



RESEARCH PAPER

Adoption gap in soybean cultivation

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Abstract : Soybean is a critical crop that contributes significantly to India's agricultural economy and has been a reliable oilseed source over the last few decades. Despite its importance and increase in area and production, productivity remains a challenge in Maharashtra, which is a leading soybean-producing state. Soybean (*Glycine max* L. Merrill) is a major oilseed crop in India, but its productivity at the farm level continues to remain well below the achievable potential. The present investigation was undertaken in Amravati district of Maharashtra during 2024–25 to examine the extent of adoption gap, yield gap, and socio-economic determinants of soybean cultivation. A multistage random sampling procedure was employed to select 120 soybean growers from ten villages of Amravati and Nandgaon Khandeshwar tahsils. Data were gathered through a structured interview schedule and analyzed using descriptive statistics along with Pearson's correlation. Findings indicated that most farmers were middle-aged, owned small to semi-medium landholdings, and had medium levels of income, knowledge, innovativeness, and risk orientation. Overall adoption of recommended soybean practices was moderate; however, notable gaps persisted in seed treatment, balanced fertilization, plant protection, and irrigation practices. The yield index reflected a yield shortfall of about 30–40% between research station potential and field-level performance. Correlation results revealed that knowledge, innovativeness, and risk orientation significantly reduced adoption gaps, while variables such as age and education had little impact. The main constraints reported were high input costs, labour scarcity, inadequate irrigation, pest and disease incidence, and low market prices. Farmers recommended timely supply of quality inputs, greater training opportunities, subsidies on fertilizers and irrigation, and provision of local storage and procurement facilities. These findings highlight the need for integrated technical, institutional, and policy measures to narrow adoption gaps and enhance soybean productivity.

Key Words : Soybean, Adoption gap, Yield gap, Farmers, Constraints

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