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Research Article

Diagnostic SWOT appraisal of the wicker handicraft entrepreneurship development in Kashmir, India

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Abstract
Critical analyses of the perceptions on SWOT (strengths, weaknesses, opportunities and threats) have become a fundamental element of multi-criteria decision making for developing wicker handicraft entrepreneurship. The study examined the effectiveness and prioritization of entrepreneur's perceptions towards SWOT categories and factors and provided insights for developing wicker handicraft entrepreneurship in Pulwama district of Kashmir. Data were collected through structured interviews and focus group discussions of 100 wicker handicraft entrepreneurs of 20 villages selected by multi-stage random sampling. Simple descriptive statistics were used for the data analysis. Results showed that the factors like income generation (19.30%) and employment generation (19.00%) were viewed as most important strengths while labour intensive and less remunerative livelihood (18.80%) and seasonal subsistence (18.70%) were identified as main weaknesses. Further, poverty alleviation (20.70%), preservation of traditional art craft (19.00%) and improvement in public-private relations (17.50%) were adjudged as strong opportunities whereas limited marketing facilities (20.70%), lack of co-operative societies (18.90%) and harassment by officials in withies collection (16.50%) were seen as chief threats. The challenges (weaknesses and threats) (50.40%) for wicker handicraft entrepreneurship outweighed the prospects (strengths and opportunities) (49.60%) while the internal factors (strengths and weaknesses) (54.80%) prevailed over the external factors (opportunities and threats) (54.20%). F statistics ($p<0.05$) indicated significant differences between the internal factors (strengths and weaknesses) and external factors (opportunities and threats). The results projected the basis to the policymakers to prioritize and address the prominent challenges and reinforce the prospects for conceptualizing, formulating and implementing the strategies for strengthening the wicker handicraft entrepreneurship.

Keywords: Entrepreneurship, Kashmir, Perceptions, SWOT analysis, Wicker handicraft

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INTRODUCTION

Wicker handicraft entrepreneurship is a well-known traditional small-scale forest-based cottage industry of *Shaakhsaaz* communities in rural Kashmir (Islam and Sheikh Shah, 2017). The *Shaakhsaaz* communities derived their name from the Kashmiri words *shaakh* and *saaz*, meaning slender branches of trees or twigs and the act of weaving, respectively (Singh and Khan, 2001). It is undoubtedly the most widespread and admired handicraft transferred from time immemorial and intensely rooted in local material culture (Rather *et al*., 2010). The wicker handicrafts manufactured from the withies of *Salix triandra, S. viminalis, S. daphnoides, Indigofera pulchella*, *Cotoneaster baciliaris*, *Parrotia jacquemontiana*, etc. have received acclamation worldwide for their exceptional designs, artifact and efficient utilities (Masoodi *et al*., 2008). Wicker handicraft entrepreneurship plays a significant role in income diversification, self-employment, socio-economic improvement, material-culture, petty business and poverty alleviation of entrepreneurs in Kashmir (Islam *et al*., 2018). The wicker handicraft entrepreneurship generates an income of Rs. 59534.70/household/year which accounts 66.97% share in the total household annual income (Islam, 2015). The Gini coefficients for the household income with wicker handicraft income (0.21) and without wicker handicraft income (0.53) apparently indicated that the wicker handicraft income mitigated the rural income inequalities tremendously in the entrepreneurs (Biswas and Hussain, 2008). The weaving of high-class multi-shaped and multi-use wicker handicrafts has an exclusive skill of complex handcraftsmanship inherited from generations and has become a prioritized industrial option for rural livelihood diversification (Gangoo *et al*., 2017).

The identification and analysis of the strengths, weaknesses, opportunities and threats (SWOT) is a tool of systematic thinking and comprehensive diagnosis which scrutinize internal factors (strengths and weaknesses) and illuminate the external factors (opportunities and threats) of an issue or an organization (Kukrety *et al*., 2013; Etongo *et al*., 2018). Understanding the SWOT issues of wicker handicraft entrepreneurship will provide a thoughtful basis to the policymakers for strategy formulation and execution. Although, the wicker handicraft entrepreneurship has been recognized as a key choice in state's industrial and financial planning, but still some immediate and sensible policy implications is indispensable to strengthen this industry (Bhat *et al*., 2017). While existing studies by former workers (Biswas and Hussain, 2008; Masoodi *et al*., 2008; Rather et al., 2010; Islam, 2015; Bhat *et al*., 2017; Gangoo *et al*., 2017; Islam and Sheikh Shah, 2017; Islam *et al*., 2018) have broadened our knowledge on various aspects of wicker handicraft, the empirical researches on the entrepreneurs' perceptions on developing the wicker handicraft entrepreneurship using SWOT analysis are still essential research areas to be addressed. Since, the wicker handicraft entrepreneurship remained an integral component of livelihood strategies among the forest fringe communities of Pulwama, Kashmir valley, such aforesaid research is urgent. In light of this, the present research has been conducted to unveil the strengths, weaknesses, opportunities and threats of developing wicker handicraft entrepreneurship using SWOT analysis approach in Kashmir.

MATERIALS AND METHODS

Study area: The study was undertaken in Pulwama district of Kashmir valley (Fig. 1) located within geographical coordinates of 33°8'0" N and 74°92'0" E at an altitude of 1630 meters above mean sea level. The district covers an area of 1398 km^2 and about 810 km^2 (57.94%) of this land is under Himalayan Dry Temperate Forest (13/C) (Champion and Seth, 1968). The district is categorised into two altitudinal Zones, Zone-I that covers the cultivated area up to 1700 meters and Zone-II which includes green meadows between 1700 and 2000 meters. The general landscape of the area is both mountainous and plain and the perennial river Jhelum flows through the district from Anantnag to Srinagar. The land uses include cropland, pastures, forests, non-agricultural lands, fallows, wasteland, tree cover and groves. The district has a multi-ethnic population of 570069 (Census of India, 2011) with a density of 514/km^2 and literacy rate of 65.00%. The district consists of inhabitants of multi-religious background with the Muslims constituting the largest (97.53%) followed by the Hindus (0.63%) and Sikhs (1.80%). The ethnic communities (*Gujjar* and *Bakkerwal*) form a considerable population who settled the upper reaches of the district. The people have diversified livelihood activities including agriculture, livestock production, horticulture, forestry weaving, crafting and minor business. The temperate climate prevails in the district with mean temperatures ranging between –1.92°C to 29.8°C and mean annual precipitation of 1163.2 mm (Anonymous, 2011). The higher expanses receive heavy snowfalls, experience severe cold and remain unapproachable in winter for some time.

Sampling design: A multistage random sampling technique (Kumar, 2012) was employed to select the blocks, villages and entrepreneurs. At the first stage, the entire five blocks (Pulwama, Keller, Kakpora, Pampora and Tral) were purposively sampled on account of the occurrence of wicker handicraft cottage industries. At second stage, twenty sample villages comprising four villages each from Pulwama (Grawgund, Beighgund, Ren-

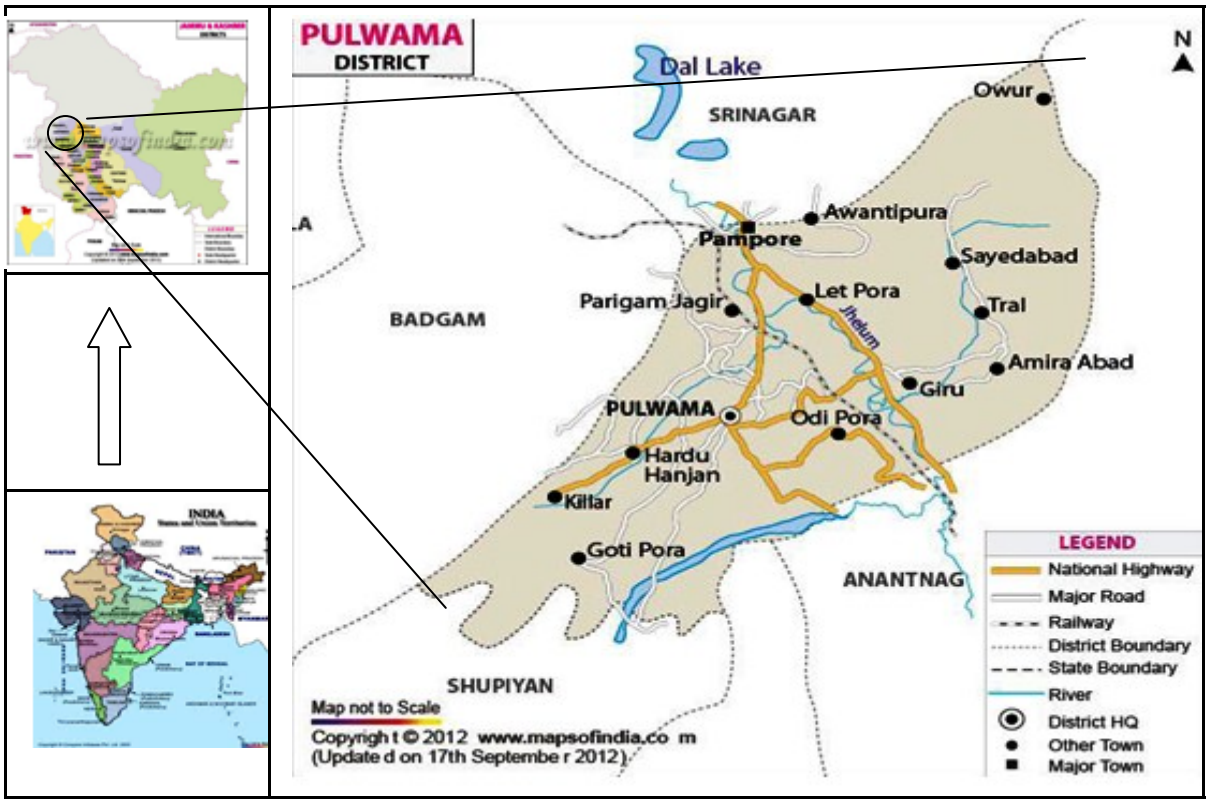

Fig 1. *Location map of the study area showing villages of Pulwama district of Kashmir.*

zipora and Reshipora), Keller (Rehmoo, Yechgoza, Abhama and Rajpora), Kakpora (Larew, Pohwoo, Narbal and Lelhar), Pampora (Chandhara, Woyen, Sharshali and Khrew) and Tral (Satoora, Panzoo, Batenoor and Dadasora) were randomly selected. At third stage, a total of hundred entrepreneurs owning small scale wicker handicraft cottage industries having five entrepreneurs from each village were randomly selected. The respondents interviewed were either household heads or the eldest members.

Data collection: The data were gathered from the sample wicker handicraft entrepreneurs using a structured interview schedule and focus group discussions (FGD) guided by a checklist of questions (Mukherjee, 1993). In order to assess the entrepreneur's perception toward the wicker handicraft entrepreneurship development, six factors under each SWOT categories (Table 1) were incorporated in the schedule and administered to the respondents. The entrepreneurs were asked to rate the degree of effectiveness against each of the factors on a three-point continuum as; most effective, moderately effective and least effective with their respective scores 3, 2 and 1 (Ray and Mondol, 2004). Preference ranking technique based on mean cumulative scores was applied to find out the degree of effectiveness and prioritization of various SWOT factors of wicker handicraft entrepreneurship. The FGDs were carried out with 8-12 wicker handicraft entrepreneurs and the observations extracted from FGDs were used to triangulate and validate the data collected through field survey, understand the results and draw conclusions.

Data analysis: Descriptive statistics including frequency, percentage, average and F test (Snedecor and Cochran, 1967) were applied to analyse the SWOT categories and factors of wicker handicraft entrepreneurship. The weighted mean score (WMS) for each SWOT categories and factors was obtained by multiplying the frequencies with their respective scores, adding them up and dividing by the total number of respondents as follows:

$$WMS = \frac{\sum s_i f_i}{n} \quad \text{.....Eq. 1.}$$

where, f_i = frequency of the respondents for ith item

s_i = score of the ith item

i = 0, 1, 2, 3, 4 or 5

n = total number of respondent

The WMS of each factor is normalized by totalling the mean scores of all the factors under each SWOT category and then dividing each factor WMS by the category sum to yield its normalized score. The data collected were analyzed on MS Excel and Statistical Package for Social Sciences

(SPSS) software and the results were displayed through tables and graphs.

RESULTS AND DISCUSSION

Strengths of wicker handicraft entrepreneurship: The most recognised strength of wicker handicraft entrepreneurship is found to be the income generation (WMS, 2.98; rank 1st) which was closely followed by the employment generation (WMS, 2.92; rank 2nd). The socio-economic development (WMS, 2.62; rank 3rd), migration check (WMS, 2.53, rank 4th), less capital intensive (WMS, 2.35; rank 5th) and easy raw material and machinery procurement (WMS, 2.01; rank 6th) were noted as key strengths but were ranked lower in importance (Fig. 2 and Table 2). The priorities of the factors (Fig. 4) reflected the relative importance of the factors within a category, while the overall priorities (Table 2 and 3) provided the relative contribution of the categories towards the overall perception. Additionally, the WMSs (Table 2) were used to derive conclusions regarding the entrepreneurs' preferences. The entrepreneurs viewed the income generation and employment generation as the very prominent strengths accounting for 38.30% of the total perceptions. These preferences can be attributed to the facts that these factors have a direct impact on wicker entrepreneur's income, subsistence, the standard of living, well-being and survival. The socio-economic development, migration check, less capital intensive and easy raw material and machinery procurement were received lower priorities among the strengths which reflect the entrepreneurs' low awareness and knowledge about the values of these factors. The studies conducted by Islam *et al*. (2014) in Jharkhand, India and Garekae *et al.* (2017) in Chobe Enclave, Botswana emphasized that the strengths are the key predictors for developing forest enterprises to sustain local livelihoods, a view corroborated the present findings.

Weaknesses of wicker handicraft entrepreneurship: The most important weaknesses of wicker handicraft entrepreneurship as perceived by the entrepreneurs were labour intensive and less remunerative livelihood (WMS, 2.96; rank 1st) and seasonal subsistence (WMS, 2.93; rank 2nd). The unsafe and unsecured working environment (WMS, 2.73; rank 3rd), supplementary income (WMS, 2.58; rank 4th), lack of modern techniques (WMS, 2.30; 5th) and small landholding (WMS, 2.22; rank 6th) were also considered prominent weaknesses by the wicker handicraft entrepreneurs but were the lowest-ranked weaknesses (Fig. 2 and Table 2). Under the weaknesses category, the factor labour intensive and less remunerative livelihood (18.80%) received the highest priority closely followed by the factor seasonal subsistence (18.70%). The collection of withies, processing, grading and weaving of handicrafts are cumbersome, labour intensive and time-consuming activities while the prices the entrepreneurs get for their handicrafts is not remunerative to their endeavour spent. Further, the wicker handicrafts have limited marketing period and peak trading of all the major wicker handicrafts is confined to 6 months only. Hence, the labour intensive and less remunerative livelihood and seasonal subsistence were the serious constraints in adoption of wicker handicraft entrepreneurship. The unsafe and unsecured working environment, supplementary income, lack of modern techniques and small landholding were other important contributory factors perceived by the wicker handicraft entrepreneurs in the weaknesses category. This clearly indicated that addressing these weaknesses properly will help in creating favourable environment for the development of wicker entrepreneurship. The observations made by Islam and Sato (2010) in Modhupur Sal forest area in Mymensingh and Tangail districts of Bangladesh and Khandagale *et al*. (2012) in Akola district of Maharashtra, India are in line with the present findings which revealed the important role of weanesses in restricting the adoption of forestry interventions.

Opportunities of wicker handicraft entrepreneurship: The poverty alleviation (WMS, 2.64; rank 1st) was the top potential opportunity as adjudged by the wicker handicraft entrepreneurs. The preservation of traditional art craft (WMS, 2.43; rank 2nd) and improvement in public-private relations (WMS, 2.23; rank 3rd) were perceived as next stronger opportunities for the wicker handicraft entrepreneurship. The extension and training for skill up gradation (WMS, 1.96; rank 4th), extensive promotion and support by Government (WMS, 1.76; rank 5th) and funding, finance and subsidies (WMS, 1.74; rank 6th) were the lowest-ranked opportunities of wicker handicraft entrepreneurship (Fig. 3 and Table 2). Among the opportunities factors, the entrepreneurs gave the highest score to poverty alleviation (20.70%) which indicated that they have strong perception towards the potential role of wicker handicraft entrepreneurship in livelihood security and socio-economic development with a focus on alleviation of rural poverty. The preservation of traditional art craft and improvement in public-private relations were received next highest priority scores in this category. This implies that the manufacture of wicker handicrafts is a traditional forest-based cottage industry transferred from generations; thus, the entrepreneurship plays a significant role in the preservation of skill and knowledge of traditional art craft. Further, the involvement of private entrepreneurs with the public sector as partners and the formation of public-private wicker entrepreneurship has strengthened the public-private relations. The extension and training for skill up-

Table 1. SWOT categories and factors identified for wicker handicraft entrepreneurship development.

	Positive	Negative
Internal	***Strengths***	***Weaknesses***
	S1: Income generation	**W1:** Lack of modern techniques
	S2: Employment generation	**W2:** Small land holding
	S3: Less capital intensive	**W3:** Labour intensive and less remunerative livelihood
	S4: Migration check	**W4:** Supplementary income
	S5: Easy raw material and machinery procurement	**W5:** Seasonal subsistence
	S6: Socio-economic development	**W6:** Unsafe and unsecured working environment
External	***Opportunities***	***Threats***
	O1: Extensive promotion and support by Government	**T1:** Influence of middlemen
	O2: Preservation of traditional art craft	**T2:** Limited marketing facilities
	O3: Extension and training for skill upgradation	**T3:** Lack of co-operative societies
	O4: Poverty alleviation	**T4:** Harassment by officials in withies collection
	O5: Funding, finance and subsidies	**T5:** Lack of rights and concessions to access and use forest resources
	O6: Improvement in public-private relations	**T6:** Scarcity of transportation facilities

Table 2. Relative mean values of the SWOT factors and categories (N=100).

	SWOT factors						Overall mean
	1	**2**	**3**	**4**	**5**	**6**	
Strengths (S)	2.98^{1}	2.92^{2}	2.35^{5}	2.53^{4}	2.01^{6}	2.62^{3}	2.57^{a} $(0.271)^{\S 2}$
Weaknesses (W)	2.30^{5}	2.22^{6}	2.96^{1}	2.73^{3}	2.93^{2}	2.58^{4}	2.62^{a} $(0.276)^{1}$
Opportunities (O)	1.76^{5}	2.43^{2}	1.96^{4}	2.64^{1}	1.74^{6}	2.23^{3}	2.13^{b} $(0.225)^{4}$
Threats (T)	1.96^{5}	2.68^{1}	2.44^{2}	2.14^{3}	1.98^{4}	1.74^{6}	2.16^{b} $(0.228)^{3}$

§Figures in the parentheses indicate normalized score of SWOT categories ; $^{1-5}$Mean rank of SWOT factors in rows or categories in column; ^{ab}Overall means followed by different superscript letters within the column are significantly different ($p<0.05$)

Table 3. Overall perceptions towards internal, external, negative and positive SWOT categories (N=100).

SWOT categories	Priority score	Perception (%)
Internal/external		
Internal (Strengths and Weaknesses)	0.548	54.80
External (Opportunities and Threats)	0.452	45.20
Negative/positive		
Negative (Weaknesses and Threats)	0.504	50.40
Positive (Strengths and Opportunities)	0.496	49.60

gradation, extensive promotion and support by Government and funding, finance and subsidies were the lowest-ranked opportunities of wicker handicraft entrepreneurship which reflects the entrepreneur's low consciousness and familiarity about these opportunities. The results are consistent with the previous studies of Petro *et al.* (2015) in Kilimanjaro Region, Tanzania and Derbe *et al.* (2018) in Wogera District, North Gondar Zone, the Amhara Regional State of Ethiopia who found that the opportunities have direct linkage with the development of forestry interventions.

Threats of wicker handicraft entrepreneurship: The limited marketing facilities (WMS, 2.68; rank 1st) was ranked as the topmost threat by the wicker handicraft entrepreneurs which was followed by the lack of co-operative societies (WMS, 2.44; rank 2nd) and harassment by officials in withies collection (WMS, 2.14; rank 3rd). The lack of rights and concessions to access and use forest resources (WMS, 1.98; rank 4th), the influence of middlemen (WMS, 1.96; rank 5th) and scarcity of transportation facilities (WMS, 1.74; 6th) were the

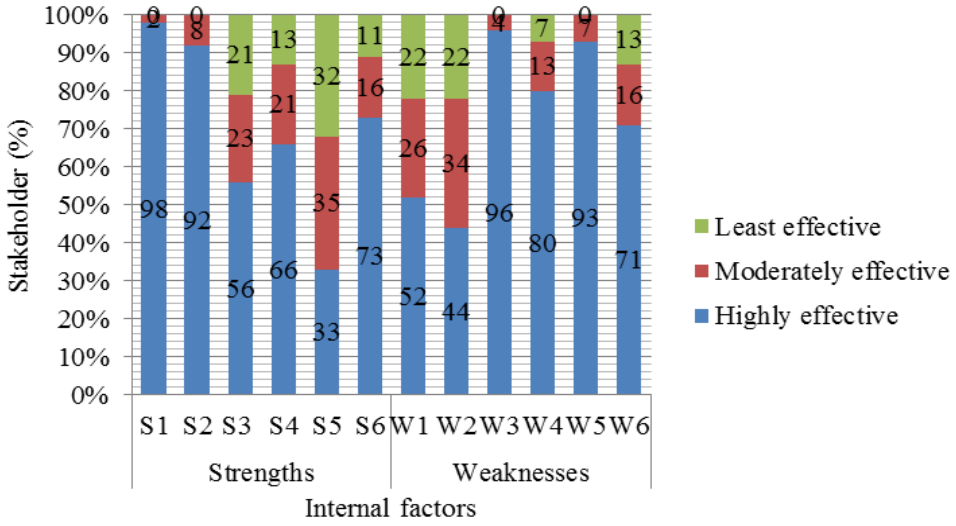

Fig. 2. *Entrepreneur's perceptions of strengths and weaknesses (N=100).*

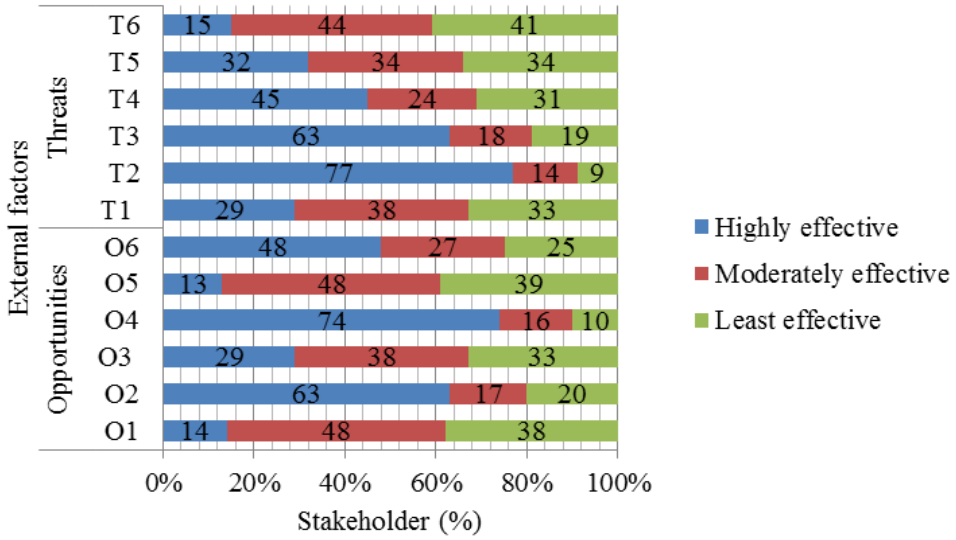

Fig. 3. *Entrepreneur's perceptions of opportunities and threats (N=100).*

other least important threats as opined by the wicker entrepreneurs (Fig. 3 and Table 2). Under the threats category, the factor limited marketing facilities (20.70%) received the highest priority among the wicker handicraft entrepreneurs. The marketing mechanism of the wicker handicrafts is primarily individual-oriented confined to the regional or domestic level, which restricts the entrepreneurs to access the remunerative global markets. The poor marketing infrastructure compels them to sell off their handicrafts in the local markets or the wholesalers. All the wicker handicrafts generally hit the market during the peak season, where getting a better price becomes difficult due to the competitive market situation. Low market infrastructure has always been a major problem for wicker entrepreneurs and the high priority to the limited marketing facilities reflects their sensible perceptions. Lack of co-operative societies and harassment by officials in withies collection was the second-highest priorities under the threats category, which has a direct negative impact on the development of wicker entrepreneurship. The lack of rights and concessions to access and use forest resources, the influence of middlemen and scarcity of transportation facilities were the other serious threats encountered by the wicker handicraft entrepreneurs and even alienated some people from adopting the wicker handicraft entrepreneurship. The present findings get the support of the earlier works of Reddy (2011) in Rajampet, Kadappa district, Andhra Pradesh, India and Ofoegbu *et al.* (2017) in Vhembe District of South Africa who had reported the potential role of

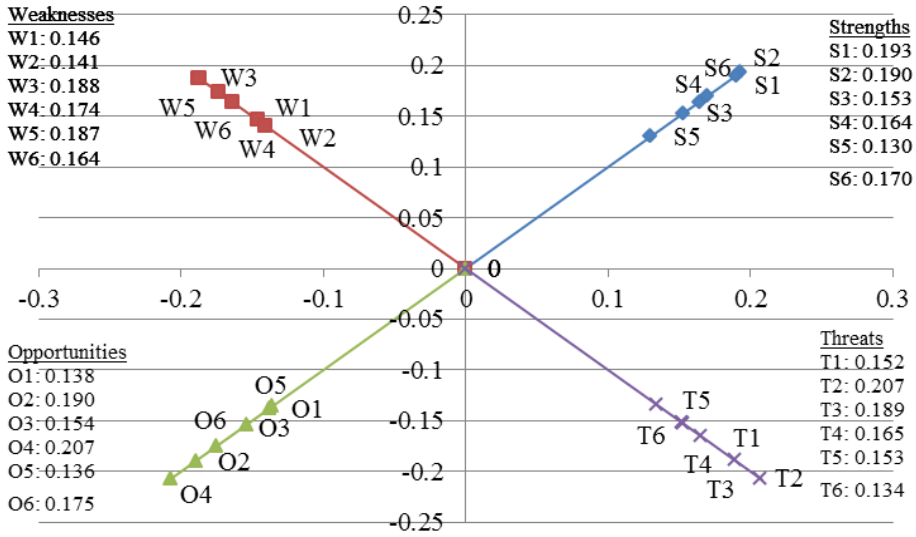

Fig. 4. *Priority scores for the SWOT factors (N=100).*

threats in constraining the adoption of forestry entrepreneurship.

Overall SWOT performance: The averages and normalized scores of the overall perceptions across the SWOT categories indicated that the entrepreneurs viewed the highest perception for weaknesses (27.60%) which was followed by strengths (27.10%), threats (22.80%) and opportunities (22.50%) (Table 2). The overall combined priority value (54.80%) of internal (strengths and weaknesses) categories prevailed over the combined priority value (54.20%) of external (opportunities and threats) factors (Table 3). Basically, the combined priority values of strengths and opportunities factors (positive) are considered as prospects, whereas that of weaknesses and threats categories (negative) as challenges. In order to create a positive environment for wicker handicraft entrepreneurship development, the potential strengths must be combined with promising opportunities to eliminate crucial weaknesses and threats using the SWOT strategy formulation technique. It is astonishing that the entrepreneurs' overall perception of the challenges (50.40%), including weaknesses and threats, dominated the prospects (49.60%) consisted of strengths and opportunities. It is apparent that the challenges outweighed the prospects and prohibited the adoption of wicker handicraft entrepreneurship among the rural people. This implied that addressing the existing challenges in the wicker handicraft entrepreneurship can create a suitable environment for the sustainability of the entrepreneurship because as the challenges reduce, the prospects of sustainable wicker handicraft entrepreneurship is likely to increase. The F statistics ($p<0.05$) confirmed that the internal factors (strengths and weaknesses) were significantly different to the external factors (opportunities and threats) since the contributions of strengths and weaknesses are easily assessable while the impacts of opportunities and threats are least observable among the wicker handicraft entrepreneurs. As stated by Kukrety *et al.* (2013) and Szulecka and Zalazar (2017), the diagnostic SWOT analyses endow with an informative overview and make it easy to identify the important problems and prospects of entrepreneurship, an issue or an organization. In addition, reflecting the exact situation of the problem and prospects using SWOT, including internal and external success factors gives a strong basis for strategic assessment (Etongo *et al.*, 2018; Stainback *et al.*, 2011). Hence, the identification and evaluation of the SWOT components and factors and explanation of their relative importance in the current study will be instrumental for strategic planning and management of wicker handicraft entrepreneurship in the Kashmir valley. Deliberation of SWOT factors will help the entrepreneurs to create strategic plan, explore various areas of management, provide an insight into the relative importance of the components within the entrepreneur, facilitate them to initiate appropriate action and operate in a dynamic environment. The findings will be the basis to prioritize and address the major challenges and strengthen the existing prospects of wicker handicraft entrepreneurship for policy implications.

Conclusion

The findings illustrated that the challenges for developing the wicker handicraft entrepreneurship prevailed over the prospects among the entrepreneurs of Pulwama district in Kashmir. On average, the overall perceptions of the entrepreneurs were dominated by weaknesses and threats over the strengths and opportunities. The factors labour

intensive and less remunerative livelihood, seasonal subsistence, limited marketing facilities, lack of co-operative societies and harassment by officials in withies collection were identified as the major challenges. These challenges reflected the flaws of the present wicker handicraft entrepreneurial set-up and provided directives for further corrective actions. All the entrepreneurs identified income generation, employment generation, poverty alleviation, preservation of traditional art craft and improvement in public-private relations as main prospects associated with the wicker handicraft entrepreneurship. However, efficient addressing of the challenges and judicious exploitation of the prospects are essential for creating a favourable environment for strengthening the wicker handicraft entrepreneurship. The research findings provide the policymakers, extension providers and planners with a critical review of the existing problems and prospects of the wicker handicraft entrepreneurship and a base for a new entrepreneurship policy, which is essential for its further improvement and reinforcement in Kashmir.

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