



Impact of Globalization and Technology on Women Agricultural Labourers in Tamil Nadu : A Study

Dr.Aruna Jayamani

Assistant Professor, Centre for Planning, Monitoring and Evaluation National Institute of Rural Development & Panchayati Raj (NIRD & PR) Rajendra Nagar Hyderabad 500030

KEYWORDS

Introduction

Emergence of World Trade Organization (WTO) and the series of deliberations under Uruguay as well as Doha round have changed the world economic order. Indian government has shelved and phased out the earlier protectionist policies and opened up the economy to the rest of the world market. The term globalization encompasses all types of economic and cultural transfers between nations. In other words, it refers to the economic exchange of goods and services internationally. International financial flows through global trade and investment patterns have an impact on employment relations and work arrangements around the globe. Yet, there is no single meaning of economic liberalization and globalization for the global workforce. The impact can be both positive and negative and differs by context, by industry and trade, and by employment. Some of those, who work in the informal economy, have been able to find new jobs or new markets for their products while others have lost jobs or markets. Evidences from the studies reveal the fact that many workers have seen their wages decline, working conditions deteriorate, workloads increase, etc.

Agricultural operations have become highly cost-intensive; moreover commercialization and capitalization of agriculture has increased the debt burden of the small and marginal farmers who have little access to resources and institutional credit. The process of globalization has adversely affected the rural women too. Agricultural sector is the mainstay of Indian economy in rural sector around which socio-economic privileges and deprivations revolve, and any change in its structure is likely to have a corresponding impact on the existing pattern of social equality. Lack of demand for the traditional rural based agro industrial produces, flow of foreign goods and outburst of capital intensive technologies leading to high-tech production processes have resulted in large-scale unemployment in the agriculture sector, especially in the field of land-related farming activities. Globalization's impact on women's work comes through in a variety of ways – through introduction of new technologies, technological change, flexibilization of the work force, by opening of new markets, changes in social security policies and through growing pressure on natural resources. This is due to the complete lack of any access to skill training and technological know-how. It is essential to analyze and understand the real impact of newer technological interventions on women in the agriculture sector in order to find strategies to strengthen the positive impact and to protect them from negative impact so as to maintain a decent standard of living for the women work force.

Globalization has presented new challenges for the realization of the goal of women's equality, but its impact on gender has not been systematically evaluated fully. The recent introduction of hi-tech strategies for increased production and productivity in general, created a lot of inconveniences and economic problems to the people who are involved in agricultural production oriented activities. In this context, women are the

most vulnerable community facing host of social and economic problems. Ultimately, it resulted in displacement of employment potential for women in this sector. Benefits of the growing global economy have been unevenly distributed leading to wider economic disparities, the feminization of poverty, increased gender inequality in access to technology often deteriorating working conditions and unsafe working environment, especially in the informal economy in the rural areas. With this backdrop, this research is aimed to study the socio-economic status of women, who involved in agricultural operations, and the impact of technology introduction on employment and food security of women agriculture labourers.

Objectives of the Study

The objectives of the study are:

- To study the socio-economic status of women agriculture labourers in different regions of Tamil Nadu.
- To analyse the changing trends and pattern of employment pre and post globalization era with special focus on women agriculture labourers in the study area.
- To examine the technological interventions in agricultural activities and analyse their impact on women employment and food security.

To fulfill the objectives of the study, primary data were collected through household survey among women agriculture labourers covering adequate number of respondents from marginal farmers and landless labourers. The present study examined the different labour replacing technologies introduced in agriculture especially related to farming activities. The changes in terms of status and pattern of employment of rural women in the farming sector were also studied and analyzed. Further the study focused on the extent of their productive utilization, seasonality of employment availability and wage fluctuation, their role and contribution in production, social and economic constraints affecting their work participation change in social and economic status of women in family and community, change in employment and working conditions, etc. The desired primary data were collected through in-depth focus group discussion and personal interview with sample respondents by using interview schedule.

Methodology of the study

Purposive and multi-stage sampling technique was used to select study area in order to identify impact of technologies and globalization process from three different regions. Various parameters were used to select the study area like cropping pattern, types of technologies, different agro-climatic characteristics and level of development. After considering all these factors, three districts, namely, Coimbatore, Tanjore and Dindigul districts were selected. After the first stage of selection of sample unit of districts, one block from each district and one gram panchayat from each block was selected; finally three villages were covered in each gram panchayat. Totally nine villages were selected based on the similar parameters used for districts selection. From each village, 50 women

agriculture labourers were selected on systematic sampling through lottery method. Required data were collected from 150 respondents from each district and in total, the study covered 450 women agriculture labourers. In addition, Focused Group Discussions (FGDs) were also conducted to understand the trends of change in agricultural operations. In order to support the primary data, secondary data were also collected from various published sources.

Major Findings:

- Majority of respondents (44 %) are in the age group of 46-50 years and 35 % are illiterates. Being from poor family background with the status of agricultural labourers, they had less opportunities to avail or access to education. Among the literates, majority of them attended formal schooling that too studied up to primary level.
- Generally agriculture labourers are predominantly belong to SC and ST communities in India and this study also has reflected the macro trends with 54.5 % who belong to SC community.
- Occupational pattern shows that around 62 % are only agriculture labourers followed by 30.7 % involved in farming activities not only in their own field but also work as wage workers in big farmer's field.
- Annual individual income of 70.4 % of respondents constitute less than Rs. 10,000; but annual family income ranges between Rs.10,000 and Rs. 25,000.

Expenditure pattern also has exhibited a similar scenario among the respondent's families. Major portion of income of the women agriculture workers goes to food basket and ceremonial functions.

- In the patriarchic society like in India men are the decision makers; 61.1 % women agreed with this, and only 20.4 % women have the responsibility to lead the family which includes forced women headed families. Women have restricted mobility only. Around 65 % women agricultural labour reported that they do not have freedom of mobility as they wish. Physical mobility is restricted within the block or maximum up to district boundaries. Around 78.0 % of them said that the income earned by them have handed over to male head of the household. Around 95 % did not participate in any political decision making activity.
- Majority of the women agriculture labourer viewed that the employment opportunities were better during pre-globalized era. About 78.7 % respondents said that they get 20-30 days of employment per month. The situation is totally opposite during post globalized era and 57.8 % opined that women get an employment of only 10-20 days, and 37.1 % respondents replied to only less than 10 days per month. During the period of non-availability work or in the off season, 44.4 % remain unemployed due to various factors in addition to the reason of non-availability of remarkable and desirable agri-labour work. There are 13.8 % who replied they migrate to urban centers to find opportunities for their livelihood.
- Majority of women agriculture labourer (58.9 %) showed that they got wage of Rs. 50-75 per day for ordinary works like weeding, plucking of flowers and collecting vegetables, etc. The practice of wage payment partly in cash and remaining in kinds like providing free lunch also prevailed in the study area.
- Around 50% respondents opined that before the globalization process, farmers bought the required seeds and seedlings from private nurseries, and 33.7% responded that the farmers collected and stored the seeds on their own. Responses on the practice of seed collection during globalization era, due to the introduction of high yielding seeds, genetically modified seeds and also the availability of certified seeds, affected the practice of traditional seeds collection. More than 90 % respondents viewed that farmers buy the seeds from outside either private or government approved dealers only.
- Among the respondents, 54.4% expressed that the probability of crop failure is very high in using seeds of private supplies; 97.8 % opined that the price of certified seeds supplied by the private organizations would be even more

than 20 times of the ordinary seeds; 91.3 % expressed their views that new seeds replacement instead of using traditional seeds make health hazards due to use of high dosage of fertilizers and pesticides. Majority respondents i.e. 52.2 % of small and marginal farmers among the respondents expressed that advanced seeds have less percentage of germination, if adequate quantity of inputs are not supplied in time, leading to high mortality and irregular growth affects the production.

- It is found that 93.5 % respondents expressed that corporate seeds have less resistant power to local pests; high dose or increasing interval of pest control practices makes harmful effects to beneficial living organisms. Majority respondents, (98.7%) agreed that these seeds have less chances for multiple crops. About 69.5% people agreed with the possibility of soil degradation with increased use of more fertilizers and other inputs to increase the yield. Ultimately, 86.4 % respondents opined that in-organic cultivation practices result in damage to the eco system. Ninety Six per cent of study populations expressed that massive shift from food crops to cash crops cultivation has taken place during post globalization period only. Further 53.1% accepted the trend of change from food crops to horticultural crops which have high export demand in developed countries. Around 97% respondents replied that high-tech and mechanized cultivation practices in view of attracting world costumers to maintain perfection and export standards in production aiming for export compelled unskilled labours to leave from the job market.
- Around 66 % responded that the trend of increasing contract farming have made small farmers as victims of exploitation in terms of paying low price to their farm produces by quoting quality terms. Majority of people i.e. 88.2 % have agreed that, present agriculture system made negative impact on food security of the agricultural labourers.
- More than 82% respondents said that non-availability local varieties of food grains like millets and coarse cereals has narrowed the choices of food preferences to only paddy which led to price hike and poor people could not afford to buy in the open market. Around 88.4% opined that mechanization especially like use of harvester and thresher affected the food security of agriculture labour, because poor people gain and collect huge quantity of food grains as wage during harvesting season.
- Regarding availability of employment in different seasons around 51% stated the availability of employment for 75-100 days during Kharif season, 58.7% said availability for 50-75 days during Rabi and less than 25 days during summer to the labour community especially women labour. But with present pattern of agriculture, less than 25 days employment only is available in all the three seasons, and it was acknowledged by majority respondents 75.1 %, 87.5% and 52.2% respectively to various seasons. Forty Seven per cent respondents expressed that they are remain unemployed during summer.
- Earlier, the women participation in different activities of agriculture was in direct sowing (22.4%), followed in transplanting (48.2%). In the intercultural activities like weeding and gap filling in major vegetable crops women participated predominately.
- Dominant food crops cultivated before the year 1990 in terms of coverage was rice reported by 81.1%, millets by 72.7%, pulses by 97.1%, jowar by 91.3%, sorghum by 86.4% and vegetables by 100%.
- After 1990's, major crops covering larger areas reported by majority views are horticultural crops (63.8%), followed by oil seeds (63.8%), cotton (80.4%), tobacco (98.0%) and floriculture (89.5%). The commercial raw material crops like turmeric considered by (81.3%) and tapioca by (95.3%) respondents. These changes in cropping pattern have considerably affected the employment of women in agriculture.
- It was accepted by 88.7% respondents that greater loss of employment due to the change in food crops to cash crops like sugar cane and horticultural plantations; 91.5%

expressed the loss of food security because of diversification of cropping to oil seeds like groundnut, sugarcane and horticulture crops. Replacement of vegetable and pulse crops affected the employment opportunities also.

- Data evidences shows that cultivation of food crops has been replaced by cash crops in larger areas. Due to this change, 94.2% noticed always loss of employment, 64.4% expressed that it effected on loss of skill and 70.4% experienced shift from self-subsistence status to market dependency.
- Changed cropping pattern, were noticed from multiple cropping to mono-cropping, resulted with loss of employment reported by 52.7%; loss of skill by 46.2%; enhanced the market dependency by 86.0 % respondents.
- Technology intervention and various advance methods of cultivation like precision farming, contract farming, green house cultivation led to increase in production but reduced the opportunities to poor; it was reported by all women agricultural labourers for loss of employment, 80.4 % reported for loss of skill, 94.4 % responded to increased market dependence.
- Majority respondents (68.7%) expressed that introduction of mechanization like tractor, weedicide implements, bund making instruments in land preparation activities have reduced the women employment.
- Around 90% of respondents viewed that intervention of transplantors and harvester cum thresher led to tremendous reduction of women employment and they reduced their family income.
- Majority (57.3%) respondents agreed that huge loss of employment are due to mechanization in shifting of harvested produces from the field to the threshing floor; followed by 82.9% accepted for employment loss from the activity of winnowing.
- Around 41.8 % respondents of viewed that they lost 25-50 days of employment due to replacement of traditional seeds, mechanization in land clearance and preparation deprived employment (94.0 %) for less than 25 days; all the respondents lost around 25 days of employed in connection with technology intervention in showing activity, 72.4 % said that 51-75 days were lost due to the adoption of improved irrigation technology.
- All respondents opined the loss of employment are due to mechanization in transplantation; but their responses vary from 26-50 days by 42.4%; to 51-75 days by 39.3 % and 18.27 % told for 76-100 days.
- Harvesting is a major activity which affected the employment in a greater way; majority laborers expressed the loss of 50-75 days; followed by 75-100 days (38.9 %). In other activities like head loading, threshing and also winnowing of agricultural products women's role was commendable earlier, but presently majority people were thrown out from many of these activities. Its impact on loss of employment in shifting of harvested products ranges from 26-50 days and 51-75 days, as responded by 44.0 % and 35.1% respectively. Introduction of harvester cum thresher led to loss of 51-75 days employment.

Conclusion

Globalization is usually biased against unskilled workers. Rural women mostly engaged in unskilled labour have to suffer because their unskilled work is invisible and unprotected in the work 'economy'. Peasant and indigenous women contribute tremendously to food and agricultural production through their toil, knowledge, and their nurturing capacities. They are involved in all aspects of agriculture – sowing, nurturing and protecting crops from pests, harvesting, selecting and preserving seeds for the next crop, soil enrichment and so on. They use local ecological resources in a balanced way and then regenerate these resources. Learning by experience, and experimenting and innovating when faced with problems, they have developed a vast amount of knowledge and varied skills in agriculture over generations, and have provided food security to millions of families. In agriculture, the shift from food crops to cash crops for export has led to a decline in women's employment. Women's contribution in the total labor force

is nearly invisible. 95% of Indian women are working in the unorganized sector. Globalization should require economic and social policies to provide the much required safety net for women who have been involved with production in the traditional ways, have to cope with numerous problems which affect their employment, income health and food security most.

References

- Mruthyunjaya P.K, Joshi and R. Saxena (eds), (2003): **Institutional Changes in Indian Agriculture**, NCAP, New Delhi.
- Sajjad.H, (1998): **Employment of Landless labourers**. BR Publishing Corporation, Delhi, India
- Stewart, Frances, (1995): **Adjustment and Poverty: Options and Choices**, Routledge, London and New York.
- Beohar B B, Sarawgi A K and Chaudhari A K: "Women's Contribution in Paddy Cultivation: A Case Study of a Village of Chhattisgarh Region of Madhya Pradesh", *Indian Journal of Agricultural Economics*, July 1999, Vol. 54 No. 3, PP 323-324.