

TOWARDS AN ANALYTICAL FRAMEWORK :
WOMEN, FOOD SELF-SUFFICIENCY AND
FOOD STRATEGIES

Winnie WEEKES-VAGLIANI

The subject of women, food self-sufficiency and food strategies is not new, but it seems that what happens in most cases is that only lip service is being paid, at most one or two paragraphs have been dedicated to it in numerous documents over the last decade (1). The essential contribution that women make includes the production and processing of staple food crops and responsibility often for their sale, storage and preservation. Although it is both generally accepted and recognised that some degree of food self-sufficiency is advisable and that women play pivotal roles in any strategy for food self-sufficiency in Africa, Asia and Latin America, it is not clear how women fit into national food strategies.

The main purpose of this paper, therefore, is to raise ideas for examination which will provide an informed understanding of how what women do on the micro level is related to the macro food policy level.

In the first section of this paper the issues to be addressed will be briefly presented. Following that, the basic assumptions for research on this subject will be presented ; and the variables and the data required for an examination of the main problems and issues will then be considered.

(1) See for example : World Food Council, *National Food Strategies, to Eradicate Hunger*, UN 1982 and 10th Ministerial Meeting of WFC, Preliminary Conclusions and Recommendations, June 1984, Addis Abeba.

1. ISSUES

Decisions taken by producers as to what, how and for whom to produce vary according to preferences which are not only related to food provisioning.

One issue relates to the question of *how* production is increased. This is an issue raised by Mellor and Johnston (1) who emphasise the importance of increasing *productivity* as part of the growth of output. For our purposes, it is even more important to ask *by whom* ? will production be increased, by men or women ? This raises the possibility that men and women producers may have goals conflicting with each other and with those of governments in regard to the cultivation of given crops. For example, governments may want a surplus in given staples such as wheat, maize or rice to be produced for urban consumers who are politically more articulate and powerful than the rural producers. Moreover, women are often not engaged in the production of the crops the government has earmarked for food self-sufficiency or may not give priority to the latter for various reasons. It becomes important, therefore, to consider in concrete cases the implications of the fact that women are not usually cultivating "self sufficiency" crops.

Another issue is the need for more research focussed on the household and farm division of labour and how all family members are affected by the type of production unit in which they live. There is still little understanding of how the household level and the women in them are related in practice to national strategies for food self-sufficiency. Furthermore what is known about farming systems must be articulated to include women in the analysis as we shall illustrate below.

(1) J.W. Mellor and B.F. Johnston, "The World Food Equation : Interrelations Among Development, Employment, and Food Consumption" in *Journal of Economic Literature*, Vol. XXII, (June 1984) : 531-574.

2. UNDERLYING ASSUMPTIONS AND VARIABLES TO BE EXAMINED

A balanced appraisal of a food policy for self-reliance (1) would include expertise from several disciplines : economics, nutrition, sociology, anthropology and ecology.

A food systems approach is essential to an understanding of how food problems are linked to economic structure and varying internal and external forces (2).

2.1. Variables - some explanations

Ruth B. Dixon (3) has examined selected features of rural economies such as the size of landholdings and their distribution, the market orientation of agricultural production and the relative attractiveness of urban opportunities and the sex composition of the agricultural labour force. Her analysis shows that each of these variables have a sex-specific effect on the farm labour force.

For instance, ILO estimates for sub-Saharan Africa show that it has the highest proportion of females in the agricultural labour force as compared to other regions ; it is 39 per cent in Africa, 28 per cent in Asia, 18 per cent in the Middle East and 11 per cent in Latin America (4).

Furthermore, where smallholder agriculture engaged in subsistence production or production for local markets is prevalent, the proportion of women in the agricultural labour force is highest. Male outmigration to towns and cities in regions with low levels of urbanisation reinfor-

-
- (1) See Duncan Miller, "Food Self-Sufficiency : Preliminary Reflections on Concepts and Measurements, Working Paper, CD/R(79)1103. The wider concept of self-reliance is implied when the term self-sufficiency includes the notion of decreased dependence on outside sources.
 - (2) Hartmut Schneider - *Meeting food requirement in a context of change*, forthcoming OECD Development Centre publication.
 - (3) Ruth B. Dixon, "Land, Labour and the Sex Composition of the Agricultural Land Force : An International Comparison", in *Development and Change*, (Sage, London, Beverly Hills and New Delhi), Vol. 14 (1983) : 347-372.
 - (4) Janice Jiggins, *Rhetoric and Reality : Where Do Women in Agricultural Development Projects Stand Today ? Part 1. Women in Agricultural Development : The World Bank's View in Agricultural Administration* 15(1984) : 157-175.

ces the pattern of high female labour force participation in agriculture (1).

The key variables for examination of women's participation as illustrated above are : smallholder agriculture with production for local markets and male outmigration. The crop cultivated is another important variable. An examination of data in regard to the crops designated for self-sufficiency by governments (2) as compared to the crops cultivated by women is essential ; they are most often not the same. In other words, if production targets for self-sufficiency are not related to the crops women cultivate, then their contribution to food strategies is masked or taken for granted, and yet may not be forthcoming. There is evidence that the food crops produced by women provide a kind of "safety net" for the farm family significantly influencing the amount of risk male farmers are willing to incur in the production of other crops (3).

The multiplicity of women's roles and competing demands made on their time makes studies of women's time allocation including the seasonality aspect an essential component in any food equation (4).

For instance, since cassava can grow also in depleted soils, it is often planted at the end of the rotation cycle in Africa (5). (Cassava has also replaced yams in some areas of West Africa where male outmigration is heavy since its cultivation needs less land preparation). This means that the characteristics of the crop have to be investigated. Another characteristic of this crop is its perishability after harvesting (it keeps well in the ground). Therefore, processing technology

(1) Ruth B. Dixon, *op. cit.* : 364-365.

(2) See Duncan Miller, *op. cit.* What is usually meant by food self-sufficiency is not complete autarky, i.e. 100 % self-sufficiency ; normally what is implied is self-provisioning in one or more of the major staples at the national, regional or household level.

(3) Susan C. Rogers, Social Sciences Analysis, preliminary report of USAID Mission to Mali, 1983.

(4) Cf. J.W. Mellor and B.F. Johnston, *op. cit.* : 534.

(5) Jane I. Guyer, "The World Bank's Prescriptions for Rural Africa : Accelerated Development in Sub-Saharan Africa (The Berg Report) Washington, DC 1981, "Women's Work and Production Systems : A review of Two Reports on an Agricultural Crisis" in *Review of African Political Economy*, reviews : 188.

would have to be developed to cope with any increased output in this crop (1). Storage becomes problematic otherwise.

Since food strategies are also concerned with agricultural exports the fact that some roots, tubers and other crops produced by women are not competitive on international markets and indeed are not even exportable, is of relevance. However, for Africa at least, they are important components of national diets in many countries, which will continue to be so for a number of decades (2). Furthermore, the resilience and "root retention" of African populations for their traditional foods may conflict with the government's objectives for a "self-sufficiency crop" as in the case of Nigeria. The planting of wheat was delayed by farmers in the Kano River Scheme because *their* food (sorghum) comes first (3). This could also be said for the cultivation of yams in regard to certain ethnic groups such as the Baoulé in the Ivory Coast (4).

Peasant producers may not only decide that *their* foods come first but that producing a surplus is not worthwhile in terms of prices, lack of production supports and indebtedness. This is clearly a frequently occurring phenomenon, see for instance reports from Mexico (5).

Another variable is the socio-cultural context in which the constellation of these factors operate. The same ecological and economic patterns and variables might give rise to different policy implications if the socio-cultural environment is different (6).

2.2. Elements of a conceptual and sample framework for comparative research

A first step in constructing a sample of countries or regions within them would be to identify areas where the cluster or constellation of the key variables mentioned above could be related to different

(1) *Ibid.* : 189.

(2) W. Weekes-Vagliani, *Actors and Institutions in the Food Chain : The Case of the Ivory Coast*, Forthcoming Development Centre Paper.

(3) Gavin Williams, "The World Bank and Nigeria's Green Revolution" in *Review of African Political Economy*, review : 193.

(4) W. Weekes-Vagliani, *op. cit.* (Ivory Coast).

(5) A. Schejtman, "Economía Campesina : Logica Interna, Articulacion y Persistencia" in *Revista de la CEPAL*, n° 11, August, 1980.

(6) W. Weekes-Vagliani, *Actors and Institutions in the Food Chain : The Case of Peru*, forthcoming Development Centre Paper.

degrees of self-sufficiency. The analysis in research of this kind should identify the characteristics of the actors in relation to the crops they are producing and how they relate to national food policies. For example, Thailand which is self-sufficient in rice could be compared to Mexico whose stated goals are self-sufficiency in maize and beans in central and southern Mexico (1) or a Sahelian country such as Upper Volta which has not achieved its objectives of self-sufficiency. For specific regions in these countries, a preliminary examination would "plot" the key variables on a chart or axis (2). Since, for instance, in Mexico the crisis in food production is on rainfed land in the centre and south where smallholders cultivating maize and beans predominate, research should focus on the distribution and size of agricultural holdings, the intra-household sexual division of labour, migration patterns etc. to find out how women fit into food strategies for self-sufficiency.

Based on this "objective data" (ecological area, crops cultivated, migration patterns, type of holding, intra-household division of labour, etc.) a series of hypotheses could be developed with these specific populations in mind. Perhaps the best way to start would be to examine specific food and agricultural projects while they are being designed or just before implementation. For this, much of the type of data mentioned above is available. Work at the project level would fill the gap in our knowledge in regard to a number of questions ; crops cultivated by women with what complementarity with men , women's time allocation and seasonal patterns, what are their needs : financial, technological, access to income etc. and how these needs are currently being met (3). These initial forays would provide clues and information as to how this micro picture might add up on a larger scale and the implications for planners.

-
- (1) SAM (Sistema Alimentario Mexicano) "Notas Analíticas y Lineamientos Metodológicos para el Proyecto Sistema Alimentario Mexicano" Working Document, Oficina de Asesores del C. Presidente, Mexico, August 1979.
 - (2) See W. Weekes-Vagliani, *Women in Development : At the Right Time for the Right Reasons*, OECD Development Centre, Paris, 1980, methodological section on multidimensional scaling exercise for the Malaysian case study.
 - (3) Cf. Janice Jiggins, *op. cit.* part 2 - "Women in Agricultural Development : Some Project, Programme and Policy Issues" : 223-237.

2.3. Policy Implications and these variables

There is repeated reference in the literature to the importance of smallholders (one of our key variables in regard to women) for agricultural production. In fact, the most recent reference advocates an emphasis on a "unimodal" (1) pattern of agricultural development on smallholdings rather than a dualistic pattern of cultivation. This is advised because agriculture is the most important potential source of income and employment in low-income countries. Increases in productivity must be envisaged which employ the labour which is abundant in most low-income countries. Therefore, emphasis must be placed on gradually increasing the productivity of small farmers. The technological and other innovations to bring this about should be adapted to these labour abundant populations rather than emphasizing capital which is usually scarce.

The food systems approach suggested at the beginning of this paper, is also a way of linking nutritional need with access to resources to satisfy that need. This focus is more helpful than the welfare oriented approach too often associated with women (2).

In other words, it is no longer enough to state that women have pivotal roles in any food strategy, we have to find out what these are in the larger perspective. With an examination of data and an analysis of how the key variables interact we can acquire an informed understanding of how women can and do tip the balance in the food equation. It is only with knowledge of this kind that a consistent set of measures can be designed whose implementation will enhance the role of women in food systems in a number of settings.

Research of this kind can spell out the implications for governments in terms of the economic costs of unsuccessful food strategies for food self-sufficiency. Without further research women may continue to remain "invisible" for planners with the accompanying negative consequences for the outcome of food strategies.

(1) J.W. Mellor and B.F. Johnston, *op. cit.* : 533.

(2) Cf. *Ibid.* and W. Weekes-Vagliani, "The Integration of Women in Development Projects", CD/R(83)16 (1st Rev.) distributed April 1984 (Restricted).

Advocacy certainly has a role to play, but it must not stop at pure rhetoric and continued neglect, we must begin to examine the available data (1). Countries do operate under constraints, they do need foreign exchange from agricultural exports, but the pitfalls of taking food production by women for granted must be made evident with careful examination and analysis of concrete situations.

(1) Jane I. Guyer, *op. cit.* This author makes the point that both IBRD 1981 and USDA 1981 reports neglect the subject of women and the issues concerning them almost completely : 187.

ABSTRACT

The main purpose of this paper is to put forward ideas for examination, which will provide a sound understanding of how women's micro-level activities are related to the macro food policy level. Then, the author presents some basic assumptions for research on this subject, and the variables and the data required for an examination of the main problems and issues.

RÉSUMÉ

L'objectif essentiel de cet exposé consiste à proposer quelques idées à soumettre à la réflexion, afin de parvenir à mieux comprendre le rapport entre les activités micro-économiques des femmes et le niveau des politiques macro-alimentaires. L'auteur énonce ensuite certaines hypothèses de base pour une recherche en ce domaine, ainsi que les variables et les données nécessaires à l'examen des principaux problèmes envisagés.