpetuate the competitive character dominating society which is reflected in the educational system, the employment market and also in politics. A relationship between this 'competitive character' and the institution of marriage is not difficult to find if one examined the values governing present day marriages.

#### Historical perspective

The 19th century development of capitalism contributed a number of significant changes to the practices of marriage in Sri Lanka including the introduction of a legal basis for marriage, through legislation. These changes are attributed to the continuous influence of western culture and religion. In the West too the situation generally prevailing in the ancient world was profoundly changed by Christianity. In the Christian tradition as it evolved, the sex relationship, in order to constitute marriage had to be monogamous and

#### MONEY & MARRIAGE

Artist: Janaki Ramnathugala



## THE ECONOMICS OF MARRIAGE

also be characterised by the duty of faithfulness. It came to mean a life-long union of one man and one woman to the exclusion of all others. Such unions were preceded by some form of ceremonial recognised by the law of the particular country in which it took place. It also became necessary to determine whether or not a marriage existed as a preliminary to the adjudication of claims to an estate. Marriage thus became almost universally a formalised transaction requiring a public act or ceremony.

A closer look at the historical background of marriage in Sri Lanka

before proceeding to its present forms would be instructive as the modern practice of marriage appears to be the product of a long term evolution.

As in all other societies and cultures marriage in this country too has performed many basic personal and social functions such as procreation; a formalised upbringing of children; providing for satisfaction of personal needs, for affection, companionship and status; regulating of lines of descent; division of labour between the sexes; economic production and consumption.

The historical evidence of marriage practices in Sri Lanka can be traced back to early times. Reference to the economic aspects of this partnership are of particular interest.

In their monumental work on the "Veddahs" the Seligmanns commented thus on this aspect: "*The man goes to his future father-in-law with a present of honey, yams, grain or dried deer's flesh tied to his unstrung bow, which he uses as a carrying stick. Whether he generally repeats this visit or receives his bride immediately was not clear, and probably the custom varies in this particular. Handuna of Godatalawa told us that he did not take his bride away until he had twice taken a present of food to his mother's brother (father-in-law). When a girl married, her father usually made over to his son-in-law a tract of land, generally a hill known to be inhabited by colonies of the 'bambara' or rock bee, or gave him a piece of personal property such as a bow or one or two arrows. Sometimes a dog was given.*"

The Mahavamsa makes reference to the custom of 'giving' in the period when King Sena ruled in the 9th century A.D. After the King died the Mahavipada Sena entered the town and Samgha who was his consort, he consecrated Mahesi and gave her a dowry according to custom.

In primitive Buddhism the arrangement of a marriage bond was strictly a family affair and unlike in later times no soothsayers or astrologers were called in either to approve of the union, or to cast a day for the ceremony. But fathers were expected to gift their daughters with a marriage portion consisting of jewellery or other forms of wealth. Even in early times, however, our folk customs and ceremonies varied according to the locality and the social and financial position of the parties. After the period of foreign rule began in Sri Lanka several writers recorded interesting details about our marriage customs and ceremonies. Among one of the first Western writers was Father Queyroz, the Portuguese historian. In his book about the Island, published in 1683, he wrote:

*"Among the Singalese, however, though the lower folk buy wives, and the man brings a dowry and furniture with him, and the woman brings only her*

*personal ornaments, among the nobles there is a different fashion, for the bridegroom-elect sends a present to the parents of the bride, an article for each as a token of the contract, and they are obliged to give the dowry agreed upon, along with the daughter. In other things there is a considerable diversity, for among them there is no stable matrimony nor union except as long as they like; though they are also most observant of not marrying except those of their caste."*

This principle of 'giving' came to be known as the dowry system. The system as it exists in Sri Lanka today, is the adaptation of an ancient practice to modern conditions. In ancient times a person's consequence depended on his status in society, that is on his caste and the service on which he held land. When a woman was given in marriage (diga), it was to a person of the same status, and she brought with her some personal ornaments or wealth as her portion or dowry. In some cases, however, a woman was not actually given in marriage, but rather she took a husband (binna) who became adopted to the wife's family and her share of the inheritance was her dowry. In modern times however, though people still tend to stick to caste especially in marriage contracts, it is one's profession or employment that takes the place of social status; and as profession and employment now depend on a person's education and less on his birth or family; it has become common for parents of means to secure husbands for their daughters from the professional class by the offer of rich dowries.

More definite evidence of marriage practices in Sri Lanka becomes available in the 18th century. Although there was no legislation giving legal effect to marriage in the Kandyan period, observance of some formalities and customs confirmed the legal union between two parties. These practices were related primarily to property inheritance within the families of the same caste. Determination of legality of a marriage was necessary since the Kandyan law of inheritance distinguished between legitimate and illegitimate children. The essential elements of a legal marriage under Kandyan law has been classified by Hayley (1923) as follows:—

1. The parties must have connubium (an agreement for union). Generally marriage between persons of different caste or even of different ranks within a caste were prohibited and void. But there were exceptions, and in some districts men of one caste regularly took their wives from another caste. Niti-niganduwa considers the case of a goigama or *raté* woman marrying a man of a higher caste than herself, and states that children did not succeed to their father's caste, but were considered legitimate and entitled to inherit their father's property, even if he should have other children by a wife of his own caste.
2. The parties must not have been within the prohibited degrees of relationship (i.e. laws such as a marriage should not take place between parallel cousins, i.e. one should not marry his father's brother's daughter or mother's sister's daughter and one should not marry his paternal grandfather's brother's blood daughter etc.).
3. The parties must have cohabited with the intention of forming a definite alliance, the intention being inferred from the circumstance as far as inheritance was concerned, the formalities were not looked into in order to determine the regularity of a marriage.
4. The consent of the respective heads of the families; the countenance and sanction of the relations to the third or fourth degree on both sides to the union of the parties. A woman was entirely at the disposal of her parents or after their death, of her nearest male relations, even after the termination of her first marriage by death or divorce. But she could choose a suitable husband for herself if her parents or brothers neglected their duty of finding her a suitable partner. In the case of men a greater freedom was allowed, a man being entitled to contract a valid marriage with a woman of a low rank after the death of his parents. But generally opposition of parents or kinsmen was sufficient to annul a marriage.

celebrated with all due formality. In the case of chiefs of high rank, the king's consent was necessary before they married.

In Sinhalese law and social practice matrilineal and patrilocal marriages were distinguished. Ralph Poole, in his study of Sinhalese Social Organisation (1936) states, "In the *'dina'* (matrilineal) marriage, the husband lived in the wife's parental home and the had an equal interest in her parents' estate with her brothers, and her children had a claim on the family estate equal to their mother's interest. A *dina* husband had no privilege in his wife's house, no power over her property and was liable to expulsion or divorce by the wife or her parents at any moment. In the case of *'diga'* (patrilocal) marriage the daughter lost her right to inheritance, but was entitled to maintenance in the event of her being obliged to return from her father's household".

During the Kandyan period polygamy was found to be a common practice, the most predominant form was the polyandrous marriage where two brothers had one wife and cohabited in the same house. Robert Knox who was an English prisoner in Sri Lanka in the 17th century has also commented on polyandrous marriages among the Kandyan Sinhalese. It is clear that this form of marriage had been treated as a convenient method of passing down property from one generation to the other. It is believed that those who inherited black land from their parents often contracted polyandrous marriages in order to retain the ownership of land within the family.

According to Davy (1821) "This singular species of polygamy is not confined to any class or rank; it is more or less general amongst the high and low, the rich and poor; the specialty of the poor is that they cannot afford to have a particular wife, and of the wealthy and men of rank, that such wives be native as it meets families, concentrate property and influence and conspires to the interests of the children who having two fathers will be better taken care of, and will still have a father though they may lose one".

Ralph Poole also shows how the practice of polyandry minimized the fragmentation of ancestral property. For three brothers having four sons

by a joint wife, would certainly have had no provision for parcelled heirs if each had a separate wife. If they contracted a polyandrous union the parental estate would be held undividedly by their four sons. Polyandry was finally added to the *raga heriga* system which required many a person to be away from home on public service, leaving his family unprotected for several months at a time. It was customary for brothers to turn to all the fields and care for the joint wife and children. Indeed so common was the practice of fraternal polyandry in the Kandyan times that such an arrangement was presumed when two or three brothers holding land in common, occupied the same Mulgodara and one of them married.

The joint husbands were always 'brothers' and fraternal polyandry was allowed without any limitation as to the number of husbands, but the wife could not take a second associated husband without the consent of the first. If the second husband was not a brother of the first, the wife's family had to be consulted. A wife could refuse to admit a second husband even if he were a brother of the first. The most common form of polyandry was for two brothers to have a wife between them, and even in a family of many brothers, two would arrange to have a joint wife and live separately.

The available evidence of divorce cases, after enforcement of the Kandyan Marriage Ordinances of 1859 reveals that although a marriage was registered in the name of one brother, the others had access to the wife; the polyandrous situation changed in principle into one of group marriage if one of the brothers brought another wife into the mulgodara. Besides the widespread practice of polyandry, there had been other forms. Nisigandana states that "it is also a frequent custom for two or three men to have two or three wives in common". It would appear that in a household where some brothers shared a spouse while others had wives of their own, fraternal entry might be such that a brother would not regard his wife as his exclusive property, and his rights were extended to his brothers by such consent. During the Kandyan period divorce

## POLYANDRY

Polygamy was found to be a common practice in the island when the foreigners arrived. Rijkho (1883) described Sinhalese marriage at the time of the Portuguese occupation as follows:

"Their marriages are a voluntary union. A girl makes a contract to marry a man of her own caste for she never marries outside his, and if the relatives are agreeable they give a banquet and invite the betrothed couple. The next day a brother of the husband takes his place, and if there are seven brothers she is the wife of all of them, distributing the nights by turns, without the husband having a greater right than any of his brothers. If during the day any of them find the chamber unoccupied, he can retire with the woman. If he thinks fit, and while he is within no one else can enter. She can refuse to go to any of them, whichever brother he may be that claims a share in the marriage, and the woman is the wife of all, only if the youngest marry, none of the other brothers has any right over her, but every man has access to the women of all of them wherever he likes. If a woman has more than one brother that marry, those who consent that number have no right over her; but if there are two or three, they are satisfied with one woman, and a woman who is married to a husband with a large number of brothers is considered very fortunate, for all eat and celebrate for her and bring whatever they wish to the house, and she lives much honoured and well supported, and for this reason the children call all of the brothers their fathers".

was flexible and could be arranged with mutual consent. Divorce was also a common event, the usual method by which a man repudiated his wife was "by taking her back to her village". The law required her parents or brothers to support her until she re-married as daughters did not usually inherit land, although a dowry is given when they are given in 'diga'. The Kandyan custom did not allow continuity of property between brothers and wife, this may have been a natural consequence of the looseness of the marriage tie. It is evident that even in *diga* marriages, where the bride left her parental home to reside with her husband, the latter had no control over her dowry, nor could he interfere with any property acquired by her after marriage, independently of him. But the wife could make use of her husband's property for the maintenance of her family, even selling or pawning or mortgaging his lands if necessary for subsistence, but she was

precluded from selling his estate. D'Oyly (1835) notes that a wife could take nothing belonging to her husband if she left him contrary to his wish, and must leave even the wearing apparel provided by him.

Since the contract of marriage was easily terminated, some rituals such as binding the hands of the bride and the bridegroom have been avoided in some instances for symbolizing that the bond was not indisposible. Similarly there were other rituals, the performance of which had been avoided at times, for symbolizing the observance of certain practices in the future.

### Development of Commercialism and its Impact on the Institution of Marriage

Although marriage practices in the Kandyan regions were not subject to significant changes in the nineteenth century, the institution of marriage in the maritime provinces experienced changes due to the constant influence of foreign powers, namely the Portuguese, the Dutch and the British who ruled the maritime provinces over a few centuries. During the Portuguese and the Dutch period, the maritime provinces were exposed to the pressure of a commercial system based on trade. Along with these changes that resulted there were considerable changes in social patterns among the low country Sinhalese. The influence of Christianity and other changes introduced to the educational and legal systems made a significant impact. Traditional norms such as the extended family started breaking up since the emphasis placed on its basis, namely agriculture, shifted more towards trade and other occupations.

The pace of change became more rapid when the British regime succeeded the Dutch. The English established what they regarded as a sound basis for their administration by creating a plantation economy on the one hand and an indigenous capitalist class supporting them on the other. The indigenous capitalist class consisted primarily of low country Sinhalese who entered into business related to the plantations. They also generally became Christians and used Christianity as a resource to obtain favours from the English rulers. The children of these locals were given an

English education and were recruited to various middle level positions in the administration. The missionary education during this period played an important role in bringing about cultural changes. Those who benefited from these socio-economic changes were aligned economically with the British interests and were captive in their social life to Western values. Kinship and marriage among these elite groups took a different form from that of Kandyan Sinhalese. When intermarriage (i.e. marriage between cross cousins) was considered ideal according to Sinhalese tradition, the elite of the low country gave more prominence to one's economic and social background and thus have used 'marriage' not only to mean a union of two parties but also to align two business interests.

In his study of elite formation (1975) Michael Roberts refers to 'strategic marriage alliances' and identifies the formation of family pbalanxes through such marriages as an important element of elite formation in the nineteenth century. The basis for the negotiation of such marriage contracts has been one's occupational or financial background. The business and marriage alliances of some low-country families who emerged as leading families forming the indigenous capitalist class in the nineteenth century, have bolstered their wealth as well as elite status.

The Kandyan marriage practices were flexible and in terms of present day norms they were casual. There were no legal barriers to divorce while polygamy was a common practice. Concubinage and temporary liaisons were also widely prevalent. These marriage practices were subject to constant criticism and condemnation by the English-educated low country Sinhalese who went to the extent of criticising polyandry and other marriage practices as 'brutal' or 'barbarous' habits from the point of view of Western values. They felt that such habits were against the civilization taught to them by the English. These criticisms also show the extent to which the Western culture had influenced their thinking.

It was not only the Britishers or members of the low-country Sinhalese elite who wanted the Kandyan marriage practices changed. Historical evidence shows that in the 1850s

the Kandyan elite consisting of Kandyan chiefs, Headmen and other noble persons had sought legal enactments which would prohibit their marriage practices, and enforce monogamy and the registration of marriages. The first request for such reforms was made by a group of Kandyan chiefs at an interview with the British Governor, Sir George Anderson in the early 1850's. This request was however not given serious consideration by the British rulers. For the second time a large deputation of Kandyan chiefs repeated their request at an interview with the new Governor Sir Henry Ward in May 1858. The records of the then Government Agent in Kandy, Phillip Braybrooke, show that he had received a petition signed by a large number of people including Kandyan chiefs, Headmen and others requesting the Government to bring about immediate reforms to the Kandyan marriage practices.

The Kandyan Marriage Ordinance No. 13 of 1859 was passed as a response to these requests. The attempts in implementing this Ordinance were however not successful as expected. The records of Government Agents and other district officers show that the registration of marriages had been difficult. In some instances the practice of polyandry had been continued even in the case of registered marriages. It appears that registration of marriage was not a felt need among the peasants although there were pressures from the elite for reforms in marriage customs.

As the economy faced a transition from feudalism to commercial capitalism based on plantations, the attitudes in regard to ownership of property would have changed. Thus private ownership of property based on the nuclear family would have been preferred against the joint ownership of land and other property which was the basis of polygamic marriage. The evidence supporting the change of attitude in regard to property ownership shows that the initiative for such changes came first from the low country Sinhalese elite. The Kandyan regions were affected by these changes in the latter part of the nineteenth century. It is reflected in the monogamic marriages entered upon by the Kandyan aristocracy (the Kandyan elite) who had an English

education and thus were exposed to Western culture and values. The records of the government officers during this period show that evolution of old customs and enforcement of new laws became necessary to establish a system of laws governing marriage and divorce in order to minimize litigation and settlement of other matters pertaining to property transactions.

Although some practices and traditions relating to marriage were changed after introducing legal norms, such changes could not influence the patrilineal kinship pattern among the Sinhalese within which marriages were arranged. The bride-price was predominant and other traditional systems of a woman and her children are considered by marriage, to her husband and his kin. The norms of a patrilineal kinship pattern were such that the father enjoyed a right of abstinence and it was his obligation to support his daughters until they married. The father was also obliged to arrange suitable marriage partners and to provide dowries with them. After his death these duties devolved upon his eldest son regarded as father-in-law.

If a daughter was given in dowry, she was given a dowry of money, jewellery, clothes and other moveables, and was entitled to return to her family and claim maintenance if she divorced. This makes the father was also obliged to look after his daughter in case the parental choice by him turned out badly.

Within the kinship structure the marriage between cross cousins (father's sister's daughter or mother's brother's daughter) was considered proper and close such marriage was a norm among the Kandyan Sinhalese. The terms of cross relationship *saava* (derived from Sanskrit *svasara*) meaning 'necessity' signifies the fact that one is the only candidate but even required to marry cross cousins. Although patrilineal marriage customs such as arranging marriage partners by the father, giving dowry etc. applies even to the low country Sinhalese, the norms such as marriage between cross cousins, does not appear to have been given or important, due to the low country marriage practices.

The economic significance attached to the institution of marriage was

demonstrated in early marriage practices such as polygamy and the marriage between cross-cousins also had economic motives similar to that of polygamous marriage. However, these marriage practices gradually lost their place as the economy changed from a feudal to a capitalist stage. These changes were more clear in the maritime provinces and in urban areas which grew as townships due to increased commercial activities. The Kandyan areas too, in more urbanized areas where educational and other facilities were available, experienced these changes and the middle class developed subsequent to the development of education in these regions were more receptive to changes.

"They go according to their class, a portion of estate, slaves and money with their daughter and her family come to the marriage and as a result, the portion thus an informal dowry, and their also a lot for another dowry, being a lot of money never the worse for wedding". Robert Knox, *Annals of the Kingdom of Ceylon, the Dutch period* (1682).

Arranging marriages outside one's group, leading to the service of a match-maker (*Kapewa*) became an accepted norm, particularly among the middle class. This replaced the inter-marriage system. (Though inter-marriages are still common among the peasantry and offered a more systematic system of maintaining marriages to the middle class society. Even in the case of arranged marriages traditional attributes such as caste, religion, place of birth (whether up-country or low country) etc. are considered, while at the same time modern attributes such as family background of prospective parties (whether well connected or not), occupation, educational qualifications (whether professionally qualified), wealth, dress (whether Euro standards or not) etc. play an equally important role. If the latter requirements are not satisfied a marriage may not be entered upon even if the former requirements are more than satisfied. There are also instances where interference of either caste or religion is not considered a serious drawback if the latter requirements are satisfied. This shows the extent to which the middle class has adopted flexible norms of marriage considering its economics. In some instances, other occupation or family background of the bride or

the bridegroom becomes the primary factor of matching two parties if the families are well connected (resolving influential capacity or access to wealth etc.) or the prospective bride or bridegroom belongs to a reputed profession. These changes imply a development of a class concept in terms of capitalist economies and a decline of caste concept inherited from the old feudal social order. The consideration of 'class' when match of two parties, are confirmed through marriage, is however not a feature that can be generalized because such changes are yet confined to a relatively smaller group who are more educated, westernized and also live in urban areas. The large majority of the Sinhalese population still live in rural areas where feudal social and economic characteristics are still existent. Their social life is less affected by changes taking place in the urban areas; thus the importance attached to such traditional attributes as caste in clearly norms treated in their marriages arranged with the consent of the kin group.

The marriage practices among the peasants in some parts of the island takes a still different form from those of the Kandyan peasants. The dry zone peasants in the areas like Ampara, Vavuniya and other remote areas particularly have attached more intensive economic values to the institution of marriage. According to these values, a marriage means a union of two labour units representing a union of two families. In such marriages, prominence is given to the agricultural skills possessed by the bridegroom rather than to his caste or family background. In some instances the skill of the prospective bridegroom is subject to test by the father of the bride or the eldest male member of her family. It is only if the bridegroom can convince the bride's party that he is an efficient agricultural worker who can look after the family that the marriage is confirmed. In most instances these marriages are not legally confirmed through registration. The paradox is that the bride goes and cohabits with the young man who opens up a chain in the jungle. If he succeeds in proving the results of his labour, the parents of the bride allow her to continue her stay with him and assist them to setup a family. In some cases a bride price is expected to pay a certain price to the parents of the bride in the form

of labour or agricultural implements for compensating the resulted loss of a family labour unit due to his marriage. These marriage practices appear to be more flexible and somewhat similar to tribal marriage practices in Africa in terms of the value attached to labour when a marriage contract is entered upon. In Sri Lanka, however, this type of marriage practices is not common and cannot be generalized for the dry zone peasantry as a whole. Even in the dry zone areas, the practice of marriage differs significantly between various groups. For instance in the '*purana gamas*' of Anuradhapura where some characteristics of the ancient hydraulic civilization are still existent, marriages are governed by a rigid set of values which give prominence to castes and ethnic distinctions. Although the element of labour is considered important in choosing a suitable partner, more prominence is given to caste (or the *vamsaya*), and ownership of land and family background of the proposed partner. These values reflect the feudal characteristics of the socio-economic order of traditional villages (*purana gamas*) in the dry zone, where a vertical power structure based on caste distinctions is predominant.

Over the last two decades, the pace of social change became more rapid in these areas due to increased development activities such as government sponsored settlement schemes, land development schemes, irrigation development schemes, rural electrification programmes etc. which resulted in the mobility of communities as well as labour. With the increased mobility the old villagers became settlers in an area away from their villages. Thus they were compelled to adopt to new situations and mix with other people who had different origins. This also resulted in changes of their social life, values, and attitudes. It also resulted in developing new kinship allies between settlers of different origin who used marriage as a way of building social relations. Thus, the marriage practices of settler communities in the present colonisation schemes represent a mixed value system which is more receptive to change.

The development of mass media has also contributed to the changes in marriage practices. Particularly in the case of middle class marriages the mass media has been used widely

as a means of matching partners. The service rendered by leading newspapers for prospective brides and bridegrooms has been more extensive over the last decade or two. This is reflected to an extent in the increasing number of advertisers on the one hand and the rapid decline of the marriage arranged by match-makers on the other. The newspaper offered a more efficient and economical way of finding partners for those who consider traditional as well as modern attributes in contracting a marriage. Although the newspaper is open to any one who seeks its service the type of advertisers are drawn mainly from the middle class who are employed in the modern sectors. How they keep pace with the changing economy and to what extent they accept the traditional attributes in finding their partners reflects to some extent the present values of Sri Lanka's middle class. The socio-economic analysis of matrimonial advertisements carried in this issue on pages 9 to 11 throws further light on this subject.

#### Social and Economic Implications of Marriage

The social and economic implications of present day norms in regard to marriage can be examined in relation to several spheres. As mentioned earlier the transformation of the economy from feudal to a capitalist stage brought significant social changes, more specifically the values and norms of society were changed as the economic basis of society experienced changes. The development of education and communication, changed the attitudes of people and their behaviour. Some groups of society particularly the low country Sinhalese elite were more receptive to these changes at the beginning and at the later stages. What the elite groups accepted became more or less common norms among other social groups as well. In the case of marriage, however, the feudal norms were not changed entirely. Even after centuries of evolution, the mobility between people of different castes, religions, and ethnic groups has been limited in the contracting of marriages. The dowry system which prevailed centuries ago still plays an important role, the only change is that it now takes different forms as dowries are given not only in money, jewellery, property etc. but also in the form of educational facilities abroad, entitlement for

foreign exchange channelled through Convertible Rupee Accounts etc.

The present norms particularly among the middle class allow for a greater degree of mobility between different castes, religions or even between ethnic groups. Although parental intervention on the part of the family interests is common in middle class marriages, the prospective bride and bridegroom also enjoy a greater participation when decisions are made. The obligation to give a dowry under the present day norms is lessened if the bride is employed and earns a reasonable income. This has encouraged parents to give their children a better education which has in turn enabled them to find jobs such as in teaching, or some other form of employment, possibly of a professional status. To many parents a job for their daughters has been a source of security for them, particularly at marriage and in later life. The result is that female participation in higher education and in the labour force has increased over the last few years and it can continue to increase at a higher rate in future.

The values of present society have laid down certain conditions upon marriage that also have some impact on the employment market, education, job aspirations etc. In the case of arranged marriages one could find that these values are geared more towards raising the price of males according to occupational status, qualifications etc. While in the case of females a compromise in regard to price can be entered upon only if they can match the occupational status or qualifications of the male. This is reflected very clearly in the dowry system. For instance, the highest dowries are generally offered to doctors, engineers, accountants and other professionals who are in government or corporation service or to officers in the Sri Lanka Administrative Service who enjoy a higher occupational status though their income in terms of salary is lower when compared to the former. The second preference is given to executives, managerial and similar employees preferably in the government or corporation service, while the third preference is given to teachers, clerks and similar workers in the public and mercantile sectors.

(continued on page 12)

# A SOCIO-ECONOMIC ANALYSIS OF NEWSPAPER MARRIAGE ADVERTISEMENTS IN SRI LANKA

The use of mass media as a means of arranging marriage has become increasingly popular among the middle classes over the last few decades. The marriage advertisement system makes direct communication between two parties feasible without the help of middlemen, known as 'match makers' or 'magal kappas', and thus offers a more economical and practical method of arranging marriages. The use of mass media for arranging marriages is an indication of how the institution of marriage in Sri Lanka has been swept to commercial practices. However, the nature of these advertisements does not suggest a strong departure from traditional norms; it gives those interested in choosing their partners an opportunity to consider both the traditional as well as modern attributes. Generally newspaper advertisements carry information on names, religion and a brief background of the advertiser in addition to his/her educational, occupational and family background. The type of public relations groom sought is also mentioned in most cases. One can thus draw connections directly with a suitable party depending on his information.

This study which examines the characteristics of prospective brides and bridegrooms who advertise in leading Sunday newspapers, is based on a sample of 50 per cent selected random from a group of 92 marriage advertisements appearing in leading Sinhala and English newspapers over a period of three months. There are, however, limitations to this study as it is not representative of the broad geographical or recent day marriage in Sri Lanka, based only on marriage advertisements since the advertisers do not represent our society as a whole. However, the advertisements provide a mirror to the values and norms which marriage in middle class society through which one can attempt an explanation of the nature of social change.

The sample consisted of 117 marriage advertisements made up of 46 males and 71 females. The socio-economic background of these advertisers suggests that they come from different levels of the middle class. Some advertisers may fall into the upper stratum of the middle class if one employs criteria such as income, occupation, educational qualifications, family background and age classification. These advertisers come from different parts of island. Among the sampled advertisers, 59 have mentioned their home towns which are shown in Table I.

According to this Table, a majority of the advertisers come from the Colombo district or the Western province. The second largest number come from Kandy and if we take the Central province as a whole, the advertisers of Kandy origin constitute about 31 per cent. A large number also come from the Southern province. It is however interesting to note that almost 70 per cent of

TABLE I  
DISTRICTWISE DISTRIBUTION  
OF ADVERTISERS

Colombo	...	39
Kandy	...	11
Galle	...	6
Kotara	...	0
Kegalle	...	2
Karunegala	...	1
Katugampola	...	1
Kalutara	...	1
Mawatha	...	2
Badulla	...	1
Matugampola	...	2
Total	...	69

the advertisers had a low country origin; this suggests that the socio-economic environment of greater urbanization in the Maritime provinces has been more conducive towards change of traditional methods of arranging marriages. The historical evidence also points to the fact that changes of traditional marriage practices were in vogue for the people of the Maritime provinces who were exposed to socio-economic changes (largely the introduction of Christianity) induced during and after the occupation of foreign powers.

The influence of parental kinship patterns, when marriage is concerned, is reflected even in the case of marriages arranged through the newspaper advertisements. The mode of the parental kinship pattern was given by 57 out of 117 marriage advertisements; 26 out of 57 have been given by 'father only', meaning an older member of the family or a close relation. In the case of females, almost all have been advertised by parents; among the self-advertised cases the majority were from males. This shows that the traditional father has, according to traditional practices, to find a suitable partner for his daughter is still continued in a modified form. A large number (especially females) advertised by the parents (with the phrase 'father only' or 'parents are') shows that even among the middle class who are more educated and connected to urban areas through occupations or otherwise, the earlier conditions are still dominant as now such parents consider it their duty to find suitable marriage partners for their children.

TABLE II—AGE DISTRIBUTION OF ADVERTISERS

Age Group	Total	%	Male	%	Female	%
18-24	12	10.3	3	6.5	9	12.7
24-30	12	10.3	10	34.3	2	2.7
30-36	38	32.5	19	41.3	19	26.7
36-42	34	29.0	7	19.1	27	37.7
42-48	7	6.0	3	8.2	4	5.6
Total	117	100.0	46	100.0	71	100.0

The age distribution of the prospective brides and bridegrooms who advertise in the newspapers suggests that there has been a change in the norms. It probably means that other means of obtaining a partner may have been attempted whilst the advertisers were younger and being filed, now the mass media is resorted to. The mean age of marriage for the country as a whole is 25 for males and 23 for females. Among the sampled advertisers, the mean age for males was 33 years while for the females the mean age was 29 years. The age distribution of the advertisers, given in Table II, shows that a majority of the female advertisers are below the age of 30.

Over 30 per cent of the female advertisers are concentrated in the age group of 24-30 years. There were only 9 females in the age group of 18-24 years. In the case of males, the majority is distributed over older age groups. There were only 29 male advertisers (nearly 25 per cent) below the age of 30 years. The age difference between male and female advertisers also reflects the differences of their activity status. In the case of female advertisers 20 were unemployed and 32 were employed, whereas all the male advertisers were employed. The female advertisers in the youngest age group are not married (50 per cent). It is however important to note that age at marriage even among the unemployed female advertisers is generally over 23 years; this also reflects how the traditional norms in regard to the age of brides at marriage changes in the present context.

In this analysis of newspaper marriage advertisements, Subhan Ranaasinghe, a senior researcher at the Change Institute, shows the extent to which our middle classes keep pace with the changing economy and how far they still accept traditional attributes and norms in finding their marriage partners.

The socio-economic background and background of the advertisers reveals some characteristics of their class status showing that a large number of them are employed in modern sectors of the economy and earn wages or salaries. A majority of them were engaged in public sector jobs. Table III classifies them by occupational categories and nature of employment.

The data given in Table II shows that the advertisers are distributed largely between three major fields of employment, of which professional, technical and clerical categories cover over 60

TABLE III OCCUPATIONAL CATEGORY		
	No.	%
Professional & Technical	25	32.5
Medical ...	3	
Engineering ...	5	
Para Medical ...	1	
Technicians ...	2	
Scientists ...	1	
Teaching ...	13	
Administrative, Managerial and Executive ...	9	12.1
Clerical ...	21	27.3
Self-employed ...	18	23.9
Agriculture ...	3	
Trade ...	9	
Industry ...	4	
Services ...	2	
Defence Services ...	1	1.3
Employed Abroad	3	3.9
Total ...	77	100.0

per cent. In the case of those employed in the category of professionals and technologists income levels as well as social status attached to the job can vary depending on the skills. For instance those employed in the medical and engineering professions can enjoy a better social status as well as a higher income level compared to those employed as teachers or technicians. In the clerical category, however, such differences can be minimal.

TABLE IV EDUCATIONAL BACKGROUND OF ADVERTISERS

	Total	%	Male	%	Female	%
G.C.E. (OL) ...	42	61.0	9	36.0	33	75.0
G.C.E. (AL) ...	2	3.0	1	4.0	1	2.3
Graduate (Arts) ...	13	19.0	6	24.0	7	16.0
Graduate (Science) ...	6	8.0	4	16.0	2	4.4
Post Graduate (Arts) ...	1	1.0	—	—	1	2.3
Post Graduate (Science) ...	1	1.3	1	4.0	—	—
Professional or Technical ...	4	5.8	4	16.0	—	—
	69	100.0	25	100.0	44	100.0

The educational background of the advertisers shows some differences between the education levels of males and females. Of the sampled advertisers 69 specified their educational background. Table IV classifies them by levels of education and sex.

According to the table, 75 per cent of the female advertisers have passed the G.C.E. (O.L.), while a little over 20 per cent have received a University education. Those with a G.C.E. (O.L.) qualification consist mainly of unemployed female advertisers. The female advertisers with University degrees were in most instances employed as school teachers or were engaged in middle level managerial positions. The male advertisers had relatively higher educational qualifications. All those who had professional or technical training were males. They may have spent a fairly long time to gain these qualifications and the fact that male advertisers are generally above the age of females is also explained to some extent by the differences of educational qualifications between males and females.

Almost all the advertisers have given information on their caste and religion. In the case of minority communities the ethnic group was specified. Caste and religion were two major considerations of matching two parties in the case of arranged marriages. The importance attached to caste in the earlier marriage practices was expressed by distinguishing legitimate and illegitimate children and using such criteria to make decisions on property inheritance. These practices were however changed by new laws relating to property inheritance. Yet, caste distinctions continued to play an important role in marriage.

In the case of marriages arranged using mass media, emphasis has been given to other factors such as family background, employment, income etc. in addition to that of caste and religion. The emphasis given to caste, religion and other ethnic differences reflects what is inherited from traditional practices; while the emphasis placed on modern attributes such as family background, employment and income of the partner, reflects the extent to which Western values have penetrated into what are regarded as traditional factors. This tendency indicates a new social trend, particularly among the middle class.

The distribution of sampled advertisers by caste and religion is given in Table V. It shows that the Govi caste

performed different service functions under the feudal society form the minority. Although the advertisers have specified their castes, they are not engaged at present in their respective caste occupations, or the occupations of respective castes are not related in most cases to their present jobs. In this context the information given about caste has no economic significance. The table also shows that the majority of advertisers (84 per cent) are Buddhists, while Catholics and Christians are small in numbers.

#### Socio-Economic Considerations

In examining the emphasis placed on caste and religion for arranging marriages through newspaper advertisements, it was found that over 55% of the advertisers did not specify whether they sought partners from their own caste and religion. A majority of the advertisers thus seemed indifferent towards choosing partners from a particular caste and religion. This majority of advertisers, however, specified their own castes and religions, which implied that accepting a partner from a different caste or religion may be allowed but it also showed that they attached significance to their own castes and religions. The decision of this group on arranging a marriage with different castes may depend more on economic factors such as employment and income or social factors such as family status of the partner. This points to a tendency away from traditionally accepted norms in a situation where adoption of modern norms is likely to take place as a response to rapid economic changes.

About 33% stated explicitly that the bride or the bridegroom sought should be from the same caste and religion; while about 12% stated that they did not consider caste and religion as important and were willing to accept partners of any caste or religion provided other considerations such as employment, income, or family status were satisfied.

A classification of the advertisements by caste and the degree of emphasis placed on caste and religion in choosing their partners, shows that the lack of emphasis given one's own caste is common to all castes. In the case of 79 advertisers of the govi caste only 25

TABLE V  
BACKGROUND OF ADVERTISERS BY CASTE AND RELIGION

Caste	M	F	T	%	Bud- dhist	Cath- olic	Chris- tian	Hindu	Others
Govigama	31	48	79	67.5	73	5	—	—	1
Karawe	6	7	13	11.0	8	4	1	—	—
Durawe	3	2	5	4.3	4	—	—	—	1
Salagama	—	4	4	3.4	3	1	—	—	—
Navandanne	—	2	2	1.7	2	—	—	—	—
Deva	—	4	4	3.4	4	—	—	—	—
Rajaka	2	1	3	2.5	2	—	1	—	—
Vellala*	—	1	1	0.9	—	—	—	1	—
Chetty**	1	1	2	1.8	—	1	—	—	1
Unspecified	3	1	4	3.4	2	—	—	—	2
TOTAL	46	71	117	100.0	98 (84.0)	11 (9.40)	2 (1.70)	1 (0.85)	5 (4.27)

\*A caste among the Tamils which is similar to Govi caste among the Sinhalese.

\*\*Refers to an ethnic minority in the coastal areas.

(91%) stated that the bride or the bridegroom sought should be from the same caste and religion. While the bridegroom of the bride was 82% of a Hindu and 18% of a Christian, the bride of the bridegroom was 67% of a Hindu and 33% of a Christian. The bridegroom sought was 67% of a Hindu and 33% of a Christian. The bridegroom sought was 67% of a Hindu and 33% of a Christian.

In the case of Marwari came three out of thirteen advertisements (23%) stated that caste and religion were not desired factors in the bride or the bridegroom sought. While the bride was 100% of a Hindu and 0% of a Christian, the bridegroom was 100% of a Hindu and 0% of a Christian. The bridegroom sought was 100% of a Hindu and 0% of a Christian.

Among the sampled advertisements only (12%) stated definitely that no caste, while the bride or the bridegroom would be considered in choosing their partners. As a point of interest, 30.8% stated that the bride or the bridegroom of the same caste and religion, while 37% of the advertisements had not specified whether they expected partners from the same caste and religion. Although many are willing to consider from the accepted norms, it is still small, the increasing number of advertisements who take an attitude of indifference towards the traditional norms such as considering caste and religion within one's own caste and religion suggests that the tendency towards a departure from such norms can continue to grow as new values affecting marriage are likely to be developed in the changing economic climate.

# Employment and Family Background

Apart from the factors like caste and religion, emphasis is also laid on the employment, family background, and financial status of the bridegroom. These considerations are also found in marriage partners sought in the newspaper advertisements. Among the sampled advertisements 74% mentioned employment of the bridegroom, while another 25% expected partners with a good family background. This consists of 16 male advertisements who sought non-marriage brides from well connected families. The phrase 'well connected' implies the relationship of the respective partner to various positions in the public service including not only wealth but also political, business and other power positions. Among those who sought employed partners, there were 25 males who made up over 54 per cent of the male advertisements. Four of them expected professionally qualified partners. All the female advertisements sought employed partners earning a good salary. In some cases the type of employment of the partner was specified. Among them, 16 female advertisements (14% of the female advertisements) who sought professional

TABLE VI VALUE OF DOWRY OFFERED FOR BRIDE IN PARTICULAR OCCUPATIONS

Occupational Category of Bridegroom	Value of Dowry—Rs.	100,000 or above	50,000 to 100,000	10,000 to 50,000	1,000 or less	No dowry
Professionals	...	4	2	1	—	7
Executive and Staff Officers in Govt. or Govt. Services	...	1	1	1	1	10
Public & Municipal Services, Teachers, Clerks, etc.	...	—	—	2	2	18
Self-employed in business	...	—	—	1	1	2
Total	...	5	3	4	3	27

(Doctors, Engineers, Accountants, etc.) and another 10 (37%) who sought Executive or Staff Officers preferably in the Government or Government services.

The offer of dowry which is another traditional feature of marriage, especially in South India, appears to take an important position in the newspaper advertisements. In the sample, the number of prospective brides who were entitled for dowry (in jewellery, money, property etc.) amounted to 37 (91%) of them as were unemployed while the remaining 3 were employed. It is interesting to note that out of 35 unemployed female advertisements, only 10 did not offer dowry. This suggests that the traditional practice of dowry is still in vogue for marriage under present day values and norms. If the prospective bride is employed and earns a fair income, in the case of unemployed females, however, a dowry seems to be an important qualification for marriage.

It is evident from the data that the occupational status of the bridegroom sought depends to a large extent on the quantity of the dowry. The advertisements which specify the occupation of the bridegroom sought and the value of the dowry to which the bridegroom is entitled, show that the higher the value of a dowry, the greater the tendency to seek bridegrooms in 'righted' professions. In some cases the value of the dowry offered by a female seeking a partner or an employment was above Rs. 1,00,000; while, those who sought Partners or Staff Officers, the dowry was around Rs. 50,000 to Rs. 1,00,000. The information on dowry with reference to the occupational category of the bridegroom sought shows that four of the five female advertisements who offered dowries worth Rs. 1,00,000 or over were seeking professionals. Another three seeking professionals were entitled to some what lesser dowries. Out of ten female advertisements who sought Executives or Staff Officers in Government or Government services, 10 had dowries worth of Rs. 50,000 or more. In the case of those who sought employees such as clerks and teachers in the public and municipal services, the dowry offered was generally less than that offered to professionals or executives and staff officers. This data reveals that the value of the dowry offered varies according to the occupational status of the bridegroom.

It also reflects a certain price attached to occupations of different status. The dowry system under these values, however, takes the form of a ritualized transaction which is different from what existed in the past.

# Emphasis on Dress

Emphasis has also been given in some instances on the dress of the partner sought. Among the female advertisements about (21%) emphasized that the partner should be European dressed. This reflects to some extent the increasing cultural Westernization in the country. The dress of the partner is, however, not an important consideration which can be generalized as only shows a point of reference where a choice has to be made between several prospective bridegrooms who respond to a certain marriage advertisement. The emphasis placed on European dressed partners is also important. The traditional expectations of a partner on the housewife, if the bridegroom of the prospective bride and the bridegroom did not meet each other, a marriage could not have been a success. The importance which is a marking of bridegroom in the case of marriage sought through newspaper advertisements is evident. Of the sampled advertisements 67 (91%) gave information on the housewife of the prospective bride or the bridegroom concerned and expected responses only from those who had matching dowries.

The characteristics of the prospective bride and bridegroom who advertise in the newspaper suggest a shift in attitude towards a change in traditional marriage practices. The information on the type of partner sought and the dowry placed on marriage and dowry is particularly significant. It leads to the conclusion that strict considerations of caste and religion in arranged marriages, which the Indian society tends to have in a context where traditional norms are being modified in a society that adapts to changing economic conditions. These advertisements come from different parts of the Indian and possibly many of them have their roots in the rural areas with their parents generally residing from a lower class in the hierarchy. In this sense, a breakdown of the advertisements will reflect the aspirations of a rising class and it is clear that dowry, a phenomenon common all over the world.

Sudama Ramalinghe

If the bridegroom is a professional meaning a doctor (person with Western medical qualifications), engineer or an accountant (those who possess professional qualifications in the respective fields) whose monthly earning capacity is above Rs. 1,000/-, the price offered in the form of dowry is generally higher. A compromise in regard to this price can be entered upon, depending on the occupational status of the female if employed, or on her family background, meaning the connections of the prospective bride's family to various power positions in society. The quantum of dowry and in what forms it is offered, therefore vary according to professions and status attached to these, and qualifications, income etc. of prospective bridegrooms.

According to Sinhalese traditions, the offer of a dowry was justified on the grounds that the Kandyan laws of inheritance did not permit the females who were given in *diga* to inherit ancestral property; thus, dowry represented the right of a female member of a family to share a certain portion of ancestral wealth. It was also considered that the dowry would not only help a female given in *diga* to establish herself economically but would also be added support to maintain her dignity within the kin group of her husband. If the union ended in divorce, it entailed the restoration of dowry. This practice was legally ensured by the Marriage and Divorce Ordinance of 1912.

The dowry was also a dominant feature of Tamil and Muslim marriage practices. According to the *Thesawalamai* and Muslim laws, the dowry given in the form of property is subject to restoration on divorce, but the donation of cash (known as *Kalkuli* in the Muslim law) made to the husband's party once the marriage is finalised, is not generally returned even on divorce. The mechanism of dowry among the Tamil community is interesting. The marriage practices particularly among the Jaffna Tamils appear to be more rigid in dowry transactions. It is evident more in the case of middle class marriages, where the bridegroom is obliged to provide the bride with jewellery worth a few thousands, and in turn the bride's party is obliged to make a donation of cash (amounting to several thousands) to the bridegroom's party after finalising the marriage. The dowry

given in the form of property etc. is a transaction that comes after the marriage. The Tamil Law does not cover the cash donation, which is the disposal of the husband's family. In some instances this donation is invested in the education of the husband's family members or it can even be converted to a fresh donation from the husband's family to another if the marriage of a female member of the husband's family takes place.

The rigidity of marriage practices specially in the case of dowry transactions among the Tamil community implies a severe burden socially as well as economically to the families where there are females who have reached the age of marriage. If more girls are born to a family a poor father has to devote the whole of his life to raise funds for donations at the marriage of his daughters. The pressure which is made by such a system of unjustifiable transactions, has led to the unfavourable situation of curtailing the matrimonial prospects of some people. There are instances where young females find it difficult to get married at the proper age due to the inability of their families to make a substantial donation or dowry to the family of their partners proposed or otherwise.

Generally, the caste system is taken far more seriously by the Tamils than the Sinhalese and as a result the rigidity of traditional marriage practices has undergone less change than in the South. In only exceptional circumstances among Tamils are such marriages not contracted by parental arrangements according to caste and social standing; and where dowry is essential.

The practice of interchange of gifts and giving of dowries is most firmly embedded in Muslim custom and law; and to many Muslims their marriage law is regarded a religious law. Among Muslims the custom still persists where, 'A person wishing to marry, application must be made to the bride's father and mother for their consent'; 'Should the parents of such bride be dead, the man must make his intentions known to the relatives of the bride, and endeavour to obtain their consent'; 'And after consent has been obtained it is the custom that the bride and bridegroom interchange some presents which, however, are reciprocally restored if

the marriage does not take place'; 'The parents or nearest relatives of the bride shall then with the knowledge and consent of the bride enter upon an agreement with the bridegroom concerning the marriage gift, called *Maskaviya*' (i.e., *Mahr*).

Under Muslim law a valid marriage is constituted by declaration and acceptance, with the proper stipulation of dower (*mahr*) payable to the bride, in the presence of two competent witnesses.

Following the religious ceremony is the civil ceremony where the registration takes place. The register is signed by the bride's father and if he is not alive by the grandfather or a brother or male next of kin on her father's side. At this stage the sum of money that the bride should receive as '*mahr*' is stipulated and entered into a column in the official register. This stipulation becomes a key factor in the event of divorce. The practice till recently was to state the amount of '*mahr*' in gold, but today the value could be denoted in rupees. It is compulsory that the column in the register for '*mahr*' is filled. There is also a column for dowry, where the amount to be given by the bride's family should be stated, but filling of this column is not compulsory.

The impact made by norms and values behind the institution of marriage on the employment market, education and also on job aspirations of youth is considerable. Although it is not empirically tested a few general observations on such implications could be made. The characteristics of the present employment market are such that there is a greater demand for professional skills which are in short supply. Thus the price of these professional skills also go up as the demand increases. The gaining of professional skills involves a substantial investment in education and it is only a limited number who could afford it. The place for these professionals is open not only in the domestic employment market but also in the employment market abroad. All these have contributed in raising their professional status and in turn raising matrimonial prospects.

Although there is a short supply of other technical and professional skills vital for national development, society has not recognised the dignity of such

labour (mechanical, construction workers, unskilled workers etc.) by placing more skills on a higher plane of the wage structure. In the case of agriculture too the same situation prevails as there is no proper recognition, mobility or status-wise, for those solidly trained in agriculture. These anomalies of the employment market have had adverse effects on the economy in the long term as on the formation of social values on the other.

Social values which are also conditioned by the class characteristics of society, where discriminatory prices to labour skills falling to the upper and lower system and have used the institution of marriage to maintain this discrimination most firmly. Here one can find that wealth transactions in the form of dowry (which also takes different forms) are being regulated by these social distinctions and in some instances it involves a transfer of accumulated wealth from one family to another, forming 'family dynasties'. The professional strata (mainly clerical) have been of greater use in the accumulation of wealth over several decades. This is largely true in the case of the traditional and legal professions. The marriage alliances of some of the professional families in the early 20th century would have laid the basis for some of the present status regarding dowry.

The educational system in Sri Lanka is still largely geared towards examinations and certificates. Passing higher examinations, securing stable employment and settling down with a dowry a good dowry have become goals of society. The whole educational system has been conducive to these goals and particularly those who had access to better opportunities of education, have been able to achieve these goals entering reputed professions and other power positions in the administration. The prospects and status enjoyed by those in certain professions have also created an unnecessary burden to society as the educational system, after taking up a substantial portion of national income has apparently been able to create fewer successes than failures. The increasing demand for higher education from those who wish to ensure a certain type of employment compel the system to orient itself towards examinations and certificates. But the number

## WEDDINGS: SRI LANKA MIDDLE CLASS STYLE

Weddings are traditionally a time of coming together and festivity. In the traditional Sri Lankan village it was a matter of playing of ritual, religious coming together, eating and sports-making. Within a formal manner, more or less laid down by tradition, the bride and groom and their families were invited. And, in a traditional system, as friends and were highly desired from both sides and majority of the expenses at a wedding were mutual.

In European weddings now there is an air of informality and festivity. The number of participants in such Western wedding parties is generally small because of the breakdown of the extended family. Further, within the formal attire that is often used in Western weddings a high degree of informality and even irreverence is possible. The present day type of Western wedding is of course, a result of the deep-going social changes that have occurred over the last few years or so.

The middle class Sri Lankan wedding, as it is today either in a hotel or in a public place. The Colombo style or the country's upper middle class generally tend to hold their weddings in either one or the other of the two ways; mostly in the city. As with the wedding, both in Sri Lanka has changed with the coming of new hotels over the last few years, the preferred manner of weddings for this group has also simultaneously changed. For the traditional middle class or the lower middle class, less expensive hotels and places of gathering like those of various religious organisations, women's organisations, police clubs etc. are used. Generally to come out of Colombo, weddings take place in town halls or with a minimum of the new one star hotels at a fairly sophisticated hotel.

The middle class now can afford such a wedding and those who in the eyes of their relatives are those who have made a name for themselves. Thus the number of invitees tend to be large, as the presence of the bride and groom is the occasion to show their new status to the less fortunate and also as a way to others. Before the imposition of curfew rules by the Government it was an occasion for high spending and waste. This type of wedding ceremony has similarities to the ancestral past ceremony of certain American Indian tribes where one's status depended on the amount of one's property destroyed in front of on-lookers. These were great weddings today dress themselves, if they are females in dress, shoes etc. and the recent fashion changes are not second strongly. With the spread of mass communication, as well as travel, fashions have spread throughout the country easily. One sees therefore a tendency towards similar dress in those that attend weddings in the big hotels, as well as, those that attend weddings in outstation halls.

The dress of the women which till recent times were saris, were therefore associated closely with the traditional culture.

This dress therefore had an organic growth with the traditional culture. The middle class men on the other hand dressed themselves in trousers and coats or national dress (for the rural middle class). However, nearly the trousers and coat has specially for the younger between the standard uniform. But this is an imported dress (mainly the coat, not having any functional value in a hot climate like Sri Lanka and not personally worn everyday) and even with the men wearing these in such gatherings repeat unconditioned habit have the appearance of suit and shoes. Further the suits tend to be done in colour, reminiscent of Western full length uniforms and of present day Western school uniforms. (The initiative for this is always a few decades behind the fashion?).

Whereas in the village wedding as in the wedding in the West there was a high degree of social interaction, the formal middle class hotel wedding has only limited social interaction. Children, therefore, women and men social in circles (mostly men in separate circles, and the women in one for women) rarely talking to each other and were still in opposition. It quite often seems that everybody is watching each other from their dress or social cues. An additional ceremony in the wedding was one in which the bride and groom in the Western hotel. As this time it was introduced the bride used to play outdated western music, but in the outdated western music was including in sometimes had into the world of pop in a wedding. Unpleasant the wedding bands also play musical music, but since it is outdated musical music of years which was basically a display of two groups and with a marriage, a high level of information transfer is observed.

With the coming of women's groups over the last few years, a phenomenon in such weddings is the invitation of dowry. This is highly in the West was the result of the dowry as well as those associated with the dowry and bent of largely African mother women. The new middle class, specially the younger group, like parents in dowry such weddings may, even those had in rural areas. A common number families in such wedding ceremony to the limited Western society, in the more urban areas the family participation being higher. However, the amount of female participation is increasing rapidly. When such dowry occurs, there are depending on the social class represented in the wedding, a large number of on-lookers who took upon it as a form of culture.

In some weddings there is also included an informal bar, where alcoholic drinks are served. Sometimes the hotel bar is converted for such use and a selected few (almost exclusively males) are selectively given a drink. This of course is a practice emanating from the village where village morality decreed that drinks be not indulged in but was done on the sly. In weddings nearer the rural areas the bar is more surreptitious and males retire almost in secret for a quick drink to reappear later in the larger gathering.

succeeding is relatively few compared to the number competing for such qualifications.

The job aspirations of youth who join the labour market after getting some educational qualifications are also geared towards certain types of jobs. Those who join the workforce after some years of formal education as well as those who join the workforce with some 'certificates' generally expect 'wage earning', stable jobs. The more educated aspire to jobs that have white collar status, but hardly anyone aspires to jobs in agriculture or related fields. These aspirations reflect the value system of present society, within which today's youth leaving schools and higher educational institutes exist. According to these values a youth if not in wage earning, stable employment will have meagre matrimonial prospects. Many studies on job aspirations of youth reveal that they expect jobs which ensure a stable income, security and future prospects. One can also observe a relationship between these criteria and the values by which the price of a young man is assessed in the case of present day arranged marriages.

Marriage also plays an important role in Sri Lanka's political spheres. The family relationships developed through marriage contracts particularly among the elite families of Kandyan as well as low country origin have been used as an entry to politics by some while there are other instances where the relationships developed through marriage have been used to strengthen the political position of those already involved in politics. There have been some studies of the genealogical background of present day leading politicians and it strongly suggests that marriage relationships tended to operate as a hidden force of solidarity among these politicians. In some instances these relationships have also been of use to mitigate the ideological differences between some of these politicians. These facts have also been widely discussed in many forums including the National State Assembly. The nepotism arising from political favours has been a characteristic feature of the ruling elite groups not only in Sri Lanka but also in many other ex-colonial countries with and without parliamentary democracies.

In several such instances the rulers under this political system came from the elite classes consisting of the descendants of old feudal chiefs and the indigenous capitalist class. The social and political environment in these countries has been conducive for their elites to enter politics and use their power to satisfy their class interests. In this process, the institution of marriage has been used to safeguard the political as well as economic interests of this class.

Present day marriage is also affected by the growing economic problems in Sri Lanka. Among these problems, youth unemployment can be identified as a most crucial problem which is likely to have a significant impact on marriage. It would not be incorrect to say that youths who have reached the age of marriage are yet unmarried as they have no self-supporting employment. Thus the problems of unemployment have compelled them to postpone marriage. According to Sinhalese tradition a man must have the means to support a wife and family before he gets married. In the past, self dependence where food is concerned was considered a qualification for a man to contract a marriage, and this was tested by the bride's party on their visit to the bridegroom's ancestral home. The present day norms generally give emphasis to man's employment and income, although in the villages early traditions are still being practiced.

The present unemployed population is estimated at nearly 800,000 of which over 500,000 live in villages. About 75 percent of these unemployed are youth in the age group of 15-24 years and they consist of an equal number of males and females. The majority of these youth have also received some sort of secondary education. It is also significant that those who are married constitute only a very small proportion of those unemployed. Among those married the majority are females. The increasing unemployment among youth in both rural and urban sectors suggests that employment opportunities are limited in agriculture as well as in other wage sectors. This problem has a tremendous significance on account of its socio-economic implications. The postponement of marriage can be one social consequence coupled with various economic factors.

### Cashing in on Marriage

Sri Lanka has increasingly attracted attention, in recent years, of Westerners seeking oriental marriage partners. The latest exposures on this sordid business came out recently in the West German tabloid "*Bild am Sonntag*" and the Swedish newspaper "*Aftenbladet*". The Swedish paper described how a girl from a rural home in Sri Lanka had found her dream of a Scandinavian paradise turning into a nightmare.

The lure of an apparently comfortable life, free from financial stress, has emboldened many Sri Lankan girls to answer advertisements in the local press with the hope of wedding men from affluent western countries. The principal motivating factor in this type of marriage is money. The applicants apparently believe that the middle aged men who seek Eastern brides will not merely honour their marriage vows but also elevate them from their humdrum, prosaic existence to the glittering life of the rich world. This seems to be a reversal of the present dowry system; the Western man here provides the money, while in the normal Sri Lanka case the woman is the money giver.

An analysis of the socio-economic backgrounds of many of these girls and their partners has revealed very wide differences particularly in social and cultural backgrounds. The girls are often from families where the fathers are not in a position to give a dowry and settle their charges as they would wish to.

For these tourists, mostly from the Scandinavian countries, a marriage in Sri Lanka is a novelty. There are, however, instances of foreigners marrying Sri Lankan girls and living happily thereafter. Reports reaching our shores from time to time, however, reveal the plight of many girls doing all they could to escape from their country of adoption.

The parents of many of these girls who have scoffed at the mere mention of their daughters marrying an outsider from their selected social circle and backgrounds, readily respond to a suggestion for a proposal of marriage from a foreigner whom they hardly know. The lure is in easy money. They believe firmly that a well settled daughter would bring financial stability to the entire family including those members who are yet to be settled.

Not many of these parents would have read of the German papers' exposures of the lucrative trade carried on by a Scandinavian "marriage agency". The agency called for photographs along with specific details from Sri Lanka girls who wish to marry European bachelors. This data was collected by the agency and issued in catalogues to prospective customers for a fee. The interested males fly over to Colombo to take back a willing partner to Europe.

The last few years marked a declining fertility trend in Sri Lanka. The rate of growth of population has dropped over the last two years from 1.8 percent to 1.6 percent. This is attributable to factors such as the extension of family planning programmes and rising trend of late marriages among the females as well as males. This is a direct consequence of the postponement of marriage which can be explained in terms of increasing educational attainments of females and an increasing labour force participation among them compared to the past. As mentioned earlier a large number of youth join the work-force but remain unemployed. They are therefore unable to fulfil family obligations which involve not only attending to domestic work but also contributing physically to family income. The increased family burden among the poor communities (in terms of income over 80 percent of Sri Lanka's population falls into the poor category where expenditures are less than Rs. 400 p.m.) has changed the role of the female from one of 'housewife' to 'income earner'; thus a female youth is now expected to find suitable employment after leaving school. It has been revealed that preference is given to teaching, nursing, clerical and similar jobs by those who have reached G.C.E. (O.L.) or above and spinning, weaving or similar school work, have been practised in the case of those who dropped out at the middle school level. The modern norms in regard to marriage such as preference given to employed females with a fair level of education, late marriage etc. reflect to some extent the impact made by growing economic changes on marriage. These changes could be seen even in a village context.

In 1953 the average age at marriage for females was 23 years in general and 20.4 and 18.7 years for Kandyan and Muslim females respectively. By 1968 the average age at marriage rose to 23.6 in general and 21.6 for Kandyan females, while among the females

of the Muslim community, the average age at marriage remained without a significant change. The census of 1971 reveals that average age at marriage among females has increased further and is over 24 years.

In the case of present developed countries the postponement of marriage with the decline of fertility has been a phenomenon occurring concurrently as the economy moved from a less developed to a developed stage. These characteristics of demographic transitions are generally attributed to rapid economic growth, increasing opportunities of employment, advancement of science, technology, education, urbanization and other factors. In the case of Sri Lanka however, a similar demographic change appears to be emerging in a state of under-development. It is also a manifestation of how society responds to a situation of partial under-development where some indicators of social development like education and literacy have reached a satisfactory standard while other indicators of economic development such as employment, incomes etc. have not.

### Conclusion

An attempt has been made in a preceding discussion to survey the institution of marriage in Sri Lanka's society in its early as well as modern forms. It is apparent that the economic rationality of early practices of marriage had their roots in the feudal economy while the modern practices have their roots in a capitalist economy though they still preserve some characteristics inherited from the old feudal socio-economic order. The importance attached to caste, religion and ethnic differences reflects the influence of feudal values on present society while other considerations such as family status, professional skills and incomes reflect the extent to which the values of a society with class distinctions influence the institutions of marriage.

The socio-economic transition in Sri Lanka started with the influence of Western powers had a considerable impact in changing the characteristics of certain social institutions, among which was the institution of marriage. But these changes (for example monogamy taking the place of polygamy) did not occur as a result of evolution but as a result of measures introduced from outside. Thus the institution of marriage by itself did not change entirely. It preserved some of its feudal norms and values which persisted within the old social framework, the economic rationality on which the institution of marriage was based. The growth of the capitalist economy in the 19th and early 20th century took place through the plantations, but it had only a little influence in changing the life of peasants who remained isolated and not directly integrated into the plantation economy. In this context the pace of social change among the peasants was not as rapid when compared to the changes that took place among the urban communities. The distinctions between norms and values behind the institution of marriage among peasants and urban communities would also reflect the distinctions between the economies within which they operate.

The socio-economic implications of present day marriage practices would point to the fact that existing norms and values governing these practices are nothing but a manifestation of a 'social cost' which little seems to society as a whole. The consumption patterns of the class which are generally conspicuous, are forced according to these values. Further such values also promote some form of social and cultural dependence on the West. They also limit the possibilities of integrating various social groups for common goals. These norms and values also tend to maintain social inequalities through a system of unjustifiable transfer of wealth. It appears that some of these practices attach a commercial value to the female and thus undermines the role of woman in present society. The impact of present day criteria, by which marriage contracts are entered upon is considerable in areas such as the employment market, education and in the formulation of people's aspirations. These factors have all conspired society as a whole to pay a higher price than it should.

### MEAN AGE AT MARRIAGE

	General		Kandyan		Muslim	
	Males	Females	Males	Females	Males	Females
1953	22.7	22.0	20.4	20.5	22.1	18.7
1960	23.1	22.6	20.6	20.5	22.2	18.5
1961	23.1	22.6	20.6	20.7	22.3	18.4
1962	23.0	22.6	20.7	20.4	22.3	18.3
1963	23.2	22.4	20.8	20.5	22.5	18.5
1964	23.3	22.3	20.8	20.5	22.5	18.5
1965	23.4	22.7	20.7	20.7	22.5	18.7
1966	23.4	22.4	20.8	20.8	22.5	18.5

## Land Reform and Co-operative Farming

The Janawasa Law passed by the National State Assembly marked another step in the country's recent agrarian reform. This law which provides for the registration of certain societies as Janawasas, and the establishment of a Janawasa Commission to register, regulate and supervise Janawasas is a significant move in the history of collective farming in Sri Lanka. This law marks a phase in the transition from private ownership to collective ownership and fostering of a collective management and development of agricultural land. This may be considered a progressive step towards socialized agriculture. Co-operative farming in this country is not a recent development. Attempts at co-operative farming date back to the early fifties when this system was tried out on settlement schemes in the dry zone. Such early attempts were introduced mainly among peasants from the wet zone who were settled in agricultural settlements in the dry zone. These did not meet with much success and had to be abandoned. A fresh attempt was then made in the mid and late sixties. This time it was among the employed youth who were settled in youth settlement schemes. Although ambitious plans were drawn up to establish 230 co-operative youth farms between 1966-70, only 43 were established during this period with a membership of 2,739 youths as against the target of 25,500.

### Land Reforms

Co-operative farming reached new grounds following the Land Reform introduced in 1972. Provision was made under the Land Reform Law for the establishment of co-operative settlements (Janawasas). For this purpose a separate unit (co-operative settlement) was established within the Land Reform Commission. With humble beginnings in 1973 today Janawasas have grown considerably within a short span of three years, amounting to 183 in 14 districts, covering an acreage close to 50,000 and a membership of 18,000. In addition to the Janawasas there are also the Samupakara Gammanas (Co-operative farms under the Ministry of Agri-

culture) and the DDC Co-operative farms (under the Planning Ministry.) Thus co-operative farming today is a key component of the country's agricultural structure.

There is no doubt that co-operative farming is finally the only realistic way to safeguard the peasants from poverty, land, hunger, backwardness and oppression.

The ideal policy of allocating a viable holding to each peasant is not feasible in view of the limits on expansion of cultivable area and current population growth trends. The total cultivable area in the country is estimated to be around 10 mn. acres of which about 50 per cent is already under cultivation. A case has been argued for co-operative farming on technical grounds as well. For instance as Dr. Ernest Abeyratne, the Director of Agriculture emphasised:

*"The basic choice before us is between environmentally unbalanced systems of small holdings, dictated by current social demands, with all the attendant difficulties of servicing and support and the more easily managed, large-scale, labour-intensive collective or co-operative systems which are environmentally stable".*

In socialist countries co-operative farming is a political necessity and co-operative farms are in harmony with the rest of the economy. Co-operative farms are thus an inseparable part of a socialist economy and the co-operative transformation of agriculture is not just a question of organisation which can be carried through separated from the nature of the social order and character of state power.

Even in these countries the transformation of co-operative farms was a gradual process. In East Germany for instance, the transformation took place in about 15 years. Poland on the other hand, immediately after the war, started on a massive programme of collectivisation but subsequently decollectivized them and

today 80% of the land in Poland is under private ownership.

Co-operative settlements in Sri Lanka are just a segment of the agricultural sector of the country. Out of the total lands vested with the State following the Land Reform, only 7% of it has been alienated for co-operative settlements while over 20% of the lands vested have been redistributed as individual holdings to landless peasants.

While it is important that co-operative settlements are given a prominent place an equal amount of consideration must be given to organise production in the lands distributed as individual holdings. The mere redistribution of holdings to the landless should not be the sole objective and every effort should be taken to bring these lands under an appropriate production plan so that these would give the recipients a reasonable income and could make a major contribution to increase agricultural production of the country. Excessive attention on Janawasas could result in mutual jealousies and rivalry between the villages and estates which would also lead to problems in integrating the two.

### Time for Assessment

In Sri Lanka collective farming is still in its embryonic stages. Although we do have many co-operative farms which are managed successfully we cannot yet say that Sri Lanka's experience in collectivisation is a complete success. There are many problems yet to be classified and it will be a long time before we could evolve a system based on our own ideologies.

This brings us to consider the present position of co-operative farming schemes in Sri Lanka. Is the time ripe for us to increase the number of co-operative farms? To what extent have Sri Lanka's co-operative farms been successful? Have we evolved a system based on our own ideologies and aspirations of the people? Thus it would be useful if we could now make a complete assessment of the co-operative farming system in Sri Lanka and identify its obstacles for its sustained growth before further expansion is made.

# COMMODITIES

## COCONUT

### Trends in Production and Export

Sri Lanka's coconut crop in 1977 is expected to be one of the lowest in recent history. The Coconut Marketing Board in its Annual Review of Coconut Products for 1976 has stated that the adverse weather should continue to affect the coconut crop in 1977 and a marked decline in the crop is expected particularly during January-April 1977 and for the year as a whole the crop is estimated to be below one million tons, which is one of the lowest crops in recent history. The review points out that coconut production in Sri Lanka in 1976 is estimated at 2330 million coconuts compared with 2585 million in 1975. This represents a decline of 255 million nuts or nearly 10% in relation to 1975. The decline in the crop was primarily a result of adverse weather conditions and the shortfall in the crop was most pronounced in the months of May-June and October-December of 1976.

The export surplus (in the form of fresh nuts, copra, coconut oil, de-oiled coconut) in 1976 amounted to 794 million nut equivalents representing some 34% of the total crop. The export surplus in 1976 was lower than 1975 by some 120 million nut equivalents or about 15%. Table 1 gives further details.

Table 1  
Estimated Export Surplus  
Coconut Crop  
Million Nuts  
as % of the Crop

Year	Million Nuts	Export Surplus	as % of the Crop
1974	2445	887	36.3
1975	2605	1120	43.0
1976	2330	794	34.1
1977	2040	495	24.4
1978	1855	304	16.4
1979	1670	154	9.2

Domestic consumption in the form of fresh nuts (food nuts) absorbed 55% of the coconut production in 1976. Calculated on the basis of an annual per capita consumption of 90 coconuts, the total domestic consumption of fresh nuts in 1976 amounted to 1236 million nuts, an increase of 12 million from the corresponding level in 1975. Copra Pro-

duction in 1975 is estimated at 251,382 metric tonnes which represented a drop of over 10,000 MT or 25% from the previous year's level. Copra production absorbed about 35% of the coconut crop in 1975.

Table II  
EXPORT VALUE OF COCONUT PRODUCTS  
(Rs. Millions)

Product	1975	% of Total	1976	% of Total
Coconut Oil	210.0	25.1	191.6	37.9
De-oiled Coconut	172.2	34.0	187.1	37.9
Fresh Nuts	9.4	1.2	7.8	1.5
Sub Total Kernel Products	400.4	80.3	386.5	76.6
Coin Fibre Products	34.1	6.7	10.1	10.8
Coconut Shell Products	11.0	2.2	11.2	2.3
Coconut Husk	1.5	0.3	4.4	0.9
Sub Total By-products	57.2	19.4	25.7	23.2
TOTAL ALL PRODUCTS	503.1	100.0	506.5	100.0

The production and export of by-products (coin fibre, coconut shell products and coconut husk) showed a considerable improvement from the previous year's levels. The coin fibre production is estimated at 105,500 MT representing an improvement of 25,500 MT or 25% from the 1975 level. Coconut shell charcoal production is estimated at 22,500 MT, an increase of 5,000 MT or 22% in relation to the 1975 level. Coconut husk exports were 385 MT as against 2070 MT in 1975, an increase of over 180%.

As seen in Table II above the total value (Rs.) of all coconut product exports amounted to Rs. 507 million in 1976 as against Rs. 503 million in 1975. Kernel product exports (fresh nuts, copra, oil and DC) accounted for 77% of the total export earnings as against 80% in 1975. The largest single contribution came from coconut oil with 38% of the total closely followed by DC with a share of 36%. Coin Products contributed nearly 20% of the total export value. The export earnings from coconut by-products amounted to Rs. 25 million which represented an increase of Rs. 20 million or over 20% in relation to previous year's earnings. In contrast, the export earnings from kernel products

at Rs. 388 million recorded a drop of Rs. 18 million or 4.3% in relation to 1975 earnings.

De-oiled coconut production in 1976 amounted to 46,186 MT which represented a decline of nearly 13,396 MT or 29% from the previous year's level. De-oiled coconut absorbed

13% of the coconut production during the year.

## TEA

### Prospects of Further Upward Movement in Prices

Attractive advances in prices of all grades of tea have been recorded at each successive auction during the opening two months of this year. This trend has in fact been noted in all auction centres in the world. As a leading Colombo broker states: "The most popular question in the trade today is 'When is there going to be a slack in this persistently upward swing in prices?' A very difficult question indeed to answer but at the moment there is no evidence that points towards this in the near future. Tea continues to be the cheapest beverage and as in so many other countries, the U.K.'s most popular retail packet is now around 20 p. per 1/4 lb. while the same weight of instant coffee is between 90p and 100p. Further increases are an immediate prospect for both commodities but the reasons for drinking tea are becoming more powerful. World supplies in 1976 increased by 17 million kilograms of which 16 million kilograms was taken up by India for internal consumption. Internal consumption in

India is expected to show a further rise in the current year. There is no immediate prospect therefore of export supplies meeting with the continued increase in world consumption and we are happily confident that we will not see prices again similar to those of a few months ago. On the contrary, all indications are that there is every prospect of further price increases".

So Lanka was sold at the London auctions on February 21, registered substantial price increases ranging from 10p to 20p per kilo. Brokers' forecast that "perhaps, with these fantastic price increases in London, coupled with the very limited offerings in Calcutta, local auction prices could well move up further".

Ten prices in London are reported to have moved up by approximately 300% during the past year and the basic reason for this is that the forces of supply and demand have begun to work in favour of the producers. Stocks in London have been extremely low and at the end of December 1975 the figure stood at only 20,450 tons as against the normal average of 25,000 to 25,000 tons.

It is a common belief that the world consumption of tea has increased considerably, at a quicker pace than during the past so many years. It is also believed that there will be only limited quantities available for disposal at main auction centres of the world for the next few months. These factors will play a very important part in the world price for tea and everything points to a further upward movement in price for this commodity. It is hoped that production, which does not appear to have increased over that of January and February in 1976, will pick up in Sri Lanka from about April onwards; for unless crop increases are forthcoming Sri Lanka will not be able to take full advantage of the upward price spiral.

## RUBBER

### Heavy arrivals at auctions

During February there were continual heavy arrivals of crepe and sheet at the public auctions. Values were thus marked down with the easier conditions. Each overseas market appreciated the situation. Buying was very selective and defective crepes met with very poor demand.

The extreme drought conditions experienced during the January/February period had affected the production of quality rubber.

## TRANSPORT

### Electrification of Sri Lanka Railway

The Government's decision to go ahead with an electrification project of the suburban railway and its approval of Rs. 200 million for this project is the ultimate result of progress in this direction initiated nearly 60 years ago. The case for electrification for part of our railway has been presented consistently and consistently by many advocates starting with Wimalasundera in 1918 and most recently by A. R. P. Wijesekera.

Wimalasundera presented his proposal to the Engineering Association of Ceylon in 1918 in a paper entitled "The Economics of Power Utilization in Ceylon". After discussing available sources of energy for industrial, domestic and traction uses, and identifying about 250 MW (191,000 Bhp) of non-storage run-of-river hydro power he argued:

"Power derived from one or more of these sources could be utilised for operating some sections of our railway system electrically, especially the hill section, and that most economically. For the purpose of this paper, we will select for consideration the section from Polkalawala to Sumbawala, including the branch line from Kandy to Maskeli."

His selection of this upcountry section in his comparative analysis was because of popularity to the source of power, and the possibility of using descending trains on down grade to generate electricity as part of their braking effort and so to utilize power to the limit. However in the same paper Wimalasundera also showed the usefulness of:

"An electrically operated urban train service in Colombo (tramway services in Colombo, Kandy and other towns, railless traction (trolley buses) as tractors to steam and train".

Wimalasundera was motivated by his knowledge first that central generation of electricity (even using fossil fuels) is more efficient than separate generation at each place of use and second that the water of his country ran down from mountain to sea free of any cost whatsoever. He also drew on his immense knowledge of world developments at that time including electrification of railways.

Wimalasundera was scoffed at then by his British colleagues in the Association who had neither Wimalasundera's knowledge of the world nor of electric science, nor any intention of upsetting existing ways by electrifying the railway.

But the question arises for consideration as to why railway electrification escaped commitment, let alone implementation, until 1977. The chief advantages from 1900 until now have remained basically the same, namely:

1. flexibility of primary energy source (and hence the chance to use nationally available and/or renewable resources in any country);
2. possibility for regenerative braking;
3. less moving parts on the train (especially reciprocatingly moving parts) and hence less maintenance, longer life, and greater loco availability;
4. comparative silence and smoothness of running;
5. complete absence of air pollutive exhausts;
6. easier scheduling because there is no need for refuelling or watering;
7. greater instant availability of enhanced power;
8. opportunity to place tractive force on all axes of the train;
9. better acceleration and decelerative capability for the same cost or same weight of machine.

These are among the reasons which have impelled both coal surplus countries (Britain, Germany) and oil-scarce countries (Romania, USSR) to electrify their railways. Indeed today two countries most intensively engaged in rail electrification are OPEC members, Venezuela and Iran. Moreover USSR and China, both reputed to hold enormous reserves of oil, are both electrifying railways just as vigorously as Germany, France, Holland, Spain and Italy.

How is it then that other countries, such as Britain, were so pitifully slow in this advance, and still others, such as US and Canada, not only failed to electrify but even de-electrified some lines? It is interesting that in USA the big privately owned railways

were disinterested in electrification even after 1973, whereas the State Governments of Massachusetts, New Jersey, New York, Pennsylvania and which had taken over the urban railways and the federally controlled AMTRAK (passenger trains) are all committed to and urging more electrification.

An even more intriguing question is why successive governments of Sri Lanka, (and even successive railway administrations) until now have opposed, or partly opposed, the electric power. In this the CGR could be the only railway outside USA which has of itself opposed electrification from 1948 until 1976. Most state-owned railways (such as British Rail) have pleaded for electrification but have been refused money by their governments.

In this country electrification has had various excuses put forward for postponing this measure. They include such arguments as:

1. alleged shortage of power (which could be self-fulfilling if the same agents postpone hydro development);
2. Corrosion of overhead catenary and masts along the sea coast is minor controllable problem;
3. necessity to raise bridge decks for electrical clearance (British Rail raised nearly four hundred bridges in 35 miles of electrification from London to Manchester in the 1960s; the number of bridges we would have to raise is comparatively negligible);
4. Interference with colour light signals and with telecommunication. (This is a matter of the cost of adaptation, yet the first aspect could have been avoided by installing "non-interference" colour light signalling in the first place).

The chief factor delaying railway electrification in some parts of the world has been the apparent cheapness, and liberty assumed in extra stability, of petrol/diesel. Another factor has been the attitude of bankers and/or accountants brought up in the banking philosophy, who have tended to judge enterprises, and investments in them by the narrow measure of their interrelated book-keeping profits or losses. They have not counted social benefits, or social disbenefits which are external to the railway. And they have been reluctant to visualize benefits lasting into the future.

The electrification chosen now for the Colombo area extends from Kalutara to Veyangoda. Views are expressed that it would have been better to have gone as far as Kurunegala which is a significant and road city in NWP and also in Negombo, but so long as some part is started, excursions should be able to follow. Likewise the restriction of the scheme to local suburban trains is being regretted. Once the catenary is installed, it should be used by all trains moving north or by means of loco switching at the electric limits. However, this too can follow once the suburban lines are electrified.

Germany and France both have what are called "rolling programs" of electrification. That is to say a long term commitment so that design and survey and construction teams move on from one section to another without disbanding, when each section is done. This country too could benefit by such a commitment as would be inherent in government starting now that electrification will proceed over time all the way to Kurunegala, Matale, Baroda, Kottakkele and Matara. Once the first initial start up segment is ready, Sri Lankan technological teams set up and trained in all aspects under the first foreign contractors could take over the planning and execution of continuous electrification mile by mile over the next few decades.

It is not worthy that technology has reduced the cost of electrification in real terms. High voltage (25,000 volts) AC electrification is cheaper than the 2,400 volt DC electrification proposed by Wimalawansa because the higher the voltage the less current needed (and therefore less diameter and weight of copper wire to carry it) to convey the same energy. This was of course not unknown to Wimalawansa, but in those days there were no easy solid state devices to step down and convert high voltage single phase current to both the main line low voltage DC or three phase current for the traction motors. Many countries are now using triac controls for making regeneration by bringing more feasible and less noisy, with great saving in energy, although A. K. P. Wimalawansa with good reason needs to favour more colour symbolism for the time being as long as hydro power is possible in our conditions.

The short-term advantage of electric trains is not solely economic. In five years time the whole quality of rail travel would have improved. With its characteristic advantages the electric train will be capable of giving faster, more frequent and more comfortable travel which will be

attractive for off peak as well as peak riders, and should be properly catered to by CTB feeder services to rail stations.

But the chief future advantage for which our descendants will have to thank the present decision makers relates to energy. The world has approximately 58 billion tons of proven petroleum reserves which even now it is using up at the rate of 3 billion tons per annum. Other things remaining unchanged the oil would be over in 33 years time. Today's most hopeful optimists expect another 200 billion tons of oil to be discovered, but then they expect world oil consumption to rise to at least 7 billion tons per annum. The increased use will partly come from persistent profligacy in OECD countries, but also from increased "reasonable" use in socialist and some Third World countries breaking through the poverty restraints. The net effect, according to forecasts, will be increased costs of extracting oil from deeper wells or less accessible places, and even more persistent pressure on prices due to demand rising against the increasing desire of oil producers to keep their stocks on the ground for future disposal at higher prices.

For Sri Lanka this may mean in terms of these estimates, an unbearable price of £100 (1977 dollars) per barrel of oil by the late 1990s as against a mere £12 today. Hence any viability comparison done today need to be based on a realization that oil prices may increase up to eight times as fast as the general level of prices under inflationary conditions.

In this context it has to be noted that although the cost of hydro turbines will also go up somewhat, and the cost of electric rail equipment and other associated costs, and indeed the cost of such foreign experts and contractors as we may need with the flight of our own talent to take up other countries "challenge", although all these things will go up, the cost of the water precipitated on our hills, and the cost of gravity compelling it down to the sea will remain zero, with one qualification.

The qualification is that trees are maintained in the hydro catchments, to serve as the first and largest water retainer.

## Principles and Policies to Promote Sri Lanka's Milk Production Industry

Earle de Silva

*The glaring shortage in national milk supplies and an inability to satisfy even the minimum needs of the most sensitive groups in our population has been highlighted in many previous discussions on this subject. In this paper, which is an edited talk given by Dr. Earle de Silva, Deputy Director, National Planning (Agriculture), Development Planning Unit, Ministry of Planning and Economic Affairs, on the first day of the First FAO Government of Sri Lanka National Dairy Training Course Seminar arranged by the Regional FAO Dairy Training Centre in the Philippines, some of the reasons for this situation are discussed and many constructive proposals are put forward for an effective policy on the development of milk production and the supply situation in Sri Lanka.*

Policies are a dangerous subject because they are framed by the Political Executive and some are more sensitive than others about their policies. But policies are not permanent. Policies enter the statute books, some to be alive, others to lie dormant for varying periods of time, some to be forgotten and others to be changed by succeeding governments. Paradoxically, some even defeat their own objectives. However policies regarding milk and milk production have a serious impact on the daily life of the entire population of Sri Lanka.

The views I express are my own. But I shall treat the subject from the broad perspective of National Planning and not from the parochial view of the Milk Board or its sector. The facts and figures I quote are from authentic documented material.

The People's Bank *Economic Reviews* of July 1975 and March 1976 dealt with the Milk and Nutrition situation in Sri Lanka in the cover stories of

these issues where the serious protein-caloric malnutrition incidence amongst sensitive groups of children was identified. A milk crisis has been with us for nearly a decade. Our local press has periodically spotlighted critical shortages. I will focus attention on the urgent need to review the policies in regard to the Milk and the Milk Production Industry in Sri Lanka.

The basic economic principles which are universal; and which should influence and govern policy making in regard to the dairy industry (by dairy industry I mean both primary and secondary sectors) are:

1. The objective to satisfy demand.
2. The policy of declaring milk as an essential food item.
3. The principles underlying efficient supply and distribution to meet the objectives at (1) and (2).
4. Pricing policy.

The principle underlying economic policy on milk at national level must undoubtedly be demand, and its relevant social policy is the declaration of milk as an essential item of food, particularly if nutrition considerations are of paramount importance in a situation of inadequate supply both locally and from external sources under balance of payment constraints.

### SATISFYING DEMAND

This is undoubtedly the primary objective of any development and production programme, import programme, distribution scheme and pricing policy. In all LDCs of which, there are 161, the objective of dairy development is to satisfy internal demand.

Nearly all LDCs are net importers of dairy products. The exporters are inevitably Developed Countries. Of the world population of 4½ billion these LDCs carry over 3½ billion. But out of the world milk production of 421.32 million metric tons (1973) these LDCs produced only 84.93

million metric tons, i.e. only 22% of the world milk for 78% of the population.

Nevertheless, the LDCs continued to be net importers of milk products and cows to satisfy consumer demand and promote milk production respectively.

In the developed market economies, demand for milk products is more or less a direct function of income and prices. The population effect is less pronounced. But in many LDCs it is not such a simple function. Demand is also linked with traditional consumer habits, levels of education and even religion; and also government controls via import duties, import quotas, prices and distribution systems. The population effect is itself significant. India for instance, is a country where demand for milk and milk products is traditionally high in relative terms of demand for other essential food items. Sri Lanka on the other hand is traditionally backward in this respect. Daily per capita consumption in India with a population of 600 million was 105 gms. in 1975. In Sri Lanka it dropped from 56 gms. in 1963 to 41.4 gms. in 1974, according to the Consumer Finances Survey 1963, of the Central Bank and the Food Balance Sheets of the Department of Census and Statistics.

In most countries which were former colonies of a metropolitan European Power demand for processed milk products has been derived through the consumer habit of dependence on imported products. This is particularly true of export economies such as Sri Lanka where a part of export earnings from primary products was utilised for the import of popular consumer items from the metropolitan country or its trading partners. But the demand for these products was invariably restricted to urban consumers, the upper income groups and the educated segment of the population which copied the customs of the metropolitan immigrants. With the gaining of independence, widespread education, rural development and emancipation of backward areas, development of provincial

covene and the increasing mobility of the population, the consumer habits such as use of processed milk foods spread to a larger section of the population. This spread-effect has been further accelerated with the increasing incidence of female employment and the consequent decline in traditional breast feeding of infants.

Thus the derived demand through imports ultimately created the local market which became the pre-condition essential for promoting local dairy development and local processing to achieve import substitution.

These historical origins are still evident in the marketing system of our own National Milk Board. Its products are predominantly geared to the urban population and the income groups which could afford them. Derived demand as in Sri Lanka is traditional demand as in India could be utilised as the goal in the promotion of local milk production and dairy development. The demand must be assessed.

But neither the household statistics nor the expenditure in Family Budget Surveys give a true picture in the situation where imports are severely restricted, local production is far behind our needs and supplies are not accessible to various sections of the people either because of bad distribution or inaccessible prices and because a section of suppressed demand exists in the country.

In the situation where supply is inadequate both from local production and restricted imports, government has to decide the policy with regard to milk, and then which of the milk products are to be accorded the priority status of essential food items, on the basis of nutrition considerations, for the sensitive groups in the population.

## MILK NUTRITION

Milk is considered a complete food. In the mammalian world all young are nurtured exclusively on milk from birth up to various ages of development and substitutes are ingested. The human baby has relatively a long period of growth up to maturity. During this entire period of growth and development of the skeletal structure which may be up to about the 18th year, milk will provide the essential nutritive elements in proper balance despite the ingestion of all

other food. Milk is absolutely vital in the early years for the growth of the brain and mental powers. It is now known that milk starvation and undernutrition at this stage would cause mental retardation for life. Therefore milk still remains essential despite all other foods taken until the 10th year or so. From this stage a child's growth accelerates rapidly until puberty. The skeletal structure grows rapidly and therefore once again it is a critical stage because milk is the only food item which has the necessary essential mineral elements in a proper balanced ratio and in an easily assimilable form. There are therefore four milk essential stages of growth. The last that must be considered are the first three stages. These are the sensitive age groups in the population.

Apart from this group of children there are three other milk-sensitive groups. These are lactating mothers, invalids and the old age groups.

Therefore a policy on milk, as an essential item of food, must seek to meet the needs of these sensitive groups.

## Requirements for Sensitive Groups

These sensitive groups are represented in every country but with some variation. In Sri Lanka the most sensitive groups are the age groups of children up to 15 years numbering 5.39 millions at the 1973 demography; and 371,000 lactating mothers who together comprise 41% of the population of 13.604 millions. This is high for any country with scarce resources; especially to provide adequate supplies of milk foods and to ensure that the supplies reach this large sensitive segment of the population at a price within their reach.

The daily minimum milk requirements for these groups are 227 gms. for children 1-3 years old, 148 gms. for the age groups of 4-12 years, 71 gms. from 13-15 years and also those over 60 years old, and 90 gms. for pregnant and lactating mothers. On a rough calculation the daily milk requirement for these groups alone is 1,138,000 pints. The supply in 1973 average is about 650,000 pints, of liquid milk a day when all the Milk Board products of Lakshmy, Vita-milk, sterilised milk and pasteurised milk are taken into account together with all the imported milk food.

Of the National production of 650,000 pints or in a day, about 425,000 pints of milk not collected by the Milk Board were locally consumed. The total national supply was therefore in the region of about 1,000,000 pints a day.

The implication is that the supply was short by about 1,400,000 pints a day to satisfy the minimum needs of the sensitive groups in the population in 1973.

Let us look at the supply position on a per capita basis. In 1963 the per capita consumption with a population of 10.8 m. was 2.025 pints per day of which 1.025 was imported milk and milk products. The national milk production was 600,000 pints a day. By 1973 consumption had dropped to 1.602 pints and a production of 540,000 pints, according to the Socio-Economic Survey of the Department of Census and Statistics. By 1974 it had dropped further to 1.481 pints on the basis of the Food Balance Sheet of the Department of Census & Statistics. The MRL recommendations are 3.3 pints per head. On this basis the daily supply should be 3.74 m. pints of liquid milk or 175% more than the present supply.

In the light of this situation could there then be an effective policy on milk production, development and supply in Sri Lanka?

What are the ill-effects of this situation? The ill-effects are vividly identified in the People's Bank *Economic Review* of July 1975 and March 1976.

The MRL has repeatedly warned of the increasing incidence of first degree protein-calorie malnutrition, especially among the most sensitive age groups in the population. The incidence is at least a million children more annually among the urban poor and mostly in the poorest 40% of the population with an income under Rs. 200. The least expenditure on any form of milk is in the income group under Rs. 100/- shown in the Socio-Economic Survey of 1969-79. The increase in expenditure rises locally but slowly until the income groups of Rs. 600-799 is reached. It shoots up from this income level. Even Marasmus and Kwashiorkor which are the severe clinical conditions of protein-calorie malnutrition have appeared in Sri Lanka in recent times. The severity of protein-calorie malnutrition is that at 24 months 1st

degree affliction is 47%, at 2 years 61%, at 3 years 71% and then gently decreases. **This age incidence is clearly on account of the lack of milk and milk substitutes and supplements.** Surely the decreasing supply in the last few years with 1974 as the worst year on record must be a contributory factor.

The need for a review of policy I believe is therefore most urgent. If the policy objective is primarily to supply the sensitive age groups and most needy in the population with essential milk foods, then the matter of demand is of secondary importance. Such a policy is justified when local production is inadequate and imports are restricted by balance of payments problems. But this sort of selective supply policy is very difficult to implement because it must be supported by a well developed marketing system and a strong non-corrupt administration and bureaucracy to implement controlled distribution of quotas and the accompanying subsidised pricing policy. Otherwise corrupt practices would emerge and some part of supplies will find its way to meet suppressed demand among the more affluent. The poorest and most needy will be denied supplies. Only strong governments capable of eradicating corruption with severe punitive measures could succeed in effecting selective distribution.

An alternative is a health welfare distribution scheme to the sensitive groups through schools and maternity and health clinics. But here too, in order that all in these sensitive groups may be reached, the schools and health infrastructure would have to be well-developed and widespread. For the last 15 years Sri Lanka has had a Ministry of Health Milk Distribution Scheme assisted by CARE. But the problem of malnutrition described before is so large that this programme seems to be too small. The Ministry of Health and CARE have just established a Cereal Products Factory at Kundasale to prepare Thripasha from local materials for a larger distribution programme of this milk substitute. To be fair, such a programme still cannot substitute a normal supply of milk food. It can only supplement the requirements of the most needy it can reach.

In both supply systems proposed, it is necessary to have population

statistics broken down into age groups, schooling groups, female employees and so on. Then the required supply is estimated on the basis of daily needs for different categories recommended by nutritionists.

The third alternative of supply is to assess demand and make supply adequate and at a price within reach of the low income groups in the population, as the criteria of accessibility for all. Only when a country can generate adequate supplies including imports and also subsidise milk to the consumer at a price which to him it would be an advantageous opportunity cost, relative to the next most important essential item, would milk reach the largest segment of the needy and sensitive groups in the population through the open market. This is the basis on which milk remains a relatively cheap essential food item in Developed Countries.

#### PRICING POLICY AND SUBSIDIES

In the world crisis of inflationary prices the prices of milk products rose for instance by 350% in the case of skimmed milk powder between 1970 to 1974. The c.i.f. prices of milk products for the majority of LDCs thus rose faster than income gains. On the one hand, imports were restricted due to balance of payments problems in the majority of LDCs. On the other, demand slackened due to the price hike. These two factors have had somewhat of a balancing effect although an equilibrium position could not be reached because of the large element of essential milk food demand. It is this element if accepted by governments as a matter of national nutrition policy which would need to be fortified in these circumstances with a consumer subsidy and a distribution system to reach the majority of the most needy. Still a major problem of a consumer subsidy is that although it will improve real income and the purchasing power of the recipient, the very poor and destitute may sell the subsidised product at a higher price to a third party in order to use the cash for the purchase of more bulky but less nutritious foods or for some other urgent needs. This, in fact, has been happening with Lak-spray in this country.

If instead, consumer prices are kept down by subsidising the cost of

production, it would on the one hand increase effective demand and on the other it would stimulate production, both because of the viability of the enterprise and the marketing opportunity which would be created. Unlike consumer-subsidies which are difficult to remove once introduced under democratic systems of governments and the trends of continuous inflation, producer-subsidies can be reviewed and manipulated with greater ease from time to time, commensurate with market fluctuations. The producer subsidy could be selectively applied, on one or more factors of production. It could be a means to promote improved techniques of production and could also be an incentive for development. This would be the more valid policy to adopt in most LDCs because it could achieve several important objectives. It makes dairying profitable and promotes development and production. The ex-farm subsidised cost of production can be further manipulated if necessary selectively or uniformly at the point of the consumer in order that milk would reach the large majority of the most needy. Thus the nutrition objective would be achieved while simultaneously a rise in the cost of living would also be curbed by some amount. In effect real income and purchasing power of consumers would increase.

Pricing policies may also be extended to situations of unrestricted supply where, by imposing duties on the c.i.f. price, the market price could be raised and demand curtailed resulting finally in reducing imports. Reducing imports via duties and restrictions are necessary protective steps for nascent local industries of milk products and for their promotion. In this way a pricing policy can play an active and positive role in the country's development. The producer can be subsidised to the extent of making the industry profitable and attractive for new investments and expansion while duties are placed on imported products to raise the prices of such competing products, significantly above the local products. However, local production should be nearly adequate for basic needs. If not, if a selective distribution system operates because supply is inadequate than the imported product or the part of it channelled into selective distribution would have

to be subsidised to the selected consumers.

Perhaps the remedy for Sri Lanka is both a supervised producer subsidy and a selective consumer-subsidy for the most needy.

The government now provides three subsidies. A pasture development subsidy of about 30% of costs; a 7% subsidy on the price of imported cattle which at today's prices in the United Kingdom is 75 percent of the cost; and the third is the consumer-subsidy via writing-off of National Milk Board losses up to about Rs. 50 million a year at the present time.

These policies also need to be reconsidered.

### Pasture Development Subsidy

The pasture development subsidy is out of date because:

1. The ceiling on land ownership does not permit economies in raising large breeding, milking and dairy herds on developed pastures. If at all this is now only possible in the small groups of wet zone coconut estates of 25-30 acre holdings. Here too, on account of the present comparative price advantage of dairy milk sales as against rising calves for 3 or 4 years before the production phase is reached, farmers would concentrate on milk production and not on dairy.
2. In the rest of the country milk production is exclusively on small holdings and in mixed farms and home gardens. Breeding is exclusively on the small home small plots and not on grazing. The time for fattening in the dry zone would certainly be longer on small limited fodder plots on small mixed farms. Besides, the type of animal improves with the situation of exotic breeds of dairy animals, dairying will shift away from the dry zone to the wet zone and will be able to supplement itself with the fodder supplies and will not concentrate.
3. It once and for all pasture development subsidy does not benefit the small farmer who does not have an acre or two, but produces 95% of the national milk production. It is only relevant for the small number of more diligent or contented farmers. They will in any case obtain needed assistance off income tax. The biggest beneficiaries are the state sectors of coconut estates under the Land Reform. This is only a book transfer of capital because these state institutions operate on government capital grants for development; their losses are continuously subsidised and they do not operate on the commercial basis of profitability criteria with commercial equity.
4. In any case a pasture development subsidy is meaningless because 25 years of pasture research, publications of learned papers on the subject, foreign training of Sri Lanka officials and the "Aid" and foreign experts combined, have to insignificant extent promoted the development

of improved pasture and the systematic management and utilisation. Of what use is a development subsidy if there is no systematic management research? No state livestock farm demonstrates the research findings by example. No private farmer would take the trouble while coconut, paddy and rice lands are easily and cheaply available.

### Stabilising Production Costs

Therefore a producer-subsidy on one or more important production factors, specially to stabilise cost of production under severe market fluctuations, would be a more meaningful for this industry. The fertilizer subsidy as a follow-up to the pasture development subsidy has never been consistent and has been increasing out of tune for long periods with rising import costs. It is in any case not relevant for our economy. Fodder should be grown with cattle manure techniques to promote the cultivation of fodder and the conservation of sludge and hay from grown crops and the stabilising of coconut paddy and rice farm prices must surely be the future policies for dairy development.

The subsidy on imported cattle is only supporting farmers abroad. The large majority of calves born to good dairy animals in Sri Lanka are not raised because of high costs over time to four years. Small dairymen prefer to sell milk to obtain cash and leave the calves. The import programme therefore lacks development policy. Two strategic producer subsidies proposed will reverse this trend to some extent. But in addition, we are in urgent need of a new policy to pay out to farmers incentive prices for quality dairy animals raised in this country. The very recent imports of pregnant heifers from Australia, under the IDA Sri Lanka project, cost about Rs. 6000 per animal. Why not pay our farmers at least half this price?

### Milk Board Losses

The consumer subsidies via writing-off of milk losses tends to perpetuate inefficiencies in the Milk Board. The Board has run at a loss every year since its inception except in one year, (please see *Economic Review July 1973*). The loss in 1973 was Rs. 75 million. The Chairman proclaimed at the Special Budget Meeting of the Ministry of Agriculture and Lands for 1977 that with every additional pint

of milk collected and processed the Board's losses keep mounting more rapidly. This is really unique for any industry anywhere in the world. How can any economy, least of all a poor country, bear such a burden? This apart, the principle of a consumer subsidy based on writing-off of Milk Board's losses is obviously not conducive from the point of view of the consumer and least of all from the point of view of policies discussed before, where "Milk is an Essential Food Item for the Most Needy". Hence the price inaccessibility of milk products to a large cross-section of the most needy children in this country despite the heavy subsidy (rather losses).

Clearly a new pricing policy is necessary based both on producer-subsidies and selective consumer subsidies under controlled distribution for the most needy.

The implications of a pricing policy in Sri Lanka's context has other ramifications. If a producer-subsidy is to be an incentive, to develop and expand milk production, it must reach the largest possible cross-section of dairy farmers. But to be justified all milk produced must then flow into the controlled distribution scheme for the most needy sections in the country. But the first national production now is only about 24% of the minimum needs for the most sensitive groups. Therefore to operate an effective distribution scheme, imports need to be increased to meet the deficit. First, there is the foreign exchange constraint. Secondly, the c.i.f. price will have to be heavily subsidised. In effect we would be subsidising farmers abroad.

The next question is who is to handle such scheme. The Milk Board has been given the monopoly for milk collection, imports and distribution except the small quota of special brands of infant milk foods still in the hands of the private trade. But the Milk Board is only handling about 20% of national production and less than 1% of the minimum needs for the sensitive groups in the population.

### Future Policies for the Milk Board

If the Milk Board is to be the focal point of National Policy to promote dairy development, maximise the collection and national milk production and launch a national scheme to meet,

say the minimum requirements of the most needy in the population, then the Board would have to adopt a completely new ideology and thinking, new policies as its goals and new principles on which to achieve these goals. The Milk Board would have to be reorganised by Government fiat on lines suggested below if we hope to achieve these main policies. The Milk Board will have to be—

1. Responsible for the effective supply and distribution of milk to meet the national goal of adequate supplies for the sensitive groups in the population. Surely by virtue of the monopoly vested in the Milk Board it cannot entirely absolve itself of this responsibility and the milk nutrition crisis of the children of this country. The authority and financial support should be given to the Board to maximise milk collection and to process and distribute milk to meet this objective, to import the deficit and to control the distribution system. There should be no room left for some other unconnected authority to decide import requirements and for some other party to take the blame for poor distribution.
2. Responsible for maximising milk collection as a further commitment of the primary goal. But then it will also have to ensure that the children who may be deprived as a result are provided with adequate substitute milk at an accessible price. Besides the milk collection objectives should be in harmony with the dairy development objectives so that as at present valuable calves will not be lost due to milk starvation, but instead would be raised to maturity to maintain and expand production levels.
3. Authorised to re-organise the structure of its dairy factories and accordingly to produce the type of products most essential for the community and diversify its product-mix in order to obtain industrial economies through diversification.
4. Totally responsible for promoting the production of milk and development of dairying in this country. Surely, some other non-commercial authority with other multi-

farious responsibilities cannot be expected to gear itself to the Milk Board's commercial needs. This is now a well established fact which needs no elaboration. Since 1969 the Department of Agriculture which took over responsibility for dairy development in Sri Lanka and virtually banned the Milk Board from such activity has not been able to gear the country's dairy development to supply 1/3rd the Milk Board's factory capacities up to the end of last year, let alone national needs. Nor has there been concern for the farmers costs of production and the industry as a whole as evidenced by the 20% recession in the industry during 1973 and 1974 due to the increase in cost of milk production by 300% at least. This had the most serious deleterious effect on the economy and finances of the Milk Board, although of converse general price inflation, the price hike on imported products and the Board's own inefficiencies too have been contributory factors.

By virtue therefore of the responsibility cast on the Milk Board by the proposed policy, it must surely be the premier body responsible for dairy development in this country. It must then have the authority to operate and control all services in this connection including credit schemes, advisory services, veterinary services, feed factories, purchase and distribution of dairy animals etc.

5. Responsible for the operation of the pricing policy both in regard to the nutrition policy for the underprivileged and low-income groups and the general price structure for its products, and the producer-subsidies to ensure adequate incomes to farmers, make dairying profitable and an attraction for investment and self-employment. An important component of this policy would be to stabilise the critical coconut poonac feed price and also tie in an incentive price scheme to breed and raise good quality dairy purpose heifers through a national cattle breeding policy and put an end to the loss of calves and consequent dependence on imported cattle.

If therefore, at some future point in time the Milk Board were to be reorganised, to achieve the proposed national policy goals it must become a national body with authority and freedom to carry out its responsibilities. Its orientation would be towards national service and development. Its functions would have to be financed by Government grants. It should not be subject to FEECs and parochial administrative and financial bottlenecks which would defeat its objectives straightaway.

Unless such a single national authority is established it would not be possible to programme dairy development tied to milk collection and factory requirements of the Milk Board, geared to achieve the goals of import substitution and self-sufficiency, and to make the industry highly profitable for farmers, attract investments and provide large-scale employment. It is the only way to remedy the present diffusion of authority for this industry, which is spread over many institutions under half a dozen Ministries, and the consequent parochial and professionally sectarian interests which today predominate and override national interests.

Finally, to carry out such a huge national task the future Board of Directors would have to represent the vital areas of authority relative to the special functions. For instance, the following representation seems essential.

1. The Commissioner, Co-operative Development—in respect of farmers organisations and collection of milk and distribution of milk production;
2. The Price Controller—on account of the far-reaching pricing policy;
3. The Director of the Nutrition Programme of the Ministry of Health because of the alarming incidence of protein-calorie malnutrition amongst children.
4. The Director, National Planning—in regard to national policy, capital grants for development and co-ordination of activities.
5. The Director Supply and Cadre, Ministry of Finance—in regard to financial provision.
6. The Director, Agricultural Development, Ministry of Agriculture to co-ordinate the Board's activities with other institutions under the Ministry.

## Policy for Farmers Organisation

The Milk Board Act, No. 12 of 1954 and subsequent amendments of 1955, 1957 and 1964 provide the Milk Board with necessary authority to carry out most of these functions.

Finally, if the Milk Board is to carry out this huge task its aspirations, success and economy rests ultimately on the dairy farmers in this country of whom 85% are small farmers who produce nearly half our national milk consumption, the other half being imported. Of the three massive areas of responsibility one would be dairy development and production on a scale not even contemplated yet. Roughly three times the present national production of 700,000 tons a day would have to be the immediate medium term target. This would require the mobilisation of about 175,000 more small farmers and their resources of small mixed farms. It could add 20,000 cows and heifers to the present cull herd of about 70,000 out of the national population of about 1.9 million cattle and buffaloes and employ about 4500 persons in new jobs between the farmers and the consumer due to the multiplier effect of new development. If development on this scale is to be launched and sustained over a long period of time the farmers must be insulated against economic shocks and bureaucratic interferences. No Government body could on its own provide such safeguards. The farmers themselves must fashion their own institutional safeguards, the Milk Board being the instrument to organise them.

Dairy farming is the most personal economic activity in the whole agricultural sector because of its biological nature and involves private initiative and individual decision-making every day. Milk is highly perishable. The physiology of milk production is closely linked with management. There are also environmental risks. Logically the responsibility must rest with the farmers until the milk reaches the Milk Board's points of collection. Hence the organisation and institutions needed to be fashioned to satisfy these unique conditions. Invariably they fail to be so oriented when their origins and motivations have been purely political and parochial. Bureaucrats over-

seeing their empires from ivory towers have neither the feel nor can they see and understand the farmers' needs and problems and the development phenomena involved unless they have worked at the production frontier.

While there are various types of private and public sector institutional arrangements in the industry, universally the most successful one is undoubtedly the 'Producers' Co-operative'. This is the established order in the majority of advanced dairying countries in Europe, Oceania, Centrally Planned East European countries and in India the most advanced dairying country among Less Developed Countries.

Briefly the framework would be as follows. Dairy farmers are organised into producer co-operative societies on the basis of villages or administrative districts or geographical milk sheds. Each society is managed by a committee of voted members and provides milk collection facilities and other services such as loans, credit etc. according to the needs of each situation and the advanced stage of the industry. Staff of various categories may also be employed. A cluster of such societies are then federated into a co-operative union which handles milk processing and marketing. The unions are then federated into a single body at National level which is the voice of the dairy industry in the country and is represented in the Government's body under which the dairy industry is placed. The Federation of Unions translates Government policy into operational policy and passes these down through the Unions to the Co-operative Societies and its dairy farmer members. The Federation is the link between the industry and the Government and controls the size, content and economy of the industry and activities of the unions. The unions make up the federation through their representation and also maintain it. The Unions operate the industrial activity, and management audit and function as the employer and provides the technical services and vital inputs.

The reasons underlying the success of this co-operative organisation in the dairy industry all over the world are the following:

1. Dairy farming is one of the most personal economic activities and involves private initiative and individual decision-making every day. The true co-operative safeguards this principle.
2. The co-operative of producers provides an institutional framework of strength in numbers of pooled resources and greater bargaining power. For small producers, specially, and in LDCs such as Sri Lanka, this is a great economic advantage. The Federation of societies into a Union provides the parallel institutional counter-bailing power against damaging market forces and even damaging activities of state subsidisations. The Federation of Unions at the level of Government policy making is the safeguard at the apex of the industry.
3. This institutional arrangement allows the necessary commercial flexibility for the market operations of the Unions; and in turn for the farmers to adjust production and costs, and to optimise the economic activities of the farmer since an equal share of benefits are distributed through the societies to each farmer. There may be in monetary terms as dividends and in kind, such as, better marketing facilities for milk and animals, advisory services, veterinary services, feed inputs at advantageous competitive prices and so on.

This co-operative ideology has been propounded by the F.A.O. for the agricultural sector and also small industries and rural development since the launching of the UN's Second Development Decade. With the economic upheaval in recent years it has gained even more meaning as an institutional arrangement to safeguard farmers and to lessen collective effort and collective responsibility. Countries which still value individual freedom and social welfare and economic emancipation of farmers and also positive objectives and not mere slogans are finding in this institutional arrangement the means to mobilise farmers and their resources for rapid development.

# THE TRAFFIC IN TECHNOLOGY

Philip Maxwell

*Philip Maxwell, a research fellow at the Science Policy Research Unit, Sussex University was one of a team of researchers working on the transfer of technology to developing countries.*

## The Package Deal

Already this year two major 'technology' scandals have shocked the British public. First came the news that a major part of Britain's North Sea oil wealth had been taken over on the cheap by American companies. Soon afterwards came the announcement that the secretive Swiss-based drug company Hoffman La Roche was charging the National Health Service £407 and £1014 for the active ingredients of Librium and Valium which could be bought from Italian manufacturers at £9 and £20 respectively.

What do these two scandals have in common? In both cases the companies concerned had something which Britain needed—advanced oil exploration technology in one case and vitally needed medicines in the other.

But the American companies were not interested in coming over only to find the oil and then go home again. Instead they sold Britain a package deal which involved not only finding the oil but also helping to exploit it and becoming 'sitting tenants' over a large area of the North Sea oil fields.

Similarly Hoffman La Roche were not selling just one piece of pharmaceutical technology. For each bottle of Librium or Valium pills is in itself a complex package, including the Hoffman La Roche tranquilliser production know-how, the trade marks 'Librium and Valium', the patents for their key chemical ingredients, and the company's extensive sales network.

The key fact in all this is that neither Hoffman La Roche nor the American oil companies were interested in selling the elements of their technology separately. They are in the business of designing, producing and selling package deals.

'Commercial lock-ins' are standard practice between two branches of the same multinational company, and in this case 'lock-ins' do not even require a contract—just a memo or a telephone call from head office. This was exactly the game played by Hoffman La Roche and its British subsidiary Roche (U.K.). Roche (U.K.) was commercially locked-in to buying several ingredients of the Librium and Valium packages from Hoffman La Roche in Switzerland.

*"The technology which the rich countries have developed over the last two hundred years is what made them rich—and the great advantage of the developing countries is that this technology is freely available to them now without having to go through two hundred years of development to get it".*

For years this argument has prevailed. For years it has been a source of hope in poor countries and complacency in rich countries.

But the prophecy is not coming true? And now it is becoming clear that technology is not primarily being used to make the poor less poor but to make the rich more rich. The fundamental reason for this is that much of modern technology is not "freely available"—it is the property of the rich nations and multinational companies who are now engaged in selling it to the poor world at prices which are often scandalous and on conditions which are often damaging to a poor country's development efforts—*New Internationalist*.

So having forced your customer into buying more than he wants and locking him into buying it all from you, you can also make him pay much more than he bargained for.

## Multi Channel Payments

The next potential abuse is perhaps the most damaging. The technique is to establish as many separate channels of payment for your technological package as you possibly can. You invoice your customer separately for royalty payments on patented products, for sales of the ingredients which make-up the product, for a share of central office overheads and research costs, in addition to your profit and dividend remittances from your foreign subsidiary. Then, if the government of the country you are selling to legislates a maximum royalty rate or an upper limit of profits going out of the country, you simply increase the price of the raw materials or raise your charges for 'research costs'. Obviously it is only the total remittance you are interested in, not how much is paid through each individual channel.

This system, commonly called 'transfer accounting', is now standard practice with many multinational companies, including Hoffman La Roche. Whilst Roche (U.K.) Ltd., had declared profits of £3 million on the sales of Librium and Valium between 1966 and 1972, 'transfer accounting' had been used to sluice out from Britain £21 million through inflated ingredient prices and an unusually high charge for overheads and research costs. So not only had Hoffman La Roche stung the British taxpayer for £21 million by selling Librium and Valium to the National Health Service at inflated prices, but they had also avoided paying British taxes on a large slice of the profits they made in doing so.

It is difficult enough for a highly developed and financially sophisticated country to 'police' all these channels of payment and impose limits on them—witness American and European headaches with exchange control. But a poor country which lacks financial experience and trained commercial manpower cannot always police every channel adequately. And policing only some of

the channels of payment is of limited usefulness. It is like a man trying to plug eleven holes in a dyke with only ten fingers.

## Colombia Investigates

In 1968, the Colombian government spotted a strange anomaly in the behaviour of American investors. Why did American companies operating in Colombia report such low profits and at the same time show themselves so desperately keen to expand their Colombian operations? The government invited a young Greek economist, Constantine Vaitos, to investigate.

Vaitos came to Bogota, capital city of Colombia, and was given access to the customs office files. There one of his team worked for 11 months, tabulating data on 1,500 imported intermediate products, recording the name and quality of the products, the names of the importer and exporter, the volume of the imports, and most important of all—the price of the imports. The prices paid by Colombian subsidiaries for imported ingredients in technology packages were compared to the international prices prevailing for the same products as quoted in European and American markets. The differences were staggering. In the pharmaceutical sector, the average overpricing of intermediate ingredients imported by foreign-owned subsidiaries was 155%. Vaitos worked out that, together with adjustments for royalties and consultancy fees, this meant that the profit rate earned by foreign pharmaceutical firms investing in Colombia was not the 6.1% average which they declared to the Colombian authorities—but actually 79.1%. The trick employed was exactly the same trick that Hoffman La Roche played on Britain with Librium and Valium—transfer pricing! It is interesting to note that the two worst cases of overpricing uncovered by Vaitos and his team concerned the products "Diazepam" and "Chlordiazepoxide". In Britain these two pharmaceutical products are marketed by Roche (U.K.) and are no more other than Librium and Valium. In Colombia, the overpricing on "Diazepam" was 6,478% and on "Chlordiazepoxide" a mere 6,155%. Perhaps we in Britain should count ourselves lucky. (*New Internationalist*, July 1973).

# Technological Dependence and the International Pharmaceutical Industry

## A Case Study

Sanjay Lall

In its efforts to improve the understanding of problems faced by the developing countries in acquiring, assimilating, and applying foreign developed technology, UNCTAD has commissioned a series of studies on this subject. In the field of pharmaceuticals, Dr. Sanjay Lall of the Institute of Economics and Statistics, Oxford University, did much research on this subject on behalf of UNCTAD. His findings have been published in several recent reports and papers which are gaining widespread notice in Third World countries. He has shown that the factors of the world pharmaceutical industry have major implications for countries in technology development countries. They are, on the one hand, a source of financial resources for countries in technology development countries, but also a source of financial resources and research in the pharmaceutical industry of developing countries, primarily through the control of the acquired technology by the leading transnational drug companies.

The pharmaceutical industry today is one of the most international of all the industries originating from the developed world. The leading fifty or so drug companies, which account for the bulk of drug production in the non-Socialist countries, are directly engaged in the production, formulating and sale of pharmaceuticals in practically every developed or developing country, and have been among the first firms to undertake import substitution in countries which seek tariff and customs encouragement such activity. Though these firms are not exceptionally large by MNC standards (only 41 firms had drug sales over \$10 billion in 1970, and the largest, Roche, had sales of \$840 million), the degree of multinationality of their operations, the total importance of their output, their pervasiveness and their political economic strength makes them an ideal subject to illustrate the nature and consequences of technological dependence. The basic characteristics of the drug industry highlight the inherent features of all multinational industries, albeit in a form clearer and somewhat more exaggerated than other industries; it has, moreover, the added

advantage that recent concern with its practices has led to a great deal of valuable research on it in several countries.

### Industry's Background

Before starting our analysis, let us briefly describe the industry's background:

- (i) The world market for pharmaceuticals has been estimated at about \$25 billion in 1970, of which the U.S. accounted for 50%, the socialist bloc countries for 25%, other developed countries for 15%, and less developed countries together for only 10%. A later estimate put the total at \$23 billion in 1975. A recent study by the author (Lall, 1975) prepared for UNCTAD, estimated world drug production to be \$28 billion in 1975, of which the developed capitalist countries accounted for 80%, socialist bloc countries for 10% (including Spain, 6.4%), and less developed countries as a whole for the remaining 10%.
- (ii) Production is highly concentrated in a few firms. Of the total OTC (over-the-counter) sales of about \$10 billion in 1970, served by nearly 3,000 firms, a mere handful (about 100) probably supplied up to 80% of the total sales. The concentration of firms in most developed countries, for which we have data.
- (iii) Though these firms are rarely "multinational" in terms of their activities, their ownership tends to be closely held in their countries of origin. Even in developing countries where stringent land purchase and employment laws such as that in India was among the first in the world to limit foreign equity and control.
- (iv) The drug industry is highly research-intensive, with the leading firms spending around 15% (on an average) of their turnover on Research and Development. Most of this R and D is however undertaken in their countries of origin, and possibly no research which is of value is conducted in less developed countries. This concentration is also reflected in the ownership of pharmaceutical patents, which are heavily dominated by the countries of origin, in developed as well as less developed countries. Thus, in the U.S. less than 10% of new drug patents filed in past decades have been national, while in such developing countries as India, Pakistan or Colombia this ratio is probably under 5% for the total, some 20% outstanding drug patents. The extent of concentration in it and its concentration is even greater

than that in production; in the U.S. the top twenty or larger firms account for 65% of total patents R and D, and in the U.K. the largest firms account for over 70% of the total.

Though has been said to give a general picture of the industry's structure that of a highly oligopolistic and widespread industry, with a few relatively enormous companies, mainly from 5 or 6 countries, dominating the entire non-socialist world system of investment, production, and research. There is little need to ask about the facts about the existence of technological dependence in pharmaceuticals. With a few exceptions, the developing countries have contributed nothing to technological progress in the pharmaceutical industry, and have relied almost exclusively for research done in the home countries of the drug MNCs. (This is not to denigrate the great contributions to medication made by indigenous systems of treatment; however, the focus of this paper is on the 'industry' which produces modern allopathic drugs).

The main channel for the transfer of pharmaceutical technology has been direct investment in wholly foreign-owned or foreign-controlled subsidiaries. While a number of licenses have been sold to locally owned firms in developing countries, the bulk of recent and valuable (and unprofitable) technology has been closely held by the MNCs, who have naturally preferred to exploit it directly than by licensing local firms. It should be noted however, that cross-licensing between MNCs is quite common, either because a particular firm does not possess an adequate marketing outlet in a particular country or because conflicts can be conveniently divided in this way. This does not benefit locally owned firms unless they have already established a powerful market position in a developing country, though the Argentinian example suggests that once a firm does reach this position foreign MNCs attempt to buy it.

What are the economic implications of this sort of international structure of the drug industry? An instructive way to analyse them would be to use the concept of *market power*—the commercial power of firms to dominate a market and earn greater profits than would be possible in a competitive

situation—and to see whether the drug MNCs have great market power, what the sources of this market power are, and the costs that its exercise imposes on society. In the following sections we shall deal with these questions in turn, and shall also consider the policies that are open to developing countries to reduce the costs of the market power which technological dependence exposes them to. In the final section we shall draw the main conclusions of this paper.

## MARKET POWER IN THE PHARMACEUTICAL INDUSTRY

It is imperative to note from the start that the existence of market power in the international drug industry arises from certain characteristics of its mode of operation in *developed as well as less-developed countries*, and its costs therefore apply to *both*. We shall argue that the social costs in less-developed countries are higher than in developed ones, but this must not be taken to imply that the former are the sole sufferers. This being said, however, we must also note that the operation of the drug industry in developed countries implies a social welfare loss as well as an internal redistribution (within the developed world as a whole) in favour of the large firms, while in less-developed countries it implies a social welfare loss as well as a redistribution of income abroad (from the less-developed world as a whole). We shall return to this in which it deals with the effects of market power. Let us first describe the indicators of market power and its sources.

### Indicators of Market Power

Most of manufacturing industry in the modern world is oligopolistic, with a few large firms dominating production, and the level of concentration is tending to increase over time. In such a situation almost all these firms can be said to possess market power in comparison with an economically ideal competitive situation. Furthermore, the new theories of direct investment and the growth of MNCs argue that the possession of some special source of market power is a necessary condition for any firm to go abroad. These general considerations would lead us to expect

the drug MNCs to possess a certain 'normal' level of market power in relation to other manufacturing industry. A glance at some indicators of market power, however, shows that this is not the case. The drug MNCs possess *abnormally high levels of market power*, hardly exceeded in manufacturing industry over a long period by any other industry (though a few individual firms may have held tighter technological monopolies for some considerable time).

We may use four convenient indicators of market power for the drug industry, concentration, profitability, price differentials, and product differentiation and marketing expenditures.

### Concentration

We have already described the extent of concentration in the production of pharmaceuticals. The previous figures do not, however, convey a true picture: the drug market is not a homogeneous one, and there are several sub-markets which are quite distinct from each other. Large firms tend to specialise in particular sub-groups and in each of the major groups the largest 4 firms account for 60-80% of production. Furthermore, this concentration has tended to remain stable over time, though there are indications that with a general slowing down of new innovations the major firms are branching out into related lines. The world's largest drug firm, Hoffman La Roche of Switzerland, account for over 70% of the anti-anxiety drug market in countries for which there is information; we remark on this because we shall be using the Roche example in other contexts.

### Profitability

This provides one of the clearest indications of an industry's market power, and certainly there is little doubt that the drug industry has been one of the most profitable manufacturing industries for a very long period in all areas of its operation. In the US, for instance, drug firms as a whole earned 21% on capital employed in 1966, as compared to less than 13% for all manufacturing. Moreover, it seems that the largest firms are significantly more profitable than small ones, and the industry as a whole has shown exceptional stability

in its earning capacity over long periods. In India, medium and large drug firms recorded profits before tax on capital employed of over 20% in every year from 1965 to 1971, as compared to under 10% for medium and large firms as a whole; the drug industry was consistently the most profitable of 23 manufacturing and non-manufacturing sectors in this 6 year period, with one exception in 1970-71 when mineral oils exceeded it slightly. Roche earned on its leading tranquillisers over 70% (including transfer-pricing profits) on capital employed in the UK in 1966-72 on conservative estimates of the Monopolies Commission (1973), when its prices in England were among the lowest in the world; on this basis it may well have been earning 150-200% on its worldwide operations. In India, its *declared* profits came to over 65% of net worth and over 60% of net capital employed, well above the average for other drug companies.

Furthermore, the 33 *leading foreign-controlled drug firms in India were always more profitable than the 6 main local ones, and also more profitable than all other types of foreign-controlled enterprises*. While transfer pricing problems reduce the reliability of these stated profitability figures, an adjustment for hidden remittances would only serve to *raise* profits, since this is the main industry which appears to use this channel for remission (we shall return to this below).

### Price Differentials

The ability of market leaders to higher prices than other producers and to practice discriminatory pricing between different markets can also be used as an indicator of market power. Both sorts of differentials are notorious in the drug industry. Brand named drugs, mostly produced by large firms, tend to be much more expensive (up to 1000 per cent) than generic equivalents, and this situation persists, even if there is no patent protection, without affecting the large firms' market shares. Thus Roche's Librium has competitors in the UK and Italy which sell at 25-30% less without making headway in the market; in India small firms are able to supply equivalents at prices 90% lower. The same drug is sold at greatly differing prices in the same

country—thus Librium was sold in different US markets at price differentials reaching 243%—or between different countries—Roche's Valium cost twice as much in Australia and 6 times as much in Switzerland, as it did in the UK (before its price was cut to 25% its original level by the Monopolies Commission).

### Product Differentiation and Marketing Expenditures

These can be taken both as indicators and sources of market power: in an industry with homogeneous products large firms would not be able to create positions of special privilege by differentiating their brands and promoting them by advertising. In the drug industry there is considerable product differentiation even among medicines with identical pharmacological properties. In the US, for instance, about 700 drugs are sold under some 35,000 names, a very similar situation obtains in all countries in which the international drug companies operate freely. Marketing expenditures are very high in the pharmaceutical industry, ranging in the US from three to four times its R and D expenditures and accounting for about one-third of the value of sales sometimes exceeding the cost of goods sold. The level of marketing costs are somewhat lower in the UK, but still high enough for the Sainsbury Committee (1967) to remark that firms had failed to measure up to the "appropriate responsibility". In 1967 the drug industry accounted for the largest single share 17% of advertising of the total of 27 US industries; its sales in the same year came to less than 5% of the total. While data on promotion expenditures are not available for most less-developed countries, some evidence on India, Argentina and Colombia shows that the pattern is very similar. The scale of marketing expenditures may be judged from the fact that these expenditures in the US alone exceed the total value of drug consumption in India by over 3 times.

On all counts, therefore, the drug industry emerges as one with a very high level of market power, concentrated in the few multinationals dominating it and preserved intact over a very long period in all areas of their operation. The evidence is,

of course, far from complete and still only indicative: but there is little reason to doubt this general conclusion or to think that it would be repudiated by fresh findings.

### Sources of Market Power

There are two main sources of market power in the pharmaceutical industry, technology and marketing. Other factors, such as access to a scarce resource, or economies of scale, which may contribute to market power in other industries, are of little or no significance in the drug industry, since most of the materials used are synthesised or relatively abundant, and economies of scale in production are practically absent.

### TECHNOLOGY

We started by noting that this was a research-intensive industry. The leading firms are often, but not always, major innovators in terms of turning out a stream of marketable new drugs, though it is sometimes argued that very large research establishments are not as productive (in terms of innovations measured against R and D expenditures) as medium-sized ones. Be that as it may, the contribution to the market power of the large firms can be traced to three sources:

- (a) R and D expenditures within the firms, which, as we pointed out, were very highly concentrated among the market leaders.
- (b) Patents on products or processes, or both. The technology of production in the drug industry is not as in many other research-intensive industries, very difficult to copy, and once a new drug is produced it is quite easy to imitate. The role of patents is, therefore, of great importance in this industry, which is now perhaps the only major industry which depends on patent-generated monopoly to protect its innovations. Patents are a source of market power not only because they prevent rival producers from stealing innovation, but also because they can be used to monopolize imports and prevent local production in countries in which the firm concerned does not start production and be-

cause the high level costs of contesting patent infringements acts as a deterrent to smaller firms who might have a legitimate case.

- (c) State support for research. It is not generally realized that government expenditure on 'basic' research concerned in the pharmaceuticals is very large, and in the US and UK exceeds total private R and D by 200-330 per cent. The results of this sort of research are generally provided for free or at very low cost to the drug firms for further development, thus giving the R and D leaders a subsidised input for profitable exploitation. While there may be some rationale for separating 'basic' research from market-orientated testing and development, it is not at all clear that the 'division of labour' as it stands at present is either natural or socially optimal. On the contrary, it has arisen simply because in a private enterprise system the most profitable sections of research are kept within private firms and official institutions are not geared to producing finished drugs. We shall argue below that the little evidence that exists does not show that state-sponsored R and D is necessarily less efficient than private R and D. As matters stand, however, a part of state research does not contribute to the market power of the private firms.

Defenders of the drug industry often point to the riskiness and lengthy gestation period of its R and D activity to justify its high profitability. Certainly it must be admitted that many individual research projects are risky and a large proportion of them never achieve fruition; it must also be admitted that due to the state of scientific knowledge in the field as a whole the level of innovative activity has slowed down in the past decade. This does not, however, prove that a large and well-diversified research programme is very risky; in fact, the leading innovators seem to come up with a fair amount of successful results over long periods. Neither does it provide a justification for high profits, because both econometric

analysis and an examination of individual firms fail to show that risk is a significant factor in explaining profitability. Furthermore, the pharmaceutical industry appears to have a relatively short period between 'invention' and 'innovation' (i.e. product development) as compared to other industries, so that the justification for exceptionally high profits based on gestation periods is rather suspect.

## MARKETING

The role of marketing in promoting the industry's market power can hardly be overemphasised; it may well be a more important source of such power than technology. There are three reasons why this is so:

(a) Separation of buyer and decision-maker. The fact that the actual decision about which drug to buy is made by the doctor and the expense is borne by the patient or a national/private health scheme means that there is no *direct* pressure on the former to 'economise' in the normal sense of the word. Most doctors do not in fact place much importance on prices, and it is up to the one who pays to attempt to find the best deal. A private patient, for obvious reasons, is hardly in a position to do anything substantive. National health systems do attempt to economise, but not with very great success, either because the political power of the drug manufacturers is too great or because doctors insist on prescribing by brand names. In developing countries with few health care systems, it is the patient who pays and the doctor who decides.

(b) Difference between brand and generic names. The fact that drugs can be sold under brand names means that it would pay firms to differentiate their products heavily and concentrate on trying to persuade doctors to prescribe their brands. This introduces a strong monopolistic element quite separate from that created by patents, and the fact that leading brands (such as Librium) have the same share of the market in a non-patent observing country like Italy as in other countries is an indication of its power.

(c) Lack of other sources of information. The speed of introduction of new products coupled with a deplorable lack of official provision of systematic information on their prices, uses and efficacy has made the medical profession totally dependent on the drug firms for information. This is a system obviously liable to use for profit maximising and not simply objective informing, and it is hardly surprising that doctors are inundated with glossy literature, free samples, gifts, banquets, visits from representatives and all the paraphernalia of high pressure marketing from a highly sophisticated industry. These are described in great detail in the US Senate hearings Klaas (1975) and Coleman (1975).

Furthermore, most doctors do not like to, or do not have the time to, read serious literature, and there are grave deficiencies in traditional methods of pharmacological training, so that the drug firms activity fills the gap in a powerful (and pleasant) manner, leaving little room for objective assessment of efficacy or cost on a wide scale, rational comparison of different drugs or an evaluation of the firms' claims. Recent investigations in the US and the UK show that hundreds of drugs commonly prescribed lack of evidence of effectiveness. While the US authorities attempt to regulate this, the UK government (and most LDC governments) do nothing to check the cause.

In developing countries the contribution of these practices to market power is *even greater* than in developed ones. Not only are doctors trained along the lines of developed countries (or in the developed countries) and so are used to the international brand names, there is also a strong prejudice in favour of foreign brand names, sometimes justifiably reinforced by the fear that some small local manufacturers adulterated drugs.

These are the sources of market power in the international drug industry. Let us now look at its effects.

## Cost of Market Power

The costs inflicted on society by the exercise of market power in the

drug industry can be grouped into direct financial costs and indirect costs. Though both categories of cost are relevant to both developed and developing countries, we can indicate where the latter may suffer relatively more than the former by virtue of their weaker bargaining and regulatory position.

## DIRECT COSTS

There are three kinds of direct financial costs of the oligopolistic mode of operation of the drug MNCs:

(i) Excessive profits. It is now becoming more accepted in developed as well as developing countries, at least by those who are not open supporters of the industry, that profits in the drug industry are 'too-high' and that drugs are 'overpriced' with reference to a more competitive situation. The problem of the 'right' level of profits is, of course, impossible to resolve in any rigorous way. It involves assessing the 'proper reward' for risk-taking and such matters, but the recent crop of investigations in several countries into particular drug companies (especially Roche) reveals that many governments feel that the drug industry has been sheltering too long behind a profitable smoke-screen of high risk, uncertainty and social service. For less developed countries the question of profits is rather different: it does not revolve round the right reward needed to induce risk-taking, since drug innovation does not depend upon sales in the developing world, but around the question of how little they can pay in order to get the necessary technology. This will be discussed in the next part.

A problem intimately related to that of excessive profits is that of *transfer pricing*. The drug is highly integrated in terms of its international operations, and trade in intermediate chemicals between different units of MNCs is very common. Since the real 'technology' of drug production is embodied in the intermediate products, and since they are not openly available on world markets, their arm's length price is extremely difficult to determine. This, coupled with the ability of the firms to make exceptional profits, provides an ideal

channel for securing profits clandestinely from countries with high effective tax rates (taking into account the tariffs on imported inputs), limitations on remittances, political and trade union pressures and policies for local equity participation. Most of the investigations of transfer pricing have used evidence from the pharmaceutical industry, where for instance Roche has been found to be overcharging for its imports in the UK by 4,000-4,500 per cent (and declaring only 12% of its true profits) and in Colombia by 3,000-6,000 per cent (and declaring a loss). Again, there are substantial problems in defining what a correct arm's-length price should be, taking R and D costs into account, but the extent of overpricing (spread over 10-15 years for Librium and Valium) is such that no conceivable justification can plausibly be found.

While the evidence indicates that excessive profits and transfer pricing are applicable to developed and less developed countries, we may argue that the latter are more heavily burdened by the market power of the MNCs. If greater local competition is usually negligible, the costs borne in terms of foreign exchange and the costs of transfer-pricing are less.

(ii) Misallocated R and D expenditures. The nature of pharmaceutical R and D aiming at producing profitable products, leads to a great deal of waste because a lot of research goes into 'molecular manipulation', imitative packaging and similar ploys for a product differentiation. There are some real medicinal benefits to be gained from new compounds and dosages, which makes it difficult to separate the useful from the unnecessary research, but this does not invalidate the point that there is considerable social waste involved. We have also noted that patenting practices work in favour of the large firms against small ones, and also enable them to monopolise markets in less-developed countries without watching the patients.

The major social cost of misallocated R and D accrues to the countries where research is undertaken. In the sense that the same amount of useful research could be produced in non-competing laboratories at a lower

cost. The cost to the developing countries accrues directly in the form of high profits and indirectly in various forms discussed below.

(iii) Marketing costs. The direct costs of heavy marketing expenses are clear enough, it is not difficult to imagine an alternative system of information for doctors which cost far less, which also enabled the large firms to earn far smaller profits.

## INDIRECT COSTS

There are several indirect (or less easily quantifiable) costs of the drug industry's operations:

(i) Suppression of small firms. A large element in the large drug firms' advertising consists of warning doctors against prescribing the products of small firms. This form of designation prevents small firms, usually quite small, from expanding into markets where patents have expired, or compulsory licensing granted, despite far lower prices. In less-developed countries it can have the more pernicious effect of suppressing entrepreneurship as a whole in an important industry.

(ii) Misprescribing and overprescribing. A phenomenon which has recently started creating concern is that of overuse and misuse of drugs. Ivan Illich in his brilliant polemic *The Medical Nemesis* (1971) argues that medicines themselves have become one of the major causes of illness in modern times, a proposition simply supported by evidence given in recent US Senate hearings and documented in medical literature. It is now well known that billions of wasted dollars, hundreds of thousands of unnecessary hospitalisations for adverse drug reactions, and thousands of lives needlessly lost are the price society pays for the promotional excesses of the drug industry. According to the testimony of Dr. S. M. Wolfe, Director, Health Research Group, Washington DC, before the US Senate's Subcommittee on Health's

Examination of the Pharmaceutical Industry 1973-74.\*

While the drug firms' promotional practices cannot be held solely to blame, they certainly contribute to the problem by using high-pressure tactics, playing down of adverse side effects (especially in unrecorded talks by representatives), offering material incentives for more prescribing and for biased reporting on tests<sup>2</sup> and generally creating an impression of greater effectiveness for their wares than is justifiable. In developing countries this effort may be even worse because of fewer controls on advertising and much greater faith in 'foreign technology'.

(iii) Restrictive business practices. The transfer of technology in the drug industry is generally accompanied by a host of restrictive practices, ranging from export restrictions and tie-in clauses to pre-empting the results of local research, market sharing agreements with other MNCs, and 'kick backs' paid in foreign exchange to local dealers. We cannot go into these in any detail here, but the costs to developing countries do not need to be belaboured.

(iv) Inequalities in treatment. The high price of foreign drugs in less developed countries, coupled with the lack of social health-care systems and the widespread incidence of illness, leads to a great concentration of the benefits of modern medicine at the top levels of the population. This unequal distribution is considerably exacerbated by the fact that institutional medical and hospital facilities (sometimes extremely modern) are located in the towns, while the mass of the people who live in the villages are almost totally deprived even of simple preventive and curative treatment. The resulting inequities in social health care may well be considerably higher than those shown by per capita income figures, and are certainly much more reprehensible. The drug MNCs are not

\*Some reputable journals, including for example the British Medical Journal, published reports written by advisers working full-time for a drug company. Many apparently independent critics have infatti sold themselves to the industry and agreed to do research for rewards of one kind or another, whether that reward be money abroad, a piece of equipment, a few dinners, a series of published papers or simply money. Coleman, (1973).

responsible for this state of affairs, but their pricing and marketing policies do worsen the consequences of an initially undesirable situation.

(v) Effects on indigenous research. An important effect of the total dependence on foreign drug technology is that very little effective research into local problems and solutions is undertaken even in those developing countries, such as India, which have pharmacological departments at universities and some R and D facilities in local government and private drug firms. Rangarao (1975) notes for India that academic and industrial work on pharmaceuticals are quite divorced from each other, the curricula offer theoretical rather than practical training, the trainees usually become drug inspectors and salesmen rather than researchers, and the total volume of R and D is less than 1% of sales. Furthermore, in some cases where local private efforts are successful, the results states Rangarao, are picked up by the large industrial R and D establishments abroad and converted into technological realities to be imported to India after a few years. These are, of course, classical symptoms of technological dependence and are common to several industries and countries. In the drug industry, however, it should be noted that R and D conducted by government establishments in India has yielded some valuable new drugs, indicating that there is no necessary comparative disadvantage in doing R and D in developing areas, contrary to the expectations of those who defend the heavy concentration of R and D in developed countries on these grounds. If present trends in the international drug industry continue, however, it is very likely that most developing countries will never be able to develop their research potential at all.

(vi) Inadequate regulation. An unfortunate result of the relative laxity of official controls over drug selling in developing countries is that the MNCs are able in some cases to get away with far more potentially harmful sales tactics than in developed ones.

The case of Chloromycetin, one of the most widely used antibiotics, today is instructive. Its manufacturer, the American multinational Parke-Davis, has had a running battle with the US authorities over undesirable side-effects of the drug, and has repeatedly been accused of negligence for failing to give adequate warnings and for overpromotion. It has paid out nearly a million dollars in damages on this count, yet it continues to promote and sell the drug heavily in the US as well as other countries. In the US, however, Parke-Davis is now required to warn against six conditions in which chloromycetin should not be used: and in several developing countries none at all. This information is taken from Raphael (1974 b.). It should be pointed out that the overuse of antibiotics generally is one of the major health hazards created by modern drugs (as mentioned above); in many developing countries antibiotics can be bought without a doctor's prescription, making the consequence of promotion even more dangerous. Thus the MNCs may well be content to leave the regulation of risky drugs to ill-informed authorities in developing countries while themselves being fully aware of the dangers inherent in selling their products.

A similar problem arises from the fact that a large number of drugs are *ineffective*, in the sense that they do not produce the benefits claimed for them. In the US, the Food and Drug Authority has banned several hundred drugs as 'lacking evidence of effectiveness' yet a recent survey reveals that many of them, costing "at least several millions of pounds" are still on sale in Britain. This was discovered in a survey conducted by The Guardian and reported by Raphael (1974 a.), who also noted the complaint by some Labour MPs that the only official body in the UK capable of evaluating drug effectiveness was disbanded in 1970 under pressure from the drug industry. There is now no comparable body in the UK with the power to evaluate the effectiveness of medicines. Most developing countries do not attempt

to check on the real effectiveness of drugs sold by MNCs. The Indian authorities for instance, seem to be unaware of this problem, and so presumably pay heavily for extremely dubious contributions to their well being.

(vii) Other costs. There are two other undesirable consequences of the drug MNCs' activities which may be mentioned briefly. First, the tightening of controls by developed countries' (particularly the US) authorities on *clinical testing* of new drugs has "forced most of them to move a large part of that function overseas.\* Since these authorities undoubtedly have sound reasons for restricting clinical testing, the 'overseas' countries (which are notably developing ones) have to bear a disproportionate share of the risk of MNC innovation. Second, the promotion of drugs via the giving of free samples to doctors sometimes leads to these drugs being resold in the market for the doctors' financial benefit. In such cases, 'promotion' comes very close to profit-sharing with the doctor—at the patient's cost—and creates an undesirably close identity of interests between the MNCs and the medical profession. The social cost of this is not simply higher profits, higher prices and over prescribing, but also a powerful and entrenched elite group opposed to reforms of the present system.

To sum up the section on the costs of market power in the international drug industry, therefore, it seems clear that its present mode of operation involves heavy social costs in developed and less developed countries. These costs arise mainly from its oligopolistic structure based upon technological innovation and marketing, and are reflected not merely in financial waste (for society) but also in various indirect effects of considerable importance. The extension of this oligopolistic structure into developing economies raises most of the costs encountered in developed ones, and introduces several new ones which arise from the technologically dependent character of the former (if we may define dependence to include weakness of technical facilities to regulate the industry's practices).

(To be concluded)

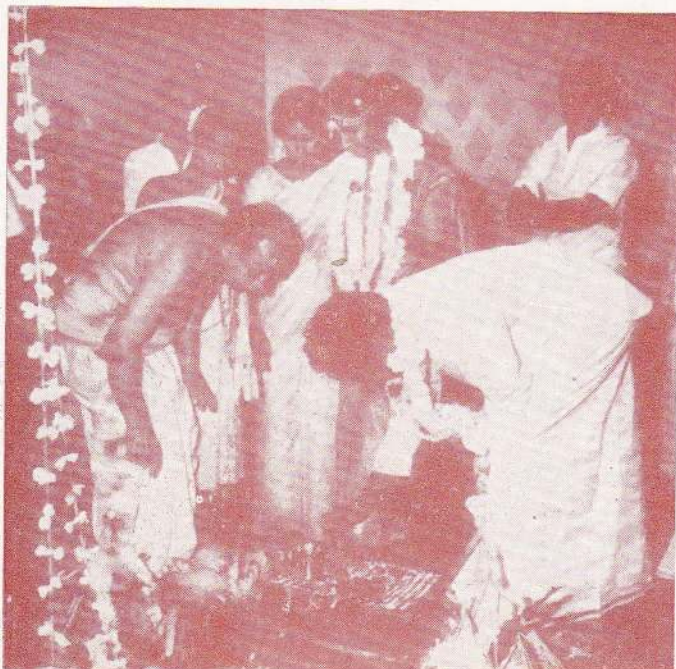
\**Business Week*, (1974), p. 67. For reports on how potentially harmful contraceptive devices were tested on poor (and often non-white) women in several LDCs by drug multinationals see various issues from 1972-1974 of the *American Journal of Obstetric Gynecology*.

The present day values compel the people to have wedding ceremonies; this is especially so in the case of middle-class marriages. Those who have means and accept the element of ceremony in marriage, organise wedding ceremonies in such a way that it adds to their prestige, while others who do not have means but are unwilling to give up the notions set by these values like to maintain 'status' by having a wedding ceremony. The money that goes into such wedding ceremonies in most instances comes through bank loans, EPF or commuted pension drawings (if the parents have retired recently from service) or through the sale of property. Thus the end-result of the ceremony is mostly an increased burden on the family.

## PRESENT DAY CERE- MONIES



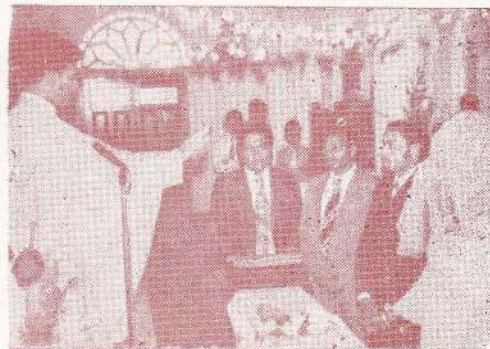
*The bridegroom is fed a cup of curd by his eldest sister as part of the elaborate ceremonial at a Muslim marriage.*



*Part of the ceremonial at a Hindu wedding—rings placed on a grindstone are fitted on the toes of the bride.*



*The traditional ceremonial observed at a present day Sinhalese marriage ceremony—the fingers of the couple are tied together by thread and water poured over their hands.*



*The bridal couple receive the blessings of the priest in a typical Christian church ceremony.*



*Towards the New Society . . . .  
Some couples, however, prefer no ceremony. They get over it with only the signing before the marriage registrar.*

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