BACKGROUND

With economic growth and structural transformation, it was expected that the employment in the economy will shift from agriculture to industry and service sectors. However, agriculture still continues to be a dominant activity in rural India, though its share national gross domestic product (GDP)/gross value added (GVA) is declining. Farm labours account for the largest share in the total labour force of the country. More and more rural households have joined the ranks of labour households due to reduction in the size of their landholdings which now employ them only for a minor part of the year. Despite the fact that women play a significant and important role in agriculture, discrimination prevails as the average daily wages for casual female workers have generally been around two-thirds of the male wages. The migration of workforce away from agriculture has resulted in labour shortage and consequent escalation of cost of cultivation. At the same time, available agricultural households reflect a greater need for skill building when compared to their non-agricultural counterparts. Among rural workers, agricultural labours are at the bottom in terms of worker productivity.

In view to deliberate and devise better ways to understand issues as mentioned above for suitable policy formulations, the detailed outline of this theme under four sub-themes (agriculture labour, employment, labour productivity and skill development) were circulated to paper writers and papers on these issues were invited. A total number of 22 papers were received while very few of them were directed at these or related questions. Out of these, five papers were selected for full length, 13 were selected for publication in summary form. The key findings of accepted papers were summarised under five themes which were published in Conference Volume of the Journal.

During the technical sessions of first two days of Conference a total of 12 papers were presented on this theme. The papers presented in this session focused mainly on...
the issues such as labour productivity, labour migration, gender disparity in agriculture, agricultural skilling and casualisation of agricultural labour.

The key findings of the papers presented and discussed at the technical session of conference are summarised and presented below:

**Key Findings**

- The labour migration adversely affected the household crop income, in terms of rising cost of cultivation while remittances received have compensated the household by relaxing credit and insurance constraint. The migration in the study area of Assam considerably influenced by household size, total value of assets holding, networking influence, distance to commercial bank and exposure of flood proneness of the village while the number of migrants, dependents, and age of migrants found to be strong predictor to inflow of remittances.
- The analysis of long-run changes in agricultural labour market and its effects on the farm economy reveal that withdrawal of agricultural labour affects farm economy either by creating physical scarcity of labour or through the rise in farm wages.
- Census based evidences suggest distress-led transition of cultivators to agricultural labours, whereas NSSO surveys based evidences refute such trends and point out towards development-led employment diversification wherein both cultivators and agricultural labours move towards more productive non-farm sectors.
- There is deceleration in withdrawal of cultivators and acceleration in withdrawal of agricultural labours. However, despite reduction in labour use, labour cost has increased. Due to inelastic demand of labour, increase in wages could not bring proportionate decrease in labour use and resulted in increase in labour cost in crop cultivation. Thus, extent of decline in labour use is found to be insufficient to negate the wage-push cost inflation.
- Farmers in Bihar did not witness any benefit on account of increased labour supply due to large scale reverse migration as labourers preferred working in MGNREGS over farms.
- Results of data analysis of the 70th Round on the NSSO survey on Situation Assessment of Agricultural Households indicate that training and extension services were found to be pivotal in influencing crop diversification among small holders. However, availability of irrigation was found to be the single most important factor in determining crop diversification.
- Skilling of workers were found to be increasing the likelihood of self-employment in agriculture besides enhancing the probability of an individual acting as an employer within the agricultural sector. Skilling also reduced the probability of an individual engagement in unpaid family work.
• Agricultural training and extension have a positive influence on determining a small holder household’s decision to participate in the output market (rice and wheat crops)
• The analysis of Indian food processing industry (FPI) using the industry-level data for 1980-2018 indicate that employment pattern in the FPI witnessed contractualisation of the labour force with rising demand for managerial and supervisory workers.
• Rising capital intensity across the manufacturing sector in general and FPI in particular. The employment function reiterates the increasing potential of FPI in generating employment along with rising capital investment.
• A declining magnitude of labour absorption in rice cultivation was found in all the States. Farm mechanisation and cropping intensity contributed negatively to the labour absorption in rice cultivation.
• Low and inadequate wage rates, lack of employment during off season, indebtedness, unfavourable working conditions and marginalisation of agricultural labour were found to be the major reasons for diversion of agricultural labourers to other sectors.
• Non-farm sector serves as a safety net for landless, marginal and small farmers by providing opportunities for income diversification.
• The rural transformation is going on in Assam as reflected by the changes in the size, extent and composition of agricultural workers and more such changes may occur in the post-COVID-19 time especially due to increased focus on agriculture and large scale returned migration.
• Gender disparity in wages and employment still persisting in rural labour market in Odisha. Despite women’s important contributions in farming and livelihoods, they are given low credits as compared to men. The male-female disparity in wages has continued to be significant, with male wages being 1.4 times the female wages.
• The improvement in labour productivity in sugarcane was found to be associated with labour displacement in sugarcane. The technological changes and associated productivity improvement have been able to ensure an increasing share of the output to the laborers.
• Rising casualisation of Indian agriculture wherein cultivators are turning to agricultural labours. Despite the size of agricultural labours is increasing, their intensity and extent of use are declining; and the expansion of farm mechanization is an important factor for this.

KEY RECOMMENDATIONS

• Concerted efforts are needed to accelerate the pace of farm mechanisation and its economic access to farmers to partially substitute labour.
• Scope of skill development in agriculture should be extended on a massive scale. The gaps in availability of extension services also need to be closed.

• Need for massive expansion in agricultural skill development and extension services for enabling small holder farmers in India to emerge from the shackles of subsistence farming and in generating sustainable agricultural livelihoods.

• In view of raising potential of FPI in generating employment along with rising capital intensity, efforts are therefore needed to focus on the high-value commodities such as meat, fish, fruits, vegetables and feed industry, to improve the output level which has more potential to generate value and employment. The grain industry being a large provider of jobs can be expanded to the nutri-rich cereals to absorb the surplus labour in the country.

• Gaining importance of skill complementing capital investment in FPI is the need of the hour to focus more on skill-oriented programmes and schemes.

• Diversion of agricultural labourer to other sectors can be gradually reduced by effective implementation of minimum wage act, provision of alternate employment during off season, providing land to landless labourers and sanctioning of loans to needy agricultural labourers. Implementing skill development training programmes for agricultural labourers to acquire new technology.

• In view of need of income diversification, there is an urgent need to strengthen the farm non-farm linkage by increasing productivity and income in farm sector to absorb the surplus rural work force and reduce urban inflow. Government has to strengthen the agricultural extension system to enhance technology adoption by farmers, and foster rural entrepreneurship through training and skill development in alternative high-income generating activities like agro-processing units, micro enterprises, etc in rural areas to retain educated rural youth in agriculture sector.

• In view of gender disparity in wages, there is a need to enforce pay parity, improve working conditions and empowerment of female agricultural labourers.

• There is an enormous need to use drip irrigation, sugarcane cutter planters, ratoon management devices and mechanical harvesters to mitigate acute labour scarcity. The initial very high cost to the purchasing farmers be subsidised. The technological changes in the form of mechanization as well as yield enhancing innovations are to be given emphasis in Sugarcane cultivation.

• Attention needs to be paid to understand the barriers which hinder the nation from achieving its goals related to economic development which leads the empowerment of women through agriculture in India.

• There are many opportunities for strengthening women in economic empowerment. Special measures need to be taken for their training in areas where they develop special skills like use of agriculture technologies, communication and information technology.
While some of the aspects related to sub-themes which remain untouched or not fully addressed/discussed are needed to be covered in future such as factors affecting de-feminisation, effect of agricultural development and technological change on gender inequality in agri-labour market, incidences of indebtedness among rural agricultural labour households, requirements and gap of skilled man power for different job roles under farm machinery sector, etc.