Peru
PN-AAY-421
ISN = 56635
21

"THE AGRICULTURAL DIVISION OF LABOR BY SEX: Myths, Facts and Contradictions in the Northern Peruvian Sierra"

Carmen Diana Deere

Economics Department
University of Massachusetts, Amherst

The views and interpretations in this publication are those of the author and should not be attributed to the Agency for International Development.

Paper presented to the panel on "Women: The New Marginals in the Development Process," Joint National Meeting of the Latin American Studies Association and the African Studies Association, Houston, Texas, November 2-5, 1977.

"The Agricultural Division of Labor by Sex:
Myths, Facts and Contradictions in the Northern Peruvian Sierra"

Ever since the publication of Boserup's Women's Role in Economic Development (1970) there has been a growing awareness that third world women have not only been excluded as beneficiaries of governmental programs of development, but that in many cases, women have been effected prejudicially by governmental initiatives of reform. The need for governmental development policy to be responsive to the needs of women has been convincingly demonstrated by the increasing number of studies focusing on the process of modernization which illustrate how the burden of poverty, and attendant exploitation, often fall unduly on poor women, exacerbated by women's sexual oppression by men. Nevertheless, the possibility that capitalist development policies could somehow alleviate women's oppression and exploitation has not been adequately examined.

A comprehensive analysis of the effect of governmental development policies on the role and status of women, particularly rural women, must necessarily be based on an analysis of the causes of underdevelopment and rural poverty, of the role of the state and reformism, and of the division of labor by sex in relation to patriarchy and class. I propose that the development of such a comprehensive framework is analytically prior to the evaluation of the effect of specific development policies on the "marginalization" of women, for the limits of capitalist reform are proscribed, by the objective conditions of peripheral capital accumulation on the one hand, and on the other hand, by the specific relationship between women's oppression and economic exploitation.

The analysis of rural poverty in relation to underdevelopment departs from the following propositions: (1) the development of the capitalist mode of production as the dominant mode within the world economic system has subjected peripheral social formations to the requirements of capital accumulation on a world scale; (2) historically, the uneven character of the penetration of capitalist

relations of production within peripheral social formations has reflected the changing pattern of insertion and incorporation of the periphery to the world capitalist system and (3) analytically, the objective requirement of peripheral accumulation, as reflected in the social relations of production, is the maintenance of cheap labor (Amin, 1976; de Janvry and Garramon, 1977). Cheap labor allows both national and foreign capitalists to extract higher profits, and in Amin's model, cheap labor represents the objective condition for reproduction of extraverted accumulation within the periphery. Cheap labor, at productivity levels concommitant with center economies, is also the basis for unequal exchange through trade.

Cheap labor implies low wages and the concurrent need for cheap foodstuffs. De Janvry and Garramon identify the objective condition of rural poverty as the need for rural areas to provide cheap labor to the capitalist agricultural sector, and for this sector, as well as for the petty commodity producing sector of the peasantry, to provide cheap foodstuffs for the urban product market. They identify the principal contradiction in agrarian underdevelopment as stemming from the need for cheap foodstuffs to maintain wages low, and the resultant agrarian stagnation stemming from the lack of incentives to make the modernization of agriculture profitable.

But in addition, it is important to recognize that import substitution industrialization, at least in some parts of Latin America, has spurred the development of capitalism in agriculture, both directly and indirectly. The development of an industrial food and fiber processing sector has stimulated the expansion of capitalist agricultural enterprises dedicated to the production of industrial raw materials (cotton, oil seeds) as well as high income food products for the urban market (rice, milk, beef). The entrance of capital into agriculture has, on the one hand, often brought about the demise or transformation of traditional "hacienda" agriculture into capitalist farms. On the other hand, it has also required the massive displacement of the peasantry through outright expulsion from haciendas or

through the development of a market in land, whereby the peasantry becomes increasingly concentrated on marginal land segments (Leon de Leal and Deere, 1977). The increasing lack of access to land, combined with population growth, has stimulated the increased semi-proletarianization of the peasantry as well as rural-urban migration in the peasantry's search for permanent employment opportunities. But a specific characteristic of dependent industrialization, reflecting the periphery's insertion within the world capitalist system, is that industrialization has been capital intensive. The principal contradiction of rural poverty, then, is that while the dynamic development of capitalism in agriculture continually separates the peasantry from access to the means of production of subsistence, sufficient employment is not engendered by the pattern of industrialization.

As Meillasoux (1973) has argued, the rural community continues to be undermined while the very conditions of capitalist development require that the non-capitalist sector store the rural labor reserve, reproducing labor power to meet the needs for the maintenance of cheap labor. In an earlier paper, I argued (Deere 1976) that this objective condition of reproducing labor power as well as producing subsistence foodstuffs for the family's consumption, fell specifically upon rural women. In the cross-cultural framework it is evident that generally men are the ones that are semi-proletarianized and that the burden of the reproduction of the family falls overwhelmingly on rural women, assuring that the division of labor by sex enhances capital accumulation through the lowering of the value of the wage to capitalists.

Governmental development policy just as capitalist reforms which are responsive to certain objective requirements of accumulation and the attendant social classes, should be analyzed in this light. Can capitalist reforms or rural development policies address the specific contradiction between the need to maintain cheap labor and the very undermining of the rural labor reserve? Can sufficient employment be generated so that the mass of the peasantry can be incorporated as

proletarians as the peasantry loses access to the means of production of subsistence? The analysis of these questions provides the framework for an understanding of the possible outcomes for women's socio-economic position, once we take into account the specific relationship between the agricultural division of labor by sex, the reproduction of patriarchy and the differentiation of the peasantry.

The objective of this paper is to present an analysis of the relationship between the agricultural division of labor by sex and the differentiation of the peasantry in the context of the contradictions of rural poverty in the northern Peruvian sierra department of Cajamarca. The analysis then provides the basis for a preliminary assessment of Peruvian agricultural policy.

The department of Cajamarca is the most populous Sierra department of Peru and stands in contrast to the rest of the Sierra for its predominantly mestizo, Spanish-speaking peasantry. The province of Cajamarca, the political division of the department that was the focus of the author's field work, comprises the economic, geographical and political heart of the department. The bulk of the population of the province is rural, located in the inter-andean valleys that range from 8,000 to 11,000 feet in elevation. The area is characterized by rain-fed agriculture, principally the cultivation of corn, grains, and potatoes, and by sheep and livestock production.

The hacienda system represented the dominant economic institution of the area until the 1950's. Since that the time the land tenure has undergone considerable transformation as the internal market, principally for milk developed due to the establishment of a milk processing plant in the area by the Nestle Corporation. The majority of the haciendas were transformed into modern dairy farms and the peasantry that once worked under servile relations of production on the haciendas was displaced: in some cases, the peasants were able to purchase hacienda lands and in other cases the peasants were simply expulsed from the haciendas. Today,

the area is characterized by a numerically large independent peasant sector, the vast majority of whom have insufficient land to produce their subsistence requirements. Since the early 1940's, this area has provided increasing numbers of seasonal and permanent migrants to the northern Peruvian Coast and today the majority of the peasantry participates to a greater or lesser extent in local as well as regional labor markets.

The paper is organized as follows: Since an adequate data base is essential to the analysis of the agricultural division of labor by sex, the first section of the paper addresses the question of the undervaluation and undernumeration of peasant women's agricultural participation. It is demonstrated that, indeed, rural women's agricultural participation is significant in the Cajamarca area, and that while women generally are not the principal agriculturalists of the peasant family unit, their labor contribution within the familial work force is important. The second and third sections present the analysis of the relationship between the agricultural division of labor by sex and the differentiation of the peasantry. It is demonstrated that there is also an important difference in women's agricultural participationas well as in agricultural decision-making among the different strata of the peasantry and that women's increased participation relative to men's within the peasant family is related to the objective conditions of rural poverty. The concluding section draws together the theoretical framework and the Cajamarcan data in a preliminary assessment of Peruvian agricultural policy. The argument is advanced that the needs of poor women and men have been ignored in the formulation and implementation of agrarian policy and that furthermore, there is little indication that the objective contradiction of rural poverty can be resolved within the Peruvian military's reformist framework.

The Magnitude of Peasant Women's Agricultural Participation

In this section I argue that women's participation in Andean agriculture has been greatly underrated. Partly as a result of the deficient data base, and partly due to the overwhelmingly patriarchal context of Latin American society, little attention has been given to the division of labor by sex within the peasantry. As a result of the former -- the deficient data base -- it is often assumed that peasant women's agricultural participation is insignificant. As a result of the latter, the reproduction of the patriarchal family is often assumed to be a policy goal.

Census estimates of women's agricultural participation in Latin America uniformly indicate that women's participation in agriculture is insignificant as compared to men's.[1] Moreover, the census often suggest that women's participation among the agricultural economically active population (EAP) has declined steadily in Latin America from the late 1930's to the 1960's and 1970's. Both of these trends are apparent in the Peruvian data. In 1940, women made up 19% of the agricultural EAP over six years of age; in the 1972 census women accounted for only

[1] Women's agricultural participation in Latin America also appears insignificant when compared with that of African women. See Boserup (1970: table 3, p. 27-29) in this regard. While Boserup recognizes the problems inherent in census measures of women's work, she goes on to utilize this faulty data base to substantiate her propositions concerning the agricultural division of labor by sex and its relation to extensive and intensive farming systems. Probably no theoretical proposition has done more to obscure the dynamics of familial labor deployment among the Latin American peasantry than her characterization of Latin America, an intensive plow agricultural system, as a male farming system. Ignorant of the social relations of production in Latin America, she was able to propose that the low level of female family participation in agriculture was related to the high proportion of agricultural wage laborers among the agricultural EAP. We will demonstrate in the following section that just the opposite is the case.

9.6% of the corresponding EAP.[2]

I propose that rather than a marked shift of women out of agricultural activities, the wide variation evidenced in female agricultural participation rates reflects different census definitions of the economically active rural participants. Further, I contend that the low female agricultural participation rates are due to faulty conceptual categories for measuring women's agricultural participation. The objective of this section is to illustrate the sources of error in measuring rural women's agricultural participation and to propose an alternative measure of the agricultural work in which women participate. The proposition that women's agricultural participation has been greatly underrated, at least in the northern Peruvian highlands, is than substantiated.

The sources of error in measuring women's agricultural participation may be summarized as follows: (1) errors in the categorization of occupation; (2) errors in the criteria employed to distinguish between the economically active and inactive agricultural participants; and (3) errors due to the measurement of self-perceptions rather than actual participation based on the labor time dedicated to the activity.

The female agricultural participation rate is particularly sensitive to the definitions of economic activity utilized in the census as well as to the operationalization of these definitions in the actual census questionnaire. For rural women usually hold dual occupations: that of housewife and mother as well as that of remunerated or unremunerated worker in an income-generating activity. Following international practice, persons that dedicate themselves to housework are automatically included among the economically inactive. If the first question asked in a census questionnaire is that of the person's principal occupation, peasant women uniformly reply "their home". In a patriarchal society, women's first responsibility is towards home and children. The internalization of cultural norms requires women

[2] Sources: Peru, Dirección Nacional de Estadística, Censo Nacional de Población de 1940, Vol II; and Censo Nacional de 1972. This trend is even more dramatic in the Colombian case. In 1938, women represented 47% of the agricultural labor force whereas in the 1951 and 1964 census women made up only 4% of the agricultural labor force. (Boserup, 1970: 29).

to project what is thought "right and proper." In contrast, if a questionnaire begins with a description of the activities that the person may engage in for remuneration or which contribute to family income, the response is quite different. This differing methodological approach appears to provide the major explanation for the differences in female participation rates in agriculture in the 1940 and later Peruvian census.

The census data for the Department of Cajamarca are illustrative. Women constituted 38% of the total EAP in the 1940 census and represented 19% of the agricultural EAP over six years of age. In this census, the persons interviewed were first asked to describe the income generating activities in which he/she engaged; this description then served for the later categorization of a person's principal occupation.[3] The 1961 as well as 1972 census first asked the person's occupation. The majority of rural women now appear as housewives. Women make up only 7.3% and 3.8% of the agricultural sector EAP, respectively.

In 1972, only 1.8% of the rural women over fifteen years of age in the Department were included in the occupational category of agriculturalists. In contrast, in the 1976 Peasant Family Survey[4], 15.3% of the adult women considered their principal occupation to be animal care or agricultural work. The discrepancy may be explained by considering the census requirements for inclusion among the economically active for those who do consider their occupation to be one other than housework. In the 1940 census no time limitation was placed on a person's exercizing his or her occupation. People were simply asked in what activities they participated, for whom they worked, and if they worked that week. The majority of women agriculturalists were classified as unremunerated family workers,

[3] See Peru, Censo Nacional de Población de 1940, Vol. 1: 606-610, for a discussion of the procedure.

[4] The 1976 Peasant Family Survey is a representative sample survey of 105 peasant households carried out by the author in three districts of the Province of Cajamarca in June-July, 1976. The population for the 1976 Peasant Family Survey was defined by an earlier survey of 1050 peasant households carried out by the Proyecto Cajamarca La-Libertad, Programa de Estudios Socio-Económicos in 1973, refered to as the 1973 Cajamarca Income Survey. The latter survey was a representative sample survey of rural property owners in the province of Cajamarca.

but included among the economically active rural participants. In the latter census a specific time requirement was placed on a person's exercise of their profession to be included among the economically active if they were unremunerated family workers. In the 1961 census a family worker must have worked in the family enterprise at least one-third of a normal working day during the week prior to the census. In the 1972 census the family worker must have worked fifteen hours in the family enterprise during the week of the census to be included among the economically active. However, these requirements of actual time on the job were not applied to other occupational categories such as independent workers. If the person exercized his or her profession that week was sufficient for enumeration among the economically active. Since within the peasant household, cultural norms dictate that the man be considered the principal agriculturalist if he resides in the household, men constitute the independent workers in agriculture and women their "helpers", the unremunerated family workers, not withstanding the relative time that each sex may have worked in agricultural activities.

What makes the census definition particularly inappropriate is the seasonality of agricultural work. A census taken during a harvest period would yield significantly different results of people's agricultural participation that week than a survey taken during the months of relative agricultural inactivity. But since the time limitation for inclusion among the economically active applied <u>only</u> to unremunerated family workers, it is only women's agricultural work that is obscured. Projecting the 1976 survey results to the Department at large would suggest that the magnitude of the error of underemuneration of women agriculturalists would be on the order of 80%. That is, of the women that consider agriculture or livestock acticities to be their principal occupation, some 80% would be excluded from among the economically active due to the time requirement placed on work within the category of unremunerated family members.

But a more severe quantitative error arises from the fact that few women consider agriculture or animal raising to be their principal activity even though their contribution to the activity in actual labor time expended is important. Given rural women's overwhelming responsibility for the production of the daily use values within the home, as well as their own self-identification as mothers and wives, women will rarely claim agriculture or animal raising as their principal occupation. This is particularly the case if the husband resides at home. In the 1976 Peasant Family Survey, the majority of the women that considered themselves to be agriculturalists were female heads of household with no adult male present.[5] The problem of perceptions, based on the internalization of cultural norms, appears not only in terms of occupational categories but in terms of who is credited with doing the work. If the society values male work as being more important, and considers agricultural work a masculine activity, women tend to down-grade their own participation. This is evident in the 1976 survey. When the peasant women were asked very generally who did the agricultural work in the family, 61.6% responded that the male head of household alone or with his children carried out the agricultural work. Data on actual agricultural participation was also collected through a participation schematic of agricultural work which sought to detail participation by age and sex for each agricultural task of the cycle. Through the latter it became apparent that women participated in agricultural work in 86% of the peasant households, whereas originally, only 38% of the households indicated that women participated in agricultural production.

The most adequate measure of the division of labor by sex in agriculture is one based on an accounting of the actual number of days of agricultural work

[5] Of the 15.3% of adult women sampled in the 1976 peasant family survey that considered agriculture or livestock to be their principal occupation, 3.9% were agriculturalists, 8.6% raised animals and 2.9% were agricultural wage workers.

performed by different households members over the agricultural cycle.[6] Once the actual labor time expended by the sexes in agricultural work is taken into account, it is clear that women are active agricultural participants. In the Cajamarca region, women contributed 21.4% of the total number of agricultural labor days employed on peasant agricultural units.

Although the data is only roughly comparable with census estimates (since the survey results apply only to peasant agriculture) the underestimation of women's agricultural participation is evident. Whereas women comprised only 3.8% of the 1972 agricultural sector EAP, they contributed slightly over a fifth of the total estimated labor time employed in peasant agriculture.

Table 1 illustrates the division of labor by sex by form of labor recruitment. Family labor has been defined to include the labor time of household members, as well as that of children in separate households that perform unremunerated labor for their parents. Reciprocal labor exchange has been defined as unremunerated labor which follows a day for day accounting in the exchange of labor services (known as ayni, desquite, un tal por otro tal, etc.); wage labor includes labor remunerated in kind or in cash.

TABLE 1: The division of labor by sex by form of labor recruitment - family labor, reciprocal labor exchange and wage labor - based on actual days spent in agricultural work on peasant farms during 1975-1976 agricultural season, N = 93.

	Family Labor	Exchange Labor	Wage Labor	TOTAL
Women	25.4%	13.2%	10.2%	21.4%
Men	74.6%	86.8%	89.8%	78.6%
Total	100.0%	100.0%	100.0%	100.0%

Source: 1976 Peasant Family Survey

[6] The data was collected via a detailed accounting of all the agricultural tasks which the family carried out for the two major crops cultivated during the 1975-1976 agricultural cycle. Intermittant participation (less than four hours) has been excluded in the above tabulation as well as complementary agricultural activities to field work such as cooking for field hands, collecting manure, agricultural processing, tool repair, animal care, etc. The data thus under-represent women's total contribution to agricultural production. The participation of children capable of working a half-day alongside their parents has been included in the aggregate data presented above.

Whereas women make up over 25% of the total number of family labor days employed in agricultural production activities, their participation accounted for slightly less than 12% of the exchange or wage labor days employed on peasant farms. The data suggest the importance of women's participation among unremunerated family members, and that it is particularly this form of participation that has been subject to underenumeration in the census estimates.

The Agricultural Division of Labor by Sex and the Differentiation of the Peasantry

If the agricultural division of labor by sex is a socio-economic variable, there is no reason to suppose that it would be static. Rather, one would expect it to differ over time and space, just as over the family life cycle, reflecting the changing availability of familial labor power. In addition, if the agricultural division of labor by sex is not culturally determined, but responsive to differing material conditions of production, one would expect to find heterogeneity in the actual agricultural participation of different groups of rural women. I propose that the relevant conceptual construct which allows us to relate differing material conditions of production among different social groups is the differentiation of the peasantry. For the peasantry does not exist as a homogenous class; while the defining characteristic of the peasantry may be its access to land, access to land is in no way equal. Rather, the peasantry represents different elements of class in the process of decomposition or constitution, based on the relations of production which govern access to the means of production. Unequal access to the means of production -- principally land -- determines the range of activities in which peasant households participate and whether peasants become integrated to the labor market, (selling their labor power for a wage to procure the means of subsistence) or to the product market (as commodity producers that hire wage labor and have the possibility for capitalization.)

In this section I relate women's agricultural participation to the dynamic process of differentiation among the peasantry. I demonstrate that peasant women's

agricultural participation is by no means uniform; there is a marked difference not only in the relative importance of women's labor participation within the familial agricultural labor force, but in the nature of the agricultural tasks in which women participate among the different strate of the peasantry. Women's greatest agricultural participation, relative to men, is found among the poorest strate of the peasantry, those without sufficient access to land to produce their full subsistence requirements.

The land tenure data on the Province of Cajamarca is indicative of the extreme inequality of landholdings among the peasantry.[7] The vast majority of peasants have insufficient land from which to support a family: 71.3% of the total number of land units in the province consist of parcels of less than 3.50 hectares in size. Some 18.5% of the land units can be considered middle peasant holdings, ranging from 3.50 to 11.00 hectares in size. Only 7.6% of the land units are in the 11.00 to 30.00 hectare range while 2.6% of the landholdings consist of units of over 30.00 hectares.[8] For the purposes of the subsequent analysis, the sample data has been broken down as follows: landless peasants (less than 0.25 hectares), small holders (0.26-3.50 hectares), middle and rich peasants (3.51 to 30.00 hectares.)

Once a proxy for class is taken into account there is considerable variation among the peasantry in the predominant form of labor recruitment for agricultural work, as well as in the familial division of labor by sex. The use of non-family labor in the production process increases relative to the total labor employed as the size of farm increases. Whereas among the landless and small holders family labor constitutes over three-quarters of the total labor input in agricultural production,

---

[7] The use of land tenure data as the basis for approximating the differentiation of the peasantry gives us only a static picture of a moment in time. A comprehensive analysis of the process of differentiation is necessarily historical. See the author's forthcoming Ph.D. dissertation, "The Development of Capitalism in Agriculture and the Division of LAbor by Sex," Department of Agricultural and Resource Economics, Univ. of California, Berkeley, for a complete development of this methodological approach.

[8] Data source is the Catastro Rural, Ministerio de Agricultura, Zona Agraria II, Cajamarca (1972).

family labor makes up barely half of the total labor input on medium and rich peasant farms. The use of wage labor, in particular, strongly differentiates the strata of the peasantry. Whereas only 5.2% of the labor requirements of the landless, and 10.1% of the smallholder farms are met by wage labor, 21.2% of the labor requirements of middle and rich peasant farms are met through the purchase of labor power. Whereas there is no significant difference between the strata in the sex of the non-family labor employed on the farm, there is a striking difference in the sexual composition of the familiar labor force by strata.

Table 2 illustrates the relationship between female participation in the family labor force by land-size strata. Whereas women among landless households provide one-third of the familial labor requirements, women from the fully constituted peasant farming sector, the middle and rich peasant farms, provide only 20.8% of the familial labor time employed in agriculture.

Table 2: Participation in the Familial Labor Force by Sex and Land Size Strata - Labor Days in Agricultural Production[9]

	Female	Male	TOTAL
Landless Peasants n=12	35.0%	65.0%	100.0%
Smallholders n=58	26.9%	73.1%	100.0%
Middle Peasants n=23	20.8%	79.2%	100.0%
TOTAL N=93	25.4%	74.6%	100.0%

Source: 1976 Peasant Family Survey

These results suggest that, indeed, the sexual division of labor is responsive to material conditions of production and that women's greater relative participation in agriculture is related to the family's dependence on familiar labor power and concomitantly, decreasing farm size.[10]

---

[9] The Chi Square test of significance has been applied to all the tables presented herein. The probability that the null hypothesis is correct (that there is no difference between strata) is <.001 for all of the statistical arguments here made.

[10] This pattern holds even after one has controlled for the family life-cycle. The participation of adult women is highest in newly constituted nuclear households or where the age of the oldest child living at home is less than twelve years. But whereas within this group, landless adult women contribute 52.3% of total family labor, adult women from middle peasant households contribute only 24.4% of total family

Thus far, only the division of labor by sex for agricultural field tasks over eight hour days has been taken into account. One of the principal problems in measuring women's agricultural participation is that women must often combine participation in field activities with responsibilities for meal preparation as well as child and animal care. Most commonly, a peasant woman will combine her productive activities over the length of the working day, alternating her work in the fields with meal preparation. But if a large noon day meal is required, which is generally the case when non-family labor is employed in agricultural work, a women must dedicate more of her time to cooking than to field work. In this case the woman usually considered cooking to be her principal activity and in the preceding estimates, the female contribution to direct agricultural production would be underestimated.

The amount of time dedicated to cooking increases with the number of people working in the field that day, but particularly in relation to the form of labor recruitment. The number and quality of meals is an important component of the remuneration to labor when wage labor is employed. If we include the labor time dedicated to cooking for agricultural activities in the total number of family days dedicated to agricultural production, women's total contribution to the productive process increases accordingly.

Women now contribute 38.6% of the total number of family labor days worked in agricultural production for the sample as a whole. Once cooking is taken into account there is no significant difference in the total number of days spent in agricultural activities by women of the different land-size strata relative to the total number of familial agricultural labor days. But the qualitative difference of the work process is apparent: whereas the majority of women from landless and smallholder households are involved in field work, the majority of middle and rich peasant women spend their time cooking for field hands. To what extent, then, is the contrasting division of labor by sex among the strata a function of the increased

requirements of cooking as the amount of land under cultivation, and the corresponding demand for non-family labor, increases? Here it is relevant to consider the actual agricultural tasks in which women participate in order to discern if there are important variations in what is considered socially appropriate work for women to engage in of different socio-economic class positions.

In order to isolate the relationship between class position and agricultural work the female respondents were asked if they would usually engage in a series of agricultural tasks. Over 90% of all the women sampled indicated that they normally participate in planting activities, placing seed in its furrow or shaking soil free from the roots of weeds. Over 90% of the women also indicated that they usually weed by hand, a task characterizing the cultivation of the grains. And over 90% of the women participate in each of the following harvest activities: harvesting by hand (collecting corn ears, beans or peas), husking corn, or sweeping up the grain during the threshing operation. These planting and harvesting tasks are complementary to male labor in other tasks that accompany the same agricultural activity.[11] But less than one percent of the sample indicated that these female activities were exclusively female activities, although they were complementary to what were generally considered only male activities.[12] Nevertheless, in the six activities where the overwhelming majority of peasant women participate, over 70% of the respondents considered men and women to work in the activity with equal productivity.

In another three agricultural tasks, all involving the use of agricultural implements, some 70% of the women participate: breaking ground with picks (piqueando), hoeing (deshierbe or aporque) and reaping grain with a sickle. Only half of the respondents felt that women worked with the hoe or sickle as well as

---

[11] For example, during planting, the man leads the oxen, plowing, while the women follows behind shaking weeds free of soil or placing the seed in the furrow. During the harvest, the woman may collect the corn ears, but the man follows, downing the corn plant with a sickle. The man wheels the pitchfork in the threshing operation or leads the horses around the threshing circle while the woman sweeps up the grain.

[12] Plowing was considered an exclusively male operation by 98% of the respondents whereas threshing was by 62.4%.

did men, while only one-third felt that women were as productive as men in the use of the pick. Women's lowest participation is in those tasks that involve the greatest physical exertion: plowing, threshing grain and carrying in the crop from the fields for storage. Nevertheless, 15% of the respondents felt that women thrashed as well as did men, while one-quarter responded that women could carry a heavy burden with equal ease as men.

Aggregating over all the tasks, a marked variation is evident in the tasks in which women will participate by land-size strata. Whereas women from landless households will participate in 73.6% of the fifteen agricultural tasks, women from middle and rich peasant households participate in only 61.9%. The most noted differences in women's participation across the strata are apparent in those field activities where agricultural implements are utilized. For example, whereas only slightly over half of the women from middle and rich peasant households will hoe with a pick, breaking up clumps of dirt or harvesting potatoes, 77.1% of women from landless and smallholder households will do so. While 63% of the women from the poorer households will cultivate potatoes or corn, only 39% of the women from the upper strata will participate occasionally. And the only women that admitted plowing on occasion were women from smallholder households, suffering from the lack of male family labor as well as the lack of liquidity to hire a wage laborer.

The data support the proposition that there is a significant difference in the agricultural division of labor by sex by strata of the peasantry. Not only do women from landless and smallholder households participate more in agriculture relative to total familial labor employed on the farm plot, but women from these strata participate in a wider variety of agricultural tasks. Women from the middle peasantry not only dedicate more time to cooking because more non-family labor is utilized in the production process, but these women do not consider it proper for women to participate in a good number of agricultural tasks. The use of agricultural implements provides the clearest boundary of the type of

agricultural work which is considered "right and proper" for women to do. Whereas poor peasant women are much more likely to participate in what generally are regarded as male tasks, women from the middle strata most strictly conform to behavioral norms. The data support the proposition that among the Andean peasantry, the increased participation of women in agriculture is related to poverty. Economic necessity requires full familial participation in agricultural production activities and a flexible division of labor by sex.

The Effect of Proletarianization

The salient characteristic of Cajamarcan agriculture is that the vast majority of the peasantry have insufficient land from which to produce even a portion of their subsistence requirements. Less than one-quarter of the mean annual net income of landless and smallholder peasant households is derived from farm income, including agricultural production and animal raising activities.[13] In contrast, middle and rich peasant households derive 55.4% and 82.0%, respectively, of their mean annual net income from farm production; the median income of this latter group is some three times higher than that of landless and smallholder peasants. The lack of access to land has been the motivating force behind the proletarianization of the peasantry.[14] Without sufficient access to the means of production from which to reproduce familial subsistence, ever increasing numbers of peasants have been forced to sell their labor power for a wage. The need to secure wage income, at least from the mid-1950's, propelled increasing numbers of peasants into temporary migration to the northern Peruvian coast; it also had its effect on familial survival strategies, with children

[13] The estimate of net annual income includes the valuation at market prices of subsistence production. The estimates were derived from the 1973 Cajamarca Income Survey, Programa de Estudios Socio-Economicos, Proyecto Cajamarca-La Libertad.

[14] An analysis of the process whereby a rural labor reserve was the outcome of the development of capitalism in agriculture may be found in the author's forthcoming Ph.D. dissertation (op.cit.)

increasingly migrating permanently from the sierra household once they could capture their own opportunity cost on the coastal labor market. Today, some 73% of landless households and 56% of smallholder households have at least one labor market participant. The majority of these peasant wage workers are semi-proletarians: sufficient employment opportunities are not available to absorb the available labor force.

What has been the effect on the agricultural division of labor sex of the increased integration of the peasantry to the labor market? If a trade-off existed between agricultural work and wage work, and men's opportunity cost on the labor market was higher than women's, we might expect women's participation in agricultural production activities to increase significantly with the men's absence from the farm. But if there is insufficient land to absorb even a minimum of the available familial labor power, as well as surplus labor with respect to employment opportunities, there is no reason a trade-off between agricultural work and wage work should motivate the agricultural division of labor by sex.

The data on the actual number of days dedicated to agricultural production is indicative of the extent to which agricultural production can not employ the familial labor force. On farms of less than one quarter of an hectare in size only twenty labor days a year are dedicated to agricultural production; on farms of up to 3.50 hectares in size the total labor requirements do not exceed two months a year. These days of full time agricultural work are of course spread out during the year, but since they are calculated in total labor time, indicate the extent to which agriculture can only be a complementary activity, not fully occupying even the male head of household.[15]

Nevertheless, the data indicate that women's increased agricultural participation is related to male proletarianization. As Table 3 indicates, the

[15] Much more time intensive is animal care, an activity which requires daily attention. For the sample as a whole, some 30 hours a week are dedicated to animal raising activities, principally by women and children.

participation of mothers relative to fathers in agricultural field work only approaches parity in households where the father is a full time wage worker. While the ratio of mother's to father's agricultural labor time is slightly higher than the sample mean in households where the father works only part time, the difference in ratios is not significant. The data conform to the observation that temporary migration has tended to be a seasonal phenomenon, related as much to the seasons of agricultural inactivity in the sierra as to the seasons of peak labor demand on the coast. In recent years, the competition for temporary jobs on the coast and the possible absolute reduction in employment opportunities in coastal agriculture, has stemmed the tide of temporary migrants. The primary source of temporary employment for the majortiy of the semi-proletarians is within the rural areas of the sierra, working as wage workers for richer peasants, or in the construction industry of the

Table 3: Proletarianization and the Relative Participation of Mothers and Fathers in Agricultural Production on Peasant Farms

	Mother's Labor Time/Father's Labor Time
Households where the Father is a Proletarian (n=7)	90.7%
Households where the Father is a Semi-Proletarian (n=20)	43.3%
Households where the Father does not participate in the labor market (n=66)	36.1%
Total Sample (n=93)	38.9%

Source: 1976 Peasant Family Survey

local capital. The average length of employment for the semi-proletarians in the sample was 66 days a year. Given the minimal labor requirements in agricultural production on small plots, as well as the prevailing labor market conditions, it is not surprising that women only work as much as men do in agriculture if the man is

employed full time in non-farm activities.

Although peasant women in Cajamarca are not becoming the principal agriculturalists of the family unit in terms of the total time dedicated to agricultural production activities relative to male participation, it is evident that the division of labor by sex among the smallholders and landless peasants is much more flexible than among the middle and rich strata of the peasantry. Moreover, the flexibility in work roles has been the outcome of male absence from the farm as the peasant productive unit is inserted into the labor market.

Agricultural Decision-Making and the Differentiation of the Peasantry

The relationship between the agricultural division of labor by sex and changing material conditions of production is clearly apparent when considering the process of agricultural decision-making among different strata of the peasantry. The Cajamarca data suggest the proposition that as agriculture becomes less important as the family's principal income source -- principally among the landless and smallholder households -- women's participation in agricultural decision-making activities increases concommitantly with women's increased participation in field work relative to men. In this section we will examine the process of agricultural decision making by sex and strata, focusing on the control over inputs, the organization of the productive process as well as product disposition.

Consider first control over inputs. In the majority of households women are charged with seed preparation, selecting and storing the seed after the harvest and cleaning it again before the planting. Men, aided by their children, generally take responsibility for fertilization activities, collecting manure from the animal corrals and spreading it over the fields. Whenever seed or fertilizer is purchased, however, it tends to fall within the men's domain. Aggregating over all input activities, women's greatest responsibility for seed selection and fertilizer collection as well as purchasing inputs is found among landless households; men and women tend to share these responsibilities principally among the smallholder house-

holds. Male dominance in these activities is a characteristic of middle peasant households.

This trend is accentuated when we consider the indicators of control over the organization of the productive process. The key decision of agricultural production concerns what crop is to be planted, in what field, and when. When the decision is one of timing only, principally among the landless and smallholder farmers (since there is often only one plot of land to plant and the crop is pre-determined by the elevation of the area or lack of irrigation), the decision tends to be based on joint family consultation in the majority of households. The principal factors to be taken into account in the decision are the amount of rainfall, and the availability of oxen for plowing as well as of family labor. Among middle and rich peasants, the decision-making process includes the crop mix; among this group men dominate the decision-making process, being an exclusively male decision in 79% of the households in this strata. By comparison, men alone make this decision in less than one-third of the landless and smallholder households.

Contracting or arranging for non-family labor to participate in the agricultural task, as well as the contracting of oxen, tends to be a male responsibility among all the strata, characterizing 79% of the households. In the case of contracting for wage labor and oxen, this task falls to women only when they are single heads of household. Women will share in the labor recruitment process when reciprocal labor exchange among families is involved. Again here, arranging for non-family labor is a strictly male activity in 88% of middle peasant households, whereas among the poorer strata of the peasantry, although men dominate the activity, there is a greater number of households where this is a shared activity (27%).

In contrast, however, to the generally male responsibility for arranging the agricultural work party, the actual coordination of the work process in the fields tends to be a shared task between men and women of all strata. This largely reflects the woman's role as "hostess" in deciding when the breaks in agricultural work are to be taken for refreshments or meals. But if both husband and wife are working in the field, either may assign people to specific tasks or actually commence the work,

although wives will defer to their husbands, if such are present. And women alone coordinate the field work only if they are female heads of household.

Once the crop is harvested, the family must decide how much is to be stored for the family's consumption over the year ahead, and how much is to be sold or bartered. Cajamarcan women in general, play a greater role in decisions over product disposition than they do in the other facets of agricultural decision-making. In the majority of households of all strata, women also take responsibility for storing the crop and for allocating the harvest to consumption, animal feed, and seed for the next planting. In only 7.5% of the households, concentrated among the middle strata of the peasantry, do men enter into what is generally regarded as the female domain. It is only among this strata, as well, that consumption decisions are shared between men and women, this being an exclusively female domain among poorer peasants.

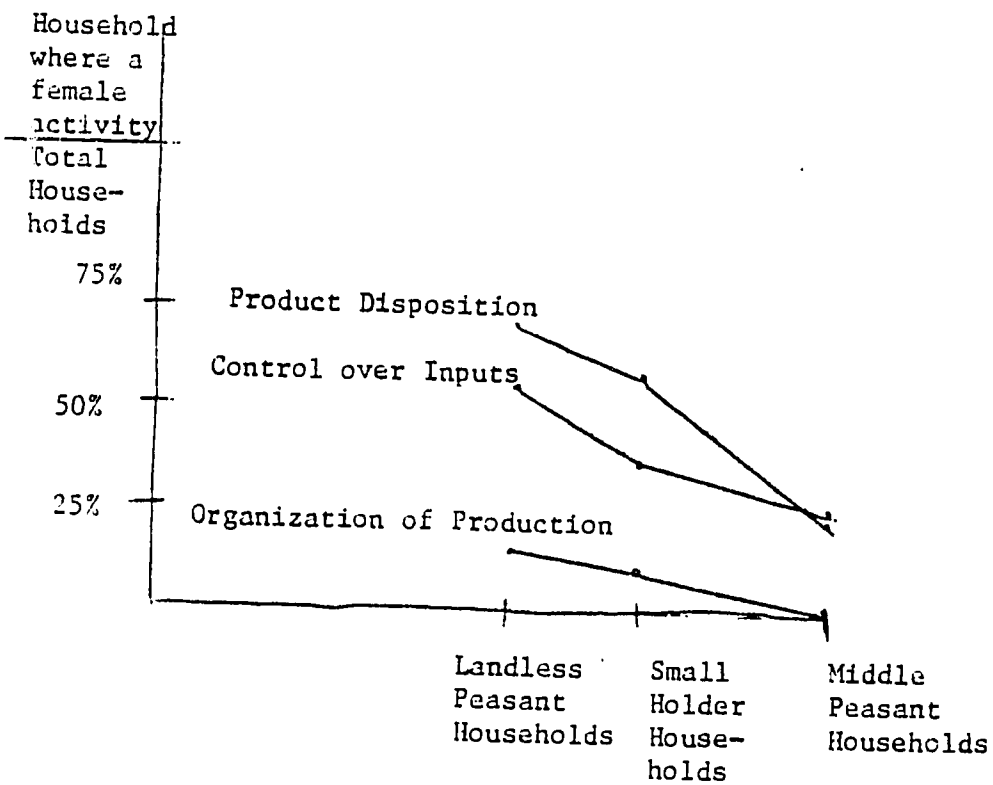
Marketing is an exclusively female task and arena of decision-making among 60% of landless households and 45% of smallholder households; in the remaining households, marketing decisions are shared between husband and wife although the woman generally carries out the sale. In contrast, in only 9.5% of middle peasant households is marketing an area of female decision-making alone. The degree of female participation and control of product disposition is closely related to the integration of the farm unit to the commodity market. Small farmers market a minimum of agricultural produce, selling small quantities of their principal crop on a weekly basis in the retail markets. Interestingly, few of these women consider marketing an income-generating activity: they sell in order to buy their "sal y aji" (salt and pepper). The market activities of these women are a direct extension of their management of the family's consumption; they sell what they have in order to purchase their necessities rather than engaging in marketing as an occupation.[16] In contrast,

[16] It should be pointed out however that the occupation of marketing at the retail level is generally a female occupation. Women in 17% of the households considered trading their principal income-generating activity, generally purchasing wholesale from their neighbors and spending fromtwo to five days a week selling in the local market. Once the scale of operation allows wholesale trade, men dominate, although women of the petty bourgeousie may also be involved in this occupation.

middle peasants are much morelikely to market their crops wholesale to middle-men right after the harvest. Here the decision as to how much is to be sold, to whom and at what price tends to be made in consultation between husband and wife, although men tend to carry out the transaction in the majority of households. Barter follows a similar pattern in that it is sensitive to scale.

A striking feature of the cross-strata comparison of control and participation in decision-making is that men and women among the poorer strata tend to share those decisions made only by men of the upper strata. Women from landless households as well as from the smallholder sector tend to control those activities which are shared by men and women on medium-size farms. Graph 1 illustrates the relationship between the relative number of households where women control the decision-making process, aggregated by types of decision over inputs, process, and outcome, by land-size strata.

GRAPH 1: Women's Participation in Agricultural Decision Making: Households where a female activity as a percentage of total number of households in the land-size strata, N=93.



Women from landless households play a much greater role in all forms of agricultural decision-making than women from other strata. And women from the smallholder sector certainly play a larger role in agricultural production and decision-making than do women from middle peasant farms. The data support the proposition that women's greater participation in agricultural field work relative to men's is related to women's greater participation in agricultural decision-making aggregating over all decisions. But it should be recalled that women's increased relative participation in agriculture is strongly tied to material conditions, agricultural production being a declining activity both in terms of income generating importance and in terms of the time absorbed by the activity. Women's increased role in agriculture among the Cajamarcan peasantry is related to the phenomenon of rural poverty, as evidenced particularly, in the decreasing land base. As the family loses access to the means of production of subsistence, the importance of agriculture in generating familial subsistence also declines. This in turn requires greater familial involvement in off-farm income generating activities. As the relative importance of agriculture diminishes, agriculture appears less as a male occupation and more a familial activity. Not only do all family members contribute their labor time to agricultural production, but decisions concerning agriculture are shared to a greater extent, or fall totally to the woman, as another concern to add to her domestic responsibilities.

Conclusions: The Implications for Peruvian Agrarian Policy

How well does Peruvian agrarian policy hold up to the Cajamarcan reality? The most important statement of agrarian policy is contained in the 1969 Peruvian Agrarian Reform legislation. It is clear in the legislation that the original goal of the reform was to create a homogenous class of peasant family producers. Sara Lafosse's (1969) careful analysis of the legislation has illustrated how the conception of the family farm ideal embodied in the law would have been most prejudicial to women. To qualify as beneficiaries of the reform, a peasant family

must be solely dedicated to agricultural activities; further, it is only the man as head of household, not the family, that is adjudicated land under the provisions of the law. She suggests that the underlying effect of this provision is to reproduce the traditional norm of male dominance within the family. Further, while women may qualify as heads of household if they are widowed, separated or abandoned, and have children that are dependent on them, married women whose husbands are adjudicated land have no right to the land if left widowed and have a son over 18 years of age. Rural women who dedicate themselves to agriculture, but whose husbands engage in non-agricultural activities also were to be excluded as beneficiaries of the reform.

Our analysis of the Cajamarca data would indicate that the legislation was intended to replicate the middle peasantry as the "ideal" peasantry; men are the agriculturalists, and women help at the peak seasons of the year. The legislation conforms to the data on the division of labor by sex within this strata in agricultural tasks as well as decision-making. But if peasants were to be excluded as beneficiaries of the reform if they engaged in non-agricultural activities, certainly the mass of Cajamarcan peasantry would have been outside the limits of the reform. Moreover, the mass of the peasantry exhibit a different agricultural division of labor by sex than the "ideal" underlying the legislation. Although men, among the smallholder and landless peasant, contribute the most significant share of agricultural labor, women's participation is not insignificant and women participate actively in various facets of agricultural decision-making. The creation of a sector of middle peasant farms out of this group, under the male's sole responsibility, would appear to indeed be insensitive to women's socio-economic position.

As the Peruvian military quickly found out, the agrarian legislation could hardly conform to the realities of the availability of land and the peasant's land hunger.[17] The family farm ideal was rapidly abandoned, and new solutions to

[17] Excellent analyses of the Peruvian agrarian reform legislation and process may be found in Zaldivar (1974) and Harding (1975).

the agrarian structure were proposed, based on the collective adjudication of large landholdings. Nevertheless, the idealization of the patriarchal family reflected in the qualifications required to be designated a beneficiary of the reform were applied as selective criteria for membership in the emerging cooperative structure. The first cooperatives formed in the Cajamarca area consisted in the adjudication of the capitalist dairy enterprises that evolved in the process of transformation of Cajamarcan agriculture in the 1950's and 1960's. Women made up from one-quarter to one-third of the wage workers on these dairy enterprises but they were extended membership in the cooperative only if they were single heads of household. Wives, daughters and sisters of male wage workers on the cooperative were thus systematically deprived of membership unless they could demonstrate that they had a dependent and received no support from male family members.[18] On the haciendas dedicated to agricultural activities, there were few female wage workers to start with, and the male heads of household were the designated members of the cooperatives.

But just as the cooperatives have been receiving the dominant share of governmental resources (credit, technical assistance, etc.) in this period, it is the female family members of the cooperative sector that have been the object of the governmental efforts directed toward the rural woman. The principal governmental initiative in this regard is ACOMUC, the Associación de Cooperación con la Mujer Campesina, a semi-public institution functioning under the auspices of the Ministry of Agriculture. Founded in 1972, the objectives of the group are to "promote the fundamental values of the peasant family through the education of family members, allow women to participate in society ..... through the setting up of day care centers, training programs, etc.," and to stimulate agricultural and artisan development through special programs.[19] While the work of ACOMUC is not

---

[18] Not surprisingly my review of the relevant documentation of membership revealed a surprising array of fictitious dependents in these women's attempts to be included among the beneficiaries.

[19] "Finalidad de la ACOMUC", mimeo, n.d., made available to me by the Filial Cajamarca, Ministry of Agriculture.

restricted to the cooperatives, in the first years of its operation in Cajamarca its activities have been limited to the promotion of artisan groups that were previously constituted, and to pilot programs within the cooperatives. Its projects are designed to make women more productive in the t asks that they already carry out, through increased preparation and training in literacy, health, nutrition and citizenship, as well as through the development of cash income activities, including home garden projects, animal raising projects and the development of home artisan industries. The first groups that were contacted in the Cajamarcan area, interestingly, were the milk maids, in the effort to teach them artisan trades. But the objectives of the group include special programs for the wives of cooperative members, and specific attention was to be given to their needs in subsequent years. While in the Peruvian case, we may at least conclude that some governmental attention is being given to the concerns of some rural women, it is apparent that the effort is extremely limited, and will primarily benefit the group who does have access to an assured source of income, the cooperative sector of the peasantry.

In the Cajamarca region, the cooperative solution will eventually benefit only 13.4% of the Cajamarcan peasant households.[20] Evident, is the fact that the majority of the peasantry is excluded as beneficiaries to the reform. The reform can do little to answer the principal contradiction of Peruvian rural poverty: the mass of the peasantry will remain without sufficient access to land to reproduce their subsistence requirements, while the reform can do little to increase the available employment opportunities required by the peasantry in the process of proletarianization. The majority of women, just as the majority of men, are excluded from increased access to land or to employment opportunities.

Peruvian agrarian policy has not benefited the mass of poor women just as it cannot benefit the mass of the peasantry. The contradiction remains unresolved.

---

[20] Data from the Ministry of Agricultura, Zona Agraria II, Cajamarca. An analysis of the reform process in Cajamarca and its effect on the differentiation of the peasantry, specifically in terms of employment opportunities, is included in the author's Ph.D. dissertation (op.cit.).