Printed and bound in Canada

ISBN-2-7603-3207-1

SOUTHEAST ASIA:

WOMEN, CHANGING SOCIAL STRUCTURE AND CULTURAL CONTINUITY

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Selected Proceedings, Ninth Annual Conference
Canadian Council for Southeast Asian Studies
at the Institute of Asian Research, U.B.C.
Vancouver, November 1979

UNIVERSITY OF OTTAWA PRESS
Ottawa, Canada
1981

THE INFANT FORMULA CONTROVERSY IN SOUTHEAST ASIA: ADVOCACY CONFRONTATION OR APPLIED ANTHROPOLOGY?

P. Van Esterik

In October 1979, Maclean's magazine brought the infant formula controversy into thousands of Canadian homes (McNicoll). The article summarized the advocacy position, citing, in particular, the information from Senator Kennedy's congressional hearing on the marketing and promotion of infant formula in developing countries (Congressional hearing, 1978), and the evidence collected by INFACT, the infant formula action coalition operating out of Minneapolis.

The advocacy position is quite straightforward. It argues that the makers of infant formula should not be marketing and promoting infant formula and bottle feeding in developing countries where breast-feeding is prevalent and the technology for adequate use of infant formula is absent. Advocacy groups claim that multinational corporations (like Nestle), in their search for new markets, have launched massive and unethical campaigns directed toward medical personnel and consumers, which encourage mothers in developing countries to abandon breast-feeding for a more expensive, inconvenient, technologically complex, and dangerous method of infant feeding -- formula from bottles. For poor women who have insufficient cash for formula, bottles, sterilization equipment, fuel, or refrigerators, who have no regular access to safe, pure drinking water, and who may be unable to read and comprehend instructions for formula use, the results are tragic. Misuse of formula results in malnutrition which impairs physical and mental health permanently, or cycles of gastroenteritis, diarrhea, dehydration and eventually death. Advocacy groups place the blame for this "commerciogenic malnutrition" on these companies. The trend away from breast-feeding to bottle-feeding with formula is most marked in urban communities. This shift constitutes a waste of a product which meets the nutritional needs of infants, provides them with irreplaceable immunological protection, and contributes to natural child spacing. This promotion, the advocates argue, provides substantial corporate profits (cf. Cottingham 1976, Greiner 1975, Mueller 1974).

In this paper, I first summarize Canada's response to this issue, and then examine the research available in Southeast Asia to determine whether it supports the claims of advocacy groups. I conclude that Southeast Asia's populations are particularly vulnerable at present, suggesting that research is vitally needed to offset present trends.

INFACT (Canada) now operates as a task force of the Inter-church Committee for World Development Education in

Victoria and is expanding its work in other parts o
country. As Canadian churches have become aware of the
of food distributors, many have joined forces to protes
marketing techniques. One method has been to boycot
products of the Nestle company, the largest distribut
infant formula in developing countries. As a Swiss-
company, it is less accessible to stockholders actions.

Canadian doctors are supporting the campaign particu
as research indicates that similar abuses exist in n
Canadian populations. (Gerrard 1974, Shaefer 1971). A
health worker, Fatima Patal, testified in Senator Kenne
Senate Committee hearings about the extent of formula mi
even in the remote jungle outposts of Peru. In addition,
was influential in the decision by the government of Papua -
Guinea to ban infant formula and bottles in that coun
Clearly, the issue has been defined in Canada by churches
individuals with humanitarian motives, and Canadians
responded with sympathy and sacrifice of Taster's Choice
Nestea.

We meet here in Vancouver at this conference because
our varying degrees of commitment to the countries of South
Asia. Most of us have done research there or hope to do
in future. We should therefore be concerned about iss
fundamental to the health and welfare of Southeast As
children. But, as academics and professionals in dive
fields, we can respond to this issue on more than humanitar
grounds. And we can if we wish do more than support a consu
boycott (which, as individuals, we might also do). We can br
together research from different fields and make suggesti
which may assist policy makers in finding solutions to t
problem. We may warn against overly simplistic solutions,
provide research to clarify some of the difficult proble
associated with the controversy.

The rhetoric on both sides of this controversy
dramatic. Advocacy groups demonstrate with emotional movi
such as Bottle Babies and pictures of dying babies, dramat
cases of formula misuse (see, for example, Mueller 1974
Companies respond that they are not responsible for this abus
The culprits are poverty and ignorance, not corporate marketi
strategies. And further, they point out that objective evidenc
on the subject is only anecdotal or incomplete, and thus
is premature to define the extent and cause of the problem (see
Infant Feeding in the Developing Countries, a booklet sent t
consumers who send complaints to Nestle; see also Hakim 1979
and McCollough 1979).

But drama is a necessary part of advocacy positions
Cooke writes that the purpose of nutritional advocacy is t
legitimize a specific nutritional improvement, be it to fortif

rice or to promote breast-feeding in a community (1979: 104). Successful advocacy depends on successful salesmanship and polemics, as well as quiet careful research. I would like to review some of this quiet, careful research in Southeast Asia, and bring it to the attention of those who can dramatize the issue effectively. Perhaps we may find within ourselves the capacity to dramatize or at least publicize the issue as well.

Southeast Asia: The evidence

This review of the literature focuses primarily on published reports from the Philippines, Indonesia, Singapore, Malaysia, and Thailand. It is clearly not exhaustive, and I welcome additional suggestions and evidence from regional and disciplinary specialists.

Referring back to the advocacy position summarized earlier, there is evidence for the claim that substantial sales campaigns directed to medical personnel and consumers exist in the area. From past experience in Thailand, I can confirm the prevalent ads for formula on T.V., radio, billboards, and sound trucks in Bangkok. Even hand carts and canal boats (see Greiner 1975: 72a) were used to promote these products in the mid-seventies. My Thai pediatrician also provided me with formula samples during a routine examination of my infant daughter. In hospitals and clinics, women receive samples formula routinely.

In Malaysia, Nestle sponsored a baby show in Penang in October, 1978, four months after Nestle claims to have suspended all direct consumer advertising (INFACT newsletter, Feb. 1979: 7). The newsletter also published a letter from a Malaysian pediatrician, Khairuddin Yusof of the University of Malaya complaining about the intensive campaigns conducted by infant formula companies among the urban poor in Malaysia.

In the hospitals and clinics of Manila in 1977, Lappe and McCallie report that "virtually every infant born in a clinic or hospital is taken from its mother and given infant formula for the first 2 or 3 days of life." (1977: 1) They further document the extent of posters, gifts, booklets, and free samples found in charity hospitals. In the Hospital de San Juan de Dios, in Pasay city, they describe the closed marketing arrangement with Mead-Johnson, Wyeth, and Nestle who are each allowed "15 days in rotation during which time the hospital uses nothing but their products" (Lappé and McCallie 1977: 4).

Throughout Southeast Asia, conditions exist for the potential misuse of formula. In this conference, we have been focusing on the levels of living in Southeast Asia, and have been given substantial evidence on the extent of poverty in the area. Substantial cash income is needed for adequate use of bottles with formula. In tropical climates, formula must be

refrigerated if it is not used immediately, or it will beco
contaminated. Refrigerators are expensive and available only
people with substantial cash incomes. Along with expensi
imported baby bottles and nipples, most Southeast Asi
countries produce cheaper versions which are difficult
sterilize and clean. These facts, together with the fact that
regular supply of pure water is a rare commodity in many pari
of Southeast Asia, combine to make formula feeding problemati
at best among low income families. A World Health Organizatic
survey reported that in Southeast Asia, 86% of the populatic
(1,435 million people) did not have access to sewage disposa
services (Toro 1979: 52). Since powdered or concentrate
formula must be diluted, the likelihood of contaminated formul
is high in Southeast Asia.

The cost of fuel must be included when calculating th
price of infant formula. On a small charcoal burning stove
even boiling water for coffee and tea becomes impractica
(Szanton 1972: 52). Sustained sterilization procedures woul
require a substantial amount of fuel. The cost of the infan
formula itself is substantial. A Thai advocate o
breast-feeding estimates that it would cost over three hundre
dollars to feed one infant on formula for six months in Thailan
(Pressasia, Depthnews 15 March, 1979). Low-income women who ma
begin using feeding bottles in hospital and receive one or tw
free tins, may discover too late that the formula is to
expensive for them to use continuously, and either over-dilute
the available formula so that an infant does not receive
adequate calories, or make use of a cheaper substitute. In muc
of Southeast Asia, that substitute is sweetened condensed milk,
a product that is considered unsuitable for infants. To make
sweetened condensed milk, sugar (42-44%) is added to whole o
skim milk before 60% of the water is removed by heating. After
it has been canned, it can be kept indefinitely at roo
temperature and reconstituted by adding water (Lampert 1975:
246). If it is made from skim milk, it lacks sufficient fat an
vitamins A and D for use as an infant formula (Greiner 1979:
23). Nevertheless, Whyte documents the widespread use of this
product in Malaysia as a substitute for breast-milk, and cites
the harmful results of its use, including scurvy (1974: 118,
133). In Thailand and the Philippines, it is preferred for
infant feeding because it keeps well, is sweet, and is viewed as
economical because only a small part need be added to water to
make the "formula" sweet enough for use (Cabotaje 1976: 57,
Worthington n.d.). Because of the popularity of sweetened
condensed milk in the area, Southeast Asia is doubly susceptible
to exploitative advertising.

Another obstacle to adequate bottle-feeding can be
documented in Southeast Asia. Widespread illiteracy and
misunderstanding or lack of acceptance of the germ theory of
disease causation can result in failure to sterilize equipment

and formula adequately. Since diseases can be attributed to an imbalance in body humors, improper diet, malicious behaviour, or spirit intrusion, women with little education may have adequate alternate hypotheses to account for sick infants, without recourse to explanations based on germs. Women who cannot read the instructions for preparing formula may over- or under-dilute the liquid to the detriment of the health of their infants. Although literacy rates are rising for both sexes, women in Southeast Asia are still undereducated compared to males. In one rural community in west central Thailand, adult women are less likely than men to have completed the first four years of school, as the following figures demonstrate:

	Males	Females
1900-1948	56%	24%
1949-1968	87%	50%
1969-1973	93%	88%

(Van Esterik, J. 1977).

Women growing up in rural communities may have little familiarity with written instructions, even if instructions were in their own language (which is not always the case).

The advocacy position claims that the trend away from breast-feeding to bottle feeding with formula is most marked in urban communities. We might expect that Southeast Asian cities would provide evidence for this trend, since rural-ruban migration is a well-established process in this area. Women, particularly single women, entering urban squatter settlements in the midst of cities like Bangkok, Manila, or Singapore, face difficult conditions. In these communities the conditions necessary for the support of a breast-feeding mother may be absent. For example, she may have no extended kin network to give her social or emotional support, and no cash to provide properly for her family's medical and nutritional needs. Facing the stresses in an urban environment, undernourished or barely adequately nourished, a slum mother may indeed be unable to provide adequate milk for her baby. Research in Southeast Asian cities provides some confirmation of the advocacy claims about breast-feeding in urban environments.

In Singapore, as early as 1939, doctors were reporting the dangers of bottle-feeding among low-income coolie-laborers. The infant mortality rates of bottle-fed infants among this group was almost twice as high as those of breast-fed infants (Wray 1978: 216). In addition, the dangers of using sweetened condensed milk as a formula were reported in the fifties (Loftus Hills 1953). In upper class families in Singapore, there were no appreciable differences between bottle- and breast-fed infants. Dr. Wong compared lower-income families in Singapore in 1951 and 1971:

	1951	1971
initiated breast-feeding	97%	51%
breast-fed 3 months	77%	5%

(Jelliffe 1978: 402)

Turning to work in the Philippines, a survey in Manila (1958) reported that 64% of infants were breast-fed, 23% bottle fed, and 13% had mixed feedings (Del Mundo 1959). A later survey (1974) of the urban areas of Luzon found only 27% of infants were breast-fed, 29% were bottle-fed, and 44% had mixed feedings (J. Intengen 1975). According to Popkin, urban women in the Philippines reported no breast milk as a prominent cause for discontinuance of lactation (Popkin 1978: 467). Considering the evidence cited by Lappé and McCallie that even charity patients receive formula for their infants in hospitals and clinics, and that malnutrition and stress might well limit a woman's production of milk, such reports are understandable. Other surveys show that poor urban women are weaning their children earlier and relying more on bottle-feeding than rural women (cf. Osteria 1978). This trend is more marked as the education of the mother increases (Mosley et al. 1977: 96-98).

In Bangkok, Kanjanasthiti and Wray report that in the slums, women are abandoning breast-feeding and substituting bottles containing whatever product they can afford (1974). They also document extensive protein calorie malnutrition, severe enough to cause brain damage in later years. Following up this study, Worthington analyzed the context of infant feeding in slum communities of Klong Toey, Bangkok. She found that even among mothers sitting bored and lonely in their homes, two thirds of the 359 mothers chose to feed their infants with bottles alone or in combination with nursing. Included in these mixed feedings were dilutions of sweetened condensed milk (Worthington n.d.). In a study of forty professional women in Bangkok, I found that these well-educated women viewed sweetened condensed milk as a lower class substitute for formula (Van Esterik, in press).

The increasing migration into Asian cities intensifies an already existing pattern of bottle-feeding in urban centers. Hakim recognizes that the concomitant decline in breast-feeding "may simply be a result of the sharp social/demographic shifts occurring in third world countries" (Hakim 1979: 296). From an advocacy perspective, one might challenge the assumption that the shift is inevitable.

The critics of the infant formula companies make reference to an additional danger associated with a decline in breast-feeding -- the breakdown of a system which contributes to natural child spacing. Once again, research in Southeast Asia

confirms the effectiveness of breast-feeding in increasing birth intervals. This is particularly critical in areas such as Indonesia where population is increasing rapidly.

The high birth rates in Southeast Asia have not gone unnoticed by Nestle. They reported to their stockholders about their infant formula market in Thailand: "The high birth rates permit a rapid expansion in the domain of infant nutrition; the Nestle products have in particular acquired in 1970 market leadership, thanks to their quality; the efforts of the nurses, and their contacts with the medical sector in the entire country" (Nestle Bulletin, No. 3, 1971).

In spite of the high birth rates, there is a natural check on population expansion reported most fully in Indonesia. East and central Java has the lowest fertility rate in Indonesia although the area has a low rate of acceptance of modern contraceptives (Hull 1978). Fertility is lowest among poor villagers, who can least afford to support large families. The reduced fertility is attributed to a combination of an ideal of abstinence from sexual activity during breast-feeding and the long duration of post partum lactation amenorrhea. The practice of sexual abstinence is supported by the widespread belief that sexual activity prior to weaning has a detrimental effect on both the quality and quantity of mother's milk. And, in fact, surveys in Java confirm an average birth interval from 34 to 38 months (Mosley et al. 1977: 103). Although nutrition studies in east Java indicate that bottle-feeding is still uncommon in both rural and urban communities (Kardjati 1977), Hull has reported that urban elite women have shorter birth intervals due to declines in breast-feeding and sexual abstinence (Hull et al. 1976). The importance of breast-feeding as an effective means of fertility control at the individual level is clear: consider the implication for Indonesia's population if breast-feeding were abandoned on a large scale.

Research in the Philippines confirms this pattern. Here, oral contraceptives appear inferior to the traditional means of birth spacing achieved by maintaining full breast-feeding (Mosley et al. 1977: 98). Southeast Asia, then, has a great deal to lose if the decline in breast-feeding is accepted as inevitable.

Research Questions

Similar conditions exist in areas other than Southeast Asia. Nevertheless, there is a set of cultural complexes in Southeast Asia which makes this area particularly valuable for research on this complex topic. Some of these features cannot be adequately documented, and thus remain research questions rather than statements of research results.

1) What is the significance of the high symbolic value place on milk and dairy products in Islam-Hindu-Buddhist Southeas Asia? How does the use of sweet milk products in ritua contexts relate to its popularity as an infant formul substitute?

2) In many parts of Southeast Asia, the practice of earl supplementation of infant diets with mashed rice and banana reduces the available breast milk supply for the child. Th nursing mother, then, may be more vulnerable to lactatio failure, compared to regions where infants are fed nothing bu breast milk for the first few months of life. For example, i northeast Thailand, overfeeding with glutinous rice and banana provides a baby with bulk but not enough protein or calorie (Valyasevi 1964). It would be useful to ask how earl supplementation with solids affects a mother's decision t breast- or bottle-feed.

3) In Southeast Asia, women contribute substantially t subsistence activities. Agricultural and market activities ma be compatible with breast-feeding. Other professions particularly in urban centers may be less so (for example factory work, service industries, civil service jobs, etc.) unless certain institutional changes are made. The use o bottle-feeding with formula by urban professional wome eliminates pressure for institutional changes beneficial t working women, such as nurseries, day care centers, and extende maternity leaves. For example, in a recent report on th practices of the international electronics industries i Southeast Asia, the companies recognize that a reduction o maternity leaves made it "profitable to hire women again (Southeast Asia Chronicle, 1979: 8). What policies will hel encourage women to continue productive work outside the hom without endangering the health and nutrition of infants? Again from an advocacy perspective, must these two goals b incompatible?

Conclusions

I hope this survey demonstrates that, although th evidence is not all in, Southeast Asia has been affected by th shift to bottle feeding and formula. Certainly, the promotiona and marketing effort of companies selling infant formula an sweetened condensed milk is one factor among many contributin to problems in this area. I have argued that Southeast Asia i particularly vulnerable for a series of cultural, ecological and historical reasons.

But what is an appropriate response for an academic t make? Are advocacy issues, since they tend to be emotional an dramatic, unrelated to academic research? Must we suppor positions that assume that these complex changes in infan

feeding patterns are inevitable because of demographic shifts into urban communities, or the demands of Southeast Asian women for adequate employment? Are they simply inevitable parts of the process of modernization? If we do not accept this premise, we may choose to respond as individual consumers, and boycott Nestle products, writing letters to formula companies indicating our concern. As an organization, is it appropriate for us to ask our executive to submit a statement on this issue? These are questions which may be raised increasingly often in the next decade as we come to recognize our interdependence with other parts of the world.

For if we have a commitment to Southeast Asia, we should not leave all advocacy issues to the best salesmen, consumer spokesmen, or those with less knowledge about the specific countries involved. By relating advocacy to our own basic research, we can start to fill the gap between basic and applied research in Southeast Asia. If academics do not provide research leadership, simplistic solutions guided only by humanitarian concerns, for example, may be substituted. We can add the complexities and the context to many advocacy issues, but in doing so, we are taking a stance that there need be no conflict between academic research and advocacy issues.

REFERENCES CITED

Cabotaje, E.M., Food and Philippine Culture. Manila: Centro Escolar University, Research and Development Center, 1976.

Cooke, Thomas, "Short-Term Nutrition Intervention," in Food and Nutrition Policy in a Changing World. J. Mayer and J. Dwyer, eds. New York: Oxford University Press, 1979.

Cottingham, Jane (ed.), Bottle Babies. International Information and Communication Service, Switzerland, 1976.

Del Mundo, P., "Present Trends in the Feeding of Filipino Infants," Philippine Journal of Pediatrics, 8: 229, 1959.

Gerrard, J.W., "Breast-feeding: Second Thoughts," Pediatrics, 54: 757-764, 1974.

Greiner, Ted, The Promotion of Bottle Feeding by Multinational Corporations. Cornell Internati[illegible] Nutrition Monograph Series, No. 2, Ithaca, NY, 1975.

Greiner, Ted et al., The Economic Value of Breastfeeding. Cornell International Nutrition Monograph Series, No. 6, Ithaca, NY, 1979.

Hakim, Peter, "Programs to Encourage Breastfeeding in the Developing Countries," in Breastfeeding and Food Policy in a Hungry World. D. Raphael, ed. New York: Academic Press, 1979.

Hull, Valerie, "A Study of Birth Interval Dynamics in Rural Java," in Nutrition and Human Reproduction. H. Mosley, ed. New York: Plenum Press, 1978.

Hull, Valerie et al., Family Formation in the Universi[illegible] Community. Report series No. 9, Population Institu[illegible] Gadjah Mada University, Yogyakarta, Indonesia, 1976.

Intengan, C.L., "Nutritional Evaluation of Breastfeedi[illegible] Practices in Some Countries in the Far East." Pap[illegible] presented at the 10th International Congress of Nutritio[illegible] Kyoto, Japan, 1975.

Jelliffe, D.B. and E.F.P. Jelliffe, Human Milk in the Mode[illegible] World. Oxford: Oxford University Press, 1978.

Kardjati, Sri, East Java Nutrition Studies, Report 1. Surabay[illegible] Indonesia, 1977.

Khanjanasithi, Pensri and J. Wray, "Early Protein-Calor[illegible] Malnutrition in Slum Areas of Bangkok Municipali[illegible] 1970-71. Journal of Medical Association of Thailand, 5[illegible] 357-366, 1974.

Lampert, L.M., Modern Dairy Products (3rd edition). New Yor[illegible] Chemical Publishing Company, 1975.

Lappé, F.M. and E. McCallie, Infant Formula Promotion and Use [illegible] the Philippines. Institute for Food and Developme[illegible] Policy, San Francisco, 1977.

Loftus Hills, G., "Vitamin A Deficiency in Malaya," Australi[illegible] Journal of Dairy Technology, 8: 129-30, 1953.

McCollough, Tom, "A Perspective on the Impact of Infant Formu[illegible] in Developing Nations," in Breastfeeding and Food Poli[illegible] in a Hungry World. D. Raphael, ed. New York: Academ[illegible] Press, 1979.

McNicoll, Andre, "The Mother's-milk Formula for Health[illegible] Maclean's Magazine, Oct. 15, 1979.

Nestle Nestle Bulletin, No. 3. 1971.

Mosley, W.H. et al., "Interactions of Contraception a[illegible] Breast-feeding in Developing Countries," Journal [illegible] Biosocial Science, Supplement 4: 93-111, 1977.

Mosley, W.H., Nutrition and Human Reproduction. New Yor[illegible] Plenum Press, 1978.

Mueller, M., The Baby Killer. War on Want. London, 1974.

Osteria, T.S., "Variations on Fertility with Breast-feeding a[illegible] Contraception in Urban Filipino Women" in Nutrition a[illegible] Human Reproduction. W.H. Mosely, ed. New York: Plen[illegible] Press, 1978.

Popkin, B.M. "Economic Determinants of Breast-feedi[illegible] Behaviour," in Nutrition and Human Reproductio[illegible] W.H. Mosely, ed. New York: Plenum Press, 1978.

Shaefer, O., "An Epidemiological Study of Infant Feeding Habi[illegible] and Incidents of Recurrent and Chronic Middle Ear Diseas[illegible] in Canadian Eskimos," Canadian Journal of Public Healt[illegible] 62: 478-489, 1971.

Southeast Asia Chronicle, "Women's Place in the Integrate[illegible] Circuit," in Changing Role of S.E. Asian Women. No. 6[illegible] Jan.-Feb. 1979.

Szanton, M.C.B., Right to Survive. University Park[illegible] Pennsylvania State University Press, 1972.

Toro, Javier, "Food and Nutrition Policies," in Food and Nutrition Policy in a Changing World. J. Mayer and J. Dwyer, eds. New York: Oxford University Press, 1978.

Valyasevi, Aree, "Protein Calorie Malnutrition in Thailand," Second Far East Symposium on Nutrition, Taipei, Taiwan, 1964.

Van Esterik, John, Cultural Interpretation of Canonical Paradox: Lay Meditation in a Central Thai Village. Ph.D. dissertation, University of Illinois, Urbana, 1977.

Van Esterik, P.,"Infant Feeding Practices of Bangkok Professional Women," Keeping Abreast, Resources on Human Nurturing, International, in press.

Whyte, R.O., Rural Nutrition in Monsoon Asia. Kuala Lumpur: Oxford University Press, 1974.

Worthington, L., Breast and Bottle Feeding Practices, A Study in Thailand. mimeo report, n.d.

Wray, Joe, "Maternal Nutrition, Breast-feeding, and Infant Survival," in Nutrition and Human Reproduction. W.H. Mosley, ed. New York: Plenum Press, 1978.

CHANGES IN WOMEN'S STATUS ASSOCIATED WITH MODERNIZATION IN NORTHERN THAILAND

Marjorie Mueke

There is a growing literature, since Boserup's keysto work in 1970, documenting an inverse relationship betwe "modernization" or economic development, and women's status Third World countries (Boserup 1977; Chinchilla 1977; Nash 197 Papanek 1975; Thadani 1979; Tinker 1976). The findings report generally concur that development efforts have differential favored men over women. The greater training, education a occupational opportunities for men than for women are common reflected in larger proportions of women than men in unskille or low-skilled, low-paying jobs of the informal labor sector which there is little opportunity for advancement.

Little work has yet been done, however, that analyse differences in the effects of economic development upon wome with different social characteristics. In this paper, I wi discuss socio-cultural changes that have been closely associate with economic development and demographic change in the Norther Region of Thailand, and show how they have differentiall affected rural-born versus urban-born, and migrant versu non-migrant women.

The Research Population

I and four Northern Thai women repeatedly interviewed 396 married Buddhist (97.6%) and Christian (2.4%) Thai women wh were living in Chiang Mai City in both 1972-4 and 1977-8.[1] Th women represent a broad range of socioeconomic wellbeing Measures reflecting the extremes of their socio-economic rang in 1977 include material possessions: while 16% had r electricity, 15% had a television and a refrigerator. On five-point scale of general socioeconomic wellbeing, 8.1% wer rated very poor, and 3.5%, very rich. The women also exhibite a broad range in educational background: 13.6% had no forma education, and 6.7% had more than a ninth grade education Migration entails varying degrees of cultural, as well as o geographic, displacement. In Thailand, the distance between tw places is an unreliable indicator of the magnitude o differences between them. Instead, relative degree o urbanization is commonly utilized to indicate differences i levels of economic development or of "modernization" (Goldstei 1978). Therefore, for the purposes of this paper, the wome were divided into four groups by their lifetime migratio experience, viz. non-migrants or city natives, rural-to-urba migrants, urban-to-urban migrants,[2] and all migrants. All th