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**RAPPORTEUR'S REPORT
ON
IMPACT OF RURAL DEVELOPMENT ON
ECONOMIC STATUS OF WOMEN**

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In examining this theme, four interrelated aspects require particular focus :

1. An assessment of women's economic status relative to men's on the basis of specific criteria such as the extent and nature of their participation in work, including wage employment; their earnings, including from wages; their ownership of and control over property, especially agricultural land; and their access to and control over household income and other resources.
2. Changes in their economic status as a result of agricultural and rural modernization.
3. The impact of the government's anti-poverty and related programmes on women's economic status.
4. The wider implications of women's economic status, and changes therein, especially for the physical well-being and survival of women and female children, and for their social status.

Out of the 33 papers accepted for discussion, 19 have focused on some issues concerning the first aspect, nine deal with specific parts of the second aspect, four with the third, and one with the fourth. All the papers, except the last (which is based on a review of existing literature) are empirical in their thrust. In general, the quality of papers received was disappointing since the majority are descriptive and not analytical; they do not spell out why they consider it necessary to focus on women's economic status as distinct from the household's economic status; and most have some methodological weakness. Some of the salient findings and features of the papers under discussion and my critical comments on them are given below.

I

RURAL WOMEN'S EXISTING ECONOMIC STATUS

The majority of papers which deal with this aspect limit themselves to examining the nature of women's work participation in agricultural field work. Only a few look at women's work outside the field, *e.g.* in cattle rearing; a limited number also focus on wages and earnings, either exclusively or along with an examination of women's work, and only one considers the extent to which women participate in economic decision-making in the home.

I will not individually discuss the papers relating to this aspect since most of them are similar in their coverage, thrust and methodology. Their main findings are summarised below.

1. There is an observable sexual division of labour on the farm. Female labour is primarily involved in specific operations such as transplanting, weeding, harvesting and threshing. In contrast, male labour is much more evenly spread across operations. This is found to be so across different States and crops.
2. The use of farm labour per hectare is negatively associated with farm size. Female family labour use in particular is noted to decrease in both absolute and percentage terms, as farm size increases. The use of female hired labour however increases with farm size in

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some States and decreases in others, again in both absolute and relative terms. Total female labour use (hired plus family) per hectare thus decreases with farm size in some States and in others shows no consistent pattern.

3. Wage rates are found to be lower for women than for men in almost all cases, even for the same agricultural operations. This is so also for an operation such as transplanting which is performed primarily by female labour in many States.

4. Cattle rearing and related tasks take up a significant percentage of female work time and, in some States, family women's time contribution to this work is greater than that of the family men.

5. One study also examines all work done by women (including domestic work) and notes that the daily work time put in by women is more than that put in by the men.

However, there are several shortcomings in these papers stemming, on the one hand, from their limited coverage of issues and, on the other, from methodologies used.

First of all, the papers take a limited view of economic status, which is defined in terms of work participation and earnings. None explores the issue of women's ownership or control over productive assets, especially agricultural land. Nor are the questions of intra-household control over and distribution of family earnings and consumption items between male and female members, or of the specific problems faced by female-headed households, considered. These are significant gaps since they impinge directly on women's economic situation and material well-being. Second, the majority of papers lack an analytical thrust; they do not present any hypotheses, or trace the implications of observed patterns of women's agricultural and other work.

Third, methodologically, most of the papers in this section suffer from one or more of the problems indicated below:

(a) Several papers examine only female labour use on the farm without providing a comparative picture for male labour. Hence it is difficult to say to what extent what is being observed is specific to women.

(b) In many papers, no separation is made between hired and family labour, and within the hired labour category between permanent and casual labour. A separation of family and hired labour is especially important because the effect and the implications of farm size differences and technological change would be quite different for the two. For instance, farm size and female family labour tend to be associated negatively since women of economically well-off households usually do not undertake manual field work due to prestige considerations. Such households employ hired female and male labour instead, which is thus usually positively associated with size. Also any reduction in the demand for female family labour time would not directly affect the earnings of the family women, but a decrease in the demand for hired female labour (say with mechanization) would have direct adverse economic implications for women of labourer households. Without a disaggregation by type of labour, these divergent effects would not be apparent.

(c) Some papers have attempted to compute the economic value of women's contribution (including the contribution of family women) to farm production. How this value is arrived at is, however, not always indicated. The method followed appears to be the multiplication of labour time by the prevailing wage rate. The problem with this method is that where the wage rate for females is discriminately low, imputed values based on existing wage rates will be under-estimates of women's actual contribution in terms of production. In one paper an attempt has also been made to impute a value to domestic work without any discussion on how this imputed value has been obtained. In general, imputing a value to rural domestic work is problematic in a context where much of this work does not enter the market economy at all, quite apart from problems relating to market imperfections.

(d) None of the studies indicate what assumption underlies their aggregation of male and female labour to compute total labour. The common practice in much of the agricultural

economics literature has been to assume female labour as being equivalent to one-half or three-fourths of male labour. However, no evidence is presented to justify the implicit assumption that female productivity is much lower than male productivity. In fact, some existing evidence indicates that in some tasks female labour may be several times more productive than male labour (*e.g.*, see Agarwal, 1983).

II

IMPACT OF AGRICULTURAL AND RURAL MODERNIZATION

The implications of technological change and agricultural modernization on women's economic status are the primary focus of the topic under discussion. Hence, on this aspect, a more detailed focus on individual papers is warranted. Four facets of agricultural modernization have been examined in the papers of this section, namely, the effect on labour use (and in some papers also on wages) of high-yielding crop varieties (HYVs), variations in cropping patterns, large irrigation schemes, and the new agricultural technology taken as a whole.

(i) *Effect of HYVs*

Three papers have examined the effect of HYVs on female labour use. One by N.A. Gadre and Y.P. Mahalle, relating to Maharashtra, compares the use of male and female labour time, by operations, for HYV, improved and local varieties. Data for the former two varieties relate to 1980-81 and for the last to 1956-57. It is found that the use of both male and female labour is higher for HYVs relative to improved varieties. Between improved and local varieties, however, female labour use is higher with the former but male labour use is lower. The higher use of female labour with HYVs is especially in operations such as inter-culture, fertilizer use, and harvesting/threshing. The paper does not separate labour use by family and hired categories, or by farm size or crops.

Another paper, also based on Maharashtra, by C.K. Joshi and M.R. Alshi, compares the use of male and female labour time for HYV and local varieties. The differential impact on hired/family labour is examined separately only for female labour, by farm size and crops. While there is noted to be a higher absolute use with HYVs, of both family and hired labour on farms of all sizes and for both cotton and jowar, there are significant farm size differences in proportionate use. Much of the increase in female labour use on small farms is of family labour and on large farms of hired labour. It is also noteworthy that even on small farms hired female labour is a significant component of total labour.

The third paper by A. K. Ray *et al.* examines the effect of HYVs on labour use in three States (Madhya Pradesh, Rajasthan and Kerala) for 1982-83. It disaggregates the use of male and female labour for HYV and local wheat and paddy, by farm size, and by family and hired labour categories. This paper therefore has a higher degree of disaggregation than the two discussed above. It also examines female labour use alone by operations, for irrigated and unirrigated, local and HYV paddy and wheat. In addition, it undertakes a regression analysis with female family labour time as the dependent variable and farm size and area under HYV of a given crop as explanatory variables. It is found that across States and crops, the use of hired female labour increases with HYVs, but the pattern of female family labour use varies – being related positively to HYVs in some States and negatively in others.

A weakness common to the first two papers on Maharashtra (and shared by several others discussed later) is that no account is taken of factors other than HYVs. Among the significant technological variables which may be expected to affect labour use (independent of HYVs) are the extent of irrigation, the source of irrigation, and the level of farm mechanization. Unless these factors too are taken into account, it is not possible to say to what extent the noted labour use differences between farms can be attributed to HYVs. An additional

methodological problem in the first paper lies in its comparing labour use under local varieties in 1956-57 with labour use under improved and HYV varieties in 1980-81, and attributing all the noted changes to crop variety shifts without taking into account other developments over time.

Likewise in Ray *et al.*'s paper, when specifying the linear function for female family labour use, it is necessary to include other explanatory variables as well, such as the extent and source of irrigation. Also, a specification of functions for other types of labour (in addition to female family labour) is necessary for a comprehensive picture to emerge.

(ii) Cropping Pattern Effects

Two papers (one relating to Assam by Anuva Saikia and the other relating to Maharashtra by M. P. Dhongade *et al.*) examine the effect of cropping patterns on female labour use. In both cases, the papers compare labour use on farms of different sizes across regions within each State – the regions being differentiated by differences in the dominant crop(s) grown. These cross-regional differences in labour use are then attributed to the cropping pattern differences. This is again methodologically problematic since labour use can differ across regions not only due to crop pattern differences but also due to a variety of other factors, including differences in technology, the percentage of the population that is tribal/scheduled caste, the percentage of landless population, etc.

(iii) Impact of Irrigation

Only one paper by S.D. Suryawanshi and P.M. Kapase seeks to directly assess the impact of an irrigation scheme on male and female labour use (disaggregated by crops and family/hired categories) by examining the situation before and after the introduction of the Ghod Canal irrigation scheme in Maharashtra. The authors note an increase in the use of both family and hired male and female labour time, in overall terms as well as individually for most crops. The increased use of hired labour is noted to be significantly more than of family labour; the female unemployment period is also noted to have decreased.

The paper, however, does not trace the factors underlying the increase in labour use with irrigation. For instance, we would expect irrigation to lead to an increase in cropping intensity, a change in cropping pattern, a more intensive use of HYVs and fertilizers, etc. These changes in turn would affect labour use. A disaggregation of these different effects would have helped considerably in analysing how and why irrigation affects labour use in general and female labour use in particular, and would also have enabled an assessment of the relative strengths of the different effects. Also a disaggregation by farm size, and possibly also by farm location (since head-enders usually manage to get a disproportionately large share of canal water relative to the tail-enders) would have been useful. Further, while it is important to note the positive effects of an irrigation scheme on female employment, it is also necessary to assess the effect on wage rates and earnings, which the paper does not do.

(iv) Overall Effect of Agricultural Modernization

Three papers have focused on the overall effect of agricultural modernization. One by G Mallik *et al.* compares two villages in West Bengal – one located in an IADP district and the other in a non-IADP district. The year of comparison is 1984-85 and differences in labour use between the two villages are attributed to the IADP. However, as noted earlier, such an attribution cannot be justified since differences in labour use between the villages could be the result of several factors and not only of the IADP. This is especially likely since the study

relates to the mid-1980s while the IADP was undertaken in the 1960s and many other changes would also have occurred in the interim period.

Similarly, the paper by C.P. Yadav and R.N. Yadav on Bihar simply compares labour use in 1966-67 and 1980-81 and attributes the noted changes to the 'green revolution'. It does not enlighten one about the nature of the underlying changes embodied in the green revolution, or of their differential effects on labour use.

The third paper on this topic is by Ramesh Chand *et al.* on Punjab. It provides a useful inter-temporal comparison of labour use on the farm by family, casual and attached labour categories and by farm size for 1971-72 and 1980-81. It notes a doubling in the use of female labour on the farms during this period. Much of this increase is accounted for by female casual labour, although some increase is also noted in female family labour use. In contrast, for male labour, while there is an increase in casual labour employment, family and attached labour use is found to have declined, leading to an overall decline in total male labour use on the farms. But in proportionate terms male labour still accounts for 81 per cent of total farm labour time.

These aggregate effects would however hide two contradictory tendencies inherent in the new technological package: on the one hand, there would be the positive labour demand effect of HYVs and irrigation and, on the other, a negative labour demand effect of threshers, combines, etc. Hence, it would have been much more useful if the impact of the different components of the new technology had been separated out and examined over the two periods. The only component that has been examined separately is tractors. But here again no account has been taken of factors such as farm size, source of irrigation, other mechanical equipment, and the ownership vs. the hiring of tractors, all of which would affect labour use as well. The cost of cultivation data which the paper uses for its analysis would have made possible a much more detailed and disaggregated analysis than undertaken here.

To sum up, all three papers in this section essentially give a picture of the inter-temporal changes in labour use in selected regions. Such a comparison is useful in broad terms, and at least a part of the noted changes in labour use over time could be attributed to the new technology. But the absence of a disaggregative analysis of the different components of the modernization process seriously limits the value of the exercise. Also, the observed labour use changes over time would be a result not only of changes in agricultural technology but also of other indirect effects of the modernization process, such as the increasing difficulty faced by rural artisans in subsisting on craft incomes alone due to the growing competition from factory products. Many of these artisans have had to join the ranks of agricultural labourers which would have had an overall depressing effect on the agricultural wage labour market. This aspect warrants exploring as does the question: what proportion of the noted increase in labour time employment in the Punjab (and other north-western States) has gone to migrant labour from the eastern States, relative to local labour?

There are also other gaps in the papers of this section. For instance, most do not statistically test the significance of noted differences in labour use under different technologies: none examines the effect of the changes in income, or on women's work burden outside the fields. The focus of most is on labour time effects and not on the numbers employed. Hence, it cannot be said how far the increase in labour time demand with the new technology is shared between people. Also two issues that have not been discussed at all are (a) the relationship between agricultural modernization and ecological deterioration, especially due to the clearing of forest land for cultivation, and its negative implications for women particularly in communities dependent on forests for their essential needs of firewood, fodder, etc., and (b) the extent to which agricultural modernization has affected poverty levels, migration patterns and the patterns of land ownership and distribution, and their direct and indirect effects on women and children.

III

IMPACT OF THE IRDP

Four papers seek to evaluate the extent to which the IRDP Programme has benefited women who have participated in the schemes. The papers relate to Kerala, Madhya Pradesh, Tamil Nadu and Haryana. All four papers note that the majority of the IRDP beneficiaries were from poor, landless or marginal farmer households and most were below the poverty line. In other words, by and large, the choice of beneficiaries was in keeping with the IRDP criteria of income needs and poverty. However, in terms of the income benefits, derived from the scheme, variable results are reported. In the Kerala study, while 69 per cent of the participants reported some increase in income, only 28.3 per cent were able to move to a higher income class. Again in the Madhya Pradesh case while all beneficiaries were noted to have a higher per capita and per household income after the scheme, most remained below the poverty line. The paper on Tamil Nadu only provides an indication of whether income increased or decreased but not by how much. In the Haryana paper where the effect of training in tailoring was assessed, only 20 per cent who adopted tailoring professionally received significant income benefits – the rest used their skills domestically and their income benefits were marginal.

In any such assessment the reasons why so few received noteworthy income benefits need to be indicated. None of the papers examine the problems of shortcomings in scheme implementation in any depth; although the Tamil Nadu and Haryana papers provide some pointers. In the former paper, for example, women who had taken loans for milch cattle had difficulties in maintaining them, especially due to the economic and locational inaccessibility of veterinary services. TRYSEM training for manufacture of safety matches was more successful. In Haryana it was noted that a significant factor limiting the effectiveness of the tailoring scheme was the poor quality of training so that most of the women lacked the self-confidence to take up tailoring professionally. Also, the paper notes that the loan given for the purchase of a sewing machine was inadequate so that the stipend money (meant for sustaining the beneficiary during the training period) had to be used to cover machine costs. Since most of the families belonged to agricultural labour households the loss of the stipend would imply that they may have had to seek wage employment even during the training period. This would have affected their ability to gain fully from whatever training was provided.

On the whole, when examining these schemes, it is also necessary to question the appropriateness of the individual-oriented approach to IRDP implementation as opposed to say a group approach, where women in small groups co-operate in production, marketing, etc.

IV

WIDER IMPLICATIONS OF WOMEN'S ECONOMIC STATUS

Only one paper, by Barbara Harriss and Elizabeth Watson, examines the possible link between women's unequal economic status and other aspects such as the physical survival of females in the home. This issue is of considerable importance and thus needs a detailed examination. The paper notes that the sex ratio in India is strongly masculine (with 1073 males per 1000 females in 1981). However, there are significant regional variations in the ratio which is much more adverse to females in the northern States relative to the southern. The paper examines some of the explanations provided by existing studies on the possible factors underlying these variations. In particular, two types of explanations are examined: (a) the greater neglect of females relative to males in terms of access to food and health care in the North compared to the South. This neglect in turn is seen to be related to the lower female participation in agricultural work and their thus being viewed as economic liabilities

much more in the North; and (b) women's lesser control over property and its transfer, and existing marriage patterns in the northern States relative to the southern. Harriss and Watson express dissatisfaction with both sets of explanations. At the same time, they do not provide satisfactory alternative explanations and in their conclusion give primacy to the very explanations they had earlier dismissed: "The disturbing geography of the sex ratio and of health and nutritional status is not going to be explained satisfactorily until research is directed to the role of women in *property, production* and social reproduction" (emphasis mine).

In fact, the noted explanations need to be examined with much more care than accorded to them by Harriss and Watson. Let us consider some of the points they make.

1. They state that: "Would that there were evidence to test the hypothesis that higher participation rates and earnings in wage work increased the control by women over household budgets or decisions about food allocation; or that they were associated with reductions in oppressive practices.... The whole endeavour to link female work and the sex ratio can be criticised for its economic reductionism." And further that "Status.... is not adequately defined by participation in the wage labour force."

It is no doubt true that regional variations in the sex ratio cannot be attributed *only* to variations in female work participation rates (FPR) or even to other economic factors alone; clearly historical factors and cultural practices would also be important. In fact, studies such as B. D. Miller's (referred to by Harriss and Watson) which link FPR and sex ratios are careful to point out that no one-to-one association exists between the two. At the same time the evidence presented by Miller (1981) and some other recent studies does indicate that in broad terms such an association exists and cannot entirely be set aside.

Some additional points also make it necessary to give weight to the link between women's work and the relative neglect of females in the household such as:

(a) There is some evidence to indicate that in poor rural households, women's employment and wage earnings, relative to male earnings, have a much more direct and positive impact on women's and children's nutrition (e.g., Kumar, 1978; Gulati, 1978) and especially the nutrition of female children (Gulati, 1978). One reason for this is that where women earn and control cash they are found to spend it on the family's basic needs, especially food, while men spend at least a part of their earnings on tobacco and liquor (Gulati, 1978; Mencher and Saradamoni, 1982).

(b) Women's greater control over the household budget and food distribution *in itself* cannot ensure that male children will not be favoured where women themselves have internalised the bias. But here again we need to ask why women favour male children. In my view, the answer would lie *at least in part* in women's economic dependence on sons for their survival because they typically lack access to independent earnings and property.

(c) The female labour force participation rate *per se* in any case is only a crude indicator of women's likely economic contribution to household income. For instance, it basically indicates whether or not the women are working but not to what intensity (in terms of days, etc.). Hence, even if the rural women in a given region have a high FPR, their *realised* economic contribution to the household income may be small if female under-employment is high. Also, the actual economic worth of females in a household is likely to be related not only to whether or not they work in productive tasks but whether or not they *earn* (which would make their work economically *visible*). The physical visibility of women's work (i.e., whether field-based) would be important as well, in so far as it affects the social recognition accorded to it. Also, where both men and women of a household earn, we would need to see what the differentials in their earnings are, as this is likely to impinge on the relative economic valuation of males and females in the households. In other words, any association between women's work and female neglect in the household is likely to be affected not only by whether or not the women are engaged in productive work but also by their economic

contribution *relative* to the male members, and the visibility (economic, physical) of that work.

In this context, the logic of Harriss and Watson's argument that to understand regional differences in sex ratios we also need to examine women's domestic work, is not entirely clear, since the issue is not only whether women are doing work essential for the household's survival (which domestic work clearly is) but whether the work is seen and recognized as such.

2. An aspect which Harriss and Watson do not examine closely enough, and which would affect the extent to which female children would be viewed as economic liabilities, is the pattern of dowry and its relationship with women's work participation as noted by Miller. Miller presents a fair amount of evidence to show that dowry is much more prevalent in the northern States, especially among the propertied, than in the South, where marriage expenditures are much more reciprocal in nature. And the regional pattern of dowry incidence is noted to be associated negatively in broad terms with the regional pattern of FPR. These inter-relationships are of significance and need closer examination.

3. Harriss and Watson also discuss Dyson and Moore's (1983) attempt to link regional differences in the neglect of female children with differences in marriage patterns and women's access to property. Again this explanation needs more serious consideration. Even while all over India the common form of inheritance may be patrilineal and marriages patrilocal, in *relative* terms, existing evidence does indicate that women's access to property, particularly land (through inheritance and dowry) is somewhat greater in the South than in the North. Also cross-cousin marriages and the greater frequency of marriages within or close to the natal village in the South would increase (a) the feasibility of the woman claiming and exercising some control over inherited property; and (b) the ability of the parents to draw upon her support. These and related aspects are likely to impinge on the care that female children receive

To sum up, this paper is of interest and importance as it draws attention to several significant issues, and rightly cautions against single explanations for regional variations in the neglect of female children and sex ratios. At the same time, it is perhaps too hasty in its judgement of existing explanations, especially which relate to women's economic status. Existing literature, in my view, gives adequate pointers to the likely long-term relationships between female neglect and relative male-female access to work, earnings and property, and relative marriage costs. However, I would agree with Harriss and Watson, that dependence on economic explanations *alone* would not suffice, and also that there is a need to gather more systematic evidence to give greater substance to these pointers.

V

ISSUES FOR DISCUSSION

The issues and questions for discussion emerge from the noted gaps in the papers received. These are listed below :

1. Why is it necessary to examine women's economic status separately from the overall economic status of the household to which the women belong? This would also include examining the implications of women's work for their social status and physical well-being.
2. Data and conceptual biases in examining women's economic status.
3. What have been the implications of agricultural modernization for poverty, migration and economic inequalities in income and assets, and the effect of these in turn on women?
4. What is the economic status of and the special problems faced by female-headed households?

5. What is the relationship between agricultural modernization, ecological destruction and women's work and status?
6. What would be the merits of a group approach to the implementation of the IRDP and other income-generating programmes initiated by the government, as compared to the current individual-oriented approach?

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