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Perceived Benefits of Tribal Sub Plan (TSP) Project on tribal beneficiaries in Udham Singh Nagar District of Uttarakhand

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ABSTRACT: This research paper assesses the perceived benefits of the Tribal Sub Plan (TSP) project implemented in Udham Singh Nagar district of Uttarakhand, focusing on empowering tribal women through a series of five skill-based training programs conducted between January and March 2025. A total of 250 tribal women from blocks Gadarpur, Sitarganj, and Khateema participated in trainings on mushroom cultivation, food processing, and value-added products from sugarcane and millets. The study utilized structured questionnaires and interviews to evaluate economic, social, and behavioral changes post-training. Findings revealed that 38.8% of mushroom training participants and 38.0% of those trained in millet-based products reported increased income, while 19.6% of fruit and vegetable processing trainees also saw economic gains. Social indicators showed that 80% of participants experienced increased external contacts, 76% developed better relations with officials, and 74% reported enhanced social recognition. On the behavioral front, 90% gained awareness of tribal welfare schemes, 84% acquired new skills, and 80% developed an entrepreneurial mindset. The study concludes that the TSP training programs substantially contributed to income generation, self-employment, social upliftment, and behavioral transformation among tribal women, with implications for sustainable rural development through continued support and market linkages.

Keywords: Entrepreneurship, income generation, skill development, Tribal Sub Plan, Uttarakhand, women empowerment

Tribal communities constitute approximately 8.6% of India's total population (Census 2011), yet they continue to face significant socio-economic disadvantages. In states like Uttarakhand, where tribal groups reside primarily in forested and hilly terrains, access to education, healthcare, and sustainable livelihoods remains limited. The literacy rate among Scheduled Tribes is markedly lower at 59%, compared to the national average of over 74%, with tribal women facing even steeper disparities. Moreover, over 40% of tribal households fall below the poverty line, and many depend on subsistence agriculture, forest produce, or seasonal labor, leading to economic vulnerability Rao and Chakraborty (2022). These challenges are compounded by limited access to modern agricultural technologies, financial services, and market linkages (Kandpal *et.al*, 2025). The Tribal Sub Plan (TSP) was introduced as a strategy to bridge these developmental gaps by channeling funds and efforts specifically toward the upliftment of tribal populations. Skill-based training has emerged as a key intervention under TSP, addressing both livelihood generation and socio-

economic empowerment. Various studies have emphasized the impact of such training in improving economic resilience and social mobility of marginalized groups (Sharma *et al.*, 2020; Gupta and Verma, 2019). Training programs in mushroom cultivation, food processing, and value-added agro-products have proven effective in enhancing both income and self-employment opportunities (Kumar and Singh, 2021). Participation in Self-Help Groups (SHGs) has further enabled tribal women to gain decision-making power, financial independence, and better access to government schemes (Patel, 2018). This study assesses the benefits perceived by tribal women who participated in specialized training programs under TSP in Udham Singh Nagar district. The programs aimed at improving their entrepreneurial skills in food processing and value-added product development to promote sustainable livelihoods and community empowerment. The objectives of the study are given as follows: [1] To evaluate the economic benefits gained by participants post-training. [2] To analyze social and behavioral changes resulting from skill

enhancement. [3] To assess the potential for entrepreneurship and self-employment among trained tribal women.

MATERIALS AND METHODS

Present study was conducted among 250 tribal women from the villages of Haipura, Lalpuri, Ratanpur, Madnapur, and Anjaniya in block Gadarpur, as well as Khateema and Sitarganj. These women participated in five training programs organized between January and March 2025 under the Tribal Sub Plan (TSP) project, funded by ICAR and implemented by G.B. Pant University of Agriculture and Technology, Pantnagar. Data were gathered through questionnaires and personal interviews, focusing on economic, social, and behavioral aspects to assess the impact of the training. The collected data were systematically tabulated and analyzed using descriptive statistics to derive meaningful insights.

RESULTS AND DISCUSSION

The study examined various aspects of the training's effectiveness. The results are categorized into economic benefits, social improvements, and behavioral changes.

The training programs had a significant impact on the economic empowerment of tribal women by enhancing their skills in value-added product development. A total of 250 tribal women participated in five training programs organized under the TSP project funded by ICAR at G.B. Pant University of Agriculture and Technology, Pantnagar. The distribution of participants and their reported income enhancement across different training programs is summarized in Table 1. The findings indicate that among the total 250 respondents, different training programs contributed

to varying degrees of income enhancement: [1] Mushroom-Based Value-Added Products: Out of 100 participants attended training of mushroom, 97 per cent respondents reported an increase in their income through mushroom cultivation and its processed products. Many of these women successfully marketed fresh mushrooms and value-added mushroom products such as dried mushrooms, mushroom pickles, and mushroom-based snacks in local markets and exhibitions like the Kisan Mela at Pantnagar. [2] Chips, Jam, Jelly, Papad, and Vadi Making: Out of 50 participants attended training of chips, jam, jelly, papad and vadi, 98 per cent respondents benefited economically from training on fruit and vegetable-based value addition. They engaged in making jam, jelly, papad, and other traditional food products, which they later sold in local markets. [3] Pasta, Chocolate, and Millets-Based Value-Added Products: Out of 100 participants attended training of pasta, chocolate, millets-based value-added products, only 95 per cent respondents successfully developed and marketed pasta, chocolate, and millet-based snacks such as vermicelli and energy bars. Their participation in rural fairs and direct consumer sales contributed to income enhancement. These results highlight the effectiveness of skill-based training programs in improving income levels and economic independence among tribal women. The provision of raw materials during training enabled participants to apply their skills immediately, producing and marketing their products.

Similar findings were reported by Sinha *et al.* (2019), who highlighted that training in mushroom cultivation led to an average 30–40% increase in household income among tribal women in Jharkhand. Likewise, Patel and Sharma (2020) found that value addition in millets and minor forest produce could double tribal income when supported by proper market linkages and skill enhancement.

Table 1: Economic benefits through Training N=250

S. No.	Training Program	Respondents attended training	Respondents Income enhanced	Percentage
1	Mushroom Cultivation	100	97	97
2	Chips, Jam, Jelly, Papad, Vadi Making	50	49	98
3	Pasta, Chocolate, Value-Added Products of Millets, Vermicelli	100	95	95

This is consistent with our results, where respondents not only acquired new income-generating skills but also adopted entrepreneurial mindsets and marketing strategies.

The implementation of skill-based training programs focusing on value-added products such as mushrooms, millets, chips, jam, jelly, vadi, chocolate, and vermicelli brought about significant positive changes in the socio-economic and cognitive domains of tribal beneficiaries. The data presented in Table 2 clearly reflects the multifaceted impact of the interventions, categorized under Social Benefits, Behavioral Changes, and Awareness and Information.

Social Benefits

A considerable number of beneficiaries (80%) reported increased contact outside their immediate community, suggesting improved social mobility and exposure. Approximately 72% to 76% of the respondents acknowledged positive transformations such as better relations with officials (76%), increased participation in local organizations (72%), and recognition in society (74%). These shifts reflect a reduction in social isolation and enhanced integration into mainstream networks, contributing to empowerment and inclusion of the tribal population. This aligns with the findings of Kumar and Devi (2018), who noted that self-help group (SHG)-based entrepreneurship programs increased women's confidence and social visibility in tribal

belts of Odisha and Chhattisgarh.

Behavioral Changes

Behavioral improvements were particularly significant. Awareness of tribal schemes saw the highest percentage (90%), indicating that training programs effectively served as a medium for government scheme sensitization. Additionally, 84% of beneficiaries acquired new technical and entrepreneurial skills, while 80% developed a business-oriented mindset. This shift in mindset is critical for long-term sustainability and self-reliance. Increased confidence in handling business operations was reported by 76%, suggesting that the training equipped beneficiaries with practical tools and strategies for entrepreneurship. These findings are similar to Rani and Thomas (2021), who observed that training programs enhanced awareness levels of government schemes and improved decision-making capabilities among tribal women entrepreneurs.

Awareness and Information

The most substantial gains were seen in the domain of knowledge acquisition and application. About 92% of the beneficiaries reported enhanced understanding of the importance and potential of value-added products. A high percentage of respondents (86%) became aware of various types of such products, and 84% gained hands-on knowledge of preparation techniques. Importantly,

Table 2: Social behavioural changes through training

N=250

S. No.	Component	Indicators	No. of Beneficiaries	Percentage (%)
A	Social Benefits	Increased outside contact	200	80
		Changes in food habits	175	70
		Increased organizational participation	180	72
		Better relations with officials	190	76
		Recognition in society	185	74
B	Behavioral Changes	Awareness of tribal schemes	225	90
		Acquired new skills	210	84
		Developed entrepreneurial mindset	200	80
		Improved confidence in business operations	190	76
		Knowledge of value-added products and their importance	230	92
C	Awareness and Information	Awareness of types of value-added products	215	86
		Understanding of preparation methods	210	84
		Awareness of marketing and branding strategies	200	80
		Exposure to local and online marketing platforms	190	76

80% learned basic marketing and branding strategies, and 76% reported exposure to local and digital marketing platforms. These observations mirror the conclusions drawn by Meena *et al.* (2022), who emphasized that exposure to small-scale enterprise development boosted the self-efficacy and leadership qualities among tribal women in Rajasthan.

These outcomes indicate that the training sessions were not only effective in improving technical skills but also instrumental in building holistic entrepreneurial capabilities among tribal communities. The comprehensive nature of the training covering product knowledge, practical preparation methods, and marketing approaches played a crucial role in improving beneficiaries' socio-economic status and entrepreneurial confidence.

This supports the findings of FAO (2020), which emphasized that training in value addition and local agro-processing, when combined with market intelligence, leads to improved rural employment and food security outcomes.

The findings suggest that skill-based training programs play a crucial role in empowering tribal women by equipping them with technical knowledge, business acumen, and confidence to engage in income-generating activities. The high level of awareness about government schemes indicates the potential for increased participation in policy-driven economic opportunities. The significant improvements in savings and employment within families highlight the

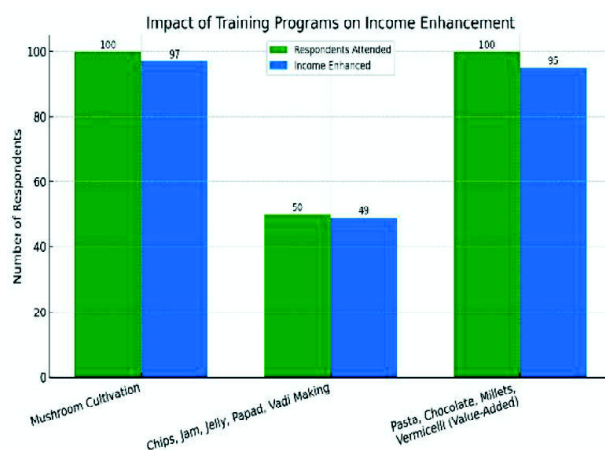
sustainability of income-generating activities post-training. The increase in entrepreneurial initiatives suggests that tribal women are not only becoming financially independent but also contributing to the local economy by creating jobs and marketable products. Furthermore, the social benefits, such as enhanced community engagement and recognition, indicate that such programs help break traditional barriers and enable women to take on leadership roles within their communities. The observed behavioral changes reinforce the idea that entrepreneurial training is not just about economic growth but also about fostering self-reliance, confidence, and long-term socio-economic development.

CONCLUSION

The study highlights the significant impact of skill-based training programs on enhancing the livelihoods and socio-economic conditions of tribal communities. The training interventions centered around value-added products such as mushrooms, millets, pasta, chocolate, papad, jam, jelly, and vermicelli played a crucial role in equipping tribal beneficiaries, particularly women, with knowledge, confidence, and entrepreneurial skills. The data revealed that a substantial percentage of participants not only enhanced their incomes but also experienced improvements in social engagement, behavioral orientation, and awareness of government schemes.

Notably, the training fostered increased interaction with external stakeholders, recognition in society, and better rapport with officials, all of which contribute to breaking the cycle of marginalization that many tribal communities face. Behavioral shifts, such as acquiring new skills and developing a business mindset, were prominent and encouraging indicators of long-term sustainability. Furthermore, the enhanced understanding of value addition techniques, product diversity, and marketing strategies empowered participants to become self-reliant entrepreneurs capable of tapping into local and regional markets.

The findings affirm that such participatory and practical capacity-building initiatives are vital for



empowering tribal populations, promoting gender equity, and strengthening rural economies. Scaling up these interventions with adequate policy support, access to credit, and market linkage frameworks can lead to inclusive and sustainable development in tribal regions.

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