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Assessment of training needs and resource availability for selection of suitable income-generating activities among rural women in Bikaner District, Rajasthan

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Abstract

The present study was conducted to assess the training needs of rural women and evaluate the availability of resources for selecting suitable income-generating activities in Bikaner district of Rajasthan. A descriptive research design was adopted, and 200 rural women were selected through a multistage random sampling technique. Data were collected using a pre-tested and validated interview schedule and analyzed using frequency, percentage, mean score, mean percent score (MPS), and ranking techniques. The findings revealed that Tie and Dye (Bandhej) (MPS = 65.67) was the most preferred income-generating activity, followed by Nutri Laddoo preparation (MPS = 64.83). The respondents had adequate access to basic household resources, bank accounts, local markets, and raw materials required for these enterprises, although access to institutional credit and specialized equipment was limited. More than half of the respondents expressed willingness to participate in training programmes and start income-generating activities. Based on the combined assessment of training needs and resource availability, Tie and Dye (Bandhej) and Nutri Laddoo preparation were identified as the most suitable activities for developing need-based training packages to enhance the livelihood and economic empowerment of rural women.

Keywords: Rural women, training needs assessment, income-generating activities, resource availability, Bandhej, Nutri Laddoo, Entrepreneurship, Bikaner

Introduction

"To awaken the people, it is the women who should be awakened. Once she is on the move, the family moves, the village moves, and the nation moves." These words of Pandit Jawaharlal Nehru highlight the crucial role of women in the socio-economic development of society.

Rural women make significant contributions to agriculture, livestock, household management, and rural livelihoods. However, despite their active participation, they continue to face challenges such as limited access to skill development, resources, technology, extension services, and market opportunities, restricting their economic empowerment.

Income-generating activities offer an effective means of improving the livelihoods of rural women by enhancing income, self-reliance, and decision-making ability. However, the success of these activities depends on identifying the actual training needs of rural women in accordance with locally available resources, market opportunities, and their interests. Many existing training programmes are supply-driven and fail to address location-specific needs, resulting in poor adoption of acquired skills. Bikaner district possesses considerable potential for livelihood-based enterprises, yet information on the specific training needs of rural women remains limited. Therefore, assessing these training needs is essential for identifying suitable income-generating activities and providing a scientific basis for planning relevant, need-based capacity-

building programmes for rural women.

Materials and Methods

The study was conducted in Bikaner district of Rajasthan, selected purposively due to its arid conditions, limited agricultural opportunities, and potential for livelihood-based income-generating activities. A multistage sampling technique was adopted to select 200 rural women from four randomly selected villages (Kolayat, Surajada, Pemasar, and Kanasar) of two randomly selected Panchayat Samitis (Bikaner and Kolayat).

Data were collected through a pre-tested and expert-validated structured interview schedule (reliability coefficient = 0.84). The first phase of the study focused on assessing the respondents' socio-economic characteristics, training needs, and availability of human, physical, financial, market, and institutional resources related to income-generating activities.

The collected data were coded, tabulated, and analyzed using frequency, percentage, mean score (MS), mean percent score (MPS), ranking, arithmetic mean, and standard deviation to identify priority training needs and suitable livelihood opportunities for rural women.

Results and Discussion

1. General Profile of Respondents

Table 1: General profile of the respondents (n = 200)

Characteristic	Category	Frequency (f)	Percentage (%)
Age	Young (<25 years)	39	19.50
	Middle (25–50 years)	132	66.00
	Old (>50 years)	29	14.50
Marital status	Unmarried	20	10.00
	Married	163	81.50
	Widow	17	8.50
Caste	Scheduled Tribe	6	3.00
	Scheduled Caste	62	31.00
	Other Backward Class	58	29.00
	Upper Caste	74	37.00
Education	Illiterate	15	7.50
	Can read and write	23	11.50
	Primary	24	12.00
	Middle	41	20.50
	Secondary	45	22.50
	Senior Secondary	31	15.50
Social media access	Graduate and above	21	10.50
	No access	49	24.50
	Occasional access	78	39.00
	Active participation	73	36.50

The general profile of the respondents revealed that the majority (66.00%) belonged to the middle-age group (25–50 years), while 81.50 per cent were married. With regard to caste, the highest proportion of respondents belonged to the upper caste category (37.00%), followed by Scheduled Caste (31.00%), Other Backward Class (29.00%), and Scheduled Tribe (3.00%). In terms of education, the largest proportion of respondents had attained secondary education (22.50%), followed by middle school education (20.50%), indicating that most respondents possessed basic formal education. Regarding digital access, 39.00 per cent of the respondents had occasional access to social media, while 36.50 per cent reported active participation on social media platforms. Overall, these socio-personal characteristics indicate that the respondents were in an economically productive stage of life, possessed adequate educational background to comprehend skill-based training, and had moderate access to digital communication channels. The predominance of married and middle-aged women suggests a preference for practical, home-based enterprises that can be managed alongside household responsibilities, whereas the educational status and social media access indicate favourable conditions for effective training delivery, technology dissemination, and market information. Furthermore, the representation of different social groups

ensured that the identified training needs reflected the diverse socio-economic characteristics of rural women in the study area, thereby providing a reliable basis for designing need-based and locally relevant training programmes.

2. Training Needs Assessment

Training needs assessment formed the initial stage in the development of the training package. It was undertaken to identify the knowledge and skill gaps of the respondents and to determine suitable income-generating activities that could be adopted by them. Information pertaining to respondents' interests, existing competencies, availability of resources, willingness to engage in entrepreneurial activities, and perceived training requirements was collected and analyzed. Based on the assessment, the identified activities were prioritized and ranked according to their suitability, feasibility, and potential for adoption. The results of the assessment provided the foundation for selecting the most appropriate activities for the development and implementation of the training package. To assess the overall training requirements and establish priorities among the activities, the Mean Percent Score (MPS) was calculated for each activity.

Table 2: Distribution of the respondents on the basis of needs regarding various income generating activities (n=200)

S. No.	Items	Distribution of the respondents						Mean Score	Mean Percent Score	Rank
		Most needed		Needed		Not needed				
		F	%	f	%	F	%			
1	Carpet Making	8	4.50	37	18.50	154	77.00	1.260	42.00	XXIV
2	Stitching	27	13.50	94	47.00	79	31.15	1.740	58.00	V
3	Painting	26	13.00	74	37.00	100	50.00	1.630	54.33	X
4	Hand Embroidery	28	14.00	73	36.50	99	49.50	1.645	54.83	IX
5	Crochet/Macrame	20	10.00	54	27.00	126	63.00	1.470	49.00	XXII
6	Upcycled Textiles	21	10.50	74	37.00	105	52.5	1.580	52.67	XIV
7	Tye and Dye	63	31.5	68	34.00	69	34.5	1.970	65.67	I
8	Home Furnishing Items	24	12.00	66	33.00	110	55.00	1.570	52.33	XVI
9	Pickles, Chutneys	25	12.50	67	33.50	108	54.00	1.585	52.83	XII
10	Papad Badi	47	23.50	64	32.00	89	44.50	1.790	59.67	IV
11	Dried Products	25	12.50	75	37.50	100	50.00	1.625	54.17	XI

12	Nutri Mix	23	11.06	64	32.16	113	56.78	1.550	51.67	XVII
13	Nutri laddo	49	24.50	91	45.50	60	30.00	1.945	64.83	II
14	Snacks	16	8.00	73	36.50	111	55.55	1.525	50.83	XX
15	Healthy Sweets	31	15.55	60	30.00	109	54.50	1.610	53.67	XII
16	Seasonal Fruit Candy	32	16.08	71	35.68	96	48.24	1.670	55.67	VII
17	Fermented Foods	19	9.50	61	30.50	120	60.00	1.495	49.83	XXI
18	Fabric Wall Hangings	5	2.50	105	52.50	90	45.00	1.575	52.50	XV
19	Pot Painting	6	3.00	82	41.00	112	56.00	1.470	49.00	XXII
20	Mirror/Glass Painting	18	9.00	97	48.50	85	42.50	1.665	55.50	VIII
21	Candle Making	23	11.50	89	44.50	88	44.00	1.675	55.83	VI
22	Low Cost Educational Toy	32	16.00	95	47.50	73	36.50	1.795	59.83	III
23	Soft Toy Making	14	7.00	63	31.50	123	61.50	1.455	48.50	XXIV
24	DIY Toys for Children	14	7.00	73	36.50	123	61.5	1.555	51.83	XVII
25	Activity Workbooks	6	3.00	95	47.50	99	49.50	1.535	51.17	XIX
26	Development of Life Skills Training Manuals	10	5.00	74	37.00	115	57.50	1.465	48.83	XXIII

Table 2 presents the mean score, mean percent score, and rank order of the training needs expressed by the respondents regarding various income-generating activities. The ranking reflects the relative priority assigned by the respondents to different training areas based on their perceived usefulness for livelihood enhancement and income generation.

The findings reveal considerable variation in the training preferences of the respondents. Among all the identified activities, Tye and Dye emerged as the most preferred training area, securing the first rank with a mean score of 1.970 and a mean percent score of 65.67. The high preference for this activity is because of attributed to its strong market demand in Bikaner District, cultural relevance in Rajasthan, low investment requirement, and suitability for home-based entrepreneurship. The popularity of Tye and Dye training suggests that respondents perceived it as a practical and profitable avenue for self-employment and income generation.

Nutri Laddo was ranked second, obtaining a mean score of 1.945 and a mean percent score of 64.83. The high ranking of Nutri Laddo indicates that respondents showed considerable interest in nutrition-based food enterprises. During the investigation of the study, it was observed that rural women could easily relate to Nutri Laddo as it is a familiar food product commonly prepared and consumed in their households. In many rural communities, Nutri Laddo is traditionally given to women during pregnancy and after childbirth due to its perceived nutritional benefits. Therefore, respondents found this enterprise activity relevant to their daily lives and existing knowledge. Additionally, the increasing awareness regarding healthy eating habits and the growing demand for nutritious, value-added food products at the household level had further encouraged respondents to seek training in the preparation and marketing of Nutri Laddo. The familiarity of the product, coupled with its potential for income generation through small-scale home-based production, likely contributed to its high preference among the respondents. Similarly, Low Cost Educational Toy Making secured the third rank with a mean score of 1.795 and a mean percent score of 59.83. This finding reflects respondents' interest in educational and child-development-related products, which can be produced at the household level with limited resources. As the researcher found that the women are becoming more aware with the child development.

Other highly preferred activities included Papad Badi

Making (mean score = 1.790) and Stitching (mean score = 1.740), which occupied the fourth and fifth ranks, respectively. These activities are traditionally recognized as viable home-based enterprises and require relatively low capital investment while offering opportunities for regular income generation. The preference for these activities suggests that respondents were inclined towards training programmes that provide practical skills with immediate economic benefits.

A moderate level of training need was observed for activities such as Candle Making, Seasonal Fruit Candy Preparation, Mirror/Glass Painting, Hand Embroidery, Painting, Healthy Sweets, Dried Products, and Pickles and Chutneys. These activities received intermediate mean scores and ranks, indicating that respondents recognized their potential for supplementary income generation but considered them less important than the top-ranked options. The researcher found that this is due to factors such as limited market exposure, seasonal demand, or lower familiarity with commercial opportunities associated with these enterprises.

On the other hand, comparatively lower training needs were reported for Soft Toy Making, Development of Life Skills Training Manuals, Crochet/Macrame, and Pot Painting. The lower mean scores obtained by these activities was because the respondents perceived them as less attractive or less feasible for income generation. Possible reasons may include limited market demand, specialized skill requirements, or reduced awareness regarding their commercial potential.

Among all the activities, Carpet Making received the lowest rank, with a mean score of 1.260 and a mean percent score of 42.00, indicating that it was the least preferred training area. The Respondents founded a low preference for carpet making because of the labour-intensive nature of the activity, longer production time, higher skill requirements, and comparatively lower accessibility to markets.

Overall, the findings clearly indicate that respondents preferred training in activities that are market-oriented, home-based, less capital intensive, easy to initiate, and capable of generating quick and sustainable income. The higher preference for activities such as Tye and Dye, Nutri Laddo, Low Cost Educational Toy Making, Papad Badi Making, and Stitching demonstrates the respondents' inclination towards enterprises that offer both economic viability and flexibility within household settings.

The findings are in line with Kothari (2019) ^[2], who

emphasized that identification of priority training needs is essential for designing effective training interventions. Similar observations were reported by Minogue *et al.* (2017) [3], who found that training programmes tailored to participants' expressed needs were perceived as more useful and relevant.

Therefore, while planning training package and livelihood promotion programmes, greater emphasis were placed on these highly ranked training areas to ensure better participation, skill utilization, and income enhancement among the target population.

3. Availability of Resources

The selection of suitable income-generating activities

depends not only on the training needs of the respondents but also on the availability of essential resources required for undertaking such activities. Therefore, an assessment of resource availability was conducted to examine the accessibility of raw materials, tools and equipment, infrastructure, financial support, and marketing facilities among the respondents. The analysis of resource availability provided valuable insights into the feasibility and sustainability of various activities. The findings, together with the training needs assessment, were utilized for identifying and selecting the most appropriate activities for the development of the training package.

Existing Skilled assessment

Table 3: Distribution of the respondents on the basis of skilled available n=200

S. No.	Activity	Skilled person		Partially skilled		Not skilled at all	
		f	%	F	%	F	%
1	Carpet making	0	0.00	47	23.5	153	76.5
2	Stitching	0	0.00	148	74.00	52	26.00
3	Bandhej (Tie and Dye)	16	8.00	80	40.00	104	52.00
4	Painting (Block/Screen/Stencil)	0	0.00	86	43.00	114	57.00
5	Hand embroidery	16	8.00	112	56.00	72	36.00
6	Crochet and knitting	16	8.00	108	54.00	76	38.00
7	Macrame/braiding techniques	5	2.50	38	19.00	157	78.50
8	Upcycled textile products	16	8.00	0	0.00	184	92.00
9	Home furnishing items	21	10.50	65	32.50	114	57.00
10	Fabric wall hanging/pot painting	14	7.00	86	43.00	100	50.00
11	Home décor & candle making	16	8.00	102	51.00	82	41.00
12	Food processing (pickles, papad, snacks)	16	8.00	86	43.00	98	49.00
13	Nutri products (bars, laddoos, nutri mix)	76	38.00	23	11.5	101	50.50
14	Educational toys & soft toys	0.00	0.00	16	8.00	184	92.00
15	Preparation of learning materials/manuals	0	0.00	28	14.00	172	86.00

The data presented in Table 3 reveal that the majority of respondents possessed only partial skills or no skills in most of the selected income-generating activities. Among the activities assessed, Nutri products (bars, laddoos and nutri mix) emerged as the area in which respondents demonstrated the highest level of expertise, with 38.00 per cent being skilled, 11.50 per cent partially skilled and 50.50 per cent not skilled. This comparatively higher level of skill may be attributed to the familiarity of rural women with the preparation of traditional nutritious food products and their increasing awareness of nutrition-based enterprises. Similar findings were reported by Rani (2021) [5], who observed greater familiarity of rural women with household-based enterprises than with specialized entrepreneurial activities. The highest proportion of skilled respondents was also observed in home furnishing items (10.50%), followed by Bandhej (Tie and Dye), hand embroidery, crochet and knitting, upcycled textile products, home décor and candle making, and food processing, each with 8.00 per cent skilled respondents. Fabric wall hanging/pot painting accounted for 7.00 per cent skilled respondents, whereas macrame/braiding techniques recorded only 2.50 per cent skilled respondents. No respondents were found to be skilled in carpet making, stitching, painting (block/screen/stencil), educational toys and soft toys, or preparation of learning materials/manuals.

A large proportion of respondents were found to be partially skilled in activities traditionally practiced at the household level. The highest% of partially skilled respondents was recorded in stitching (74.00%), followed by hand embroidery (56.00%), crochet and knitting (54.00%), home décor and candle making (51.00%), and painting (block/screen/stencil) and food processing (43.00% each). Moderate levels of partial skill were observed in Bandhej (40.00%), home furnishing items (32.50%), and carpet making (23.50%).

The findings further show that a substantial proportion of respondents lacked skills in several specialized activities. The highest% of respondents who were not skilled was observed in upcycled textile products and educational toys and soft toys (92.00% each), followed by preparation of learning materials/manuals (86.00%), macrame/braiding techniques (78.50%), and carpet making (76.50%). More than half of the respondents were also not skilled in painting (57.00%), home furnishing items (57.00%), Bandhej (52.00%), and Nutri products (50.50%).

Overall, the results indicate that respondents possessed relatively better competency in conventional household-based activities such as stitching, embroidery, knitting and food-related enterprises, whereas skill levels were considerably lower in specialized craft-based and educational product-oriented activities.

Availability of physical resources

Table 4: Distribution of the respondents on the basis of available Physical Resource (n=200)

S. No.	Physical Resource	Yes	
		f	%
1	Sewing machine	143	71.50
2	Hand tools for embroidery/knitting/macrame	90	45.00
3	Frames (Dyeing & printing tools)	12	6.00
4	Blocks (Dyeing & printing tools)	23	11.5
5	Colours (Dyeing & printing tools)	12	6.00
6	Vessels (Cooking & processing utensils)	200	100.00
7	Oven (Cooking & processing utensils)	56	28.00
8	Grinder (Cooking & processing utensils)	112	56.00
9	Stove (Cooking & processing utensils)	182	91.00
10	Dry storage (Storage facility)	80	40.00

The data presented in Table 4 show the availability of various physical resources among the respondents, which can support their participation in income-generating and entrepreneurial activities.

The findings reveal that all respondents (100.00%) possessed vessels used for cooking and food processing, making it the most commonly available resource. This was followed by stoves, available with 91.00 per cent of the respondents, indicating that most households had the basic infrastructure required for food preparation and small-scale food processing enterprises. A substantial proportion of respondents (71.50%) owned a sewing machine, suggesting good potential for engaging in stitching and tailoring-related activities.

More than half of the respondents (56.00%) reported having a grinder, which can facilitate activities such as preparation of spices, flour, and value-added food products. In contrast, only 28.00 per cent had access to an oven, indicating limited availability of equipment required for certain food processing and baking enterprises. Among textile and craft-related resources, 45.00 per cent of respondents possessed hand tools for embroidery, knitting, or macrame work, reflecting moderate readiness to undertake handicraft-based activities. However, the availability of specialized dyeing and printing equipment was considerably low. Only 11.50 per cent had printing blocks, while 6.00 per cent each possessed frames and colours used in dyeing and printing processes. This suggests limited infrastructure for activities such as Bandhej, block printing, and fabric decoration. Regarding storage facilities, 40.00 per cent of respondents had access to dry storage facilities, which are important for preserving raw materials and finished products, particularly in food-based enterprises. The availability of basic household resources indicates favourable conditions for implementing food-processing and stitching enterprises. Dangi (2021) ^[1] also emphasized that training programmes are more effective when designed around locally available resources and facilities hence, the findings indicate that respondents were relatively well-equipped with basic household resources required for food processing and stitching activities, whereas the availability of specialized equipment for dyeing, printing, and craft-based enterprises was limited but still available if needed.

Access to Raw Materials

Table 6: Distribution of the Respondents on the accessibility of raw materials (n=200)

S. No.	Raw Material	Easily Available		Available with Difficulty		Not Available	
		F	%	f	%	F	%
1	Yarn/thread	181	90.5	19	9.50	0	00.00
2	Fabric/cloth	84	42.00	62	31.00	54	27.00
3	Natural dyes/colours	64	32.00	13	6.50	123	61.5
4	Food grains/pulses	124	62.00	76	38.00	0	0.00
5	Fruits and vegetables (seasonal)	81	40.50	54	27.00	65	32.50
6	Jaggery	181	90.5	15	13.33	4	13.50
7	Millets	200	100	0	0.00	0	00.00
8	Nuts	160	80.00	38	19.00	2	1.00
9	Reusable waste materials	46	23.00	78	39.00	76	38.00

Table 6 reveal the accessibility of various raw materials required for undertaking different income-generating activities. The findings indicate that the majority of respondents had easy access to commonly used agricultural and household-based raw materials, whereas the availability of certain specialized materials was comparatively limited. Among all the raw materials, millets were reported as easily available by all respondents (100.00%), indicating their widespread cultivation and availability in the study area. Similarly, yarn/thread and jaggery were reported as easily available by 90.50 per cent of the respondents. Only a small proportion of respondents experienced difficulty in obtaining these materials, while very few reported their non-availability. This suggests favourable conditions for enterprises related to stitching, embroidery, and value-added food products.

A large majority of respondents (80.00%) reported that nuts

were easily available, while only 19.00 per cent experienced difficulty and 1.00 per cent reported non-availability. Likewise, food grains and pulses were easily available to 62.00 per cent of respondents, whereas 38.00 per cent reported some difficulty in procuring them. The easy availability of millets, jaggery, grains and nuts enhances the feasibility of nutrition-based enterprises. Similar observations were reported by Premlata (2021) ^[4], who emphasized that enterprises based on locally available resources are more readily accepted and adopted by rural women.

In the case of fabric/cloth, 42.00 per cent of respondents reported easy availability, while 31.00 per cent experienced difficulty and 27.00 per cent stated that it was not readily available. Similarly, seasonal fruits and vegetables were easily available to 40.50 per cent of respondents, whereas 27.00 per cent faced difficulties and 32.50 per cent reported

non-availability during certain seasons. The variation in accessibility may be attributed to seasonal fluctuations and local market conditions. The availability of specialized materials required for textile and craft-based enterprises was comparatively lower. More than three-fifths of the respondents (61.50%) reported that natural dyes and colours were not available, while only 32.00 per cent found them easily accessible. Likewise, reusable waste materials, which are important for upcycled and eco-friendly products, were not available to 38.00 per cent of respondents, and 39.00 per cent could obtain them only with difficulty.

During the survey, respondents expressed the view that although certain raw materials were not always available within the village, procurement was generally not a major challenge. They reported that many required materials could be easily purchased through online platforms and e-commerce websites. Furthermore, the proximity of Bikaner district headquarters provided access to wholesale and retail markets where specialized materials such as fabrics, dyes, decorative items, packaging materials, and craft supplies could be procured. Therefore, despite the limited local availability of some materials, respondents perceived that most raw materials could be arranged whenever required. Overall, the findings suggest that basic agricultural and food-related raw materials were readily available to the majority of respondents, while specialized inputs for textile printing and craft-based activities were less accessible at the village level. However, the availability of online purchasing options and nearby urban markets significantly reduced constraints related to raw material procurement and enhanced the feasibility of undertaking diverse entrepreneurial activities.

Access to financial resources

Table 7: Distribution of the respondents on the basis of financial resources (n=200)

S. No.	Resource	Yes	
		F	%
1	Membership in SHG	52	26.00
2	Access to bank account	185	92.00
3	Access to credit/loan facilities	9	4.5
4	Support from government schemes	67	33.5

Table 7 depict the financial resources available to the respondents for undertaking income-generating activities and entrepreneurship. The findings indicate that access to basic financial services was relatively high, whereas access to formal credit facilities remained limited.

A large majority of the respondents (92.00%) reported having access to a bank account, indicating a high level of financial inclusion among rural households. The widespread availability of bank accounts may be attributed to various financial inclusion initiatives and government efforts to promote banking services in rural areas. Although financial inclusion through bank accounts was high, access to credit facilities remained limited. Similar concerns regarding resource accessibility and institutional support were highlighted by Kothari (2019) ^[2].

About one-third of the respondents (33.50%) reported receiving support from government schemes, suggesting that a considerable proportion had benefited from

developmental programmes aimed at enhancing livelihood opportunities. However, the coverage of such schemes was not universal, indicating scope for increasing awareness and outreach among rural women.

Only 26.00 per cent of the respondents were found to be members of a Self-Help Group (SHG). During the survey, several respondents reported that although SHGs were present in nearby areas, many women had not yet joined such groups due to limited awareness, lack of interest, or irregular group activities. Since SHGs often serve as a source of savings, credit, and entrepreneurial support, their limited membership may restrict opportunities for collective economic advancement.

The least accessible financial resource was credit or loan facilities, with only 4.50 per cent of respondents reporting access to such facilities. Discussions with respondents revealed that many women were hesitant to avail loans due to repayment concerns, lack of information regarding loan procedures, and apprehension about financial liabilities. As a result, most respondents preferred relying on personal savings or family resources rather than formal credit

Access to market availability

Table 8: Distribution of the Respondents on the basis of Market availability (n=200)

S. No.	Resource	Yes	
		f	%
1	Local market availability for selling products	116	58.00
2	Weekly haat/village market access	64	32.00
3	Middlemen/traders support	0.00	0.00
4	Awareness about online selling/exhibitions	118	59.00
5	Transportation facility to nearby town	107	53.50

The data presented in Table 8 show the availability of market-related resources and opportunities for the respondents. Market access plays a crucial role in determining the success and sustainability of income-generating activities by enabling producers to sell their products and reach potential customers.

The findings reveal that 59.00 per cent of the respondents were aware of online selling platforms and exhibitions, making it the most commonly reported market-related resource. During the survey, respondents stated that increasing use of smartphones and social media platforms had improved their awareness of online marketing opportunities. Many women perceived online platforms as useful avenues for promoting and selling products beyond their local area. More than half of the respondents (58.00%) reported the availability of a local market for selling products, indicating that village and nearby markets could serve as important outlets for small-scale enterprises. Similarly, 53.50 per cent of respondents reported having access to transportation facilities to nearby towns, which can facilitate the procurement of raw materials and marketing of finished products.

Only 32.00 per cent of the respondents reported access to a weekly hat or village market. During interactions, respondents mentioned that such markets were either not organized regularly or were located at a considerable distance from their villages, limiting their usefulness as a marketing channel.

Notably, none of the respondents reported receiving support from middlemen or traders (0.00%). The respondents explained that products were generally sold directly to consumers, within the village, or through personal contacts rather than through organized trader networks. This absence of intermediary support may limit market reach but can also allow producers to retain a greater share of profits from sales.

Overall, the findings suggest that respondents had moderate access to market opportunities through local markets, transportation facilities, and growing awareness of online selling platforms. However, limited access to weekly markets and the absence of trader support indicate the need for stronger market linkages, marketing training, and institutional support to enhance the commercialization of rural women's enterprises.

Attitude the respondents

Table 9: Distribution of the respondents on the basis of willingness (n=200)

S. No.	Item	Yes	
		F	%
1	Interested in starting income generating activity	130	54.50
2	Willingness to attend training programmes	114	57.00
3	Time available per day for activities	110	55.00

The data presented in Table 9 depict the willingness of respondents to engage in income-generating activities and related capacity-building programmes. Willingness is an important indicator of the respondents' readiness to participate in entrepreneurial ventures and skill development initiatives.

The findings reveal that 57.00 per cent of the respondents expressed willingness to attend training programmes, making it the highest-ranked item under this category. This indicates a positive attitude among the respondents toward acquiring new knowledge and skills that could enhance their income-generating potential. During the survey, many respondents stated that they were interested in learning new techniques and enterprise-related skills if appropriate training opportunities were made available in or near their villages.

More than half of the respondents (55.00%) reported having sufficient time available per day to participate in income-generating activities. The respondents explained that after completing their routine household responsibilities, they could devote a few hours to productive activities that would contribute to household income. This finding suggests that a considerable proportion of women possess the time resources necessary for undertaking home-based enterprises. Similarly, 54.50 per cent of the respondents expressed interest in starting an income-generating activity, while the remaining respondents were either uncertain or not interested. Discussions with the respondents revealed that many women viewed entrepreneurial activities as a means of supplementing family income and improving their economic status. However, some respondents expressed concerns regarding financial investment, marketing opportunities, lack of skills, and balancing enterprise activities with household responsibilities.

Overall, the findings reveal a positive inclination among the

respondents towards entrepreneurship and skill enhancement. A majority of the respondents expressed their willingness to initiate income-generating activities, participate in training programmes, and devote time to such ventures. The respondents' favourable attitude towards attending training programmes is in line with the findings of Minogue *et al.*, (2018) ^[3] who observed that participants demonstrated considerable interest in training opportunities that catered to their identified needs. These findings indicate significant scope for the successful implementation of training and entrepreneurship development programmes among rural women, particularly when supported by appropriate technical guidance, financial assistance, and marketing facilities.

4. Selection of Suitable Income Generating Activities Combined ranking of training needs and resource availability

The selection of suitable income-generating activities for training package development was carried out by considering both the training needs expressed by the respondents and the availability of resources required for undertaking the activities. The resource assessment included skill availability, physical resources, raw material accessibility, financial resources, market opportunities, and respondents' willingness to participate in entrepreneurial activities.

The findings of the training needs assessment revealed that Tie and Dye (Bandhej) secured the highest rank with a Mean Percent Score (MPS) of 65.67, followed closely by Nutri Laddo with an MPS of 64.83. These activities were perceived by respondents as practical, culturally relevant, market-oriented, and suitable for home-based income generation. Other activities such as Low-Cost Educational Toy Making (MPS=59.83), Papad-Badi Making (MPS=59.67), and Stitching (MPS=58.00) also received high preference scores.

The resource analysis further supported the selection of Tie and Dye and Nutri Laddo. Although only 8.00 per cent of respondents were skilled in Tie and Dye and 52.00 per cent were not skilled, the activity demonstrated strong training demand and good market potential. While specialized tools such as dyeing frames, blocks, and colours were available with relatively fewer respondents, the respondents reported that these materials could be easily procured from nearby markets in Bikaner or through online platforms whenever required.

Similarly, Nutri Laddo was found to be highly feasible due to the availability of essential resources. A substantial proportion of respondents already possessed skills related to nutri-product preparation (38.00%), and the major raw materials required for production, such as millets (100.00%), jaggery (90.50%), nuts (80.00%), and food grains and pulses (62.00%), were reported to be easily available. Furthermore, all respondents possessed basic cooking utensils, 91.00 per cent had stoves, and 56.00 per cent had grinders, indicating favourable conditions for establishing nutrition-based food enterprises.

The assessment of financial and market resources also strengthened the suitability of these activities. Most respondents had access to bank accounts (92.00%), local markets (58.00%), transportation facilities (53.50%), and

awareness regarding online selling opportunities (59.00%). In addition, more than half of the respondents expressed willingness to attend training programmes (57.00%), start income-generating activities (54.50%), and allocate time for enterprise activities (55.00%).

Thus, the combined consideration of training needs and resource availability clearly indicated that Tie and Dye and Nutri Laddo were the most appropriate activities for training intervention among the respondents. The result is similarly followed according Singh and Pandey (2018) ^[6] that demonstrated that need-based training programmes improved participants' knowledge and satisfaction

5. Final selection of top two activities for training package development

The final selection of income-generating activities for training package development was based on the combined ranking of training needs and resource availability. The analysis identified Tie and Dye (Bandhej) and Nutri Laddo Preparation as the two most suitable activities for capacity building among rural women.

Tie and Dye was selected because it received the highest training need score (MPS = 65.67) among all the activities assessed. The activity has strong cultural relevance in Rajasthan, especially in the Bikaner region, and offers significant potential for home-based entrepreneurship. Respondents perceived it as a profitable enterprise with growing market demand for traditional textile products. Although existing skill levels were limited, this highlighted the need and scope for training intervention.

Nutri Laddo was selected as the second activity due to its high training need score (MPS = 64.83), existing familiarity among respondents, and strong resource support. Rural women were already acquainted with the preparation of traditional nutritious laddoos, particularly those used during pregnancy and postnatal care. The easy availability of major raw materials and cooking facilities further enhanced the feasibility of adopting this enterprise at the household level. Therefore, considering respondents' preferences, existing resource base, market opportunities, and entrepreneurial potential, Tie and Dye (Bandhej) and Nutri Laddo Preparation were finalized as the two activities for the development of training packages. The selection ensures that the proposed training programme is both need-based and resource-feasible, thereby increasing the likelihood of skill adoption, enterprise establishment, and income enhancement among rural women

Conclusion

The study clearly demonstrated that rural women in Bikaner district possess considerable potential to adopt income-generating activities when provided with appropriate need-based training and institutional support. The respondents showed a strong preference for enterprises that are home-based, culturally relevant, market-oriented, and require relatively low investment. Among the various activities assessed, Tie and Dye (Bandhej) and Nutri Laddo preparation emerged as the most suitable enterprises due to their high training demand, availability of essential resources, local market potential, and feasibility for household-level production. Although respondents possessed basic physical resources and had good access to

banking services and local markets, limited access to specialized equipment, formal credit facilities, and organizational participation may restrict entrepreneurial growth. The positive willingness of respondents to participate in training programmes further indicates substantial scope for capacity-building interventions. Therefore, training programmes designed according to the identified needs and supported by improved market linkages, financial assistance, and extension services can significantly enhance skill development, self-employment opportunities, household income, and the socio-economic empowerment of rural women.

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