## Gender Issues in Rural Household Economics

### Alison Evans

#### Introduction

Underlying much research and policy-making in rural development is some concept of the 'rural household' and its role in the development process. Even the most cursory reading of the literature on rural development reveals how often 'households' are the principal unit of analysis, whether in censuses and surveys for the collection of technical and socioeconomic data; in the diagnosis of farming problems and the extension of solutions, as in Farming Systems Research; or in the planning and targeting of poverty and nutrition interventions and health services. It is nevertheless only relatively recently that economists working in rural development have seriously begun to think about the household<sup>1</sup> and this comes at a time when other disciplines, particularly anthropology and rural sociology, are also beginning to debate their own understanding of the rural household [Guyer and Peters eds., 1987; Moock ed. 1986].

The growing interest in household behaviour amongst economists marks a break with orthodox theory (and this includes neo-classical and Marxist theory) which places most issues concerning household behaviour outside its theoretical framework. Increasingly however, economists are concerned to theorise and model household responses to changes in the market wage rate and household demand for childcare, services and education [Schultz 1988]. In rural economies the household model has been used to explore the impact of changes in farm output prices, wage rates and technology [Barnum and Squire 1979; Evenson 1976; Nakajima 1970].

The aim of economists is to develop and apply a model of household decision-making. To do this there has to be some notion of how the household functions. Although rarely made explicit, the assumption is that households function according to (in their view) generalisable rules of family/domestic organisation which involve household members in corporate activity within clearly defined socioeconomic boundaries. In other words, the household functions as a socioeconomic unity. This model of the household can be highly misleading however, particularly in complex rural economies where household form and

organisation are subject to wide variation both spatially and temporally [Guyer and Peters eds., 1987; Moock ed., 1986]. Also, the internal logic of the economists' model obscures the significance of intrahousehold dynamics, especially gender relations, in influencing social and economic behaviour. This short paper attempts to show how these shortcomings in the economic model of the household, specifically the agricultural household, derive partly from its roots in neo-classical economic theory and partly from the general limitations of economic analysis in dealing with social and economic relations beyond the market place.

# The Agricultural Household in Neo-Classical Economics<sup>2</sup>

Barnum and Squire [1979] were among the first to develop an economic model of the agricultural household in a developing economy.3 Their model draws heavily on the pioneering work of the Chicago economist, Gary Becker. Becker had, in the early 1960s, broken with the conventional economic wisdom to develop a new approach to household economics that combined arguments about the economic rationality of household behaviour with neo-classical theory of the firm [Becker 1965]. The result was a household model that was consistent with the rest of neo-classical theory but that went one stage further, to conceptualise the household as both a producer and a consumer in the market place. The theoretical approach developed by Becker, generally known as the 'New Household Economics', has since been used in a variety of household models to estimate the size of household marketed surplus, price responsiveness and household income elasticity of demand [Barnum and Squire 1979; Singh, Squire and Strauss 1986; Nakajima 1970]; patterns of labour supply [Yotopoulos 1984]; and demographic behaviour [Schultz 1988].

Along with Becker's theoretical framework these models have a number of things in common: firstly,

<sup>&</sup>lt;sup>1</sup> A. V. Chayanov is an exception to this: see his *Theory of a Peasant Economy* (1965) translated by Thorner.

<sup>&</sup>lt;sup>2</sup> Although there are numerous approaches to farm-household decision-making within the neoclassical tradition (for a thorough summary see Ellis 1988) this paper considers only one approach which has recently been gaining credence amongst agricultural economists.

<sup>&</sup>lt;sup>3</sup> Barnum and Squire (1979) used data from paddy growing farm-households in the Muda River Valley in Malaysia.

they exist in environments where factor markets (labour markets especially) and commodity markets are working, secondly, they assume the simplest possible household form; and thirdly, because of the rules about household structure, household responses are empirically indistinguishable from those of a utility maximising individual and can be aggregated for policy making.

### The New Household Economics (NHE)

The main emphasis in NHE and its first point of departure from orthodox economic theory is that it is the household and not the individual that is the most relevant unit of utility maximisation. Its second point of departure is that the household is a unit of production as well as a unit of consumption. Utility is subsequently derived not simply from the consumption of goods and services purchased in the market place but also from a range of home produced goods and services or **Z-goods**. These Z goods are often thought of as analogous to use-values because they comprise objects of 'final consumption produced within the household' [Ellis 1988:123] using a combination of inputs and household labour-time. The critical assumption is that households allocate labour time as they would any other factor of production in response to changes in relative prices and money incomes, and a major emphasis of the theory is on the allocation of household time between the production of Z-goods and working in the labour market. Hence the growing interest by economists in measuring and valuing household labour time through detailed time allocation studies [King and Evenson 1983; Hart 1978; McSweeney 1979]. In this model, households maximise utility subject to a standard production function, a budget constraint and a time constraint. By assuming that all units of household time can be valued according to the market wage rate, the time and budget constraint are collapsed into a unified fullincome constraint. Welfare maximisation is also conditional on the 'free choices' or preferences of household members being equally represented in the household utility function. As Schultz puts it, 'the welfare of each family member is normally integrated into a unified family welfare function' [Schultz 1988, my emphasis].

Household decisions are presumed to be a function of the state of household technology, the market prices of purchased inputs, the price or opportunity cost of household labour time and the rate of return to household capital. The decision rule is that households aim to minimise the costs of household production and maximise the utility of household consumption. All these variables are measured according to their actual or imputed market value. Thus, household decision-making takes place within an implicit or 'shadow' market framework.

In NHE the household division of labour is explained in terms of **comparative advantage**. Individual labour time is valued with respect to the market wage and is allocated to work in those tasks in which it is relatively more efficient, i.e. earns a higher return or has a lower opportunity cost compared to others in the household. Hence, given market wage differentials between men and women, a household division of labour in which women work within the household while men work for a wage outside it is considered to be both functional and efficient for household welfare maximisation.

While it is the production function that forges the theoretical link between NHE and neo-classical theory of the firm, it is the joint household or family welfare function that links it with neo-classical theory of consumer behaviour and utility maximisation. The link is not a simple one however, because of the problem of identifying a single household welfare function when there is more than one set of individual tastes and preferences to account for. The strong assumptions surrounding the adding-up of utilities and the problem of interdependent utilities in neoclassical methodology, prevent a simple aggregation. Becker by-passes the problem by assuming that household members subordinate their individual tastes and preferences to the pursuit of common household goals, the implication being that household members behave in a purely altruistic fashion: that there is selfless devotion by each family member to the welfare of other family members.

However, the assumption of altruism is not sufficient because it says nothing of how family or household goals come to be formulated in the interest of all members, and how they are equally pursued by all household members, i.e. how to overcome the freerider problem. Becker solves this problem by substituting the assumption of pure altruism with the assumption that the household is ruled by a 'benevolent dictator'4 who sets the goals of the household in the interest of the household as a whole. In practice the benevolent dictator is seen in terms of an altruistic household head or head of the family, and it is (his) utility function that is used to reflect the interests of the rest of the household. Nakajima goes so far as to assume that the household head will 'feel the disutility of labour, say of his wife, as much as that of his own' [Nakajima 1970].

A number of observations can be made at this stage about this particular set of assumptions:

— First, the assumption about altruism and selflessness in the household is in stark contrast to the competitiveness and self-interest of the market, which is at the very heart of neo-classical economic theory. It also raises a question about the

Becker's concept of the benevolent dictator is in some ways analogous to the concept of the 'invisible hand' presiding over the market place.

legitimacy of imputing market values to household decision-making when the kind of competitive behaviour associated with the market place is assumed away [Folbre 1986a].

- Second, for there to be such a close identity of interests within the household it must be assumed that a high degree of reciprocity exists between household members which, elsewhere in the economy, would be considered a barrier to economic efficiency [Ellis 1988].
- Third, the benevolent dictator concept sweeps aside the likelihood of conflict or inequality in household decision-making. In the market place the 'invisible-hand' ensures that no transaction takes place unless both parties benefit. In the household the benevolent dictator is presumed to work in the interest of all parties [Ellis 1988].
- Finally, the assumption is that all household members make free and independent choices but that their interest in exercising that choice coincides perfectly with other members of the household, which is then summarised in the utility function of the household head.

### Some Examples

As already mentioned, this theoretical framework has been used for empirical analysis of household responses to a wide range of exogenous variables. Barnum and Squire (1979) use the framework to predict the responses of paddy producing households to changes in the market wage rate, output prices and to changes in household size, i.e. the number of workers and dependents. The main features of their model are: that a labour market exists; that land holding size is fixed, at least in the short term; and that home production (of Z-goods) and leisure are consumed in the same way and can be combined in the household utility function. Household labour time is, at least for the empirical model, assumed to be homogenous, perfectly substitutable (although workers and dependents are distinguished) and allocated according to market criteria and comparative advantage.

Allan Low (1986) has developed a farm-household model that is quite different from the one just described, although he does draw upon many aspects of the broad NHE framework. The differences stem from the greater influence of A. V. Chayanov and the somewhat unique circumstances of the migrant wage labour areas in southern Africa in which he is working — Swaziland, Zimbabwe, Zambia.

Low's model is interesting because unlike Barnum and Squire it is applied to conditions where factor and commodity markets are not well developed except for a highly developed market for wage labour in nearby South Africa. Thus, Low assumes that a substantial

proportion of farm-household production and consumption is not linked to competitive markets, and that non-market production is a significant component of household welfare maximisation. Barnum and Squire combine non-market production with leisure, and assume that they are consumed in a similar way. Low disagrees and finds important parallels between Z-goods production and the nature of subsistence production for consumption. By using the Z-goods approach developed by Becker, Low attempts a more direct analysis of non-market and marketed production in southern Africa. Where markets are poorly developed, the emphasis is on the relationship between farm activities and household-based or domestic activities in household decision making.

In the theoretical model, Low attempts to make explicit the inter-related nature of decision-making in the African farm-household between non-market and market production, farm and non-farm employment. He also introduces risk and uncertainty into the decision-making process, something which other household models have neglected in the past, although he cannot then introduce them into the empirical model because they interact in complex ways and cannot be identified independently.

Perhaps Low's model is most interesting in the way that it approaches the issue of household labour allocation. In the simplest case — all consumption needs are met by Z-goods production using family labour - households allocate labour time either to household production or to wage employment. Since Low assumes that different household members have different potentials for earning wage income, then according to the principle of comparative advantage, individuals with the greater 'comparative disadvantage' (Low's terminology) in wage work will allocate time to household production, while those with the greater 'comparative advantage' in wage work will enter the labour market. In Low's model, such a division of labour is a necessary condition for minimising the costs of household production and ultimately maximising utility in consumption.

Low uses the logic of comparative advantage to explain why, in southern Africa, women and young children are to be found working in unpaid household (Z-goods) production while adult men tend to be away in wage employment. The reason for this is that the opportunity cost of women's labour time, in terms of their expected wage and income opportunities, is lower than that of men and older educated children. Thus, it is to the mutual advantage of the 'rational' farm-household to allocate women's labour time to household-based activities, while encouraging men to migrate for off-farm employment. Low is able to justify recent patterns of male labour migration in the region in terms of their better wage prospects and the more efficient use of women's labour time in household production.

The labour allocation decision is more complicated when there are other options open to the farmhousehold, including the possibility of selling part of their output and purchasing part of their food needs in the marketplace. In this case, differences in the time allocated by household members to each activity will reflect differences in the opportunity cost of their labour, measured in terms of underlying differentials in the market wage rate and household preferences for time-intensive and goods-intensive commodities. Low calls this the 'opportunity cost of purchase' [1986:37]. Whatever the elements of the final decision however, the assumption is that the household division of labour will always ensure that household welfare needs, interpreted as household consumption needs, are satisfied.5

An important policy implication of Low's empirical model is that household strategies such as land extensive cultivation, that save on labour time and increase returns per labour unit, are consistent with increasing male labour migration. Also, attempts by development projects to introduce labour-intensive technologies, such as hybrid maize, are unlikely to be adopted unless the returns to labour or the real value of labour time rise pari passu [Low 1986:127-8].

### Shortcomings in the NHE Model

### (i) The household as a socio-economic unity

The 'image' of the household presented in NHE is that of a contained social and economic entity with clearly defined boundaries, organised independently of other households and actors in the economy. The family is treated as the basic labour unit and the domestic group, or household, has a strong connotation of coresidence, implying that family members live and work in close proximity, under one roof, sharing the work and proceeds of their labour — 'the one pot, one roof model' [Lehman 1986].

However, anthropological evidence from sub-Saharan Africa casts doubt on this image of the household, revealing that households are often shifting, flexible structures in which the boundaries are difficult to discern. Micro-studies show a great diversity of family and household composition and social relations, mediated through marriage and kinship, creating a variety of conjugal and residential arrangements [Harris 1984; Whitehead 1984a; Kandiyoti 1985].

Residential arrangements tend to vary depending on whether women move to their husband's household on marriage or vice versa. In addition, the nature of the conjugal contract itself varies, usually influenced by complex patterns of inheritance and cultural prescription which are themselves subject to change [Whitehead 1984b]. For example, amongst the Hausa of Northern Nigeria, research reveals a complex system of economic and social relations cross-cutting domestic units and connecting secluded women of different households in the activities of production and consumption. This network of relations extends far beyond the boundaries of the standard analytic model used by economists, but is a crucial determinant of individual and household decision-making [Pittin 1982].

Wherever it is employed, the concept of the household as a single legal union and a unified economic entity submerges important information about variations in household composition — by gender, age and kinship — and intra and inter household resource allocation and distribution. For example, polygamous houseare often structured differently monogamous households. A polygamous 'household' will probably comprise of a number of separate but interrelated 'household' units in which many decisions are taken by co-wives, with or without the involvement of their husband. Forms of exchange (in labour and goods) exist between these sub-units, which are important in terms of the overall complexion of production and consumption decisionmaking. In addition, the relationship between members of the sub-units differ: for example, the position of the senior wife in decision-making is both economically and socially very different to that of a junior wife.

Thus, the single household may not be the most important reference group in the local taxonomy. Rather, a compound of several households linked together may be the basic decision-making unit, or a cluster of households linked by kinship ties or common access to the means of production. The 'closed' unidimensional household model in economic analysis is unable to approximate this kind of dislocation and heterogeneity within household structures [Whitehead 1984a, 1984b]. Consequently the predictions that it makes about economic behaviour are based on a partial, if not biased, reading of economic and social realities. Furthermore, the model obscures from view critical aspects of intra and inter household exchange (mainly non-monetary) which can be an essential source of factors of production and consumption goods. Non-market exchanges, which need not necessarily be reciprocal or egalitarian, can affect the capacity of different household members to satisfy their own and others' consumption needs.

# (ii) The substitutability of factors and the household division of labour

Empirical evidence shows that the assumption of

Ow does concede that the wage-price mechanism does not really explain why, when the productivity of adult women may be as high as that of men, women are over-burdened with domestic related tasks that constrain the amount of labour time they can spend in farm work. Low does not use the same point, however, to ask why women's capacity for wage work is more constrained than men's.

perfect substitutability between factors of production is not sustainable beyond the theoretical domain of perfectly competitive factor markets. In most agrarian economies markets are not well developed, nor are they anything like perfectly competitive. Thus, the NHE framework has to be modified (as in Low's example) to take account of imperfect markets and low substitutability between factors. However, few serious attempts have been made to question the assumption of the smooth substitutability of family labour. For the most part, family labour time is treated like any other factor of production which can be flexibly allocated on the basis of its comparative costs in market and non-market activities. But family labour is not a simple factor of production: it is differentiated by gender, age and status, all of which are influential in mobilising and allocating family labour to different farm and non-farm activities.

The division of labour within households is normally drawn along gender and/or age lines. But there may be other lines of stratification such as class and kinship, that affect its complexion. The division of labour creates certain forms of interdependence within the household and between households in the form and type of labour services provided by members, but this interdependence is not necessarily reciprocal or of equivalent benefit to all members. For example, women are the core of most family labour units in African agriculture. Many of them cultivate their own fields, mainly for food crops, while also providing the vital family labour for their husband (the farmer) to cultivate his fields, for which many receive less than adequate compensation. Women also provide most of the labour input necessary to maintain and reproduce other household members. The time intensity and duration of their labour input differs quite considerably from those of their husbands, children or other kin [Evans and Young 1988]. Often it is severely bound by economic and time constraints that raise the cost to the woman of allocating time off the farm or increasing the time spent in activities that are unpaid. It is therefore highly misleading to assume that family labour is homogenous, or that is perfectly substitutable between tasks within the household or between household and market place.

The comparative advantage argument also represents a economistic description of the status quo in most farm-households. That is, women are seen to be doing most of the subsistence type work and men are seen to be engaged in directly remunerative work. To explain this in terms of rational decision-making on the basis of underlying wage differentials implies that the 'direction of causation runs from the market to the utility function' [Ellis 1988:177] that is, since the market values the labour time of women and men differently, there is something in the household utility function that predisposes women to do domestic work. This explanation completely obscures the non-

economic and ideological factors that discriminate between male and female labour in the market place and values their labour differently in market and nonmarket sectors. It is now widely acknowledged, however, that these factors influence the way in which the gender division of labour is drawn up not only within households but also within the wider economy.

# (iii) The household as a unified unit of consumption and production

In many respects the realisation that households are not simply consumers but producers and processors as well is a breakthrough in the economic analysis of household behaviour in both agrarian and industrialised economies. However, the NHE model can only operate on the assumption that the consumption unit and production unit are unified, and that all choices are made by the same decision-making unit (the family unit), and iteratively rather than simultaneously.

Empirical evidence indicates however, that production and consumption units are a great deal more heterogeneous and shifting than the NHE model allows. In addition, decisions about what and when to produce and what and when to consume are either impossible to separate empirically or are carried out by different groups of people.

For example, in many parts of sub-Saharan Africa, production units in the major activities of cultivation are organised along extended kin lines, or by women and men separately. In North Western Zambia, amongst the Kaonde, Crehan observes that the basic unit of production for consumption and sale is a woman plus any dependent children, not necessarily her own biological children. The men of the Kaonde engage in some cash-cropping — for which women provide some labour services — fishing and wage labour. Production is therefore split up amongst different groups [Crehan 1984]. Decisions about consumption are made principally by the women who are engaged in direct production and processing of food. It cannot be said that in these households production and consumption units are unified. Nor is it possible to assume a priori that consumption decisions are made jointly only after all production decisions are made, because the production possibilities faced by the women are different from those that the men face, and there is no uniform production function that can be solved prior to making consumption decisions.

### (iv) The joint utility function

The arguments about household welfare maximisation are conditional on a number of 'heroic' assumptions. These are:

(a) Within the household, individuals make free and voluntary economic choices.

- (b) Individual choices are motivated by the desire to maximise total family welfare.
- (c) The structure of the family-household means that the joint utility function is closely identified with the utility function of the principle household decision-maker. While this need not be the male household head, in practice it is presumed to be. Evenson [1976] argues that 'in need the male dominated families of much of the low-income world fit this presumption quite well').

Some economists argue that the joint welfare function raises serious specification problems for the neoclassical household model, not least because the method of aggregating individual tastes and preferences is theoretically abstract and empirically almost impossible. Other scholars have argued that the function is not an objective representation of familyhousehold decision-making behaviour but a theoretical construct which precludes all possibility of conflict and power struggle in decision-making and resource allocation [Bowles and Gintis 1975]. For example, it is assumed that all family members always act in the economic interests of the family as a whole. There is a paradox here because it presumes that individuals who are motivated by self-interest in the market place are at the same time inherently selfless within the family [Folbre 1986a]. But why is self-interest presumed to be the preserve of the market place and altruism limited to the sphere of the household? The answer lies at the heart of the neoclassical method because it ensures that, on the one hand inter-personal conflict and competitiveness do not get in the way of the free and voluntary process of family welfare maximisation, and on the other hand, that open competition and selfinterest in the market place provide a site for free and voluntary exchange unfettered by feelings of obligation and reciprocity.

Folbre (1986a) argues that the joint utility function removes the possibility of exploring conditions of unequal exchange and exploitation between family members, and in particular between women and men. By taking family reciprocity as given and constant, the NHE framework precludes the possibility that household choices are motivated by anything other than changes in external variables, like prices and incomes. In addition, it ignores the fact that the activity of forming individual preferences and making choices is not always free or voluntary for all household members. For example, displays of 'maternal altruism' [Whitehead 1984a] are often part and parcel of women's obligations to the family. Frequently women will subordinate their own needs and choices in fulfillment of what is expected of them as a mother and wife. Women are known to go without food or new clothing on a regular basis to ensure that their children or other working members of the family are well fed and clothed. Also, research into family cooking and eating patterns commonly reveals women eating last on left-overs after other family members have had their fill or girl children being discriminated against in the allocation of food [Chen et al. 1981]. Men, on the other hand, are often under less social and cultural pressure to subordinate their basic needs to those of other family members — except perhaps in situations of severe poverty or household crisis. Male roles tend to be more independently constituted than female roles, and men are often able to make choices that lie outside any obligations to family and household welfare [Henn 1983; Whitehead 1984a].

Anthropologists have shown for Africa and Asia that women's range of economic choice is drastically curtailed by custom and patriarchal power. This has often hidden their distinct economic contributions and has invisibilised them from economic analysis.

### (v) The 'benevolent dictator'

Even if theoretically there is such a thing as a joint family welfare function, the neoclassical method is stuck with the problem of 'who defines the collective utility that household members collectively seek to maximise' [Folbre 1986b].

The NHE framework has managed to sidestep the issue of how the joint utility function is specified by assuming that one altruistic family member, for which the household head is a proxy, makes economic choices on behalf of all other household members. In effect, the economic and welfare interests of women and children (considered to be family dependents) are internalised within the utility function of the husband/ father. The heroic assumption is that the presence of one altruist in the family induces purely selfish but rational family members to behave altruistically. The resulting intrafamily allocation of resources is one that maximises the altruist's utility function subject to family resource constraints [Pollak 1985]. This privileges the so-called altruist or household head with a sense of responsibility for family welfare that empirical research is not able to substantiate.

In many rural societies particularly, the 'authority located in the household head is not intrinsic to relations between household members' [Harris 1984]. The authority invested in the male head does not necessarily coincide with the residential family unity, but may lie instead with kin based elsewhere (as in most matrilineal societies) or with some wider economic or political sphere, for example village politics. In such a situation the male patriarch may be only weakly associated with the everyday welfare of his family or household group, which suggests that the welfare of family members cannot be read off from the socio-economic characteristics and economic choices made by the household head. Furthermore, as already mentioned, differential power and individual selfinterest are part and parcel of conjugal and household relations, and there are no guarantees that the authority that the NHE model invests in the household head will result in benefits that 'trickle down' or across to household members.

### (vi) Pooling and sharing

The last section argued that the objective function defining family structure and predicting household behaviour is too narrow and overly economistic. It also ignores the possibility that changing social relations of production may modify the nature of the household as a decision-making unit, or that household economic behviour is motivated by anything other than changes in relative prices and incomes.

The NHE framework also ignores the possibility that distinctive relations within households are constituted along lines other than pooling and sharing. The neoclassical assumption is that household members share a common set of economic interests. Thus, on the grounds of allocative efficiency, family labour, income and resources enter into a common fund, and are distributed equitably among family members. So, all family members have access to pooled resources sufficient to meet their personal and collective needs.

Research from agrarian societies shows that women and men often own, and more often have access to, different kinds of income and resources, as well as having differential access to so-called 'common' resources. In many parts of sub-Saharan Africa the separate economic activities of women and men are set within a household economy entailing both joint and separate resource-holding within complex reponsibilities and rights to consumption, maintenance and access to household products. As Whitehead [1984a] argues, the household is not necessarily a 'collectivity of mutually reciprocal interests'. Intra-household management and distribution arrangements vary with respect to household form and the nature of the 'conjugal contract'. Consequently the conditions of women's and men's effective access to resources and labour income are determined by their relative position within the household, kinship group and the wider social and political environment [Evans and Young 1988].

Using data from North East Ghana and the UK, Whitehead [1984a] argues that the nature of distributive relations between women and men in households is largely a question of 'relative power'. Neoclassical economists read relative power to mean the relative wages commanded by household members in the market place, or the imputed value of human time in non-market production. However, Whitehead argues that relative power is not adequately captured by comparing the opportunity costs of labour. In fact, the gender division of labour often renders the work women and men do non-comparable, especially where

non-market and reproductive activities are concerned.

The economic and social division of labour between women and men also makes it difficult to compare the types of incomes and expenditures that women and men are responsible for. Women are often responsible for daily and short-term consumption and expenditure. while men are usually responsible for lumpy, longerterm purchases. This means that women have to keep some income and outputs separate from the family purse. Just how separate these budgets are depends on family and kin relations as well as on normative assessments of women's relative position in society. Whitehead observes that women's access to resources is more tied up with collective consumption and needs than that of men, who tend to have more individual access to non-household resources and the market place and greater control over the labour of their spouse(s) and children. She also argues that 'the . . . conjugal contract implies specific material conflicts of interest between husbands and wives' [Whitehead 1984a] and that the division of labour between women and men creates forms of interdependence which are not necessarily reciprocal. Furthermore, household budgets are managed and distributed in a variety of ways, not always the most obviously rational in economic terms, with varying amounts of cooperation and conflict between family members.

A further example of conflicts that arise in household decision-making is given by Jones [1983] in a study of the SEMRY project in West Africa. The SEMRY project in Northern Cameroon is an irrigated rice scheme; the objective is to mobilise family labour to produce rice for sale to raise farm-household incomes. In the area, many households are polygamous. Wives and husbands cultivate separate sorghum fields, most of which goes to family consumption, although women are able to sell small surpluses of sorghum and retain the cash income to purchase consumer goods if they so wish. The husband and his wive(s) both work in rice cultivation, but men are able to profit from their wives' labour by denying them control of the product of their labour, because women have to surrender all rice to husbands who control its sale and income.

Farm management research in the early 1980s showed that many rice cultivating households were operating well below the capacity offered to them by the irrigation scheme. For example, many were cultivating only one rice field although more were available, and many were single cropping instead of double cropping, which was the objective. On completion of a time allocation study it was found that married women (co-wives), who provided the bulk of the transplanting and weeding labour on the rice fields, were withholding a significant amount of their labour from their husbands because the returns that they received did not compensate them for the extra labour effort involved. They preferred to spend more time in

sorghum cultivation, where they could at least control the full product of their labour. So women's preference in allocating labour did not concur with that of the household head, given the current structure of incentives. This was not comprehended by the project, whose understanding of family labour — and specifically the terms on which women and men worked together — was at variance with reality. As a result, the success of the project was seriously diminished. Without a clear understanding of the forms of economic separation and interdependence between the labour provided by women and men, Jones argues, projects such as the SEMRY are likely to fall well short of their targets.

### Conclusions

The problem with a critique of this kind is knowing 'where to go from here'. If the household concept or model is this problematic, then what is going to replace it? What is the most relevant unit of analysis? If instead we adopt the individual as our analytical unit. we end up turning full circle into the realms of orthodox neoclassical theory, which has always privileged the status of the individual above all other economic agents. And, even if adopting an individualistic approach allows for a more explicit analysis of the separate interests and preferences of women and men in the economy, it also misrepresents the degree of interdependence between them. Whereas the NHE model takes the notion of mutuality and congruence of interest within households too far, a wholly utilitarian approach takes the notion of separation and independence too far. Furthermore, an important part of the criticism of the logic of NHE is that it collapses the complex array of relationships and exchanges within households into a function that is ultimately indistinguishable from that of an individual decision-maker. Notions of power and inequality, but also notions of sharing and reciprocity are, as a result, virtually meaningless in the economic model.

The problem is whether, by recognising that household forms vary and that intra-household dynamics matter, we distort the household model to the point where it is no longer practicable. That is, the conceptualisation of ever more complex household forms and processes simply becomes a methodological nightmare for the social scientist. However, as Ann Whitehead<sup>6</sup> points out, the importance of retaining the household concept lies in the extent to which it is the locus of a number of sets of relations — family, conjugal, economic — and the extent to which some resources are managed and claimed collectively, if not equitably. Also, as an empirical category, the

household concept is important for defining structural parameters such as land tenure rights, access to resources and socio-economic position [Guyer 1981].

It is important therefore not to go too far and ditch the concept of the household as a unit altogether. When using the concept however, economists must begin to acknowledge that household units are very variable, and that they cannot be analysed realistically from a set of generalised, a priori assumptions. That is, there must be some attempt to incorporate variable household forms and the relations within them in economic analysis. Also, the household concept is not useful when abstracted from the complex relations that extend beyond it. There is a need to explore the linkages between households, markets and the state and the dynamic that drives resource allocation in different economic and social contexts.

In brief, some of the important points to remember when using the household as a unit of analysis are:

- 1. Households are not universal or 'natural' units. They shift and change cross-culturally and with respect to the configuration of relations of production within specific environments.
- 2. Household labour is not undifferentiated and differences in family labour can have a powerful influence on the productivity, opportunity cost and motivation of labour available for household production and consumption. Family labour is often a misleading concept, but in most cases it cannot be assumed to be perfectly flexible and substitutable in the context of changing economic incentives and shifts in labour demand.
- There are many ideological, cultural as well as economic reasons underlying symmetries and asymmetries in household resource allocation. Unequal exchange and inequality do exist within households, and self-interest can be an important motivation, even within non-market enivironments.

#### References

Barnum, H. N. and Squire, L., 1979, 'A model of an agricultural household: theory and evidence', *Occasional Paper* no 27, World Bank, Washington DC

Becker, G., 1965, 'A theory of the allocation of time', Economic Journal, vol 75

—1976, The Economic Approach to Human Behaviour.
University of Chicago Press

Bowles, S. and Gintis, H., 1975, 'The problem with human capital theory — a Marxian critique', *American Economic Review*, Papers and Proceedings, no 2, May

<sup>6</sup> I am very grateful for discussions with Ann Whitehead, Megan Vaughn, Henrietta Moore, Ayesha Imam and Hilary Standing on the usefulness of the household concept, during an informal workshop held in London in April 1988.

<sup>7</sup> Ellis (1988) makes an attempt to do this in his analysis of farm-household decision-making.

- Chen, L. C., Huo, E., D'Souza, S., 1981, 'Sex bias in the family allocation of food and healthcare in rural Bangladesh', *Population and Development Review*, vol 1, no 1
- Crehan, K., 1984, 'North Western Zambia: from producer to housewife', *Review of African Political Economy*, no 27/8
- Ellis, F., 1988, Peasant Economics: Farm Households and Agrarian Development, Cambridge University Press
- Evans, A. and Young, K., 1988, Gender Issues in Household Labour Allocation - the case of Northern Province, Zambia, Report to ESCOR, ODA
- Evenson, R. E., 1976, 'On the new household economics', Journal of Agricultural Economics and Development, vol 6, pp 87-103
- Folbre, N., 1986a, 'Hearts and spades: paradigms of household economics', World Development, vol 14 no 2, pp 245-55
- —1986b, 'Cleaning house: new perspectives on households and economic development', Journal of Development Economics, June
- Friedmann, H., 1980, 'Household production and the national economy: concepts for the analysis of agrarian formations', *Journal of Peasant Studies*, vol 7 no 2
- Guyer, J., 1981, 'Household and community in Africa', African Studies Review, vol XXIV no 2/3
- --and Peters, P., 1987, Introduction in 'Conceptualising the Household: Issues of Theory and Policy in Africa', Special Issue of *Development and Change*, vol 18 no 2, pp 197-214
- Harris, O., 1984, 'Households as natural units', in K. Young et al. (eds.), Of Marriage and the Market, Routledge Kegan Paul
- Hart, G., 1978, 'Labour Allocation Strategies in Rural Japanese Households', PhD thesis, Cornell University
- Henn, J., 1983, 'Feeding the cities: women farmers', World Development, vol 11 no 12
- Jones, C., 1983, 'The mobilisation of women's labour for cash crop production: a game theoretic approach', *American Journal of Agricultural Economics*, December
- Kandiyoti, D., 1985, Women in Rural Production Systems: Problems and Policies, UNESCO, Paris
- King, E. and Evenson, R. E., 1983, 'Time allocation and production in Philipine rural households', in M. Buvinic (ed.), Women and Poverty in the Third World, Johns Hopkins, Baltimore

- Lehman, D., 1986, 'Two paths of agrarian capitalism, or a critique of Chayanovian Marxism', *Comparative Studies in Society and History*, vol 28 no 4
- Low, A., 1986, Agricultural Development in Southern Africa: farm-household theory and the food crisis, James Currey, London
- McSweeney, B. G., 1979, 'Collection and analysis of data on rural women's time use', Studies in Family Planning, vol 10 no 11/12
- Moock, J., (ed.), 1986, Understanding Africa's Rural Households and Farming Systems, Westview Press, Boulder (Co.)
- Nakajima, C., 1970, 'Subsistence and commercial family farms: some theoretical models of subjective equilibrium', in C. Wharton (ed.), Subsistence Agriculture and Economic Development, Frank Cass, London
- Pittin, R., 1982, 'Documentation of women's work in Nigeria: problems and solutions', *ILO World Employment Programme/Population and Labour Policies Programme*, no 125
- Pollak, A. R., 1985, 'A transaction cost approach to families and households', *Journal of Economic Literature*, vol XXIII, June
- Schultz, T. P., 1988, 'Economic demography and development: new directions in an old field', in G. Rains and T. P. Schultz (eds.), The State of Development Economics, Basil Blackwell, Oxford
- Singh, I., Squire, L. and Strauss, J., 1986, 'A survey of agricultural household models: recent findings and policy implications', *The World Bank Economic Review*, vol 1 no 1
- Vaughn, M., 1986, 'Household units and historical process in Southern Malawi', Review of African Political Economy, no 34
- Whitehead, A., 1984a, "I'm Hungry Mum": The Politics of Domestic Budgeting, in K. Young et al. (eds.), Marriage and The Market, Routledge Kegan Paul
- —1984b, 'Beyond the household? Gender and kinship-based resource allocation in a Ghanaian domestic economy'. Workshop on Conceptualising the Household: Theoretical Methodological and Conceptual Issues. Howard Institute for Development
- Yotopoulos, P. A. and Mergos, G. G., 1984, 'Family labour allocation in the agricultural household'. *Discussion Paper* 39, Development Economics Research Centre, University of Warwick